

Foundation\Floor Joists\J10-16" O.C.(i1048) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued & nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J10-16" O.C.(i1048)

City, State, Zip:

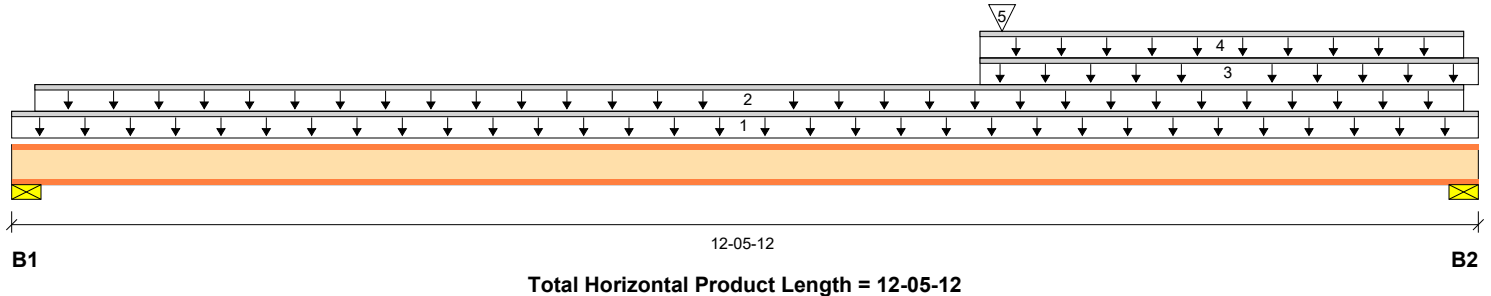
Specifier:

Customer: KC-Truss & Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 2-3/8" | 323 / 0 | 121 / 0 |      |      |           |
| B2, 4-3/8" | 334 / 0 | 228 / 0 |      |      |           |

Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-12 | Top  | 27        | 7        |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-06 | 12-04-04 | Top  | 27        | 7        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 08-02-14 | 12-05-12 | Top  |           | 13       |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 08-02-14 | 12-04-04 | Top  |           | 13       |           |           |                | n/a |
| 5   | 18(i67)                            | Conc. Pt. (lbs)   | L    | 08-05-02 | 08-05-02 | Top  |           | 73       |           |           |                | n/a |

Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1460 ft-lbs     | 53.6%       | 100%     | 1    | 06-07-13 |
| End Reaction          | 562 lbs         | 49.9%       | 100%     | 1    | 12-05-12 |
| End Shear             | 534 lbs         | 36.2%       | 100%     | 1    | 12-01-06 |
| Total Load Deflection | L/729 (0.198")  | 49.4%       | n/a      | 1    | 06-03-12 |
| Live Load Deflection  | L/1106 (0.131") | 43.4%       | n/a      | 2    | 06-02-06 |
| Max Defl.             | 0.198"          | 19.8%       | n/a      | 1    | 06-03-12 |
| Span / Depth          | 15.2            |             |          |      |          |

Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 444 lbs | 22.0%           | 43.2%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 2" | 562 lbs | 15.1%           | 49.9%          | Unspecified |

Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J10-16" O.C.(i917) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J10-16" O.C.(i917)

City, State, Zip:

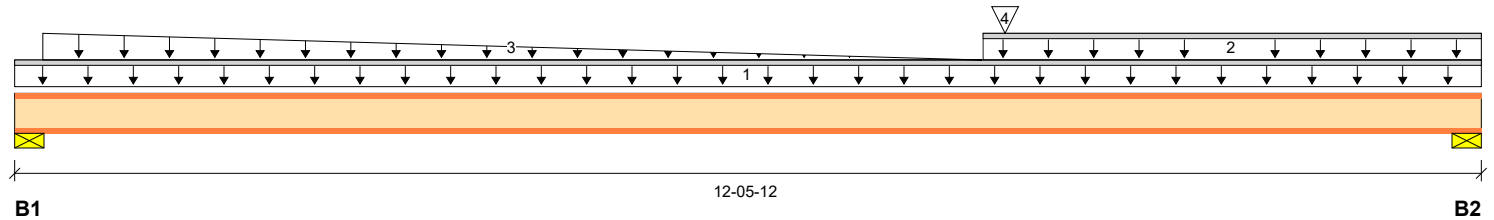
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12'-05-12"

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 2-3/8" | 352 / 0 | 167 / 0 |      |      |           |
| B2, 4-3/8" | 362 / 0 | 207 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type           | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|---------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 00-00-00 | 12-05-12 | Top  | 57   | 14   |      |      |           | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 08-02-14 | 12-05-12 | Top  |      | 13   |      |      |           | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Trapezoidal (lb/ft) | L    | 00-02-14 | 08-02-13 | Top  |      | 15   |      |      |           | n/a |
| 4   | 18(i67)                            | Conc. Pt. (lbs)     | L    | 08-05-02 | 08-05-02 | Top  |      | 79   |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 1580 ft-lbs    | 58.0%       | 100%     | 1    | 06-05-01 |
| End Reaction          | 520 lbs        | 50.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 537 lbs        | 36.4%       | 100%     | 1    | 12-01-06 |
| Total Load Deflection | L/673 (0.215") | 53.5%       | n/a      | 1    | 06-02-06 |
| Live Load Deflection  | L/1031 (0.14") | 46.6%       | n/a      | 2    | 06-02-06 |
| Max Defl.             | 0.215"         | 21.5%       | n/a      | 1    | 06-02-06 |
| Span / Depth          | 15.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 520 lbs | 25.7%           | 50.6%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 2" | 568 lbs | 15.3%           | 50.5%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

## Foundation\Floor Joists\J11-16" O.C.(i1007) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued & nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J11-16" O.C.(i1007)

City, State, Zip:

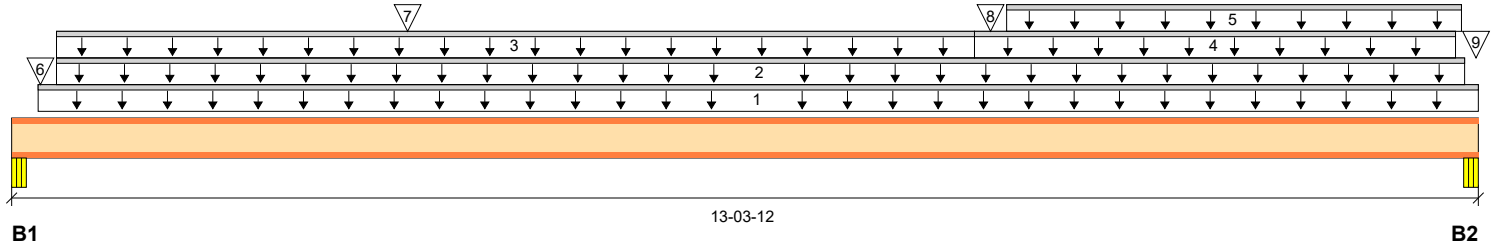
Specifier:

Customer: KC-Truss & Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 13-03-12

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 5-3/4" | 171 / 0 | 216 / 0 |      |      |           |
| B2, 5-3/4" | 178 / 0 | 412 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 13-03-12 | Top  | 27           | 7           |              |              |                      | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-04-14 | 13-02-04 | Top  |              | 9           |              |              |                      | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-04-14 | 08-08-14 | Top  |              | 4           |              |              |                      | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 08-08-14 | 13-01-05 | Top  |              | 2           |              |              |                      | n/a |
| 5   | 33(i84)                            | Unf. Lin. (lb/ft) | L    | 09-00-06 | 13-01-15 | Top  |              | 57          |              |              |                      | n/a |
| 6   | 12(i59)                            | Conc. Pt. (lbs)   | L    | 00-03-02 | 00-03-02 | Top  |              | 24          |              |              |                      | n/a |
| 7   | 38(i85)                            | Conc. Pt. (lbs)   | L    | 03-07-02 | 03-07-02 | Top  |              | 42          |              |              |                      | n/a |
| 8   | 34(i80)                            | Conc. Pt. (lbs)   | L    | 08-10-10 | 08-10-10 | Top  |              | 9           |              |              |                      | n/a |
| 9   | 31(i77)                            | Conc. Pt. (lbs)   | L    | 13-03-08 | 13-03-08 | Top  |              | 73          |              |              |                      | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 1199 ft-lbs    | 22.0%       | 100%     | 1    | 07-01-09 |
| End Reaction          | 590 lbs        | 26.2%       | 100%     | 1    | 13-03-12 |
| End Shear             | 478 lbs        | 16.2%       | 100%     | 1    | 12-10-00 |
| Total Load Deflection | L/999 (0.097") | n/a         | n/a      | 1    | 06-09-12 |
| Live Load Deflection  | L/999 (0.041") | n/a         | n/a      | 2    | 06-07-13 |
| Max Defl.             | 0.097"         | n/a         | n/a      | 1    | 06-09-12 |
| Span / Depth          | 15.8           |             |          |      |          |

| Bearing Supports | Dim. (LxW)       | Value   | % Allow<br>Support | % Allow<br>Member | Material    |
|------------------|------------------|---------|--------------------|-------------------|-------------|
| B1               | Beam 5-3/4" x 4" | 387 lbs | 4.1%               | 17.2%             | Unspecified |
| B2               | Beam 5-3/4" x 4" | 590 lbs | 6.3%               | 26.2%             | Unspecified |

**Foundation\Floor Joists\J11-16" O.C.(i1007) (Floor Joist)**

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J11-16" O.C.(i1007)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J1-16" O.C.(i1009) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i1009)

City, State, Zip:

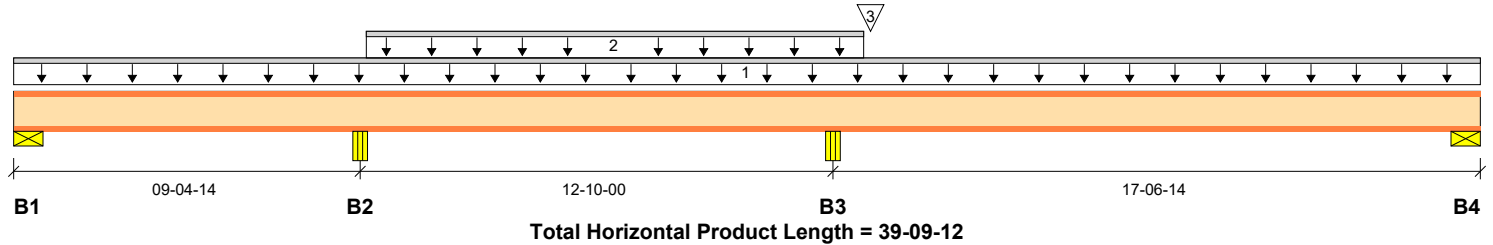
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 266 / 57 | 25 / 0  |      |      |           |
| B2, 5-3/4" | 700 / 0  | 343 / 0 |      |      |           |
| B3, 5-3/4" | 992 / 0  | 518 / 0 |      |      |           |
| B4, 4-3/8" | 412 / 21 | 90 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 39-09-12 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 23-00-14 | Top  |           | 27       |           |           |                | n/a |
| 3   | 32(i78)                            | Conc. Pt. (lbs)   | L    | 23-03-02 | 23-03-02 | Top  |           | 76       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1739 ft-lbs     | 63.8%       | 100%     | 2    | 32-04-13 |
| Neg. Moment           | -2111 ft-lbs    | 77.5%       | 100%     | 5    | 22-02-14 |
| End Reaction          | 502 lbs         | 44.6%       | 100%     | 2    | 39-09-12 |
| Int. Reaction         | 1509 lbs        | 59.8%       | 100%     | 5    | 22-02-14 |
| End Shear             | 477 lbs         | 32.4%       | 100%     | 2    | 39-05-06 |
| Cont. Shear           | 769 lbs         | 52.1%       | 100%     | 5    | 22-05-12 |
| Total Load Deflection | L/502 (0.412")  | 71.6%       | n/a      | 2    | 31-05-05 |
| Live Load Deflection  | L/584 (0.355")  | 82.2%       | n/a      | 7    | 31-05-05 |
| Total Neg. Defl.      | L/999 (-0.045") | n/a         | n/a      | 2    | 18-06-03 |
| Max Defl.             | 0.412"          | 41.2%       | n/a      | 2    | 31-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 291 lbs  | 7.8%            | 25.9%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 1043 lbs | 22.3%           | 41.3%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1509 lbs | 32.3%           | 59.8%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 502 lbs  | 13.5%           | 44.6%          | Unspecified |

**Foundation\Floor Joists\J1-16" O.C.(i1009) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i1009)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

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**Foundation\Floor Joists\J1-16" O.C.(i1009) - 01 (Floor Joist)**

BC CALC® Member Report

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December 22, 2021 10:31:03

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City, State, Zip:

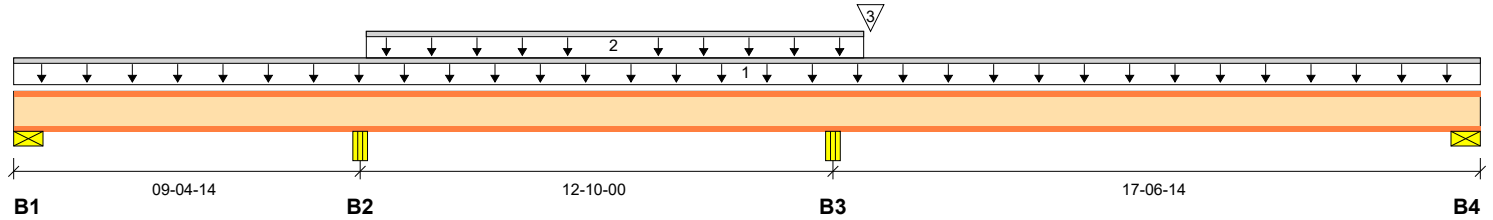
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 266 / 57 | 25 / 0  |      |      |           |
| B2, 5-3/4" | 700 / 0  | 343 / 0 |      |      |           |
| B3, 5-3/4" | 992 / 0  | 518 / 0 |      |      |           |
| B4, 4-3/8" | 412 / 21 | 90 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 39-09-12 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 23-00-14 | Top  |           | 27       |           |           |                | n/a |
| 3   | 32(i78)                            | Conc. Pt. (lbs)   | L    | 23-03-02 | 23-03-02 | Top  |           | 76       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1739 ft-lbs     | 63.8%       | 100%     | 2    | 32-04-13 |
| Neg. Moment           | -2111 ft-lbs    | 77.5%       | 100%     | 5    | 22-02-14 |
| End Reaction          | 502 lbs         | 44.6%       | 100%     | 2    | 39-09-12 |
| Int. Reaction         | 1509 lbs        | 59.8%       | 100%     | 5    | 22-02-14 |
| End Shear             | 477 lbs         | 32.4%       | 100%     | 2    | 39-05-06 |
| Cont. Shear           | 769 lbs         | 52.1%       | 100%     | 5    | 22-05-12 |
| Total Load Deflection | L/502 (0.412")  | 71.6%       | n/a      | 2    | 31-05-05 |
| Live Load Deflection  | L/584 (0.355")  | 82.2%       | n/a      | 7    | 31-05-05 |
| Total Neg. Defl.      | L/999 (-0.045") | n/a         | n/a      | 2    | 18-06-03 |
| Max Defl.             | 0.412"          | 41.2%       | n/a      | 2    | 31-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 291 lbs  | 7.8%            | 25.9%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 1043 lbs | 22.3%           | 41.3%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1509 lbs | 32.3%           | 59.8%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 502 lbs  | 13.5%           | 44.6%          | Unspecified |

**Foundation\Floor Joists\J1-16" O.C.(i1009) - 01 (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i1009)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



**Foundation\Floor Joists\J1-16" O.C.(i879) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i879)

City, State, Zip:

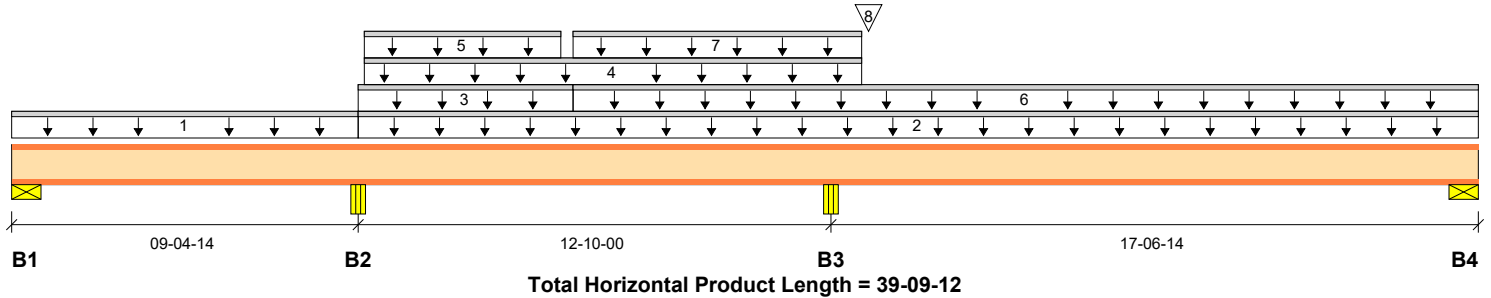
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 264 / 55 | 27 / 0  |      |      |           |
| B2, 5-3/4" | 692 / 0  | 337 / 0 |      |      |           |
| B3, 5-3/4" | 930 / 0  | 508 / 0 |      |      |           |
| B4, 4-3/8" | 385 / 20 | 84 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-04-14 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-04-14 | 39-09-12 | Top  | 27        | 7        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-04-14 | 15-02-14 | Top  | 27        | 7        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 23-00-14 | Top  |           | 13       |           |           |                | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 14-10-14 | Top  |           | 13       |           |           |                | n/a |
| 6   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 15-02-14 | 39-09-12 | Top  | 23        | 6        |           |           |                | n/a |
| 7   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 15-02-14 | 23-00-14 | Top  |           | 11       |           |           |                | n/a |
| 8   | 32(i78)                            | Conc. Pt. (lbs)   | L    | 23-03-02 | 23-03-02 | Top  |           | 94       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1628 ft-lbs     | 59.7%       | 100%     | 2    | 32-01-15 |
| Neg. Moment           | -1995 ft-lbs    | 73.2%       | 100%     | 5    | 22-02-14 |
| End Reaction          | 469 lbs         | 41.7%       | 100%     | 2    | 39-09-12 |
| Int. Reaction         | 1438 lbs        | 57.0%       | 100%     | 5    | 22-02-14 |
| End Shear             | 446 lbs         | 30.3%       | 100%     | 2    | 39-05-06 |
| Cont. Shear           | 741 lbs         | 50.2%       | 100%     | 5    | 22-05-12 |
| Total Load Deflection | L/536 (0.387")  | 67.2%       | n/a      | 2    | 31-05-05 |
| Live Load Deflection  | L/625 (0.332")  | 76.8%       | n/a      | 7    | 31-05-05 |
| Total Neg. Defl.      | L/999 (-0.043") | n/a         | n/a      | 2    | 18-07-03 |
| Max Defl.             | 0.387"          | 38.7%       | n/a      | 2    | 31-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 291 lbs  | 7.8%            | 25.8%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 1029 lbs | 22.0%           | 40.7%          | Unspecified |

Foundation\Floor Joists\J1-16" O.C.(i879) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued & nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i879)

City, State, Zip:

Specifier:

Customer: KC-Truss & Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports | Dim. (LxW)  | Value    | % Allow Support | % Allow Member | Material    |
|------------------|-------------|----------|-----------------|----------------|-------------|
| B3 Beam          | 5-3/4" x 2" | 1438 lbs | 30.8%           | 57.0%          | Unspecified |
| B4 Wall/Plate    | 4-3/8" x 2" | 469 lbs  | 12.6%           | 41.7%          | Unspecified |

## Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

## Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J1-16" O.C.(i882) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i882)

City, State, Zip:

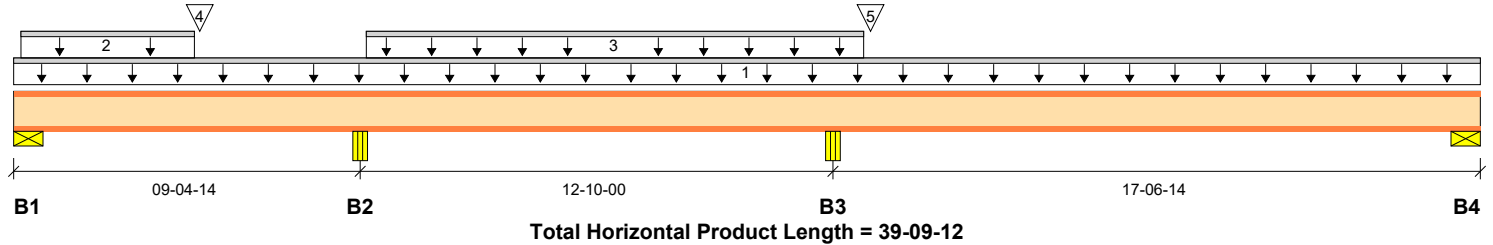
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 266 / 57 | 204 / 0 |      |      |           |
| B2, 5-3/4" | 700 / 0  | 471 / 0 |      |      |           |
| B3, 5-3/4" | 992 / 0  | 502 / 0 |      |      |           |
| B4, 4-3/8" | 412 / 21 | 91 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 39-09-12 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-06 | 04-10-14 | Top  |           | 43       |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 23-00-14 | Top  |           | 27       |           |           |                | n/a |
| 4   | 40(i87)                            | Conc. Pt. (lbs)   | L    | 05-00-10 | 05-00-10 | Top  |           | 93       |           |           |                | n/a |
| 5   | 32(i78)                            | Conc. Pt. (lbs)   | L    | 23-03-02 | 23-03-02 | Top  |           | 76       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1751 ft-lbs     | 64.3%       | 100%     | 2    | 32-01-15 |
| Neg. Moment           | -2083 ft-lbs    | 76.4%       | 100%     | 5    | 22-02-14 |
| End Reaction          | 503 lbs         | 44.7%       | 100%     | 2    | 39-09-12 |
| Int. Reaction         | 1494 lbs        | 59.2%       | 100%     | 5    | 22-02-14 |
| End Shear             | 479 lbs         | 32.5%       | 100%     | 2    | 39-05-06 |
| Cont. Shear           | 767 lbs         | 52.0%       | 100%     | 5    | 22-05-12 |
| Total Load Deflection | L/498 (0.416")  | 72.3%       | n/a      | 2    | 31-05-05 |
| Live Load Deflection  | L/584 (0.355")  | 82.2%       | n/a      | 7    | 31-05-05 |
| Total Neg. Defl.      | L/999 (-0.052") | n/a         | n/a      | 2    | 18-02-02 |
| Max Defl.             | 0.416"          | 41.6%       | n/a      | 2    | 31-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 470 lbs  | 12.7%           | 41.8%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 1171 lbs | 25.1%           | 46.4%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1494 lbs | 32.0%           | 59.2%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 503 lbs  | 13.5%           | 44.7%          | Unspecified |

**Foundation\Floor Joists\J1-16" O.C.(i882) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i882)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J1-16" O.C.(i883) (Floor Joist)

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i883)

City, State, Zip:

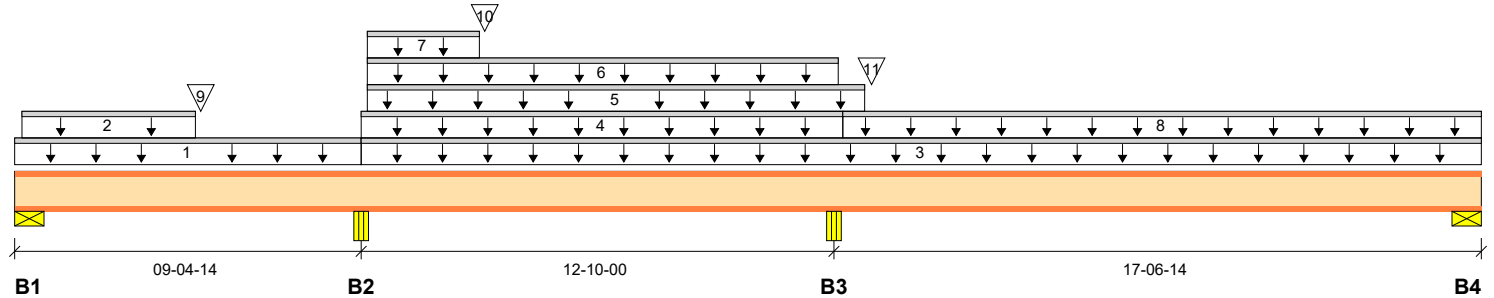
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 266 / 48 | 86 / 0  |      |      |           |
| B2, 5-3/4" | 636 / 0  | 547 / 0 |      |      |           |
| B3, 5-3/4" | 935 / 0  | 465 / 0 |      |      |           |
| B4, 4-3/8" | 412 / 17 | 90 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-04-14 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-06 | 04-10-14 | Top  |           | 14       |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-04-14 | 39-09-12 | Top  | 27        | 7        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-04-14 | 22-05-12 | Top  | 18        | 5        |           |           |                | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 23-00-14 | Top  |           | 13       |           |           |                | n/a |
| 6   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 22-04-04 | Top  |           | 9        |           |           |                | n/a |
| 7   | 39(i86)                            | Unf. Lin. (lb/ft) | L    | 09-06-14 | 12-07-06 | Top  |           | 57       |           |           |                | n/a |
| 8   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 22-05-12 | 39-09-12 | Top  | 27        | 7        |           |           |                | n/a |
| 9   | 40(i87)                            | Conc. Pt. (lbs)   | L    | 05-00-10 | 05-00-10 | Top  |           | 56       |           |           |                | n/a |
| 10  | 38(i85)                            | Conc. Pt. (lbs)   | L    | 12-09-02 | 12-09-02 | Top  |           | 24       |           |           |                | n/a |
| 11  | 32(i78)                            | Conc. Pt. (lbs)   | L    | 23-03-02 | 23-03-02 | Top  |           | 53       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1737 ft-lbs     | 63.8%       | 100%     | 2    | 32-04-13 |
| Neg. Moment           | -2034 ft-lbs    | 74.6%       | 100%     | 5    | 22-02-14 |
| End Reaction          | 501 lbs         | 44.6%       | 100%     | 2    | 39-09-12 |
| Int. Reaction         | 1400 lbs        | 55.5%       | 100%     | 5    | 22-02-14 |
| End Shear             | 477 lbs         | 32.4%       | 100%     | 2    | 39-05-06 |
| Cont. Shear           | 739 lbs         | 50.1%       | 100%     | 5    | 22-05-12 |
| Total Load Deflection | L/504 (0.412")  | 71.5%       | n/a      | 2    | 31-05-05 |
| Live Load Deflection  | L/584 (0.355")  | 82.2%       | n/a      | 7    | 31-05-05 |
| Total Neg. Defl.      | L/999 (-0.046") | n/a         | n/a      | 2    | 18-06-13 |
| Max Defl.             | 0.412"          | 41.2%       | n/a      | 2    | 31-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J1-16" O.C.(i883) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i883)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|------------------|------------------------|----------|-----------------|----------------|-------------|
| B1               | Wall/Plate 4-3/8" x 2" | 352 lbs  | 9.5%            | 31.3%          | Unspecified |
| B2               | Beam 5-3/4" x 2"       | 1182 lbs | 25.3%           | 46.8%          | Unspecified |
| B3               | Beam 5-3/4" x 2"       | 1400 lbs | 30.0%           | 55.5%          | Unspecified |
| B4               | Wall/Plate 4-3/8" x 2" | 501 lbs  | 13.5%           | 44.6%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J1-16" O.C.(i976) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i976)

City, State, Zip:

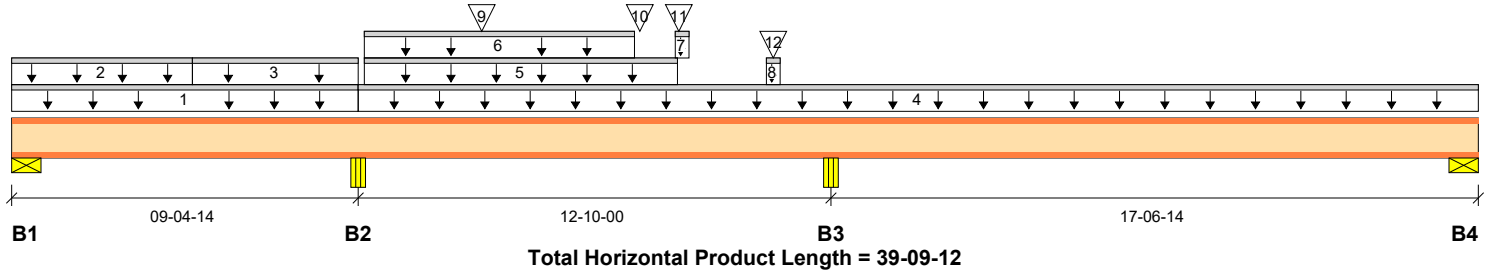
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 254 / 57 | 0 / 49  |      |      |           |
| B2, 5-3/4" | 695 / 0  | 834 / 0 |      |      |           |
| B3, 5-3/4" | 992 / 0  | 743 / 0 |      |      |           |
| B4, 4-3/8" | 412 / 21 | 63 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-04-14 | Top  | 27        | 7        |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-10-14 | Top  | 23        | 6        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-10-14 | 09-04-14 | Top  | 27        | 7        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-04-14 | 39-09-12 | Top  | 53        | 13       |           |           |                | n/a |
| 5   | 37(i81)                            | Unf. Lin. (lb/ft) | L    | 09-06-14 | 18-00-14 | Top  |           | 57       |           |           |                | n/a |
| 6   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 16-10-14 | Top  |           | 27       |           |           |                | n/a |
| 7   | 31(i77)                            | Unf. Lin. (lb/ft) | L    | 18-00-03 | 18-04-10 | Top  |           | 80       |           |           |                | n/a |
| 8   | 50(i97)                            | Unf. Lin. (lb/ft) | L    | 20-05-14 | 20-10-05 | Top  |           | 80       |           |           |                | n/a |
| 9   | 38(i85)                            | Conc. Pt. (lbs)   | L    | 12-09-02 | 12-09-02 | Top  |           | 38       |           |           |                | n/a |
| 10  | FC1 Floor Decking (Plan View Fill) | Conc. Pt. (lbs)   | L    | 17-00-10 | 17-00-10 | Top  |           | 41       |           |           |                | n/a |
| 11  | -                                  | Conc. Pt. (lbs)   | L    | 18-01-05 | 18-01-05 | Top  |           | 96       |           |           |                | n/a |
| 12  | 50(i97)                            | Conc. Pt. (lbs)   | L    | 20-08-01 | 20-08-01 | Top  |           | 114      |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1850 ft-lbs     | 67.9%       | 100%     | 3    | 15-10-07 |
| Neg. Moment           | -2482 ft-lbs    | 91.1%       | 100%     | 5    | 22-02-14 |
| End Reaction          | 475 lbs         | 42.2%       | 100%     | 2    | 39-09-12 |
| Int. Reaction         | 1735 lbs        | 68.7%       | 100%     | 5    | 22-02-14 |
| End Shear             | 451 lbs         | 30.6%       | 100%     | 2    | 39-05-06 |
| Cont. Shear           | 1009 lbs        | 68.4%       | 100%     | 4    | 09-07-12 |
| Total Load Deflection | L/580 (0.265")  | 62.1%       | n/a      | 3    | 15-10-07 |
| Live Load Deflection  | L/584 (0.355")  | 82.2%       | n/a      | 7    | 31-05-06 |
| Total Neg. Defl.      | L/999 (-0.077") | n/a         | n/a      | 3    | 27-05-12 |
| Max Defl.             | 0.348"          | 34.8%       | n/a      | 2    | 31-08-04 |
| Span / Depth          | 21.8            |             |          |      |          |



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J1-16" O.C.(i976) (Floor Joist)

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i976)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports |            | Dim. (LxW)  | Value    | % Allow Support | % Allow Member | Material    |
|------------------|------------|-------------|----------|-----------------|----------------|-------------|
| B1               | Wall/Plate | 4-3/8" x 2" | 205 lbs  | 5.5%            | 18.2%          | Unspecified |
| B1               | Uplift     |             | 105 lbs  |                 |                |             |
| B2               | Beam       | 5-3/4" x 2" | 1529 lbs | 32.7%           | 60.6%          | Unspecified |
| B3               | Beam       | 5-3/4" x 2" | 1735 lbs | 37.1%           | 68.7%          | Unspecified |
| B4               | Wall/Plate | 4-3/8" x 2" | 475 lbs  | 12.8%           | 42.2%          | Unspecified |

### Cautions

Uplift of -105 lbs found at bearing B1.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



**Foundation\Floor Joists\J1-16" O.C.(i988) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i988)

City, State, Zip:

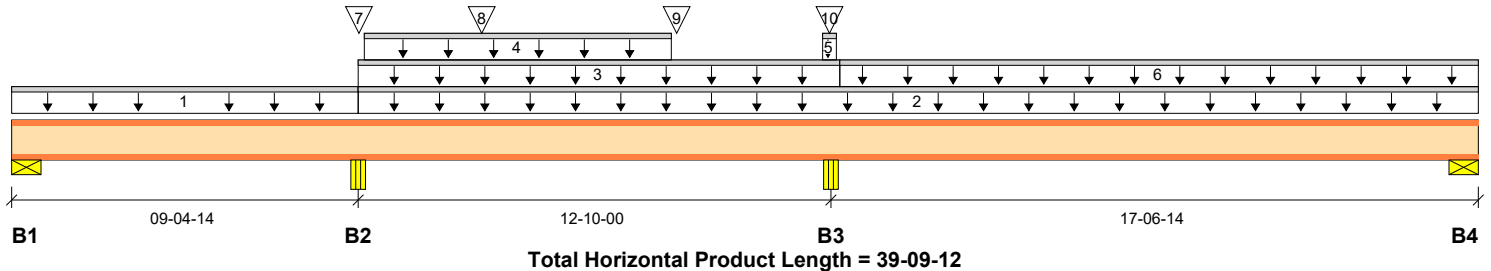
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 266 / 37 | 32 / 0  |      |      |           |
| B2, 5-3/4" | 559 / 0  | 296 / 0 |      |      |           |
| B3, 5-3/4" | 867 / 0  | 375 / 0 |      |      |           |
| B4, 4-3/8" | 412 / 14 | 92 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-04-14 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-04-14 | 39-09-12 | Top  | 27        | 7        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-04-14 | 22-05-12 | Top  | 8         | 2        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 17-10-14 | Top  |           | 18       |           |           |                | n/a |
| 5   | 31(i77)                            | Unf. Lin. (lb/ft) | L    | 22-00-03 | 22-04-10 | Top  |           | 80       |           |           |                | n/a |
| 6   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 22-05-12 | 39-09-12 | Top  | 27        | 7        |           |           |                | n/a |
| 7   | 12(i59)                            | Conc. Pt. (lbs)   | L    | 09-05-02 | 09-05-02 | Top  |           | 14       |           |           |                | n/a |
| 8   | 38(i85)                            | Conc. Pt. (lbs)   | L    | 12-09-02 | 12-09-02 | Top  |           | 47       |           |           |                | n/a |
| 9   | 34(i80)                            | Conc. Pt. (lbs)   | L    | 18-00-10 | 18-00-10 | Top  |           | 47       |           |           |                | n/a |
| 10  | 31(i77)                            | Conc. Pt. (lbs)   | L    | 22-02-06 | 22-02-06 | Top  |           | 38       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1753 ft-lbs     | 64.3%       | 100%     | 2    | 32-02-00 |
| Neg. Moment           | -1870 ft-lbs    | 68.6%       | 100%     | 5    | 22-02-14 |
| End Reaction          | 504 lbs         | 44.8%       | 100%     | 2    | 39-09-12 |
| Int. Reaction         | 1241 lbs        | 49.2%       | 100%     | 5    | 22-02-14 |
| End Shear             | 479 lbs         | 32.5%       | 100%     | 2    | 39-05-06 |
| Cont. Shear           | 669 lbs         | 45.4%       | 100%     | 5    | 22-05-12 |
| Total Load Deflection | L/498 (0.416")  | 72.3%       | n/a      | 2    | 31-05-06 |
| Live Load Deflection  | L/584 (0.355")  | 82.2%       | n/a      | 7    | 31-05-06 |
| Total Neg. Defl.      | L/999 (-0.057") | n/a         | n/a      | 2    | 18-03-00 |
| Max Defl.             | 0.416"          | 41.6%       | n/a      | 2    | 31-05-06 |
| Span / Depth          | 21.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 298 lbs | 8.0%            | 26.5%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 855 lbs | 18.3%           | 33.9%          | Unspecified |



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J1-16" O.C.(i988) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i988)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports | Dim. (LxW)  | Value    | % Allow Support | % Allow Member | Material    |
|------------------|-------------|----------|-----------------|----------------|-------------|
| B3 Beam          | 5-3/4" x 2" | 1241 lbs | 26.6%           | 49.2%          | Unspecified |
| B4 Wall/Plate    | 4-3/8" x 2" | 504 lbs  | 13.5%           | 44.8%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J1-16" O.C.(i989) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i989)

City, State, Zip:

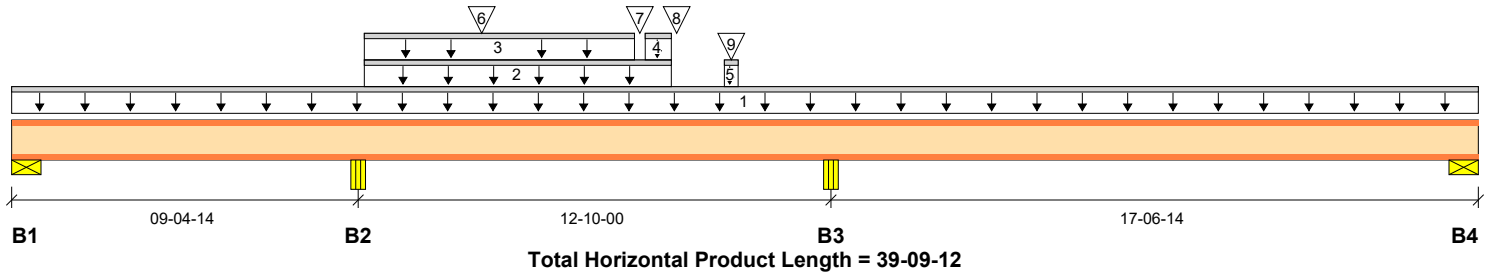
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 266 / 57 | 3 / 0   |      |      |           |
| B2, 5-3/4" | 700 / 0  | 473 / 0 |      |      |           |
| B3, 5-3/4" | 992 / 0  | 505 / 0 |      |      |           |
| B4, 4-3/8" | 412 / 21 | 79 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 39-09-12 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 17-10-14 | Top  |           | 13       |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 16-10-14 | Top  |           | 13       |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 17-02-06 | 17-10-14 | Top  |           | 36       |           |           |                | n/a |
| 5   | 31(i77)                            | Unf. Lin. (lb/ft) | L    | 19-04-03 | 19-08-10 | Top  |           | 80       |           |           |                | n/a |
| 6   | 38(i85)                            | Conc. Pt. (lbs)   | L    | 12-09-02 | 12-09-02 | Top  |           | 76       |           |           |                | n/a |
| 7   | FC1 Floor Decking (Plan View Fill) | Conc. Pt. (lbs)   | L    | 17-00-10 | 17-00-10 | Top  |           | 21       |           |           |                | n/a |
| 8   | 34(i80)                            | Conc. Pt. (lbs)   | L    | 18-00-10 | 18-00-10 | Top  |           | 76       |           |           |                | n/a |
| 9   | 31(i77)                            | Conc. Pt. (lbs)   | L    | 19-06-06 | 19-06-06 | Top  |           | 77       |           |           |                | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 1665 ft-lbs    | 61.1%       | 100%     | 2    | 32-04-14 |
| Neg. Moment           | -2204 ft-lbs   | 80.9%       | 100%     | 5    | 22-02-14 |
| End Reaction          | 491 lbs        | 43.7%       | 100%     | 2    | 39-09-12 |
| Int. Reaction         | 1497 lbs       | 59.3%       | 100%     | 5    | 22-02-14 |
| End Shear             | 467 lbs        | 31.7%       | 100%     | 2    | 39-05-06 |
| Cont. Shear           | 777 lbs        | 52.7%       | 100%     | 5    | 22-00-00 |
| Total Load Deflection | L/536 (0.387") | 67.1%       | n/a      | 2    | 31-06-13 |
| Live Load Deflection  | L/584 (0.355") | 82.2%       | n/a      | 7    | 31-05-06 |
| Total Neg. Defl.      | L/999 (-0.04") | n/a         | n/a      | 3    | 26-04-13 |
| Max Defl.             | 0.387"         | 38.7%       | n/a      | 2    | 31-06-13 |
| Span / Depth          | 21.8           |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 269 lbs  | 7.2%            | 23.9%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 1173 lbs | 25.1%           | 46.5%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1497 lbs | 32.0%           | 59.3%          | Unspecified |



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J1-16" O.C.(i989) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i989)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|------------------|------------------------|---------|-----------------|----------------|-------------|
| B4               | Wall/Plate 4-3/8" x 2" | 491 lbs | 13.2%           | 43.7%          | Unspecified |

### Cautions

Uplift of -54 lbs found at bearing B1.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J1-16" O.C.(i999) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i999)

City, State, Zip:

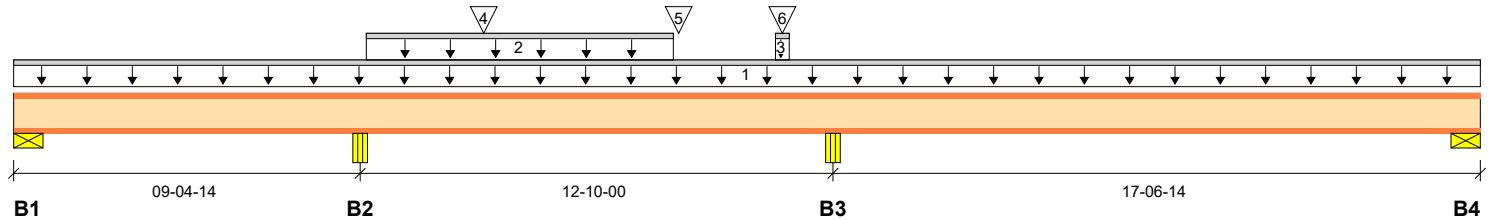
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 39-09-12

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 266 / 57 | 10 / 0  |      |      |           |
| B2, 5-3/4" | 700 / 0  | 439 / 0 |      |      |           |
| B3, 5-3/4" | 992 / 0  | 489 / 0 |      |      |           |
| B4, 4-3/8" | 412 / 21 | 83 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 39-09-12 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 17-10-14 | Top  |           | 27       |           |           |                | n/a |
| 3   | 31(i77)                            | Unf. Lin. (lb/ft) | L    | 20-08-03 | 21-00-10 | Top  |           | 80       |           |           |                | n/a |
| 4   | 38(i85)                            | Conc. Pt. (lbs)   | L    | 12-09-02 | 12-09-02 | Top  |           | 76       |           |           |                | n/a |
| 5   | 34(i80)                            | Conc. Pt. (lbs)   | L    | 18-00-10 | 18-00-10 | Top  |           | 76       |           |           |                | n/a |
| 6   | 31(i77)                            | Conc. Pt. (lbs)   | L    | 20-10-07 | 20-10-07 | Top  |           | 77       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1690 ft-lbs     | 62.0%       | 100%     | 2    | 32-04-14 |
| Neg. Moment           | -2144 ft-lbs    | 78.7%       | 100%     | 5    | 22-02-14 |
| End Reaction          | 495 lbs         | 44.0%       | 100%     | 2    | 39-09-12 |
| Int. Reaction         | 1480 lbs        | 58.6%       | 100%     | 5    | 22-02-14 |
| End Shear             | 471 lbs         | 31.9%       | 100%     | 2    | 39-05-06 |
| Cont. Shear           | 765 lbs         | 51.8%       | 100%     | 5    | 22-00-00 |
| Total Load Deflection | L/525 (0.395")  | 68.6%       | n/a      | 2    | 31-08-04 |
| Live Load Deflection  | L/584 (0.355")  | 82.2%       | n/a      | 7    | 31-05-06 |
| Total Neg. Defl.      | L/999 (-0.032") | n/a         | n/a      | 3    | 26-01-14 |
| Max Defl.             | 0.395"          | 39.5%       | n/a      | 2    | 31-08-04 |
| Span / Depth          | 21.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 277 lbs  | 7.4%            | 24.6%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 1139 lbs | 24.4%           | 45.1%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1480 lbs | 31.7%           | 58.6%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 495 lbs  | 13.3%           | 44.0%          | Unspecified |

**Foundation\Floor Joists\J1-16" O.C.(i999) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J1-16" O.C.(i999)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J14-16" O.C.(i912)

City, State, Zip:

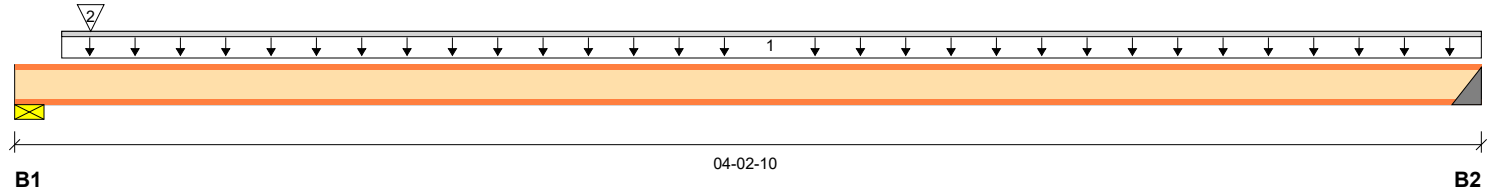
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 173 / 0 | 119 / 0 |      |      |           |
| B2, 2"     | 70 / 0  | 17 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 04-02-10 | Top  | 35   | 9   |      |      |                | n/a |
| 2   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 101  | 101 |      |      |                | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 79 ft-lbs      | 2.9%        | 100%     | 1    | 02-02-08 |
| End Reaction          | 292 lbs        | 26.0%       | 100%     | 1    | 00-00-00 |
| End Shear             | 80 lbs         | 5.4%        | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/999 (0.002") | n/a         | n/a      | 1    | 02-02-08 |
| Live Load Deflection  | L/999 (0.002") | n/a         | n/a      | 2    | 02-02-08 |
| Max Defl.             | 0.002"         | n/a         | n/a      | 1    | 02-02-08 |
| Span / Depth          | 4.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 292 lbs | 7.9%            | 26.0%          | Unspecified |
| B2 | Hanger 2" x 2"         | 87 lbs  | 6.3%            | 8.8%           | ITS2.06/9.5 |

**Cautions**

Header for the hanger ITS2.06/9.5 is a Single 1-3/4" x 9-1/2" LVL Beam.  
 Hanger ITS2.06/9.5 requires (2) 10dx1.5 face nails, (4) 10dx1.5 TF nails, (2) Strong-Grip joist nails.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

**Disclosure**

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J14-16" O.C.(i916) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J14-16" O.C.(i916)

City, State, Zip:

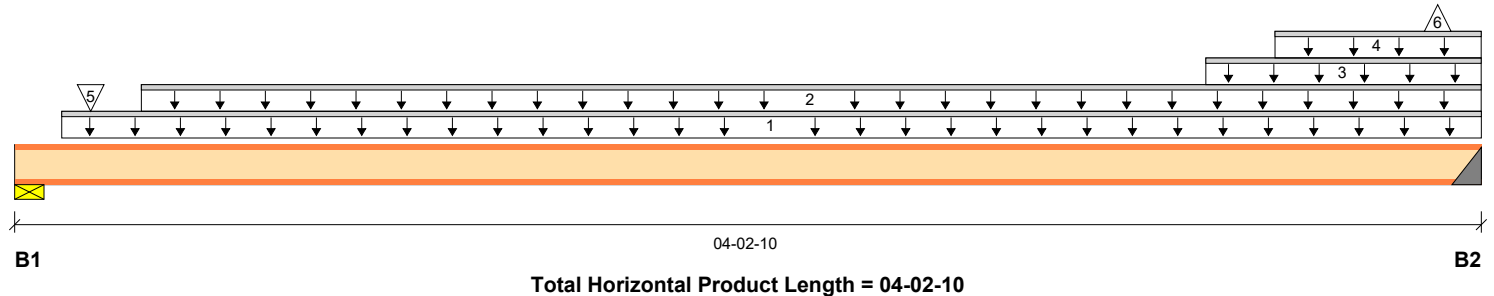
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 223 / 0  | 421 / 0 |      |      |           |
| B2, 2"     | 142 / 24 | 211 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 04-02-10 | Top  | 36           | 9           |              |              |                      | n/a |
| 2   | 3(i50)                             | Unf. Lin. (lb/ft) | L    | 00-04-06 | 04-02-10 | Top  |              | 57          |              |              |                      | n/a |
| 3   | 3(i50)                             | Unf. Lin. (lb/ft) | L    | 03-05-02 | 04-02-10 | Top  | 40           | 51          |              |              |                      | n/a |
| 4   | 3(i50)                             | Unf. Lin. (lb/ft) | L    | 03-07-08 | 04-02-10 | Top  | 72           | 74          |              |              |                      | n/a |
| 5   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 144          | 292         |              |              |                      | n/a |
| 6   | 3(i50)                             | Conc. Pt. (lbs)   | L    | 04-01-02 | 04-01-02 | Top  | -24          |             |              |              |                      | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 205 ft-lbs     | 7.5%        | 100%     | 1    | 02-03-11 |
| End Reaction          | 644 lbs        | 57.2%       | 100%     | 1    | 00-00-00 |
| End Shear             | 296 lbs        | 20.1%       | 100%     | 1    | 04-00-10 |
| Total Load Deflection | L/999 (0.006") | n/a         | n/a      | 1    | 02-03-05 |
| Live Load Deflection  | L/999 (0.002") | n/a         | n/a      | 3    | 02-03-11 |
| Max Defl.             | 0.006"         | n/a         | n/a      | 1    | 02-03-05 |
| Span / Depth          | 4.8            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 644 lbs | 17.3%           | 57.2%          | Unspecified |
| B2 | Hanger 2" x 2"         | 353 lbs | 25.3%           | 35.5%          | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Single 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10dx1.5 face nails, (4) 10dx1.5 TF nails, (2) Strong-Grip joist nails.



**Foundation\Floor Joists\J14-16" O.C.(i916) (Floor Joist)**

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

Address:

City, State, Zip:

Customer: KC-Truss &amp; Panel

Code reports: ESR-1336

File name: Lot 323 Park Ridge.mmdl

Description: Foundation\Floor Joists\J14-16" O.C.(i916)

Specifier:

Designer: Don Happel

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J14-16" O.C.(i919)

City, State, Zip:

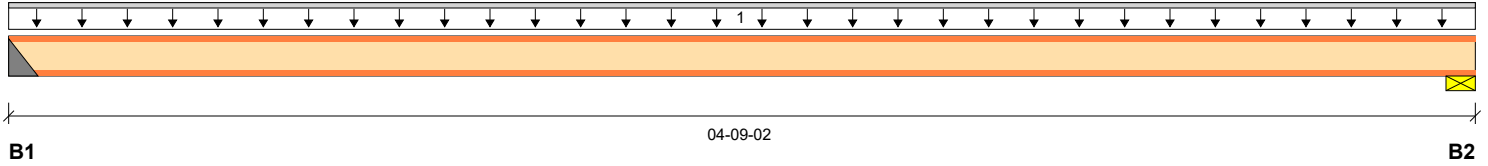
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 04-09-02

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 130 / 0 | 32 / 0 |      |      |           |
| B2, 4-3/8" | 141 / 0 | 35 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-09-02 | Top  | 57   | 14  |      |      |                | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 168 ft-lbs     | 6.2%        | 100%     | 1    | 02-03-06 |
| End Reaction          | 162 lbs        | 16.3%       | 100%     | 1    | 00-00-00 |
| End Shear             | 150 lbs        | 10.2%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.006") | n/a         | n/a      | 1    | 02-03-06 |
| Live Load Deflection  | L/999 (0.004") | n/a         | n/a      | 2    | 02-03-06 |
| Max Defl.             | 0.006"         | n/a         | n/a      | 1    | 02-03-06 |
| Span / Depth          | 5.5            |             |          |      |          |

| Bearing Supports | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|------------------|-------------|---------|-----------------|----------------|-------------|
| B1 Hanger        | 2" x 2"     | 162 lbs | 10.4%           | 16.3%          | ITS2.06/9.5 |
| B2 Wall/Plate    | 4-3/8" x 2" | 176 lbs | 4.7%            | 15.6%          | Unspecified |

**Cautions**

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.  
 Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J14-16" O.C.(i970)

City, State, Zip:

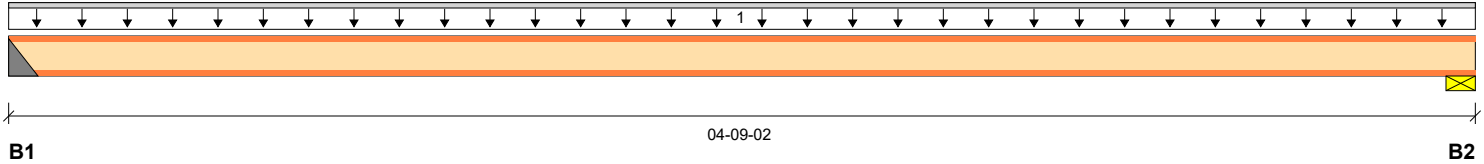
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 113 / 0 | 28 / 0 |      |      |           |
| B2, 4-3/8" | 123 / 0 | 31 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-09-02 | Top  | 50           | 12          |              |              |                      | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 147 ft-lbs     | 5.4%        | 100%     | 1    | 02-03-06 |
| End Reaction          | 141 lbs        | 14.2%       | 100%     | 1    | 00-00-00 |
| End Shear             | 131 lbs        | 8.9%        | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.005") | n/a         | n/a      | 1    | 02-03-06 |
| Live Load Deflection  | L/999 (0.004") | n/a         | n/a      | 2    | 02-03-06 |
| Max Defl.             | 0.005"         | n/a         | n/a      | 1    | 02-03-06 |
| Span / Depth          | 5.5            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Hanger 2" x 2"         | 141 lbs | 9.1%            | 14.2%          | ITS2.06/9.5 |
| B2 | Wall/Plate 4-3/8" x 2" | 153 lbs | 4.1%            | 13.6%          | Unspecified |

**Cautions**

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J14-16" O.C.(i979)

City, State, Zip:

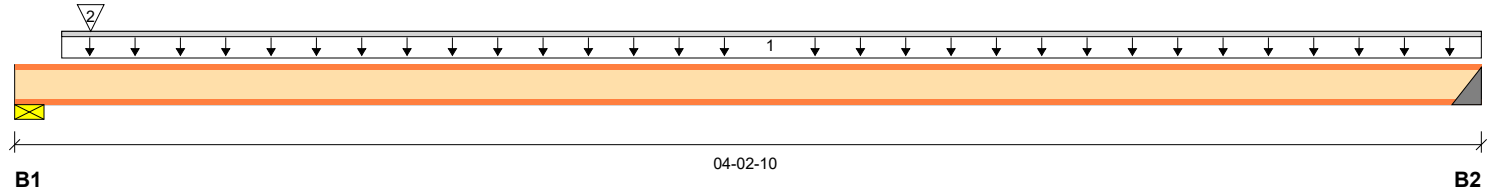
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 4-3/8" | 191 / 0 | 79 / 0 |      |      |           |
| B2, 2"     | 107 / 0 | 27 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 04-02-10 | Top  | 53   | 13  |      |      |                | n/a |
| 2   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 80   | 51  |      |      |                | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 121 ft-lbs     | 4.4%        | 100%     | 1    | 02-02-08 |
| End Reaction          | 269 lbs        | 23.9%       | 100%     | 1    | 00-00-00 |
| End Shear             | 123 lbs        | 8.3%        | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/999 (0.004") | n/a         | n/a      | 1    | 02-02-08 |
| Live Load Deflection  | L/999 (0.003") | n/a         | n/a      | 2    | 02-02-08 |
| Max Defl.             | 0.004"         | n/a         | n/a      | 1    | 02-02-08 |
| Span / Depth          | 4.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 269 lbs | 7.2%            | 23.9%          | Unspecified |
| B2 | Hanger 2" x 2"         | 134 lbs | 9.6%            | 13.5%          | ITS2.06/9.5 |

**Cautions**

Header for the hanger ITS2.06/9.5 is a Single 1-3/4" x 9-1/2" LVL Beam.  
 Hanger ITS2.06/9.5 requires (2) 10dx1.5 face nails, (4) 10dx1.5 TF nails, (2) Strong-Grip joist nails.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J2-16" O.C.(i903) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J2-16" O.C.(i903)

City, State, Zip:

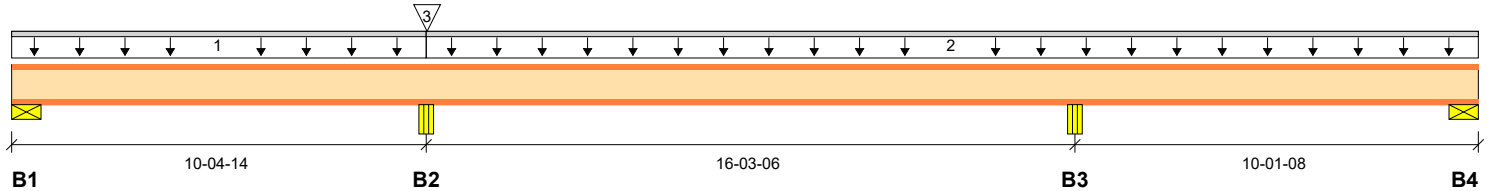
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 36-09-12

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 256 / 81 | 44 / 0  |      |      |           |
| B2, 4"     | 1018 / 0 | 304 / 0 |      |      |           |
| B3, 5-3/4" | 826 / 0  | 200 / 0 |      |      |           |
| B4, 4-3/8" | 260 / 84 | 44 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 10-04-14 | Top  | 51   | 13  |      |      |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 10-04-14 | 36-09-12 | Top  | 53   | 13  |      |      |                | n/a |
| 3   | 11(i57)                            | Conc. Pt. (lbs)   | L    | 10-05-02 | 10-05-02 | Top  | 199  | 106 |      |      |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1138 ft-lbs     | 41.8%       | 100%     | 3    | 18-06-02 |
| Neg. Moment           | -1328 ft-lbs    | 48.7%       | 100%     | 5    | 26-08-04 |
| End Reaction          | 304 lbs         | 27.0%       | 100%     | 2    | 36-09-12 |
| Int. Reaction         | 1323 lbs        | 59.4%       | 100%     | 4    | 10-04-14 |
| End Shear             | 280 lbs         | 19.0%       | 100%     | 2    | 36-05-06 |
| Cont. Shear           | 551 lbs         | 37.4%       | 100%     | 4    | 10-06-14 |
| Total Load Deflection | L/822 (0.238")  | 43.8%       | n/a      | 3    | 18-06-02 |
| Live Load Deflection  | L/978 (0.2")    | 49.1%       | n/a      | 8    | 18-06-02 |
| Total Neg. Defl.      | L/999 (-0.038") | n/a         | n/a      | 3    | 06-05-10 |
| Max Defl.             | 0.238"          | 23.8%       | n/a      | 3    | 18-06-02 |
| Span / Depth          | 20.6            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 299 lbs  | 8.0%            | 26.6%          | Unspecified |
| B2 | Beam 4" x 2"           | 1323 lbs | 40.6%           | 59.4%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1026 lbs | 22.0%           | 40.6%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 304 lbs  | 8.2%            | 27.0%          | Unspecified |

**Foundation\Floor Joists\J2-16" O.C.(i903) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J2-16" O.C.(i903)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J2-16" O.C.(i986) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J2-16" O.C.(i986)

City, State, Zip:

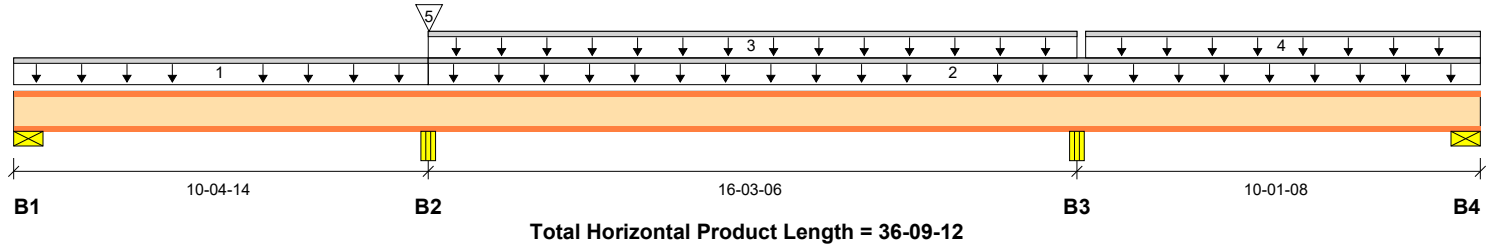
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 265 / 81 | 46 / 0  |      |      |           |
| B2, 4"     | 1046 / 0 | 298 / 0 |      |      |           |
| B3, 5-3/4" | 801 / 0  | 193 / 0 |      |      |           |
| B4, 4-3/8" | 243 / 84 | 40 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 10-04-14 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 10-04-14 | 36-09-12 | Top  | 27        | 7        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 10-04-14 | 26-08-04 | Top  | 27        | 7        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 26-10-14 | 36-09-12 | Top  | 23        | 6        |           |           |                | n/a |
| 5   | 11(i57)                            | Conc. Pt. (lbs)   | L    | 10-05-02 | 10-05-02 | Top  | 214       | 96       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1139 ft-lbs     | 41.8%       | 100%     | 3    | 18-06-02 |
| Neg. Moment           | -1341 ft-lbs    | 49.2%       | 100%     | 4    | 10-04-14 |
| End Reaction          | 311 lbs         | 27.7%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 1344 lbs        | 60.4%       | 100%     | 4    | 10-04-14 |
| End Shear             | 287 lbs         | 19.5%       | 100%     | 2    | 00-04-06 |
| Cont. Shear           | 553 lbs         | 37.5%       | 100%     | 4    | 10-06-14 |
| Total Load Deflection | L/821 (0.238")  | 43.8%       | n/a      | 3    | 18-06-02 |
| Live Load Deflection  | L/978 (0.2")    | 49.1%       | n/a      | 8    | 18-06-02 |
| Total Neg. Defl.      | L/999 (-0.038") | n/a         | n/a      | 3    | 06-05-10 |
| Max Defl.             | 0.238"          | 23.8%       | n/a      | 3    | 18-06-02 |
| Span / Depth          | 20.6            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 311 lbs  | 8.4%            | 27.7%          | Unspecified |
| B2 | Beam 4" x 2"           | 1344 lbs | 41.3%           | 60.4%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 994 lbs  | 21.3%           | 39.4%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 283 lbs  | 7.6%            | 25.2%          | Unspecified |

**Foundation\Floor Joists\J2-16" O.C.(i986) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J2-16" O.C.(i986)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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**Foundation\Floor Joists\J3-16" O.C.(i1029) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i1029)

City, State, Zip:

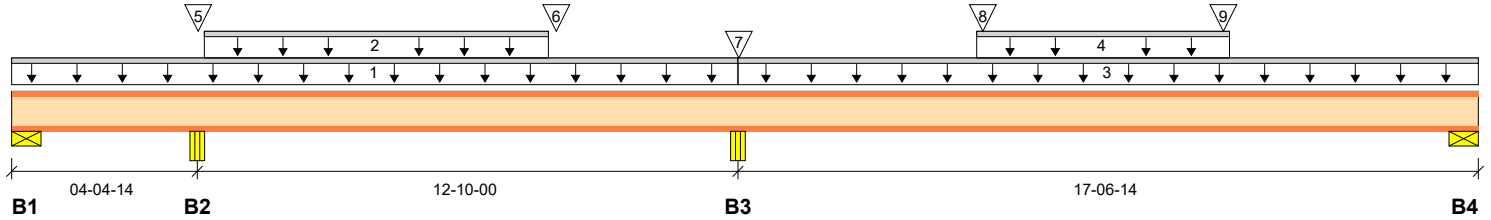
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 34-09-12

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 174 / 154 | 0 / 52  |      |      |           |
| B2, 5-3/4" | 637 / 11  | 345 / 0 |      |      |           |
| B3, 5-3/4" | 743 / 0   | 452 / 0 |      |      |           |
| B4, 4-3/8" | 256 / 19  | 121 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 17-02-14 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-06-14 | 12-08-14 | Top  |           | 27       |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 17-02-14 | 34-09-12 | Top  | 33        | 8        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 22-10-14 | 28-10-14 | Top  |           | 16       |           |           |                | n/a |
| 5   | 12(i59)                            | Conc. Pt. (lbs)   | L    | 04-05-02 | 04-05-02 | Top  |           | 9        |           |           |                | n/a |
| 6   | 30(i79)                            | Conc. Pt. (lbs)   | L    | 12-11-02 | 12-11-02 | Top  |           | 76       |           |           |                | n/a |
| 7   | 8(i53)                             | Conc. Pt. (lbs)   | L    | 17-03-02 | 17-03-02 | Top  |           | 9        |           |           |                | n/a |
| 8   | 43(i92)                            | Conc. Pt. (lbs)   | L    | 23-00-10 | 23-00-10 | Top  |           | 40       |           |           |                | n/a |
| 9   | 45(i90)                            | Conc. Pt. (lbs)   | L    | 28-09-02 | 28-09-02 | Top  |           | 40       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1461 ft-lbs     | 53.6%       | 100%     | 2    | 27-04-00 |
| Neg. Moment           | -1813 ft-lbs    | 66.5%       | 100%     | 5    | 17-02-14 |
| End Reaction          | 376 lbs         | 33.5%       | 100%     | 2    | 34-09-12 |
| Int. Reaction         | 1196 lbs        | 47.4%       | 100%     | 5    | 17-02-14 |
| End Shear             | 361 lbs         | 24.5%       | 100%     | 2    | 34-05-06 |
| Cont. Shear           | 617 lbs         | 41.8%       | 100%     | 5    | 17-00-00 |
| Total Load Deflection | L/616 (0.337")  | 58.5%       | n/a      | 2    | 26-07-07 |
| Live Load Deflection  | L/952 (0.218")  | 50.4%       | n/a      | 7    | 26-05-05 |
| Total Neg. Defl.      | L/999 (-0.022") | n/a         | n/a      | 2    | 14-09-04 |
| Max Defl.             | 0.337"          | 33.7%       | n/a      | 2    | 26-07-07 |
| Span / Depth          | 21.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 122 lbs  | 3.3%            | 10.9%          | Unspecified |
| B1 | Uplift                 | 206 lbs  |                 |                |             |
| B2 | Beam 5-3/4" x 2"       | 982 lbs  | 21.0%           | 38.9%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1196 lbs | 25.6%           | 47.4%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 376 lbs  | 10.1%           | 33.5%          | Unspecified |

**Foundation\Floor Joists\J3-16" O.C.(i1029) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i1029)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

---

**Cautions**

Uplift of -206 lbs found at bearing B1.

---

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

---

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J3-16" O.C.(i1031) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i1031)

City, State, Zip:

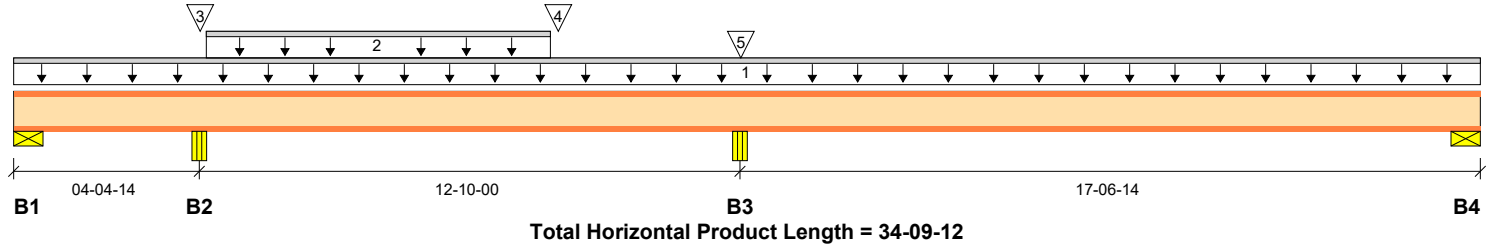
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 207 / 154 | 0 / 67  |      |      |           |
| B2, 5-3/4" | 637 / 89  | 381 / 0 |      |      |           |
| B3, 5-3/4" | 986 / 0   | 374 / 0 |      |      |           |
| B4, 4-3/8" | 409 / 19  | 88 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 34-09-12 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-06-14 | 12-08-14 | Top  |           | 27       |           |           |                | n/a |
| 3   | 12(i59)                            | Conc. Pt. (lbs)   | L    | 04-05-02 | 04-05-02 | Top  |           | 9        |           |           |                | n/a |
| 4   | 30(i79)                            | Conc. Pt. (lbs)   | L    | 12-11-02 | 12-11-02 | Top  |           | 76       |           |           |                | n/a |
| 5   | 8(i53)                             | Conc. Pt. (lbs)   | L    | 17-03-02 | 17-03-02 | Top  |           | 9        |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1705 ft-lbs     | 62.6%       | 100%     | 2    | 27-04-14 |
| Neg. Moment           | -2047 ft-lbs    | 75.1%       | 100%     | 5    | 17-02-14 |
| End Reaction          | 497 lbs         | 44.2%       | 100%     | 2    | 34-09-12 |
| Int. Reaction         | 1360 lbs        | 53.9%       | 100%     | 5    | 17-02-14 |
| End Shear             | 473 lbs         | 32.0%       | 100%     | 2    | 34-05-06 |
| Cont. Shear           | 678 lbs         | 46.0%       | 100%     | 5    | 17-05-12 |
| Total Load Deflection | L/518 (0.4")    | 69.5%       | n/a      | 2    | 26-05-06 |
| Live Load Deflection  | L/596 (0.348")  | 80.6%       | n/a      | 7    | 26-05-06 |
| Total Neg. Defl.      | L/999 (-0.033") | n/a         | n/a      | 2    | 14-04-06 |
| Max Defl.             | 0.4"            | 40.0%       | n/a      | 2    | 26-05-06 |
| Span / Depth          | 21.8            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 140 lbs  | 3.8%            | 12.4%          | Unspecified |
| B1 | Uplift                 | 221 lbs  |                 |                |             |
| B2 | Beam 5-3/4" x 2"       | 1018 lbs | 21.8%           | 40.3%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1360 lbs | 29.1%           | 53.9%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 497 lbs  | 13.4%           | 44.2%          | Unspecified |

### Cautions

Uplift of -221 lbs found at bearing B1.

**Foundation\Floor Joists\J3-16" O.C.(i1031) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i1031)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J3-16" O.C.(i1033) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i1033)

City, State, Zip:

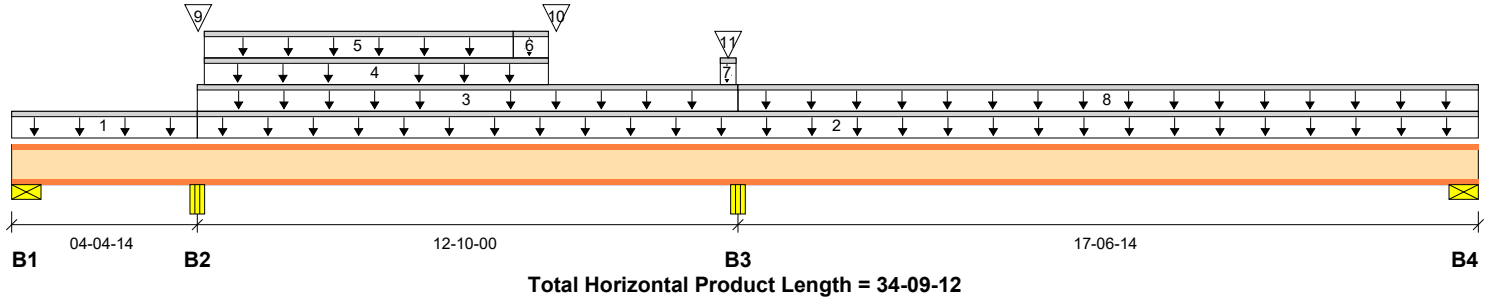
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 179 / 154 | 0 / 80  |      |      |           |
| B2, 5-3/4" | 637 / 24  | 412 / 0 |      |      |           |
| B3, 5-3/4" | 784 / 0   | 398 / 0 |      |      |           |
| B4, 4-3/8" | 281 / 19  | 55 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-04-14 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-04-14 | 34-09-12 | Top  | 27        | 7        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-04-14 | 17-02-14 | Top  | 27        | 7        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-06-14 | 12-08-14 | Top  |           | 13       |           |           |                | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-06-14 | 11-10-14 | Top  |           | 13       |           |           |                | n/a |
| 6   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 11-10-14 | 12-08-14 | Top  |           | 13       |           |           |                | n/a |
| 7   | 50(i97)                            | Unf. Lin. (lb/ft) | L    | 16-09-14 | 17-02-05 | Top  |           | 80       |           |           |                | n/a |
| 8   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 17-02-14 | 34-09-12 | Top  | 10        | 3        |           |           |                | n/a |
| 9   | 12(i59)                            | Conc. Pt. (lbs)   | L    | 04-05-02 | 04-05-02 | Top  |           | 9        |           |           |                | n/a |
| 10  | 30(i79)                            | Conc. Pt. (lbs)   | L    | 12-11-02 | 12-11-02 | Top  |           | 98       |           |           |                | n/a |
| 11  | 50(i97)                            | Conc. Pt. (lbs)   | L    | 17-00-01 | 17-00-01 | Top  |           | 38       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1133 ft-lbs     | 41.6%       | 100%     | 2    | 27-04-14 |
| Neg. Moment           | -1609 ft-lbs    | 59.1%       | 100%     | 5    | 17-02-14 |
| End Reaction          | 336 lbs         | 29.9%       | 100%     | 2    | 34-09-12 |
| Int. Reaction         | 1182 lbs        | 46.8%       | 100%     | 5    | 17-02-14 |
| End Shear             | 319 lbs         | 21.7%       | 100%     | 2    | 34-05-06 |
| Cont. Shear           | 623 lbs         | 42.2%       | 100%     | 5    | 17-00-00 |
| Total Load Deflection | L/792 (0.262")  | 45.5%       | n/a      | 2    | 26-08-04 |
| Live Load Deflection  | L/866 (0.239")  | 55.4%       | n/a      | 7    | 26-05-06 |
| Total Neg. Defl.      | L/999 (-0.038") | n/a         | n/a      | 3    | 22-00-00 |
| Max Defl.             | 0.262"          | 26.2%       | n/a      | 2    | 26-08-04 |
| Span / Depth          | 21.8            |             |          |      |          |


**Foundation\Floor Joists\J3-16" O.C.(i1033) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i1033)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports |            | Dim. (LxW)  | Value    | % Allow Support | % Allow Member | Material    |
|------------------|------------|-------------|----------|-----------------|----------------|-------------|
| B1               | Wall/Plate | 4-3/8" x 2" | 99 lbs   | 2.7%            | 8.8%           | Unspecified |
| B1               | Uplift     |             | 234 lbs  |                 |                |             |
| B2               | Beam       | 5-3/4" x 2" | 1050 lbs | 22.5%           | 41.6%          | Unspecified |
| B3               | Beam       | 5-3/4" x 2" | 1182 lbs | 25.3%           | 46.8%          | Unspecified |
| B4               | Wall/Plate | 4-3/8" x 2" | 336 lbs  | 9.0%            | 29.9%          | Unspecified |

### Cautions

Uplift of -234 lbs found at bearing B1.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J3-16" O.C.(i892) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i892)

City, State, Zip:

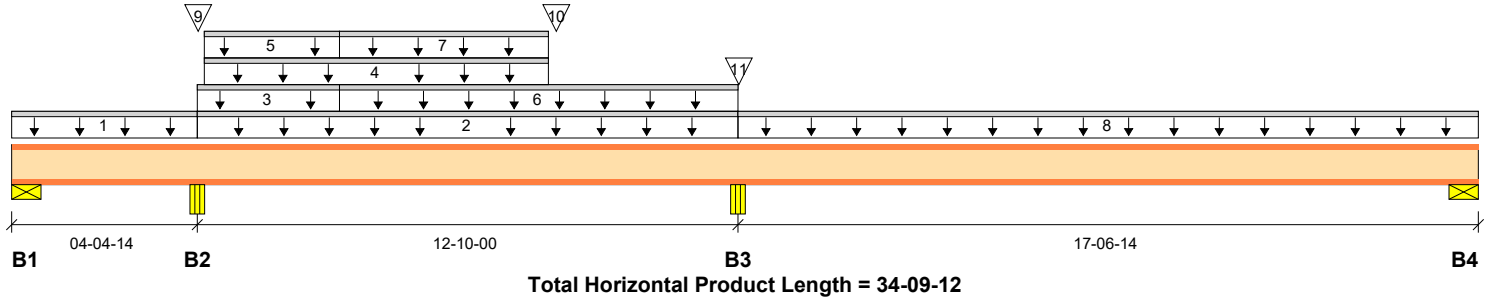
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 175 / 107 | 0 / 38  |      |      |           |
| B2, 5-3/4" | 451 / 121 | 251 / 0 |      |      |           |
| B3, 5-3/4" | 881 / 0   | 312 / 0 |      |      |           |
| B4, 4-3/8" | 409 / 13  | 92 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-04-14 | Top  | 39        | 10       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-04-14 | 17-02-14 | Top  | 27        | 7        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-04-14 | 07-09-06 | Top  | 12        | 3        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-06-14 | 12-08-14 | Top  |           | 13       |           |           |                | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-06-14 | 07-09-06 | Top  |           | 5        |           |           |                | n/a |
| 6   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 07-09-06 | 17-02-14 | Top  | 10        | 3        |           |           |                | n/a |
| 7   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 07-09-06 | 12-08-14 | Top  |           | 4        |           |           |                | n/a |
| 8   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 17-02-14 | 34-09-12 | Top  | 53        | 13       |           |           |                | n/a |
| 9   | 12(i59)                            | Conc. Pt. (lbs)   | L    | 04-05-02 | 04-05-02 | Top  |           | 9        |           |           |                | n/a |
| 10  | 30(i79)                            | Conc. Pt. (lbs)   | L    | 12-11-02 | 12-11-02 | Top  |           | 57       |           |           |                | n/a |
| 11  | 8(i53)                             | Conc. Pt. (lbs)   | L    | 17-03-02 | 17-03-02 | Top  |           | 9        |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1735 ft-lbs     | 63.7%       | 100%     | 2    | 27-04-14 |
| Neg. Moment           | -1869 ft-lbs    | 68.6%       | 100%     | 5    | 17-02-14 |
| End Reaction          | 501 lbs         | 44.6%       | 100%     | 2    | 34-09-12 |
| Int. Reaction         | 1193 lbs        | 47.2%       | 100%     | 5    | 17-02-14 |
| End Shear             | 477 lbs         | 32.3%       | 100%     | 2    | 34-05-06 |
| Cont. Shear           | 668 lbs         | 45.3%       | 100%     | 5    | 17-05-12 |
| Total Load Deflection | L/505 (0.41")   | 71.3%       | n/a      | 2    | 26-06-13 |
| Live Load Deflection  | L/596 (0.348")  | 80.5%       | n/a      | 7    | 26-05-06 |
| Total Neg. Defl.      | L/999 (-0.048") | n/a         | n/a      | 2    | 13-09-00 |
| Max Defl.             | 0.41"           | 41.0%       | n/a      | 2    | 26-06-13 |
| Span / Depth          | 21.8            |             |          |      |          |


**Foundation\Floor Joists\J3-16" O.C.(i892) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i892)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports |            | Dim. (LxW)  | Value    | % Allow Support | % Allow Member | Material    |
|------------------|------------|-------------|----------|-----------------|----------------|-------------|
| B1               | Wall/Plate | 4-3/8" x 2" | 136 lbs  | 3.7%            | 12.1%          | Unspecified |
| B1               | Uplift     |             | 145 lbs  |                 |                |             |
| B2               | Beam       | 5-3/4" x 2" | 703 lbs  | 15.0%           | 27.8%          | Unspecified |
| B3               | Beam       | 5-3/4" x 2" | 1193 lbs | 25.5%           | 47.2%          | Unspecified |
| B4               | Wall/Plate | 4-3/8" x 2" | 501 lbs  | 13.5%           | 44.6%          | Unspecified |

**Cautions**

Uplift of -145 lbs found at bearing B1.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



**Foundation\Floor Joists\J3-16" O.C.(i980) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i980)

City, State, Zip:

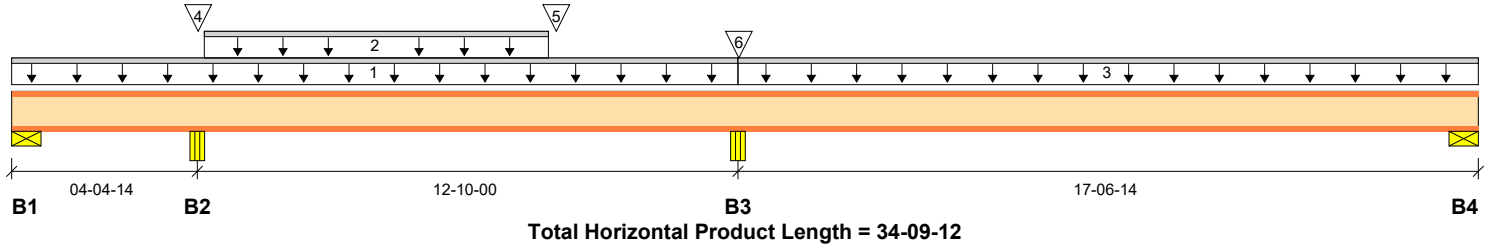
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 179 / 154 | 0 / 73  |      |      |           |
| B2, 5-3/4" | 637 / 24  | 396 / 0 |      |      |           |
| B3, 5-3/4" | 784 / 0   | 332 / 0 |      |      |           |
| B4, 4-3/8" | 281 / 19  | 57 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 17-02-14 | Top  | 53           | 13          |              |              |                      | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-06-14 | 12-08-14 | Top  |              | 27          |              |              |                      | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 17-02-14 | 34-09-12 | Top  | 37           | 9           |              |              |                      | n/a |
| 4   | 12(i59)                            | Conc. Pt. (lbs)   | L    | 04-05-02 | 04-05-02 | Top  |              | 9           |              |              |                      | n/a |
| 5   | 30(i79)                            | Conc. Pt. (lbs)   | L    | 12-11-02 | 12-11-02 | Top  |              | 76          |              |              |                      | n/a |
| 6   | 8(i53)                             | Conc. Pt. (lbs)   | L    | 17-03-02 | 17-03-02 | Top  |              | 15          |              |              |                      | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1150 ft-lbs     | 42.2%       | 100%     | 2    | 27-04-14 |
| Neg. Moment           | -1595 ft-lbs    | 58.5%       | 100%     | 5    | 17-02-14 |
| End Reaction          | 339 lbs         | 30.1%       | 100%     | 2    | 34-09-12 |
| Int. Reaction         | 1116 lbs        | 44.2%       | 100%     | 5    | 17-02-14 |
| End Shear             | 322 lbs         | 21.8%       | 100%     | 2    | 34-05-06 |
| Cont. Shear           | 605 lbs         | 41.0%       | 100%     | 4    | 04-07-12 |
| Total Load Deflection | L/778 (0.267")  | 46.3%       | n/a      | 2    | 26-07-14 |
| Live Load Deflection  | L/866 (0.239")  | 55.4%       | n/a      | 7    | 26-05-10 |
| Total Neg. Defl.      | L/999 (-0.034") | n/a         | n/a      | 3    | 21-08-15 |
| Max Defl.             | 0.267"          | 26.7%       | n/a      | 2    | 26-07-14 |
| Span / Depth          | 21.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 106 lbs  | 2.9%            | 9.4%           | Unspecified |
| B1 | Uplift                 | 227 lbs  |                 |                |             |
| B2 | Beam 5-3/4" x 2"       | 1034 lbs | 22.1%           | 40.9%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1116 lbs | 23.9%           | 44.2%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 339 lbs  | 9.1%            | 30.1%          | Unspecified |

**Cautions**

Uplift of -227 lbs found at bearing B1.

**Foundation\Floor Joists\J3-16" O.C.(i980) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J3-16" O.C.(i980)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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**Foundation\Floor Joists\J4-16" O.C.(i1000) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i1000)

City, State, Zip:

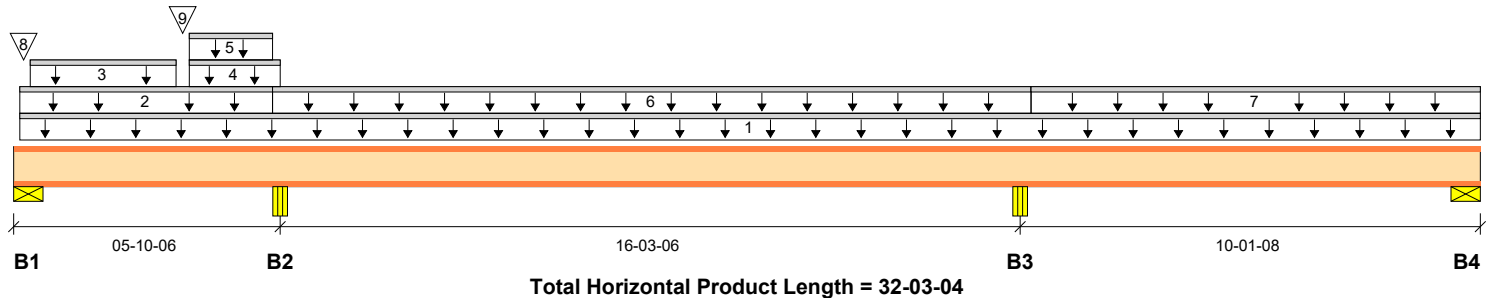
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 269 / 108 | 203 / 0 |      |      |           |
| B2, 4"     | 544 / 0   | 290 / 0 |      |      |           |
| B3, 5-3/4" | 617 / 0   | 150 / 0 |      |      |           |
| B4, 4-3/8" | 254 / 50  | 52 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 32-03-04 | Top  | 27        | 7        |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 05-08-06 | Top  | 27        | 7        |           |           |                | n/a |
| 3   | 27(i74)                            | Unf. Lin. (lb/ft) | L    | 00-04-06 | 03-06-14 | Top  |           | 57       |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-10-06 | 05-10-06 | Top  |           | 13       |           |           |                | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-10-06 | 05-08-06 | Top  |           | 13       |           |           |                | n/a |
| 6   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 05-08-06 | 22-04-10 | Top  | 7         | 2        |           |           |                | n/a |
| 7   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 22-04-10 | 32-03-04 | Top  | 27        | 7        |           |           |                | n/a |
| 8   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 106       | 36       |           |           |                | n/a |
| 9   | 24(i71)                            | Conc. Pt. (lbs)   | L    | 03-08-10 | 03-08-10 | Top  |           | 76       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 658 ft-lbs      | 24.1%       | 100%     | 3    | 14-04-03 |
| Neg. Moment           | -915 ft-lbs     | 33.6%       | 100%     | 5    | 22-01-12 |
| End Reaction          | 471 lbs         | 41.9%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 835 lbs         | 37.5%       | 100%     | 4    | 05-10-06 |
| End Shear             | 314 lbs         | 21.3%       | 100%     | 2    | 00-04-06 |
| Cont. Shear           | 470 lbs         | 31.9%       | 100%     | 4    | 05-08-06 |
| Total Load Deflection | L/1457 (0.134") | 24.7%       | n/a      | 3    | 14-01-00 |
| Live Load Deflection  | L/999 (0.116")  | n/a         | n/a      | 8    | 14-01-00 |
| Total Neg. Defl.      | L/999 (-0.017") | n/a         | n/a      | 3    | 25-07-14 |
| Max Defl.             | 0.134"          | 13.4%       | n/a      | 3    | 14-01-00 |
| Span / Depth          | 20.6            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 471 lbs | 12.7%           | 41.9%          | Unspecified |
| B2 | Beam 4" x 2"           | 835 lbs | 25.6%           | 37.5%          | Unspecified |



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J4-16" O.C.(i1000) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i1000)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|------------------|-------------|---------|-----------------|----------------|-------------|
| B3 Beam          | 5-3/4" x 2" | 767 lbs | 16.5%           | 30.4%          | Unspecified |
| B4 Wall/Plate    | 4-3/8" x 2" | 305 lbs | 8.2%            | 27.2%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J4-16" O.C.(i1011) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i1011)

City, State, Zip:

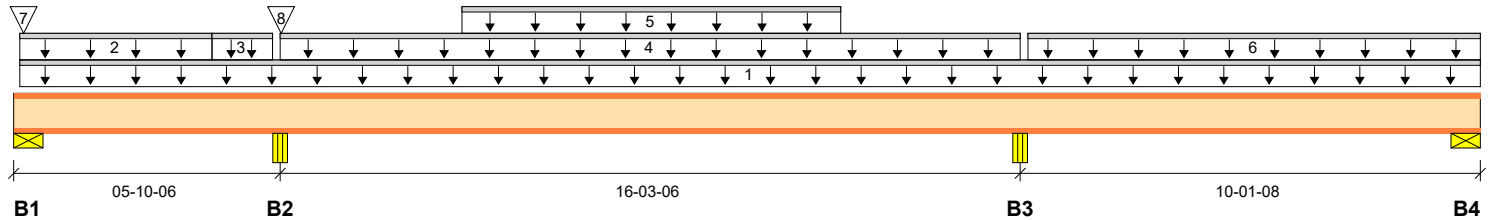
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 32-03-04

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 219 / 109 | 0 / 18  |      |      |           |
| B2, 4"     | 655 / 0   | 284 / 0 |      |      |           |
| B3, 5-3/4" | 524 / 0   | 210 / 0 |      |      |           |
| B4, 4-3/8" | 174 / 50  | 15 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 32-03-04 | Top  | 27           | 7           |              |              |                      | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 04-04-06 | Top  | 19           | 5           |              |              |                      | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-04-06 | 05-08-06 | Top  | 37           | 9           |              |              |                      | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 05-10-06 | 22-01-12 | Top  | 7            | 2           |              |              |                      | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-10-06 | 18-02-06 | Top  |              | 16          |              |              |                      | n/a |
| 6   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 22-03-13 | 32-03-04 | Top  | 10           | 3           |              |              |                      | n/a |
| 7   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 81           | 11          |              |              |                      | n/a |
| 8   | 9(i56)                             | Conc. Pt. (lbs)   | L    | 05-10-10 | 05-10-10 | Top  | 112          | 50          |              |              |                      | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 896 ft-lbs      | 32.9%       | 100%     | 3    | 14-00-06 |
| Neg. Moment           | -1003 ft-lbs    | 36.8%       | 100%     | 4    | 05-10-06 |
| End Reaction          | 202 lbs         | 17.9%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 939 lbs         | 42.2%       | 100%     | 4    | 05-10-06 |
| End Shear             | 172 lbs         | 11.7%       | 100%     | 2    | 31-10-14 |
| Cont. Shear           | 410 lbs         | 27.8%       | 100%     | 4    | 06-00-06 |
| Total Load Deflection | L/1072 (0.182") | 33.6%       | n/a      | 3    | 14-00-06 |
| Live Load Deflection  | L/999 (0.116")  | n/a         | n/a      | 8    | 14-00-06 |
| Total Neg. Defl.      | L/999 (-0.029") | n/a         | n/a      | 3    | 26-00-06 |
| Max Defl.             | 0.182"          | 18.2%       | n/a      | 3    | 14-00-06 |
| Span / Depth          | 20.6            |             |          |      |          |

**Bearing Supports**

|    |            |             |         |       |       |             |
|----|------------|-------------|---------|-------|-------|-------------|
| B1 | Wall/Plate | 4-3/8" x 2" | 202 lbs | 5.4%  | 17.9% | Unspecified |
| B1 | Uplift     |             | 126 lbs |       |       |             |
| B2 | Beam       | 4" x 2"     | 939 lbs | 28.8% | 42.2% | Unspecified |
| B3 | Beam       | 5-3/4" x 2" | 735 lbs | 15.8% | 29.1% | Unspecified |


**Foundation\Floor Joists\J4-16" O.C.(i1011) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i1011)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|------------------|------------------------|---------|-----------------|----------------|-------------|
| B4               | Wall/Plate 4-3/8" x 2" | 189 lbs | 5.1%            | 16.8%          | Unspecified |

## Cautions

Uplift of -126 lbs found at bearing B1.

## Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

## Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J4-16" O.C.(i1016) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i1016)

City, State, Zip:

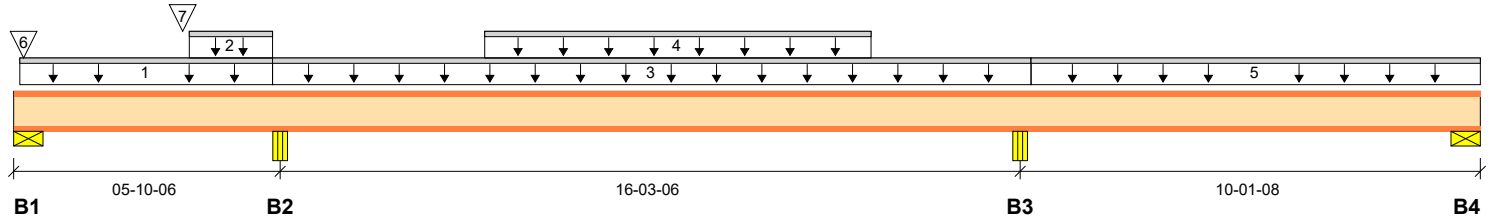
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 32-03-04

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 265 / 130 | 26 / 0  |      |      |           |
| B2, 4"     | 624 / 0   | 337 / 0 |      |      |           |
| B3, 5-3/4" | 683 / 0   | 278 / 0 |      |      |           |
| B4, 4-3/8" | 254 / 60  | 27 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 05-08-06 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-10-06 | 05-08-06 | Top  |           | 8        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 05-08-06 | 22-04-10 | Top  | 40        | 10       |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 10-04-06 | 18-10-06 | Top  |           | 20       |           |           |                | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 22-04-10 | 32-03-04 | Top  | 53        | 13       |           |           |                | n/a |
| 6   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 102       | 35       |           |           |                | n/a |
| 7   | 24(i71)                            | Conc. Pt. (lbs)   | L    | 03-08-10 | 03-08-10 | Top  |           | 76       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1080 ft-lbs     | 39.6%       | 100%     | 3    | 14-04-03 |
| Neg. Moment           | -1258 ft-lbs    | 46.2%       | 100%     | 5    | 22-01-12 |
| End Reaction          | 291 lbs         | 25.9%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 961 lbs         | 43.2%       | 100%     | 4    | 05-10-06 |
| End Shear             | 256 lbs         | 17.4%       | 100%     | 2    | 31-10-14 |
| Cont. Shear           | 497 lbs         | 33.7%       | 100%     | 5    | 21-10-14 |
| Total Load Deflection | L/893 (0.219")  | 40.3%       | n/a      | 3    | 14-01-00 |
| Live Load Deflection  | L/1402 (0.139") | 34.2%       | n/a      | 8    | 14-01-00 |
| Total Neg. Defl.      | L/999 (-0.033") | n/a         | n/a      | 3    | 25-10-14 |
| Max Defl.             | 0.219"          | 21.9%       | n/a      | 3    | 14-01-00 |
| Span / Depth          | 20.6            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 291 lbs | 7.8%            | 25.9%          | Unspecified |
| B1 | Uplift                 | 104 lbs |                 |                |             |
| B2 | Beam 4" x 2"           | 961 lbs | 29.5%           | 43.2%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 961 lbs | 20.6%           | 38.0%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 281 lbs | 7.5%            | 25.0%          | Unspecified |

**Foundation\Floor Joists\J4-16" O.C.(i1016) (Floor Joist)**

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

Address:

City, State, Zip:

Customer: KC-Truss &amp; Panel

Code reports: ESR-1336

File name: Lot 323 Park Ridge.mmdl

Description: Foundation\Floor Joists\J4-16" O.C.(i1016)

Specifier:

Designer: Don Happel

Company: Boise Cascade BMD - Lee's Summit

**Cautions**

Uplift of -104 lbs found at bearing B1.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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**Foundation\Floor Joists\J4-16" O.C.(i904) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i904)

City, State, Zip:

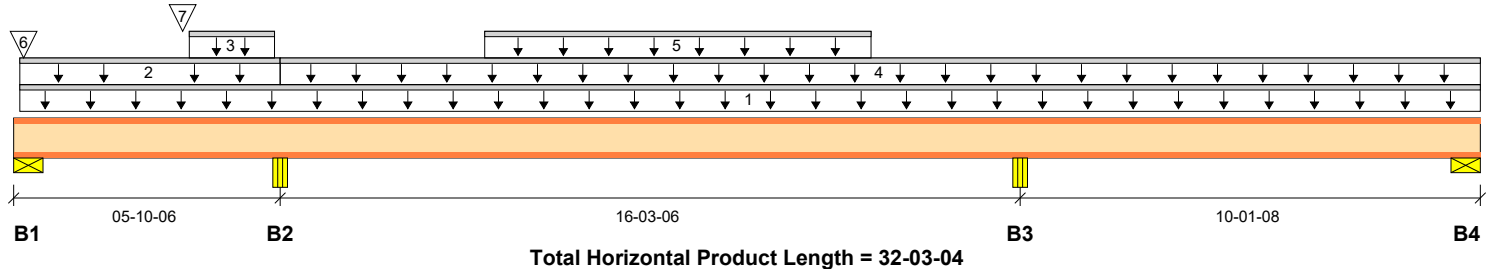
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 417 / 174 | 155 / 0 |      |      |           |
| B2, 4"     | 791 / 0   | 342 / 0 |      |      |           |
| B3, 5-3/4" | 811 / 0   | 207 / 0 |      |      |           |
| B4, 4-3/8" | 254 / 80  | 43 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 32-03-04 | Top  | 27           | 7           |              |              |                      | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 05-10-06 | Top  | 30           | 8           |              |              |                      | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-10-06 | 05-08-14 | Top  |              | 57          |              |              |                      | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 05-10-06 | 32-03-04 | Top  | 27           | 7           |              |              |                      | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 10-04-06 | 18-10-06 | Top  |              | 2           |              |              |                      | n/a |
| 6   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 245          | 118         |              |              |                      | n/a |
| 7   | 24(i71)                            | Conc. Pt. (lbs)   | L    | 03-08-10 | 03-08-10 | Top  |              | 73          |              |              |                      | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1102 ft-lbs     | 40.4%       | 100%     | 3    | 14-01-00 |
| Neg. Moment           | -1321 ft-lbs    | 48.5%       | 100%     | 4    | 05-10-06 |
| End Reaction          | 571 lbs         | 50.8%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 1133 lbs        | 50.9%       | 100%     | 4    | 05-10-06 |
| End Shear             | 272 lbs         | 18.4%       | 100%     | 2    | 31-10-14 |
| Cont. Shear           | 557 lbs         | 37.7%       | 100%     | 4    | 06-00-06 |
| Total Load Deflection | L/862 (0.227")  | 41.8%       | n/a      | 3    | 14-01-00 |
| Live Load Deflection  | L/1052 (0.186") | 45.6%       | n/a      | 8    | 14-01-00 |
| Total Neg. Defl.      | L/999 (-0.035") | n/a         | n/a      | 3    | 25-10-14 |
| Max Defl.             | 0.227"          | 22.7%       | n/a      | 3    | 14-01-00 |
| Span / Depth          | 20.6            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow<br>Support | % Allow<br>Member | Material    |
|----|------------------------|----------|--------------------|-------------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 571 lbs  | 15.4%              | 50.8%             | Unspecified |
| B2 | Beam 4" x 2"           | 1133 lbs | 34.8%              | 50.9%             | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1019 lbs | 21.9%              | 40.4%             | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 296 lbs  | 8.0%               | 26.3%             | Unspecified |

**Foundation\Floor Joists\J4-16" O.C.(i904) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i904)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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**Foundation\Floor Joists\J4-16" O.C.(i905) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i905)

City, State, Zip:

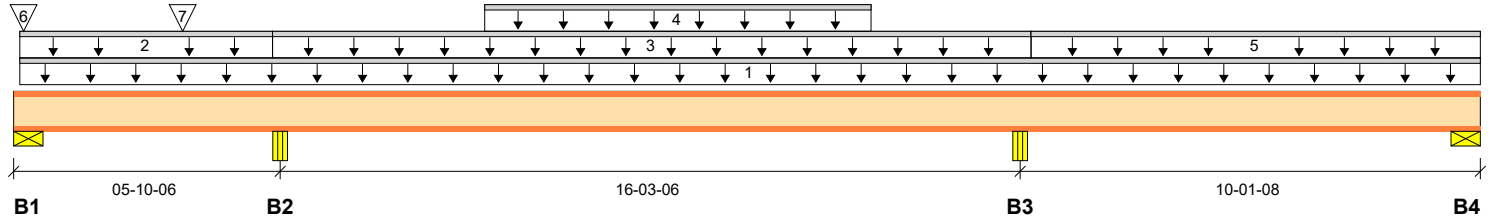
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 32-03-04

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 275 / 109 | 50 / 0  |      |      |           |
| B2, 4"     | 547 / 0   | 252 / 0 |      |      |           |
| B3, 5-3/4" | 619 / 0   | 215 / 0 |      |      |           |
| B4, 4-3/8" | 254 / 50  | 39 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 32-03-04 | Top  | 27        | 7        |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 05-08-06 | Top  | 27        | 7        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 05-08-06 | 22-04-10 | Top  | 7         | 2        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 10-04-06 | 18-10-06 | Top  |           | 12       |           |           |                | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 22-04-10 | 32-03-04 | Top  | 27        | 7        |           |           |                | n/a |
| 6   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 112       | 37       |           |           |                | n/a |
| 7   | 24(i71)                            | Conc. Pt. (lbs)   | L    | 03-08-10 | 03-08-10 | Top  |           | 76       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 826 ft-lbs      | 30.3%       | 100%     | 3    | 14-01-00 |
| Neg. Moment           | -1048 ft-lbs    | 38.4%       | 100%     | 5    | 22-01-12 |
| End Reaction          | 325 lbs         | 28.9%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 799 lbs         | 35.9%       | 100%     | 4    | 05-10-06 |
| End Shear             | 268 lbs         | 18.2%       | 100%     | 2    | 31-10-14 |
| Cont. Shear           | 418 lbs         | 28.4%       | 100%     | 5    | 22-04-10 |
| Total Load Deflection | L/1164 (0.168") | 30.9%       | n/a      | 3    | 14-01-00 |
| Live Load Deflection  | L/999 (0.117")  | n/a         | n/a      | 8    | 14-01-00 |
| Total Neg. Defl.      | L/999 (-0.023") | n/a         | n/a      | 3    | 25-09-06 |
| Max Defl.             | 0.168"          | 16.8%       | n/a      | 3    | 14-01-00 |
| Span / Depth          | 20.6            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 325 lbs | 8.7%            | 28.9%          | Unspecified |
| B2 | Beam 4" x 2"           | 799 lbs | 24.6%           | 35.9%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 835 lbs | 17.9%           | 33.1%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 292 lbs | 7.9%            | 26.0%          | Unspecified |

**Foundation\Floor Joists\J4-16" O.C.(i905) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i905)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Cautions**

Uplift of -59 lbs found at bearing B1.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J4-16" O.C.(i908) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i908)

City, State, Zip:

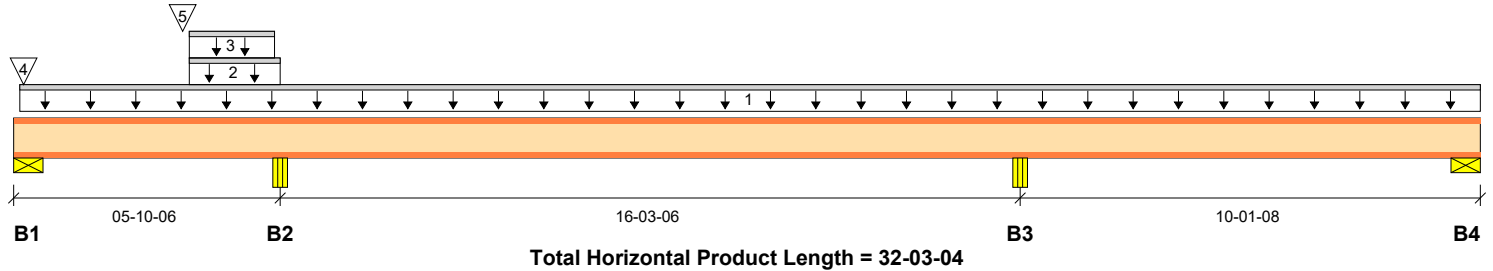
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 218 / 174 | 59 / 0  |      |      |           |
| B2, 4"     | 781 / 0   | 328 / 0 |      |      |           |
| B3, 5-3/4" | 811 / 0   | 197 / 0 |      |      |           |
| B4, 4-3/8" | 254 / 80  | 45 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 32-03-04 | Top  | 53           | 13          |              |              |                      | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-10-06 | 05-10-06 | Top  |              | 17          |              |              |                      | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-10-06 | 05-08-14 | Top  |              | 43          |              |              |                      | n/a |
| 4   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 55           | 23          |              |              |                      | n/a |
| 5   | 24(i71)                            | Conc. Pt. (lbs)   | L    | 03-08-10 | 03-08-10 | Top  |              | 64          |              |              |                      | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1077 ft-lbs     | 39.5%       | 100%     | 3    | 14-02-05 |
| Neg. Moment           | -1293 ft-lbs    | 47.4%       | 100%     | 4    | 05-10-06 |
| End Reaction          | 298 lbs         | 26.5%       | 100%     | 2    | 32-03-04 |
| Int. Reaction         | 1110 lbs        | 49.9%       | 100%     | 4    | 05-10-06 |
| End Shear             | 274 lbs         | 18.6%       | 100%     | 2    | 31-10-14 |
| Cont. Shear           | 549 lbs         | 37.2%       | 100%     | 4    | 06-00-06 |
| Total Load Deflection | L/881 (0.222")  | 40.9%       | n/a      | 3    | 14-02-05 |
| Live Load Deflection  | L/1052 (0.186") | 45.6%       | n/a      | 8    | 14-02-05 |
| Total Neg. Defl.      | L/999 (-0.034") | n/a         | n/a      | 3    | 25-10-14 |
| Max Defl.             | 0.222"          | 22.2%       | n/a      | 3    | 14-02-05 |
| Span / Depth          | 20.6            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow<br>Support | % Allow<br>Member | Material    |
|----|------------------------|----------|--------------------|-------------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 277 lbs  | 7.4%               | 24.6%             | Unspecified |
| B1 | Uplift                 | 114 lbs  |                    |                   |             |
| B2 | Beam 4" x 2"           | 1110 lbs | 34.1%              | 49.9%             | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1009 lbs | 21.7%              | 39.9%             | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 298 lbs  | 8.0%               | 26.5%             | Unspecified |

**Cautions**

Uplift of -114 lbs found at bearing B1.

**Foundation\Floor Joists\J4-16" O.C.(i908) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i908)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA).

Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J4-16" O.C.(i909) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i909)

City, State, Zip:

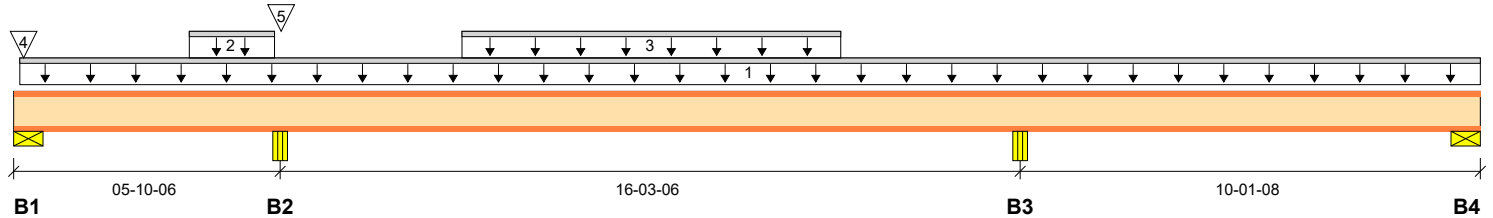
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 32-03-04

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 261 / 174 | 19 / 0  |      |      |           |
| B2, 4"     | 954 / 0   | 365 / 0 |      |      |           |
| B3, 5-3/4" | 811 / 0   | 210 / 0 |      |      |           |
| B4, 4-3/8" | 254 / 80  | 42 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 32-03-04 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-10-06 | 05-08-14 | Top  |           | 13       |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-10-06 | 18-02-06 | Top  |           | 2        |           |           |                | n/a |
| 4   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 98        | 22       |           |           |                | n/a |
| 5   | 9(i56)                             | Conc. Pt. (lbs)   | L    | 05-10-10 | 05-10-10 | Top  | 173       | 145      |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1115 ft-lbs     | 40.9%       | 100%     | 3    | 14-01-15 |
| Neg. Moment           | -1312 ft-lbs    | 48.1%       | 100%     | 5    | 22-01-12 |
| End Reaction          | 295 lbs         | 26.2%       | 100%     | 2    | 32-03-04 |
| Int. Reaction         | 1320 lbs        | 59.3%       | 100%     | 4    | 05-10-06 |
| End Shear             | 271 lbs         | 18.4%       | 100%     | 2    | 31-10-14 |
| Cont. Shear           | 554 lbs         | 37.6%       | 100%     | 4    | 06-00-06 |
| Total Load Deflection | L/850 (0.23")   | 42.4%       | n/a      | 3    | 14-01-15 |
| Live Load Deflection  | L/1052 (0.186") | 45.6%       | n/a      | 8    | 14-01-15 |
| Total Neg. Defl.      | L/999 (-0.036") | n/a         | n/a      | 3    | 26-00-06 |
| Max Defl.             | 0.23"           | 23.0%       | n/a      | 3    | 14-01-15 |
| Span / Depth          | 20.6            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 280 lbs  | 7.5%            | 24.8%          | Unspecified |
| B1 | Uplift                 | 155 lbs  |                 |                |             |
| B2 | Beam 4" x 2"           | 1320 lbs | 40.5%           | 59.3%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1022 lbs | 21.9%           | 40.5%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 295 lbs  | 7.9%            | 26.2%          | Unspecified |

### Cautions

Uplift of -155 lbs found at bearing B1.

**Foundation\Floor Joists\J4-16" O.C.(i909) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i909)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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**Foundation\Floor Joists\J4-16" O.C.(i910) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i910)

City, State, Zip:

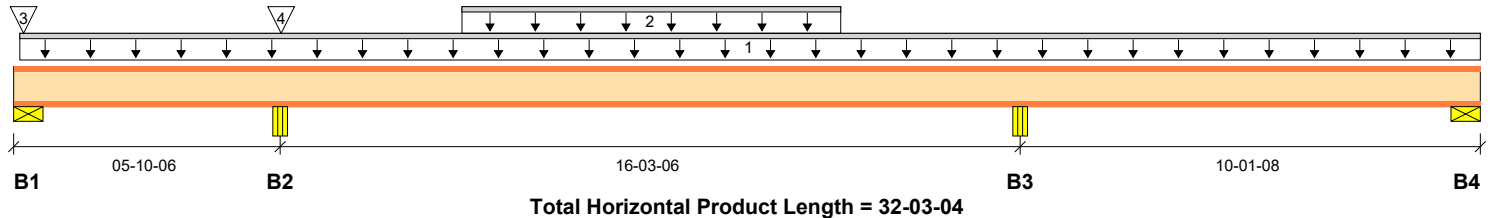
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 260 / 174 | 0 / 41  |      |      |           |
| B2, 4"     | 894 / 0   | 378 / 0 |      |      |           |
| B3, 5-3/4" | 811 / 0   | 311 / 0 |      |      |           |
| B4, 4-3/8" | 254 / 80  | 21 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 32-03-04 | Top  | 53   | 13  |      |      |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-10-06 | 18-02-06 | Top  |      | 22  |      |      |                | n/a |
| 3   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 97   | 11  |      |      |                | n/a |
| 4   | 9(i56)                             | Conc. Pt. (lbs)   | L    | 05-10-10 | 05-10-10 | Top  | 113  | 50  |      |      |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1385 ft-lbs     | 50.8%       | 100%     | 3    | 14-00-06 |
| Neg. Moment           | -1526 ft-lbs    | 56.0%       | 100%     | 4    | 05-10-06 |
| End Reaction          | 275 lbs         | 24.4%       | 100%     | 2    | 32-03-04 |
| Int. Reaction         | 1272 lbs        | 57.1%       | 100%     | 4    | 05-10-06 |
| End Shear             | 250 lbs         | 17.0%       | 100%     | 2    | 31-10-14 |
| Cont. Shear           | 638 lbs         | 43.3%       | 100%     | 4    | 06-00-06 |
| Total Load Deflection | L/692 (0.282")  | 52.0%       | n/a      | 3    | 14-00-06 |
| Live Load Deflection  | L/1052 (0.186") | 45.6%       | n/a      | 8    | 14-00-06 |
| Total Neg. Defl.      | L/999 (-0.046") | n/a         | n/a      | 3    | 26-00-06 |
| Max Defl.             | 0.282"          | 28.2%       | n/a      | 3    | 14-00-06 |
| Span / Depth          | 20.6            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 219 lbs  | 5.9%            | 19.5%          | Unspecified |
| B1 | Uplift                 | 214 lbs  |                 |                |             |
| B2 | Beam 4" x 2"           | 1272 lbs | 39.1%           | 57.1%          | Unspecified |
| B3 | Beam 5-3/4" x 2"       | 1122 lbs | 24.1%           | 44.4%          | Unspecified |
| B4 | Wall/Plate 4-3/8" x 2" | 275 lbs  | 7.4%            | 24.4%          | Unspecified |

**Cautions**

Uplift of -214 lbs found at bearing B1.

Uplift of -59 lbs found at bearing B4.

**Foundation\Floor Joists\J4-16" O.C.(i910) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J4-16" O.C.(i910)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J5-16" O.C.(i1046) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i1046)

City, State, Zip:

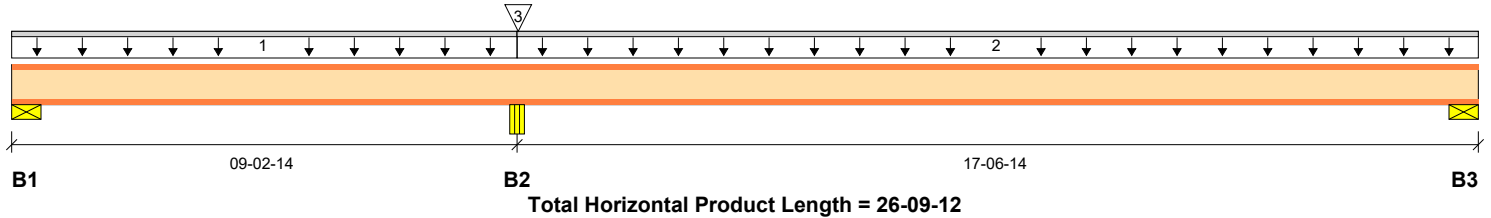
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 2-7/8" | 188 / 138 | 13 / 0  |      |      |           |
| B2, 5-3/4" | 960 / 0   | 270 / 0 |      |      |           |
| B3, 4-3/8" | 404 / 9   | 99 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-02-14 | Top  | 44   | 11  |      |      |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-02-14 | 26-09-12 | Top  | 53   | 13  |      |      |                | n/a |
| 3   | 8(i53)                             | Conc. Pt. (lbs)   | L    | 09-03-02 | 09-03-02 | Top  | 68   | 47  |      |      |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1751 ft-lbs     | 64.3%       | 100%     | 3    | 19-02-00 |
| Neg. Moment           | -1744 ft-lbs    | 64.0%       | 100%     | 1    | 09-02-14 |
| End Reaction          | 503 lbs         | 44.7%       | 100%     | 3    | 26-09-12 |
| Int. Reaction         | 1230 lbs        | 48.7%       | 100%     | 1    | 09-02-14 |
| End Shear             | 479 lbs         | 32.5%       | 100%     | 3    | 26-05-06 |
| Cont. Shear           | 661 lbs         | 44.8%       | 100%     | 1    | 09-05-12 |
| Total Load Deflection | L/499 (0.416")  | 72.2%       | n/a      | 3    | 18-05-05 |
| Live Load Deflection  | L/616 (0.337")  | 78.0%       | n/a      | 6    | 18-05-05 |
| Total Neg. Defl.      | L/999 (-0.056") | n/a         | n/a      | 3    | 05-06-03 |
| Max Defl.             | 0.416"          | 41.6%       | n/a      | 3    | 18-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-7/8" x 2" | 201 lbs  | 8.2%            | 18.8%          | Unspecified |
| B1 | Uplift                 | 125 lbs  |                 |                |             |
| B2 | Beam 5-3/4" x 2"       | 1230 lbs | 26.3%           | 48.7%          | Unspecified |
| B3 | Wall/Plate 4-3/8" x 2" | 503 lbs  | 13.5%           | 44.7%          | Unspecified |

### Cautions

Uplift of -125 lbs found at bearing B1.

**Foundation\Floor Joists\J5-16" O.C.(i1046) (Floor Joist)**

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i1046)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J5-16" O.C.(i894) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i894)

City, State, Zip:

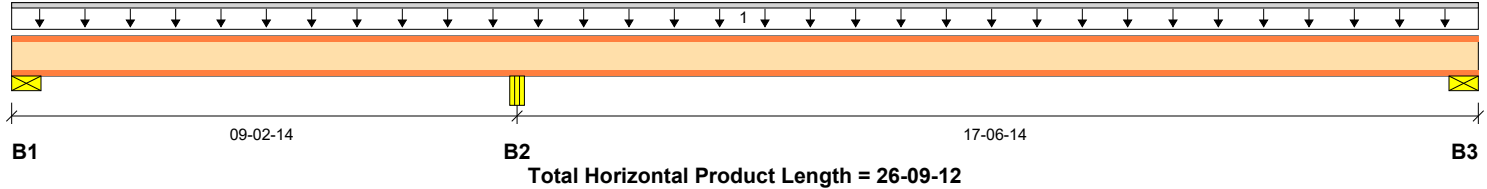
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 2-7/8" | 231 / 138 | 23 / 0  |      |      |           |
| B2, 5-3/4" | 943 / 0   | 236 / 0 |      |      |           |
| B3, 4-3/8" | 404 / 10  | 98 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 26-09-12 | Top  | 53        | 13       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1748 ft-lbs     | 64.1%       | 100%     | 3    | 19-02-00 |
| Neg. Moment           | -1786 ft-lbs    | 65.5%       | 100%     | 1    | 09-02-14 |
| End Reaction          | 503 lbs         | 44.7%       | 100%     | 3    | 26-09-12 |
| Int. Reaction         | 1178 lbs        | 46.7%       | 100%     | 1    | 09-02-14 |
| End Shear             | 479 lbs         | 32.4%       | 100%     | 3    | 26-05-06 |
| Cont. Shear           | 663 lbs         | 45.0%       | 100%     | 1    | 09-05-12 |
| Total Load Deflection | L/500 (0.414")  | 72.0%       | n/a      | 3    | 18-05-05 |
| Live Load Deflection  | L/616 (0.337")  | 78.0%       | n/a      | 6    | 18-05-05 |
| Total Neg. Defl.      | L/999 (-0.054") | n/a         | n/a      | 3    | 05-06-03 |
| Max Defl.             | 0.414"          | 41.4%       | n/a      | 3    | 18-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-7/8" x 2" | 255 lbs  | 10.4%           | 23.8%          | Unspecified |
| B1 | Uplift                 | 114 lbs  |                 |                |             |
| B2 | Beam 5-3/4" x 2"       | 1178 lbs | 25.2%           | 46.7%          | Unspecified |
| B3 | Wall/Plate 4-3/8" x 2" | 503 lbs  | 13.5%           | 44.7%          | Unspecified |

### Cautions

Uplift of -114 lbs found at bearing B1.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J5-16" O.C.(i894) - 01 (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i894)

City, State, Zip:

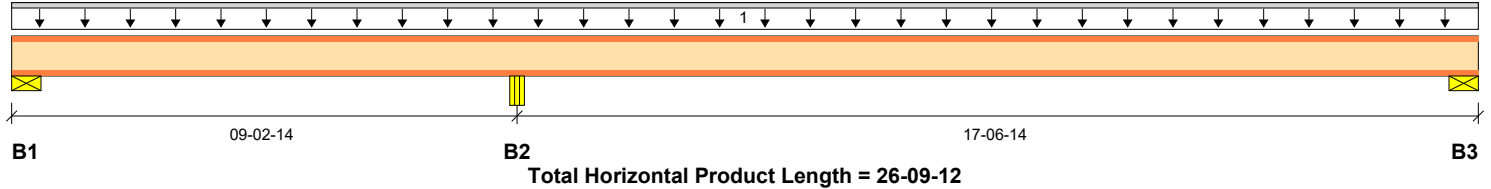
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 2-7/8" | 231 / 138 | 23 / 0  |      |      |           |
| B2, 5-3/4" | 943 / 0   | 236 / 0 |      |      |           |
| B3, 4-3/8" | 404 / 10  | 98 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 26-09-12 | Top  | 53           | 13          |              |              |                      | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1748 ft-lbs     | 64.1%       | 100%     | 3    | 19-02-00 |
| Neg. Moment           | -1786 ft-lbs    | 65.5%       | 100%     | 1    | 09-02-14 |
| End Reaction          | 503 lbs         | 44.7%       | 100%     | 3    | 26-09-12 |
| Int. Reaction         | 1178 lbs        | 46.7%       | 100%     | 1    | 09-02-14 |
| End Shear             | 479 lbs         | 32.4%       | 100%     | 3    | 26-05-06 |
| Cont. Shear           | 663 lbs         | 45.0%       | 100%     | 1    | 09-05-12 |
| Total Load Deflection | L/500 (0.414")  | 72.0%       | n/a      | 3    | 18-05-05 |
| Live Load Deflection  | L/616 (0.337")  | 78.0%       | n/a      | 6    | 18-05-05 |
| Total Neg. Defl.      | L/999 (-0.054") | n/a         | n/a      | 3    | 05-06-03 |
| Max Defl.             | 0.414"          | 41.4%       | n/a      | 3    | 18-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-7/8" x 2" | 255 lbs  | 10.4%           | 23.8%          | Unspecified |
| B1 | Uplift                 | 114 lbs  |                 |                |             |
| B2 | Beam 5-3/4" x 2"       | 1178 lbs | 25.2%           | 46.7%          | Unspecified |
| B3 | Wall/Plate 4-3/8" x 2" | 503 lbs  | 13.5%           | 44.7%          | Unspecified |

**Cautions**

Uplift of -114 lbs found at bearing B1.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**Foundation\Floor Joists\J5-16" O.C.(i894) - 02 (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i894)

City, State, Zip:

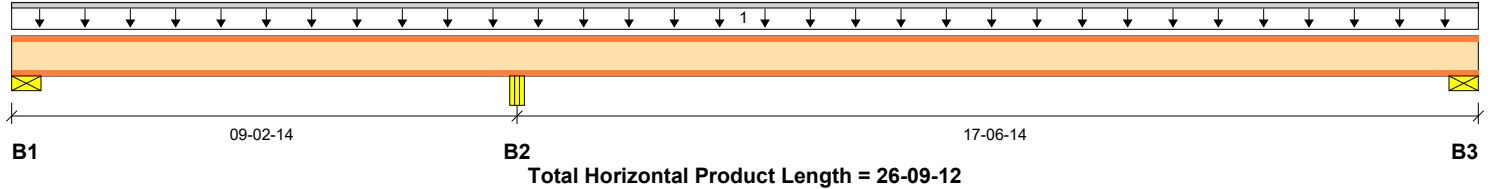
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 2-7/8" | 231 / 138 | 23 / 0  |      |      |           |
| B2, 5-3/4" | 943 / 0   | 236 / 0 |      |      |           |
| B3, 4-3/8" | 404 / 10  | 98 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 26-09-12 | Top  | 53        | 13       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1748 ft-lbs     | 64.1%       | 100%     | 3    | 19-02-00 |
| Neg. Moment           | -1786 ft-lbs    | 65.5%       | 100%     | 1    | 09-02-14 |
| End Reaction          | 503 lbs         | 44.7%       | 100%     | 3    | 26-09-12 |
| Int. Reaction         | 1178 lbs        | 46.7%       | 100%     | 1    | 09-02-14 |
| End Shear             | 479 lbs         | 32.4%       | 100%     | 3    | 26-05-06 |
| Cont. Shear           | 663 lbs         | 45.0%       | 100%     | 1    | 09-05-12 |
| Total Load Deflection | L/500 (0.414")  | 72.0%       | n/a      | 3    | 18-05-05 |
| Live Load Deflection  | L/616 (0.337")  | 78.0%       | n/a      | 6    | 18-05-05 |
| Total Neg. Defl.      | L/999 (-0.054") | n/a         | n/a      | 3    | 05-06-03 |
| Max Defl.             | 0.414"          | 41.4%       | n/a      | 3    | 18-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-7/8" x 2" | 255 lbs  | 10.4%           | 23.8%          | Unspecified |
| B1 | Uplift                 | 114 lbs  |                 |                |             |
| B2 | Beam 5-3/4" x 2"       | 1178 lbs | 25.2%           | 46.7%          | Unspecified |
| B3 | Wall/Plate 4-3/8" x 2" | 503 lbs  | 13.5%           | 44.7%          | Unspecified |

**Cautions**

Uplift of -114 lbs found at bearing B1.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,





# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J5-16" O.C.(i894) - 03 (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i894)

City, State, Zip:

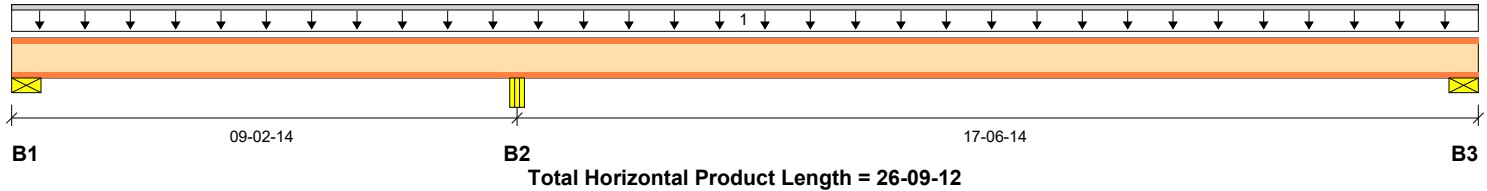
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 2-7/8" | 231 / 138 | 23 / 0  |      |      |           |
| B2, 5-3/4" | 943 / 0   | 236 / 0 |      |      |           |
| B3, 4-3/8" | 404 / 10  | 98 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 26-09-12 | Top  | 53        | 13       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1748 ft-lbs     | 64.1%       | 100%     | 3    | 19-02-00 |
| Neg. Moment           | -1786 ft-lbs    | 65.5%       | 100%     | 1    | 09-02-14 |
| End Reaction          | 503 lbs         | 44.7%       | 100%     | 3    | 26-09-12 |
| Int. Reaction         | 1178 lbs        | 46.7%       | 100%     | 1    | 09-02-14 |
| End Shear             | 479 lbs         | 32.4%       | 100%     | 3    | 26-05-06 |
| Cont. Shear           | 663 lbs         | 45.0%       | 100%     | 1    | 09-05-12 |
| Total Load Deflection | L/500 (0.414")  | 72.0%       | n/a      | 3    | 18-05-05 |
| Live Load Deflection  | L/616 (0.337")  | 78.0%       | n/a      | 6    | 18-05-05 |
| Total Neg. Defl.      | L/999 (-0.054") | n/a         | n/a      | 3    | 05-06-03 |
| Max Defl.             | 0.414"          | 41.4%       | n/a      | 3    | 18-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-7/8" x 2" | 255 lbs  | 10.4%           | 23.8%          | Unspecified |
| B1 | Uplift                 | 114 lbs  |                 |                |             |
| B2 | Beam 5-3/4" x 2"       | 1178 lbs | 25.2%           | 46.7%          | Unspecified |
| B3 | Wall/Plate 4-3/8" x 2" | 503 lbs  | 13.5%           | 44.7%          | Unspecified |

### Cautions

Uplift of -114 lbs found at bearing B1.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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**Foundation\Floor Joists\J5-16" O.C.(i900) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i900)

City, State, Zip:

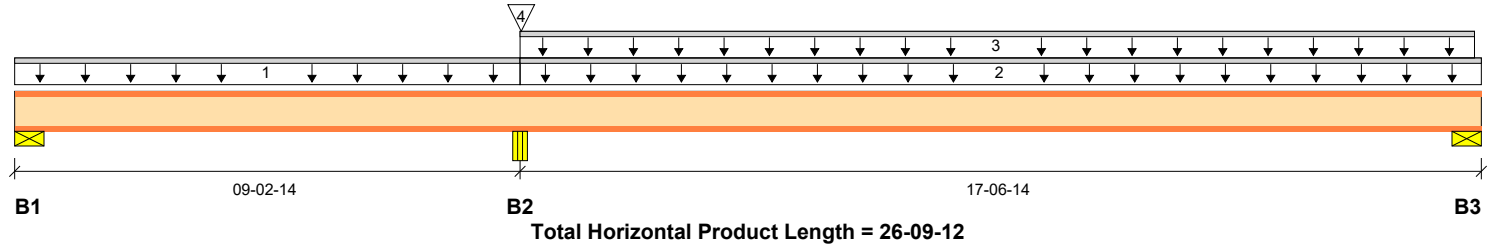
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 4-3/8" | 220 / 148 | 18 / 0  |      |      |           |
| B2, 5-3/4" | 1026 / 0  | 270 / 0 |      |      |           |
| B3, 4-3/8" | 423 / 9   | 103 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-02-14 | Top  | 50   | 13   |      |      |           | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-02-14 | 26-09-12 | Top  | 30   | 7    |      |      |           | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-02-14 | 26-08-04 | Top  | 27   | 7    |      |      |           | n/a |
| 4   | 6(i54)                             | Conc. Pt. (lbs)   | L    | 09-03-02 | 09-03-02 | Top  | 65   | 30   |      |      |           | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1843 ft-lbs     | 67.6%       | 100%     | 3    | 19-02-00 |
| Neg. Moment           | -1856 ft-lbs    | 68.1%       | 100%     | 1    | 09-02-14 |
| End Reaction          | 526 lbs         | 46.8%       | 100%     | 3    | 26-09-12 |
| Int. Reaction         | 1297 lbs        | 51.4%       | 100%     | 1    | 09-02-14 |
| End Shear             | 505 lbs         | 34.2%       | 100%     | 3    | 26-05-06 |
| Cont. Shear           | 698 lbs         | 47.3%       | 100%     | 1    | 09-05-12 |
| Total Load Deflection | L/474 (0.437")  | 75.9%       | n/a      | 3    | 18-05-05 |
| Live Load Deflection  | L/585 (0.354")  | 82.1%       | n/a      | 6    | 18-05-05 |
| Total Neg. Defl.      | L/999 (-0.057") | n/a         | n/a      | 3    | 05-06-12 |
| Max Defl.             | 0.437"          | 43.7%       | n/a      | 3    | 18-05-05 |
| Span / Depth          | 21.8            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 238 lbs  | 6.4%            | 21.2%          | Unspecified |
| B1 | Uplift                 | 130 lbs  |                 |                |             |
| B2 | Beam 5-3/4" x 2"       | 1297 lbs | 27.7%           | 51.4%          | Unspecified |
| B3 | Wall/Plate 4-3/8" x 2" | 526 lbs  | 14.2%           | 46.8%          | Unspecified |

**Cautions**

Uplift of -130 lbs found at bearing B1.

**Foundation\Floor Joists\J5-16" O.C.(i900) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i900)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J5-16" O.C.(i901) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i901)

City, State, Zip:

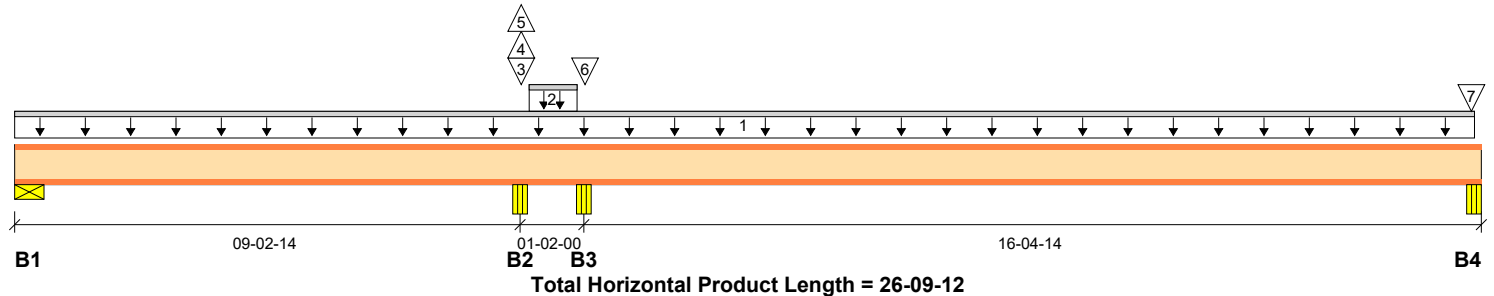
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live       | Dead     | Snow | Wind | Roof Live |
|------------|------------|----------|------|------|-----------|
| B1, 4-3/8" | 220 / 46   | 44 / 0   |      |      |           |
| B2, 5-3/4" | 541 / 1056 | 0 / 1841 |      |      |           |
| B3, 4"     | 1324 / 197 | 318 / 0  |      |      |           |
| B4, 4-3/8" | 371 / 4    | 134 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 26-08-04 | Top  | 53           | 13          |              |              |                      | n/a |
| 2   | 26(i73)                            | Unf. Lin. (lb/ft) | L    | 09-04-14 | 10-03-06 | Top  |              | 57          |              |              |                      | n/a |
| 3   | 6(i54)                             | Conc. Pt. (lbs)   | L    | 09-03-02 | 09-03-02 | Top  | 36           | 39          |              |              |                      | n/a |
| 4   | 6(i54)                             | Conc. Pt. (lbs)   | L    | 09-03-02 | 09-03-02 | Top  |              | -1857       |              |              |                      | n/a |
| 5   | 6(i54)                             | Conc. Pt. (lbs)   | L    | 09-03-02 | 09-03-02 | Top  | -364         |             |              |              |                      | n/a |
| 6   | 11(i57)                            | Conc. Pt. (lbs)   | L    | 10-05-02 | 10-05-02 | Top  | 47           | 22          |              |              |                      | n/a |
| 7   | E4(i38)                            | Conc. Pt. (lbs)   | L    | 26-07-09 | 26-07-09 | Top  |              | 45          |              |              |                      | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1434 ft-lbs     | 52.6%       | 100%     | 7    | 19-10-03 |
| Neg. Moment           | -1673 ft-lbs    | 61.4%       | 100%     | 1    | 10-04-14 |
| End Reaction          | 505 lbs         | 44.9%       | 100%     | 7    | 26-09-12 |
| Int. Reaction         | 1642 lbs        | 73.7%       | 100%     | 6    | 10-04-14 |
| End Shear             | 433 lbs         | 29.4%       | 100%     | 6    | 26-05-06 |
| Cont. Shear           | 923 lbs         | 62.5%       | 100%     | 6    | 10-02-14 |
| Total Load Deflection | L/659 (0.293")  | 54.7%       | n/a      | 7    | 19-02-03 |
| Live Load Deflection  | L/817 (0.236")  | 58.7%       | n/a      | 15   | 19-02-03 |
| Total Neg. Defl.      | L/999 (-0.013") | n/a         | n/a      | 6    | 06-00-01 |
| Max Defl.             | 0.293"          | 29.3%       | n/a      | 7    | 19-02-03 |
| Span / Depth          | 20.3            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow<br>Support | % Allow<br>Member | Material    |
|----|------------------------|----------|--------------------|-------------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 264 lbs  | 7.1%               | 23.5%             | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 0 lbs    | n/a                | n/a               | Unspecified |
| B2 | Uplift                 | 2897 lbs |                    |                   |             |
| B3 | Beam 4" x 2"           | 1642 lbs | 50.4%              | 73.7%             | Unspecified |
| B4 | Beam 4-3/8" x 2"       | 505 lbs  | 14.3%              | 44.9%             | Unspecified |

### Cautions

Uplift of -2897 lbs found at bearing B2.

**Foundation\Floor Joists\J5-16" O.C.(i901) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i901)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J5-16" O.C.(i998) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i998)

City, State, Zip:

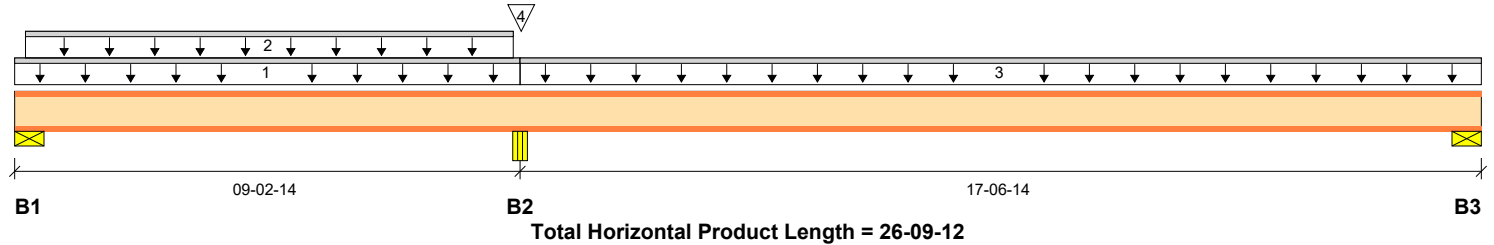
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live      | Dead    | Snow | Wind | Roof Live |
|------------|-----------|---------|------|------|-----------|
| B1, 3-5/8" | 248 / 131 | 190 / 0 |      |      |           |
| B2, 5-3/4" | 1099 / 0  | 569 / 0 |      |      |           |
| B3, 4-3/8" | 382 / 11  | 85 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
|     |                                    |                   |      |          |          |      | 100% | 90%  | 115% | 160% | 125%      |     |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-02-14 | Top  | 57   | 14   |      |      |           | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-06 | 09-01-06 | Top  |      | 39   |      |      |           | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-02-14 | 26-09-12 | Top  | 50   | 13   |      |      |           | n/a |
| 4   | 6(i54)                             | Conc. Pt. (lbs)   | L    | 09-03-02 | 09-03-02 | Top  | 177  | 148  |      |      |           | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1596 ft-lbs     | 58.6%       | 100%     | 3    | 19-04-14 |
| Neg. Moment           | -1841 ft-lbs    | 67.6%       | 100%     | 1    | 09-02-14 |
| End Reaction          | 468 lbs         | 41.6%       | 100%     | 3    | 26-09-12 |
| Int. Reaction         | 1668 lbs        | 66.1%       | 100%     | 1    | 09-02-14 |
| End Shear             | 445 lbs         | 30.1%       | 100%     | 3    | 26-05-06 |
| Cont. Shear           | 671 lbs         | 45.5%       | 100%     | 1    | 09-00-00 |
| Total Load Deflection | L/556 (0.373")  | 64.8%       | n/a      | 3    | 18-06-13 |
| Live Load Deflection  | L/652 (0.318")  | 73.6%       | n/a      | 6    | 18-05-05 |
| Total Neg. Defl.      | L/999 (-0.025") | n/a         | n/a      | 3    | 06-05-02 |
| Max Defl.             | 0.373"          | 37.3%       | n/a      | 3    | 18-06-13 |
| Span / Depth          | 21.8            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-5/8" x 2" | 438 lbs  | 14.2%           | 38.9%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 1668 lbs | 35.7%           | 66.1%          | Unspecified |
| B3 | Wall/Plate 4-3/8" x 2" | 468 lbs  | 12.6%           | 41.6%          | Unspecified |

**Foundation\Floor Joists\J5-16" O.C.(i998) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J5-16" O.C.(i998)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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# Double 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J8-16" O.C.(i1017) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J8-16" O.C.(i1017)

City, State, Zip:

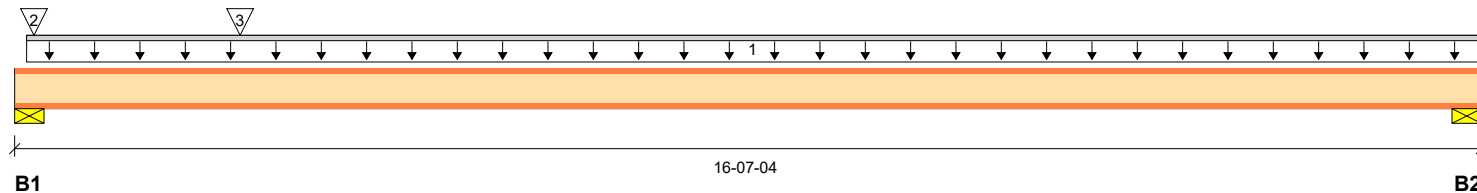
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-07-04

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 890 / 0 | 369 / 0 |      |      |           |
| B2, 4-3/8" | 429 / 0 | 118 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 16-07-04 | Top  | 52           | 13          |              |              |                      | n/a |
| 2   | 2(i52)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 468          | 201         |              |              |                      | n/a |
| 3   | 46(i93)                            | Conc. Pt. (lbs)   | L    | 02-06-10 | 02-06-10 | Top  |              | 73          |              |              |                      | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2150 ft-lbs    | 39.4%       | 100%     | 1    | 08-02-05 |
| End Reaction          | 1259 lbs       | 56.0%       | 100%     | 1    | 00-00-00 |
| End Shear             | 575 lbs        | 19.5%       | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/711 (0.27")  | 50.6%       | n/a      | 1    | 08-03-09 |
| Live Load Deflection  | L/930 (0.206") | 51.6%       | n/a      | 2    | 08-03-09 |
| Max Defl.             | 0.27"          | 27.0%       | n/a      | 1    | 08-03-09 |
| Span / Depth          | 20.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 4" | 1259 lbs | 16.9%           | 56.0%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 546 lbs  | 7.3%            | 24.3%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J8-16" O.C.(i1019)

City, State, Zip:

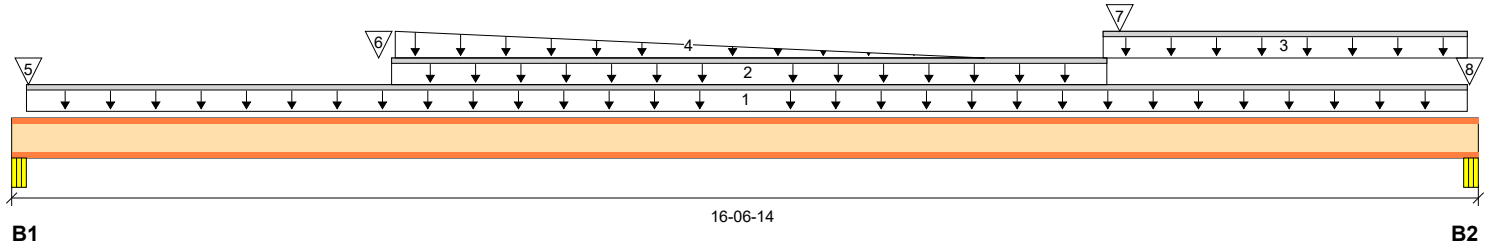
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16'-06-14

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4"     | 464 / 0 | 491 / 0 |      |      |           |
| B2, 4-3/8" | 219 / 0 | 385 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type           | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|---------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 00-02-00 | 16-05-06 | Top  | 27        | 7        |           |           |                | n/a |
| 2   | 19(i65)                            | Unf. Lin. (lb/ft)   | L    | 04-03-08 | 12-04-08 | Top  |           | 57       |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 12-04-00 | 16-05-06 | Top  |           | 10       |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Trapezoidal (lb/ft) | L    | 04-04-00 | 11-00-00 | Top  |           | 7        |           |           |                | n/a |
| 5   | 9(i56)                             | Conc. Pt. (lbs)     | L    | 00-02-04 | 00-02-04 | Top  | 248       | 149      |           |           |                | n/a |
| 6   | 20(i66)                            | Conc. Pt. (lbs)     | L    | 04-01-12 | 04-01-12 | Top  |           | 38       |           |           |                | n/a |
| 7   | 18(i67)                            | Conc. Pt. (lbs)     | L    | 12-06-04 | 12-06-04 | Top  |           | 38       |           |           |                | n/a |
| 8   | E2(i31)                            | Conc. Pt. (lbs)     | L    | 16-05-11 | 16-05-11 | Top  |           | 11       |           |           |                | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2714 ft-lbs    | 49.8%       | 100%     | 1    | 08-03-08 |
| End Reaction          | 955 lbs        | 42.4%       | 100%     | 1    | 00-00-00 |
| End Shear             | 582 lbs        | 19.7%       | 100%     | 1    | 16-02-08 |
| Total Load Deflection | L/576 (0.333") | 62.5%       | n/a      | 1    | 08-03-08 |
| Live Load Deflection  | L/999 (0.107") | n/a         | n/a      | 2    | 08-03-08 |
| Max Defl.             | 0.333"         | 33.3%       | n/a      | 1    | 08-03-08 |
| Span / Depth          | 20.2           |             |          |      |          |

**Bearing Supports**

|         | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|---------|-------------|---------|-----------------|----------------|-------------|
| B1 Beam | 4" x 4"     | 955 lbs | 14.7%           | 42.4%          | Unspecified |
| B2 Beam | 4-3/8" x 4" | 604 lbs | 8.5%            | 26.8%          | Unspecified |

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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# Double 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J8-16" O.C.(i1036) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J8-16" O.C.(i1036)

City, State, Zip:

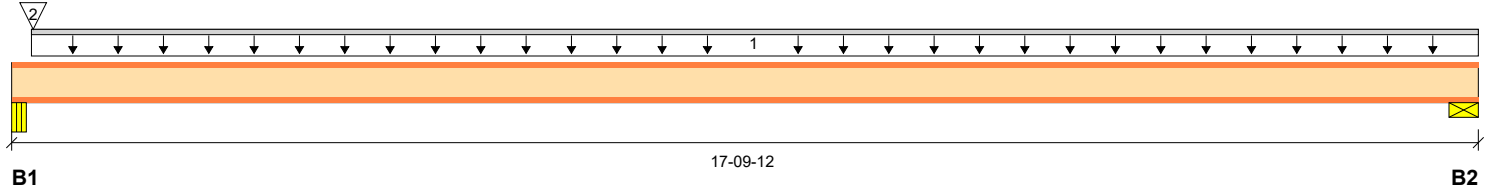
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 17'-09-12"

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 5-3/4" | 529 / 0 | 238 / 0 |      |      |           |
| B2, 4-3/8" | 472 / 0 | 118 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 17-09-12 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | 6(i54)                             | Conc. Pt. (lbs)   | L    | 00-03-02 | 00-03-02 | Top  | 64   | 122  |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2435 ft-lbs    | 44.7%       | 100%     | 1    | 08-11-09 |
| End Reaction          | 768 lbs        | 34.1%       | 100%     | 1    | 00-00-00 |
| End Shear             | 566 lbs        | 19.2%       | 100%     | 1    | 00-05-12 |
| Total Load Deflection | L/597 (0.344") | 60.3%       | n/a      | 1    | 08-11-09 |
| Live Load Deflection  | L/746 (0.275") | 64.4%       | n/a      | 2    | 08-11-09 |
| Max Defl.             | 0.344"         | 34.4%       | n/a      | 1    | 08-11-09 |
| Span / Depth          | 21.6           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 5-3/4" x 4"       | 768 lbs | 8.2%            | 34.1%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 590 lbs | 7.9%            | 26.2%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Double 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J8-16" O.C.(i1044) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J8-16" O.C.(i1044)

City, State, Zip:

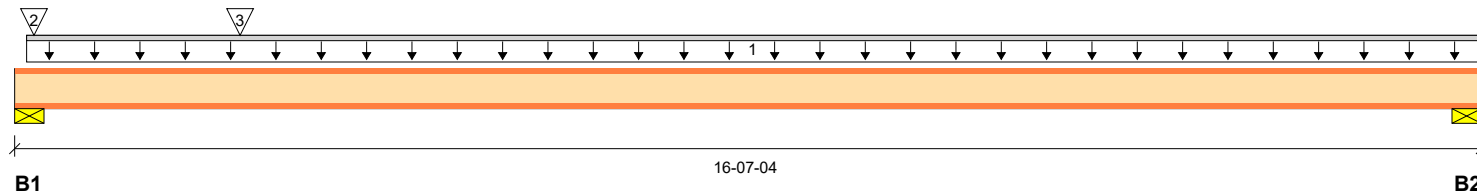
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-07-04

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 525 / 0 | 272 / 0 |      |      |           |
| B2, 4-3/8" | 304 / 0 | 84 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 16-07-04 | Top  | 37        | 9        |           |           |                | n/a |
| 2   | 2(i52)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 226       | 147      |           |           |                | n/a |
| 3   | 46(i93)                            | Conc. Pt. (lbs)   | L    | 02-06-10 | 02-06-10 | Top  |           | 59       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1531 ft-lbs     | 28.1%       | 100%     | 1    | 08-02-05 |
| End Reaction          | 797 lbs         | 35.4%       | 100%     | 1    | 00-00-00 |
| End Shear             | 414 lbs         | 14.0%       | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/998 (0.192")  | 36.1%       | n/a      | 1    | 08-02-05 |
| Live Load Deflection  | L/1313 (0.146") | 36.5%       | n/a      | 2    | 08-03-09 |
| Max Defl.             | 0.192"          | 19.2%       | n/a      | 1    | 08-02-05 |
| Span / Depth          | 20.2            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 4" | 797 lbs | 10.7%           | 35.4%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 388 lbs | 5.2%            | 17.2%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Double 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J8-16" O.C.(i1052) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J8-16" O.C.(i1052)

City, State, Zip:

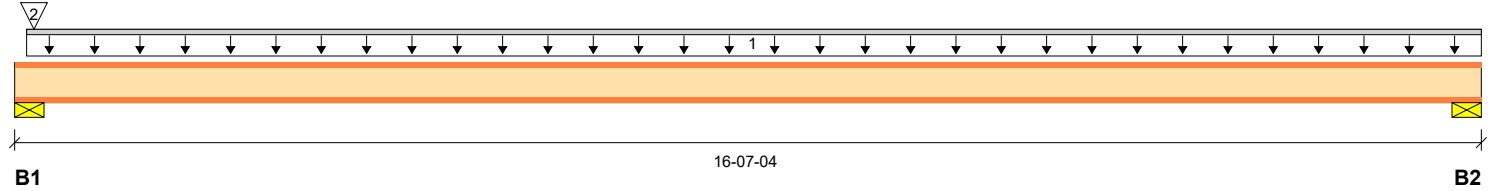
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-07-04

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 912 / 0 | 381 / 0 |      |      |           |
| B2, 4-3/8" | 443 / 0 | 111 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 16-07-04 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | 2(i52)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 476  | 272  |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2133 ft-lbs    | 39.1%       | 100%     | 1    | 08-03-10 |
| End Reaction          | 1292 lbs       | 57.4%       | 100%     | 1    | 00-00-00 |
| End Shear             | 529 lbs        | 17.9%       | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/721 (0.266") | 49.9%       | n/a      | 1    | 08-03-10 |
| Live Load Deflection  | L/901 (0.213") | 53.3%       | n/a      | 2    | 08-03-10 |
| Max Defl.             | 0.266"         | 26.6%       | n/a      | 1    | 08-03-10 |
| Span / Depth          | 20.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 4" | 1292 lbs | 17.4%           | 57.4%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 553 lbs  | 7.4%            | 24.6%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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## Foundation\Floor Joists\J8-16" O.C.(i913) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued & nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J8-16" O.C.(i913)

City, State, Zip:

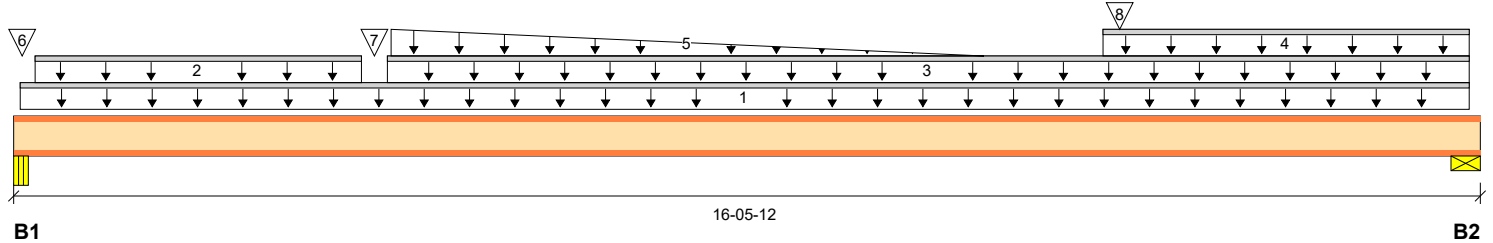
Specifier:

Customer: KC-Truss & Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-05-12

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 2-7/8" | 660 / 0 | 381 / 0 |      |      |           |
| B2, 4-3/8" | 374 / 0 | 255 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type           | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|---------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 00-00-14 | 16-04-04 | Top  | 20        | 5        |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 00-02-14 | 03-10-14 | Top  | 13        | 3        |           |           |                | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 04-02-06 | 16-04-04 | Top  | 27        | 7        |           |           |                | n/a |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 12-02-14 | 16-04-04 | Top  |           | 23       |           |           |                | n/a |
| 5   | FC1 Floor Decking (Plan View Fill) | Trapezoidal (lb/ft) | L    | 04-02-14 | 10-10-14 | Top  |           | 10<br>0  |           |           |                | n/a |
| 6   | 9(i56)                             | Conc. Pt. (lbs)     | L    | 00-01-02 | 00-01-02 | Top  | 334       | 217      |           |           |                | n/a |
| 7   | 20(i66)                            | Conc. Pt. (lbs)     | L    | 04-00-10 | 04-00-10 | Top  |           | 47       |           |           |                | n/a |
| 8   | 18(i67)                            | Conc. Pt. (lbs)     | L    | 12-05-02 | 12-05-02 | Top  |           | 68       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 2202 ft-lbs     | 40.4%       | 100%     | 1    | 08-04-14 |
| End Reaction          | 1041 lbs        | 48.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 609 lbs         | 20.7%       | 100%     | 1    | 16-01-06 |
| Total Load Deflection | L/693 (0.277")  | 52.0%       | n/a      | 1    | 08-02-06 |
| Live Load Deflection  | L/1078 (0.178") | 44.5%       | n/a      | 2    | 08-02-06 |
| Max Defl.             | 0.277"          | 27.7%       | n/a      | 1    | 08-02-06 |
| Span / Depth          | 20.2            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/8" x 4"       | 1041 lbs | 22.2%           | 48.6%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 629 lbs  | 8.5%            | 27.9%          | Unspecified |

**Double 9-1/2" BCI® 5000s-1.8****PASSED****Foundation\Floor Joists\J8-16" O.C.(i913) (Floor Joist)**

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

Address:

City, State, Zip:

Customer: KC-Truss &amp; Panel

Code reports: ESR-1336

File name: Lot 323 Park Ridge.mmdl

Description: Foundation\Floor Joists\J8-16" O.C.(i913)

Specifier:

Designer: Don Happel

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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# Double 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J8-16" O.C.(i920) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued & nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

Address:

City, State, Zip:

Customer: KC-Truss & Panel

Code reports: ESR-1336

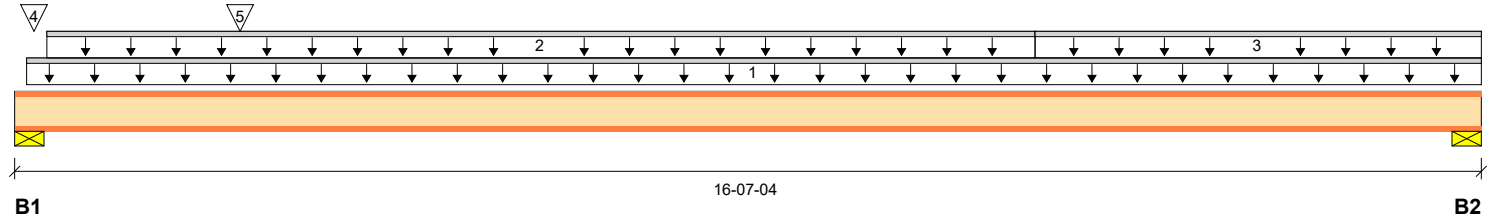
File name: Lot 323 Park Ridge.mmdl

Description: Foundation\Floor Joists\J8-16" O.C.(i920)

Specifier:

Designer: Don Happel

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-07-04

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 843 / 0 | 379 / 0 |      |      |           |
| B2, 4-3/8" | 426 / 0 | 120 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 16-07-04 | Top  | 27   | 7    |      |      |           | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-04-06 | 11-06-10 | Top  | 26   | 7    |      |      |           | n/a |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 11-06-10 | 16-07-04 | Top  | 23   | 6    |      |      |           | n/a |
| 4   | 2(i52)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 420  | 192  |      |      |           | n/a |
| 5   | 49(i95)                            | Conc. Pt. (lbs)   | L    | 02-06-10 | 02-06-10 | Top  |      | 94   |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2199 ft-lbs    | 40.3%       | 100%     | 1    | 08-00-07 |
| End Reaction          | 1222 lbs       | 54.3%       | 100%     | 1    | 00-00-00 |
| End Shear             | 602 lbs        | 20.4%       | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/696 (0.276") | 51.8%       | n/a      | 1    | 08-02-02 |
| Live Load Deflection  | L/920 (0.209") | 52.2%       | n/a      | 2    | 08-03-13 |
| Max Defl.             | 0.276"         | 27.6%       | n/a      | 1    | 08-02-02 |
| Span / Depth          | 20.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 4" | 1222 lbs | 16.4%           | 54.3%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 545 lbs  | 7.3%            | 24.2%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J8-16" O.C.(i921)

City, State, Zip:

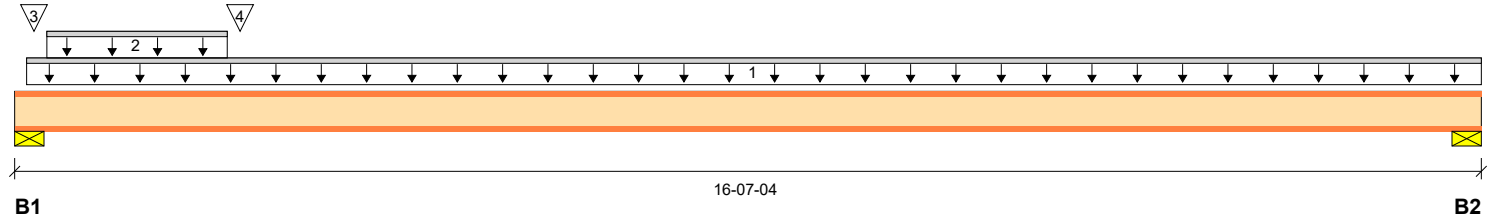
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-07-04

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 920 / 0 | 434 / 0 |      |      |           |
| B2, 4-3/8" | 443 / 0 | 127 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 16-07-04 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-04-06 | 02-04-14 | Top  |      | 22   |      |      |           | n/a |
| 3   | 2(i52)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 484  | 203  |      |      |           | n/a |
| 4   | 49(i95)                            | Conc. Pt. (lbs)   | L    | 02-06-10 | 02-06-10 | Top  |      | 92   |      |      |           | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2264 ft-lbs    | 41.5%       | 100%     | 1    | 08-01-02 |
| End Reaction          | 1353 lbs       | 60.1%       | 100%     | 1    | 00-00-00 |
| End Shear             | 651 lbs        | 22.1%       | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/674 (0.285") | 53.4%       | n/a      | 1    | 08-02-05 |
| Live Load Deflection  | L/901 (0.213") | 53.3%       | n/a      | 2    | 08-04-12 |
| Max Defl.             | 0.285"         | 28.5%       | n/a      | 1    | 08-02-05 |
| Span / Depth          | 20.2           |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 4" | 1353 lbs | 18.2%           | 60.1%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 570 lbs  | 7.7%            | 25.3%          | Unspecified |

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Double 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J8-16" O.C.(i922) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J8-16" O.C.(i922)

City, State, Zip:

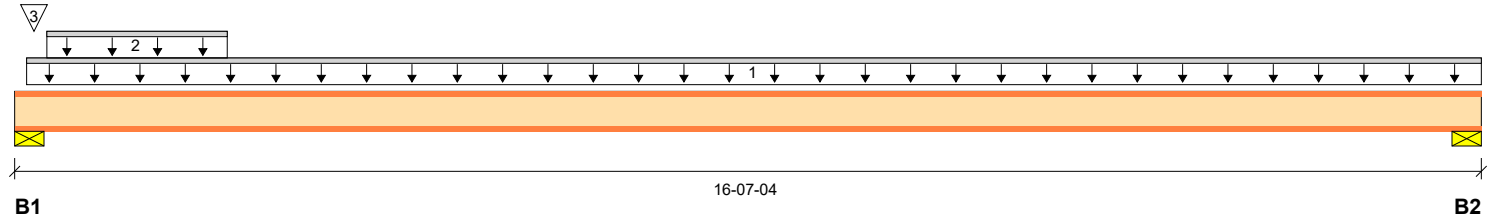
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-07-04

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 920 / 0 | 377 / 0 |      |      |           |
| B2, 4-3/8" | 443 / 0 | 115 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 16-07-04 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-04-06 | 02-04-14 | Top  |      | 34   |      |      |           | n/a |
| 3   | 2(i52)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 484  | 203  |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2171 ft-lbs    | 39.8%       | 100%     | 1    | 08-03-13 |
| End Reaction          | 1297 lbs       | 57.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 595 lbs        | 20.2%       | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/706 (0.272") | 51.0%       | n/a      | 1    | 08-03-13 |
| Live Load Deflection  | L/901 (0.213") | 53.3%       | n/a      | 2    | 08-03-13 |
| Max Defl.             | 0.272"         | 27.2%       | n/a      | 1    | 08-03-13 |
| Span / Depth          | 20.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 4" | 1297 lbs | 17.4%           | 57.6%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 558 lbs  | 7.5%            | 24.8%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Double 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J8-16" O.C.(i923) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J8-16" O.C.(i923)

City, State, Zip:

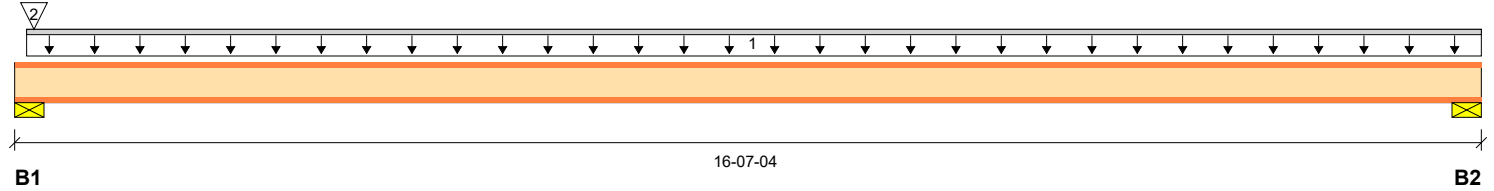
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-07-04

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 883 / 0 | 297 / 0 |      |      |           |
| B2, 4-3/8" | 443 / 0 | 111 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 16-07-04 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | 2(i52)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 447  | 188  |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2133 ft-lbs    | 39.1%       | 100%     | 1    | 08-03-10 |
| End Reaction          | 1179 lbs       | 52.4%       | 100%     | 1    | 00-00-00 |
| End Shear             | 529 lbs        | 17.9%       | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/721 (0.266") | 49.9%       | n/a      | 1    | 08-03-10 |
| Live Load Deflection  | L/901 (0.213") | 53.3%       | n/a      | 2    | 08-03-10 |
| Max Defl.             | 0.266"         | 26.6%       | n/a      | 1    | 08-03-10 |
| Span / Depth          | 20.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 4" | 1179 lbs | 15.9%           | 52.4%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 553 lbs  | 7.4%            | 24.6%          | Unspecified |

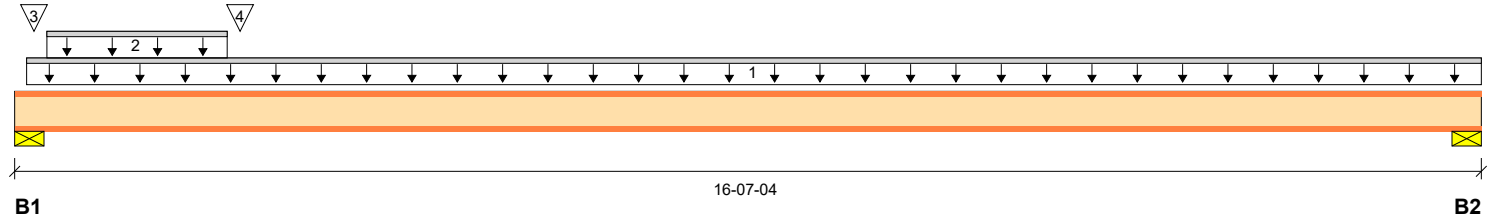
### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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Total Horizontal Product Length = 16-07-04

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 908 / 0 | 461 / 0 |      |      |           |
| B2, 4-3/8" | 443 / 0 | 126 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 16-07-04 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | 47(i94)                            | Unf. Lin. (lb/ft) | L    | 00-04-06 | 02-04-14 | Top  |      | 57   |      |      |           | n/a |
| 3   | 2(i52)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 472  | 198  |      |      |           | n/a |
| 4   | 46(i93)                            | Conc. Pt. (lbs)   | L    | 02-06-10 | 02-06-10 | Top  |      | 54   |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2258 ft-lbs    | 41.4%       | 100%     | 1    | 07-11-15 |
| End Reaction          | 1369 lbs       | 60.8%       | 100%     | 1    | 00-00-00 |
| End Shear             | 683 lbs        | 23.2%       | 100%     | 1    | 00-04-06 |
| Total Load Deflection | L/675 (0.284") | 53.3%       | n/a      | 1    | 08-02-05 |
| Live Load Deflection  | L/901 (0.213") | 53.3%       | n/a      | 2    | 08-03-09 |
| Max Defl.             | 0.284"         | 28.4%       | n/a      | 1    | 08-02-05 |
| Span / Depth          | 20.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 4" | 1369 lbs | 18.4%           | 60.8%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 4" | 569 lbs  | 7.6%            | 25.3%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J9-16" O.C.(i1025) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J9-16" O.C.(i1025)

City, State, Zip:

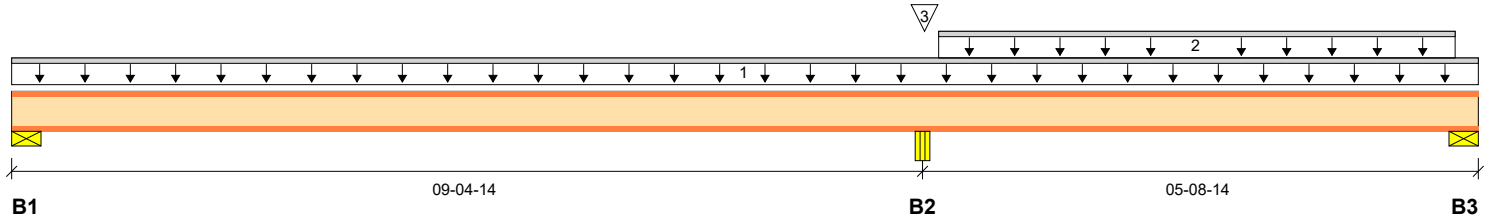
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 154 / 5  | 35 / 0  |      |      |           |
| B2, 5-3/4" | 339 / 0  | 146 / 0 |      |      |           |
| B3, 4-3/8" | 102 / 38 | 62 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 15-01-12 | Top  | 37   | 9    | 115% | 160% | 125%      | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 14-10-14 | Top  |      | 18   |      |      |           | n/a |
| 3   | 12(i59)                            | Conc. Pt. (lbs)   | L    | 09-05-02 | 09-05-02 | Top  |      | 9    |      |      |           | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 338 ft-lbs      | 12.4%       | 100%     | 2    | 04-02-07 |
| Neg. Moment           | -336 ft-lbs     | 12.3%       | 100%     | 1    | 09-04-14 |
| End Reaction          | 189 lbs         | 16.8%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 484 lbs         | 19.2%       | 100%     | 1    | 09-04-14 |
| End Shear             | 173 lbs         | 11.7%       | 100%     | 2    | 00-04-06 |
| Cont. Shear           | 233 lbs         | 15.8%       | 100%     | 1    | 09-02-00 |
| Total Load Deflection | L/999 (0.029")  | n/a         | n/a      | 2    | 04-07-13 |
| Live Load Deflection  | L/999 (0.024")  | n/a         | n/a      | 5    | 04-07-13 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 2    | 10-05-15 |
| Max Defl.             | 0.029"          | n/a         | n/a      | 2    | 04-07-13 |
| Span / Depth          | 11.5            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 189 lbs | 5.1%            | 16.8%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 484 lbs | 10.4%           | 19.2%          | Unspecified |
| B3 | Wall/Plate 4-3/8" x 2" | 164 lbs | 4.4%            | 14.5%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## Foundation\Floor Joists\J9-16" O.C.(i1050) (Floor Joist)

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Floor Joists\J9-16" O.C.(i1050)

City, State, Zip:

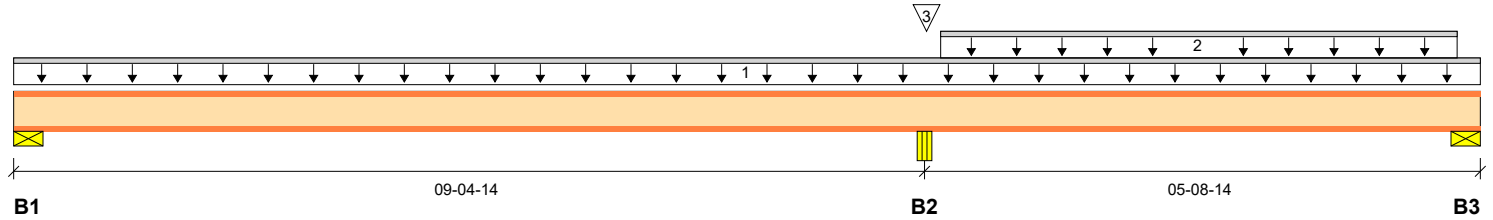
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 15'-01-12"

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 217 / 7  | 49 / 0  |      |      |           |
| B2, 5-3/4" | 476 / 0  | 203 / 0 |      |      |           |
| B3, 4-3/8" | 143 / 54 | 90 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | -                                  | Unf. Lin. (lb/ft) | L    | 00-00-00 | 15-01-12 | Top  | 51        | 13       |           |           |                | n/a |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-06-14 | 14-10-14 | Top  |           | 26       |           |           |                | n/a |
| 3   | 12(i59)                            | Conc. Pt. (lbs)   | L    | 09-05-02 | 09-05-02 | Top  |           | 9        |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 474 ft-lbs      | 17.4%       | 100%     | 2    | 04-02-07 |
| Neg. Moment           | -472 ft-lbs     | 17.3%       | 100%     | 1    | 09-04-14 |
| End Reaction          | 266 lbs         | 23.6%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 679 lbs         | 26.9%       | 100%     | 1    | 09-04-14 |
| End Shear             | 243 lbs         | 16.4%       | 100%     | 2    | 00-04-06 |
| Cont. Shear           | 328 lbs         | 22.2%       | 100%     | 1    | 09-02-00 |
| Total Load Deflection | L/999 (0.04")   | n/a         | n/a      | 2    | 04-07-13 |
| Live Load Deflection  | L/999 (0.034")  | n/a         | n/a      | 5    | 04-07-13 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 2    | 10-05-04 |
| Max Defl.             | 0.04"           | n/a         | n/a      | 2    | 04-07-13 |
| Span / Depth          | 11.5            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 2" | 266 lbs | 7.1%            | 23.6%          | Unspecified |
| B2 | Beam 5-3/4" x 2"       | 679 lbs | 14.5%           | 26.9%          | Unspecified |
| B3 | Wall/Plate 4-3/8" x 2" | 233 lbs | 6.3%            | 20.7%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## Foundation\Flush Beams\B1-2(i728) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B1-2(i728)

City, State, Zip:

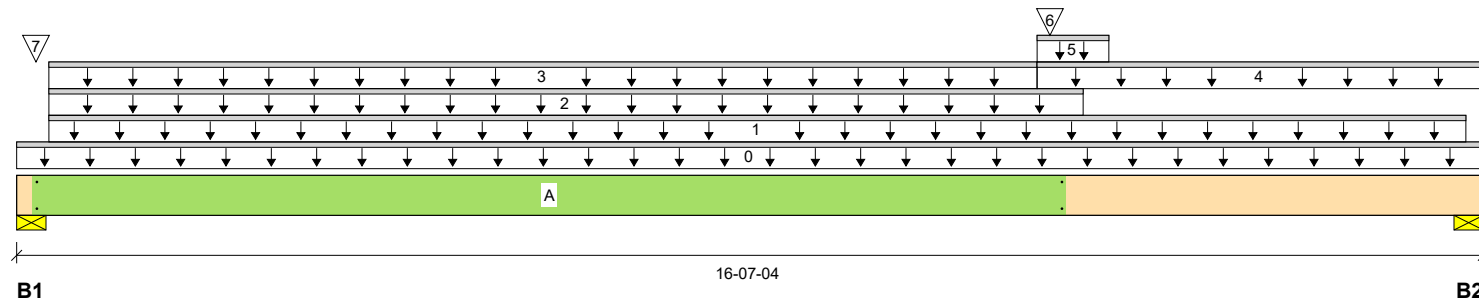
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead     | Snow | Wind | Roof Live |
|------------|---------|----------|------|------|-----------|
| B1, 4-3/8" | 602 / 0 | 1284 / 0 |      |      |           |
| B2, 4-3/8" | 606 / 0 | 1015 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc.  | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|-------|--------------|-------------|--------------|--------------|----------------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-07-04 | Top   |              | 10          |              |              |                      | 00-00-00  |
| 1   | -                                  | Unf. Lin. (lb/ft) | L    | 00-04-06 | 16-04-14 | Top   |              | 57          |              |              |                      | n/a       |
| 2   | 16(i63)                            | Unf. Lin. (lb/ft) | L    | 00-04-06 | 12-00-14 | Top   | 13           | 63          |              |              |                      | n/a       |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-04-06 | 11-06-10 | Top   | 26           | 7           |              |              |                      | n/a       |
| 4   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 11-06-10 | 16-07-04 | Top   | 53           | 13          |              |              |                      | n/a       |
| 5   | 16(i63)                            | Unf. Lin. (lb/ft) | L    | 11-06-10 | 12-04-06 | Top   | 211          | 144         |              |              |                      | n/a       |
| 6   | B8-2(i858)                         | Conc. Pt. (lbs)   | L    | 11-08-06 | 11-08-06 | Front | 124          | 49          |              |              |                      | n/a       |
| 7   | 2(i52)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top   | 193          | 188         |              |              |                      | n/a       |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 6513 ft-lbs     | 46.7%       | 100%     | 1    | 08-11-07 |
| End Shear             | 1479 lbs        | 23.4%       | 100%     | 1    | 15-05-06 |
| Total Load Deflection | L/319 (0.602")  | 75.3%       | n/a      | 1    | 08-05-09 |
| Live Load Deflection  | L/1003 (0.191") | 35.9%       | n/a      | 2    | 08-07-09 |
| Max Defl.             | 0.602"          | 60.2%       | n/a      | 1    | 08-05-09 |
| Span / Depth          | 20.2            |             |          |      |          |

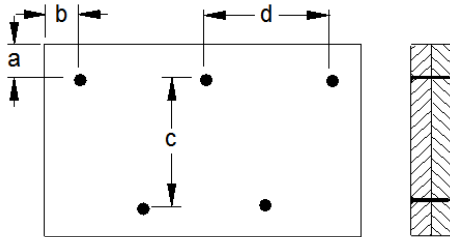
### Bearing Supports

|    | Dim. (LxW)                 | Value    | % Allow Support | % Allow Member | Material    |
|----|----------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 3-1/2" | 1886 lbs | 29.0%           | 16.4%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 3-1/2" | 1621 lbs | 24.9%           | 14.1%          | Unspecified |

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 11-02-04.

## Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

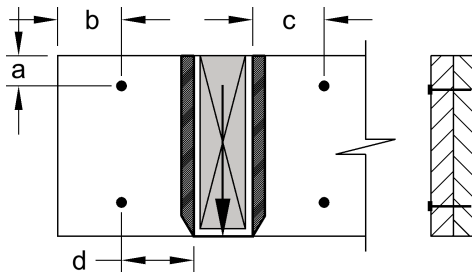
Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

## Connection Diagrams: Concentrated Side Loads

Connection Tag: A

Applies to load tag(s): 6+9



a minimum = 2"

b minimum = 4"

c minimum = 4"

d maximum = 12"

Connectors are: 4 x 3-1/4 in. Pneumatic Gun Nails

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**Foundation\Flush Beams\B1-2(i752) (Flush Beam)**

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B1-2(i752)

City, State, Zip:

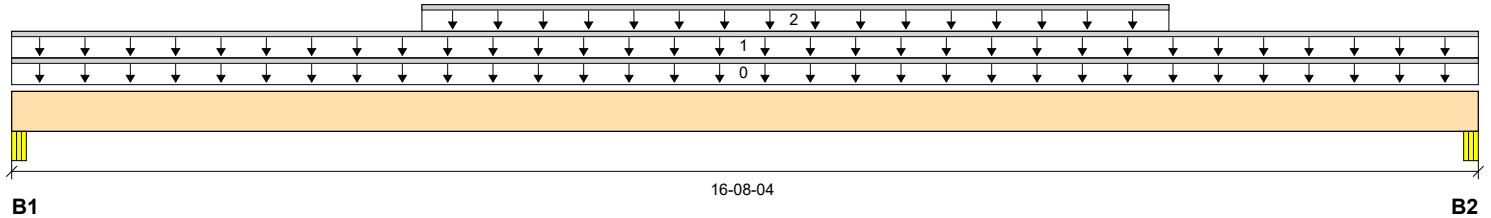
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-08-04

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4"     | 221 / 0 | 186 / 0 |      |      |           |
| B2, 5-3/4" | 224 / 0 | 194 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof Live<br>125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|-------------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-08-04 | Top  |              | 10          |              |              |                   | 00-00-00  |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-08-04 | Top  | 27           | 7           |              |              |                   | n/a       |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-08-00 | 13-02-00 | Top  |              | 13          |              |              |                   | n/a       |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1684 ft-lbs     | 12.1%       | 100%     | 1    | 08-04-10 |
| End Shear             | 364 lbs         | 5.8%        | 100%     | 1    | 15-05-00 |
| Total Load Deflection | L/1248 (0.154") | 19.2%       | n/a      | 1    | 08-04-10 |
| Live Load Deflection  | L/999 (0.079")  | n/a         | n/a      | 2    | 08-04-10 |
| Max Defl.             | 0.154"          | 15.4%       | n/a      | 1    | 08-04-10 |
| Span / Depth          | 20.2            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)           | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 4" x 3-1/2"     | 406 lbs | 7.1%            | 3.8%           | Unspecified |
| B2 | Beam 5-3/4" x 3-1/2" | 419 lbs | 5.1%            | 2.8%           | Unspecified |

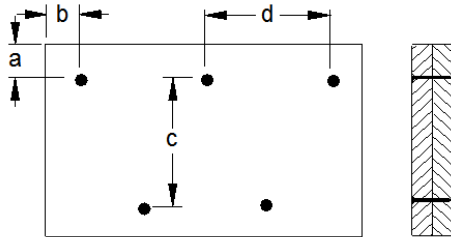
**Notes**

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 15-10-08.





## Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

## Disclosure

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BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B1-2(i875)

City, State, Zip:

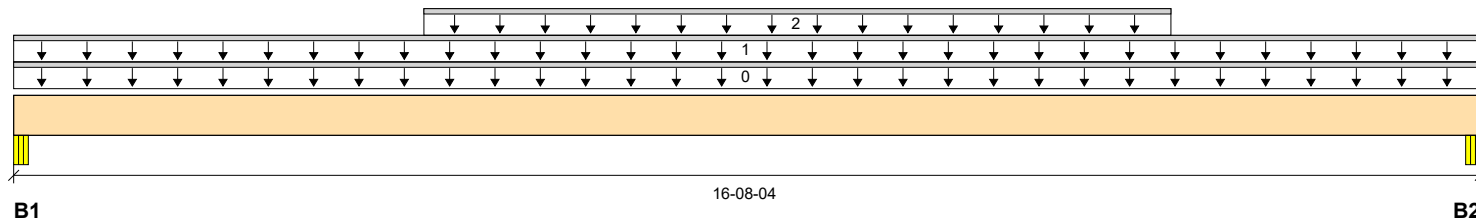
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-08-04

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4"     | 221 / 0 | 187 / 0 |      |      |           |
| B2, 5-3/4" | 224 / 0 | 198 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof Live<br>125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|-------------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-08-04 | Top  |              | 10          |              |              |                   | 00-00-00  |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-08-04 | Top  | 27           | 7           |              |              |                   | n/a       |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 04-08-00 | 13-02-00 | Top  |              | 13          |              |              |                   | n/a       |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1705 ft-lbs     | 12.2%       | 100%     | 1    | 08-04-10 |
| End Shear             | 368 lbs         | 5.8%        | 100%     | 1    | 15-05-00 |
| Total Load Deflection | L/1233 (0.156") | 19.5%       | n/a      | 1    | 08-04-10 |
| Live Load Deflection  | L/999 (0.079")  | n/a         | n/a      | 2    | 08-04-10 |
| Max Defl.             | 0.156"          | 15.6%       | n/a      | 1    | 08-04-10 |
| Span / Depth          | 20.2            |             |          |      |          |

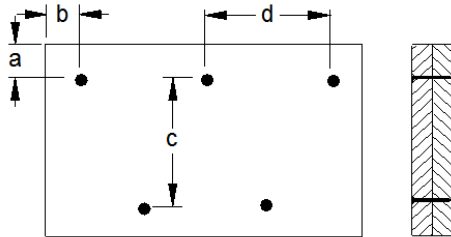
**Bearing Supports**

|    | Dim. (LxW)           | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 4" x 3-1/2"     | 408 lbs | 7.2%            | 3.9%           | Unspecified |
| B2 | Beam 5-3/4" x 3-1/2" | 423 lbs | 5.2%            | 2.8%           | Unspecified |

**Notes**

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 15-10-08.

### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

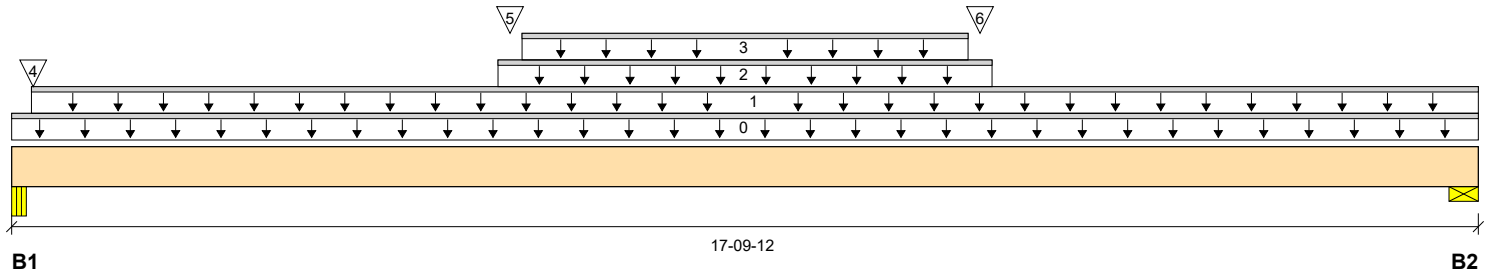
Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

### Disclosure

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### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 5-3/4" | 233 / 0 | 443 / 0 |      |      |           |
| B2, 4-3/8" | 236 / 0 | 409 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 17-09-12 | Top  |              | 14          |              |              |                      | 00-00-00  |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 17-09-12 | Top  | 27           | 7           |              |              |                      | n/a       |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 05-10-14 | 11-10-14 | Top  |              | 11          |              |              |                      | n/a       |
| 3   | 44(i91)                            | Unf. Lin. (lb/ft) | L    | 06-02-06 | 11-07-06 | Top  |              | 57          |              |              |                      | n/a       |
| 4   | 8(i53)                             | Conc. Pt. (lbs)   | L    | 00-03-02 | 00-03-02 | Top  |              | 30          |              |              |                      | n/a       |
| 5   | 43(i92)                            | Conc. Pt. (lbs)   | L    | 06-00-10 | 06-00-10 | Top  |              | 37          |              |              |                      | n/a       |
| 6   | 45(i90)                            | Conc. Pt. (lbs)   | L    | 11-09-02 | 11-09-02 | Top  |              | 37          |              |              |                      | n/a       |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 3295 ft-lbs    | 15.7%       | 100%     | 1    | 08-10-14 |
| End Shear             | 593 lbs        | 6.3%        | 100%     | 1    | 01-03-04 |
| Total Load Deflection | L/921 (0.223") | 26.1%       | n/a      | 1    | 08-10-14 |
| Live Load Deflection  | L/999 (0.068") | n/a         | n/a      | 2    | 08-10-14 |
| Max Defl.             | 0.223"         | 22.3%       | n/a      | 1    | 08-10-14 |
| Span / Depth          | 21.6           |             |          |      |          |

### Bearing Supports

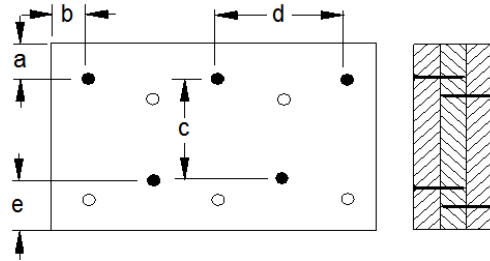
|    |            |                 |         |      |      |             |
|----|------------|-----------------|---------|------|------|-------------|
| B1 | Beam       | 5-3/4" x 5-1/4" | 676 lbs | 5.5% | 3.0% | Unspecified |
| B2 | Wall/Plate | 4-3/8" x 5-1/4" | 645 lbs | 6.6% | 3.7% | Unspecified |

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 16-11-10.



## Connection Diagram: Full Length of Member



a minimum = 2"

c = 4-1/2"

b minimum = 3"

d = 24"

e minimum = 3"

Calculated Side Load = 0.0 lb/ft

Nailing applies to both sides of the member

Connectors are: 3-1/4 in. Pneumatic Gun Nails

## Disclosure

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BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B2-3(i968)

City, State, Zip:

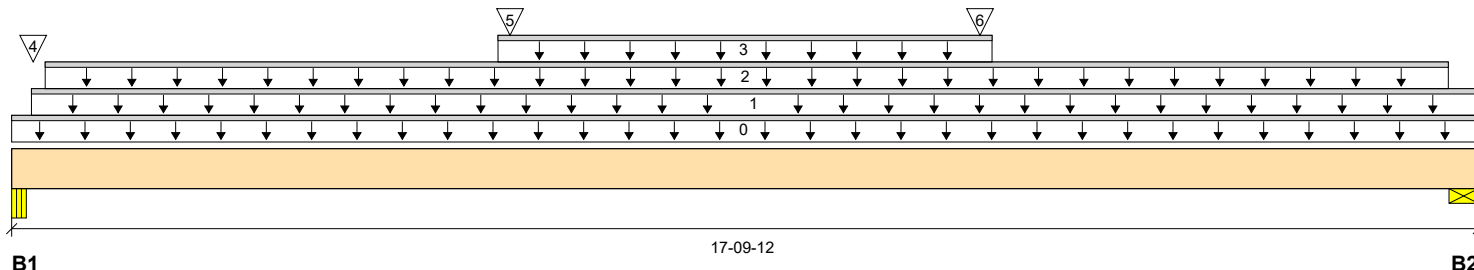
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 17'-09-12

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 5-3/4" | 233 / 0 | 730 / 0 |      |      |           |
| B2, 4-3/8" | 236 / 0 | 703 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 17-09-12 | Top  |              | 14          |              |              |                      | 00-00-00  |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 17-09-12 | Top  | 27           | 7           |              |              |                      | n/a       |
| 2   | 42(i89)                            | Unf. Lin. (lb/ft) | L    | 00-04-14 | 17-05-06 | Top  |              | 57          |              |              |                      | n/a       |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 05-10-14 | 11-10-14 | Top  |              | 5           |              |              |                      | n/a       |
| 4   | 8(i53)                             | Conc. Pt. (lbs)   | L    | 00-03-02 | 00-03-02 | Top  |              | 22          |              |              |                      | n/a       |
| 5   | 43(i92)                            | Conc. Pt. (lbs)   | L    | 06-00-10 | 06-00-10 | Top  |              | 18          |              |              |                      | n/a       |
| 6   | 45(i90)                            | Conc. Pt. (lbs)   | L    | 11-09-02 | 11-09-02 | Top  |              | 20          |              |              |                      | n/a       |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 4036 ft-lbs    | 19.3%       | 100%     | 1    | 08-10-14 |
| End Shear             | 839 lbs        | 8.8%        | 100%     | 1    | 01-03-04 |
| Total Load Deflection | L/726 (0.282") | 33.1%       | n/a      | 1    | 08-10-14 |
| Live Load Deflection  | L/999 (0.068") | n/a         | n/a      | 2    | 08-10-14 |
| Max Defl.             | 0.282"         | 28.2%       | n/a      | 1    | 08-10-14 |
| Span / Depth          | 21.6           |             |          |      |          |

**Bearing Supports**

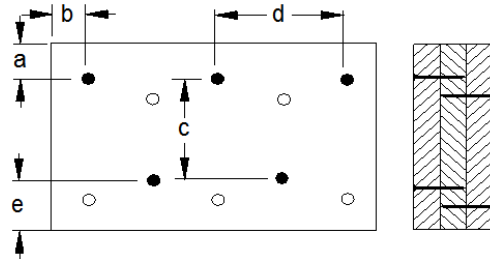
|    | Dim. (LxW)                 | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 5-3/4" x 5-1/4"       | 962 lbs | 7.8%            | 4.2%           | Unspecified |
| B2 | Wall/Plate 4-3/8" x 5-1/4" | 939 lbs | 9.6%            | 5.5%           | Unspecified |

**Notes**

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 16-11-10.



## Connection Diagram: Full Length of Member



a minimum = 2"

c = 4-1/2"

b minimum = 3"

d = 24"

e minimum = 3"

Calculated Side Load = 0.0 lb/ft

Nailing applies to both sides of the member

Connectors are: 3-1/4 in. Pneumatic Gun Nails

## Disclosure

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# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## Foundation\Flush Beams\B3-2(i1051) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B3-2(i1051)

City, State, Zip:

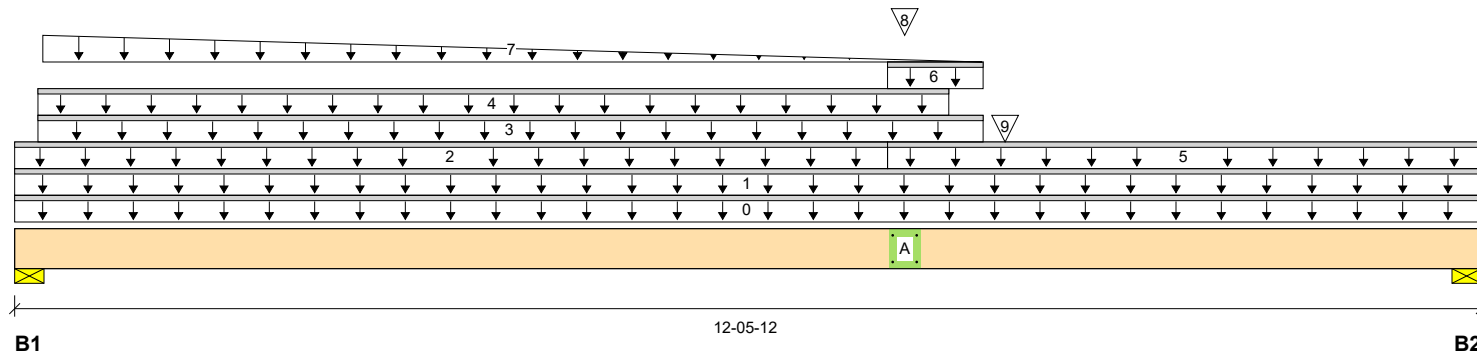
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12-05-12

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 2-3/8" | 473 / 0 | 563 / 0 |      |      |           |
| B2, 4-3/8" | 569 / 0 | 441 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type           | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | Tributary |
|-----|------------------------------------|---------------------|------|----------|----------|------|------|-----|------|------|----------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft)   | L    | 00-00-00 | 12-05-12 | Top  |      | 10  |      |      |                | 00-00-00  |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 00-00-00 | 12-05-12 | Top  | 31   | 8   |      |      |                | n/a       |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 00-00-00 | 07-05-02 | Top  | 6    | 2   |      |      |                | n/a       |
| 3   | 14(i60)                            | Unf. Lin. (lb/ft)   | L    | 00-02-06 | 08-02-14 | Top  |      | 57  |      |      |                | n/a       |
| 4   | 14(i60)                            | Unf. Lin. (lb/ft)   | L    | 00-02-06 | 07-11-06 | Top  | 20   | 8   |      |      |                | n/a       |
| 5   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft)   | L    | 07-05-02 | 12-05-12 | Top  | 23   | 6   |      |      |                | n/a       |
| 6   | 14(i60)                            | Unf. Lin. (lb/ft)   | L    | 07-05-02 | 08-02-14 | Top  | 251  | 97  |      |      |                | n/a       |
| 7   | FC1 Floor Decking (Plan View Fill) | Trapezoidal (lb/ft) | L    | 00-02-14 | 08-02-13 | Top  |      | 12  |      |      |                | n/a       |
| 8   | B8-2(i858)                         | Conc. Pt. (lbs)     | L    | 07-06-14 | 07-06-14 | Back | 144  | 54  |      |      |                | n/a       |
| 9   | 18(i67)                            | Conc. Pt. (lbs)     | L    | 08-05-02 | 08-05-02 | Top  |      | 53  |      |      |                | n/a       |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 3614 ft-lbs    | 25.9%       | 100%     | 1    | 07-02-11 |
| End Shear             | 922 lbs        | 14.6%       | 100%     | 1    | 11-03-14 |
| Total Load Deflection | L/793 (0.182") | 30.3%       | n/a      | 1    | 06-02-10 |
| Live Load Deflection  | L/999 (0.093") | n/a         | n/a      | 2    | 06-03-13 |
| Max Defl.             | 0.182"         | 18.2%       | n/a      | 1    | 06-02-10 |
| Span / Depth          | 15.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)                 | Value    | % Allow Support | % Allow Member | Material    |
|----|----------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 3-1/2" | 1035 lbs | 29.3%           | 16.6%          | Unspecified |
| B2 | Wall/Plate 4-3/8" x 3-1/2" | 1011 lbs | 15.5%           | 8.8%           | Unspecified |

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

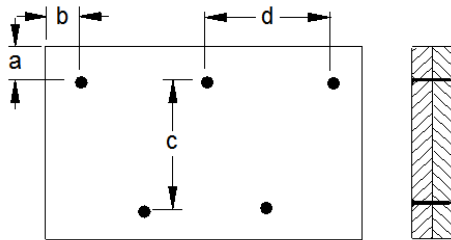
Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

Calculations assume unbraced length of Top: 00-00-00, Bottom: 07-02-12.

### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

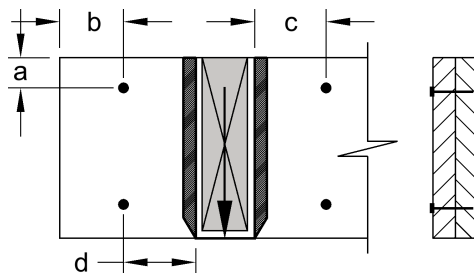
Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

### Connection Diagrams: Concentrated Side Loads

Connection Tag: A

Applies to load tag(s): 8+8



a minimum = 2"

b minimum = 4"

c minimum = 4"

d maximum = 12"

Connectors are: 4 x 3-1/4 in. Pneumatic Gun Nails

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# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## Foundation\Flush Beams\B4-2(i1010) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B4-2(i1010)

City, State, Zip:

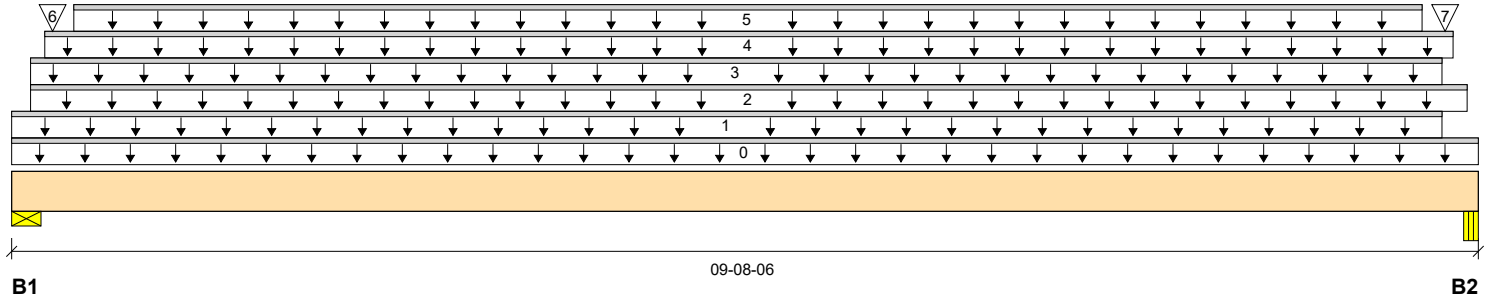
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 5-1/2" | 298 / 0 | 708 / 0 |      |      |           |
| B2, 5-3/4" | 534 / 0 | 854 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof Live<br>125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|-------------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-08-06 | Top  |              | 10          |              |              |                   | 00-00-00  |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-05-08 | Top  | 10           | 3           |              |              |                   | n/a       |
| 2   | 70(i429)                           | Unf. Lin. (lb/ft) | L    | 00-01-08 | 09-07-08 | Top  |              | 57          |              |              |                   | n/a       |
| 3   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-08 | 09-05-08 | Top  | 17           | 4           |              |              |                   | n/a       |
| 4   | 70(i429)                           | Unf. Lin. (lb/ft) | L    | 00-02-10 | 09-06-06 | Top  | 36           | 14          |              |              |                   | n/a       |
| 5   | 70(i429)                           | Unf. Lin. (lb/ft) | L    | 00-04-15 | 09-03-15 | Top  |              | 57          |              |              |                   | n/a       |
| 6   | E14(i40)                           | Conc. Pt. (lbs)   | L    | 00-03-04 | 00-03-04 | Top  |              | 30          |              |              |                   | n/a       |
| 7   | 8(i53)                             | Conc. Pt. (lbs)   | L    | 09-05-12 | 09-05-12 | Top  | 238          | 181         |              |              |                   | n/a       |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2050 ft-lbs    | 14.7%       | 100%     | 1    | 04-10-02 |
| End Shear             | 749 lbs        | 11.9%       | 100%     | 1    | 01-03-00 |
| Total Load Deflection | L/999 (0.058") | n/a         | n/a      | 1    | 04-10-02 |
| Live Load Deflection  | L/999 (0.018") | n/a         | n/a      | 2    | 04-10-02 |
| Max Defl.             | 0.058"         | n/a         | n/a      | 1    | 04-10-02 |
| Span / Depth          | 11.2           |             |          |      |          |

### Bearing Supports

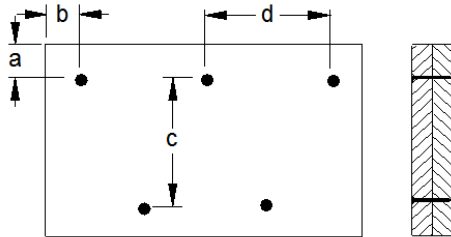
|    | Dim. (LxW)                 | Value    | % Allow Support | % Allow Member | Material    |
|----|----------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 5-1/2" x 3-1/2" | 1006 lbs | 12.3%           | 7.0%           | Unspecified |
| B2 | Beam 5-3/4" x 3-1/2"       | 1388 lbs | 17.0%           | 9.2%           | Unspecified |

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 08-09-02.



### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

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BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B4-2(i731)

City, State, Zip:

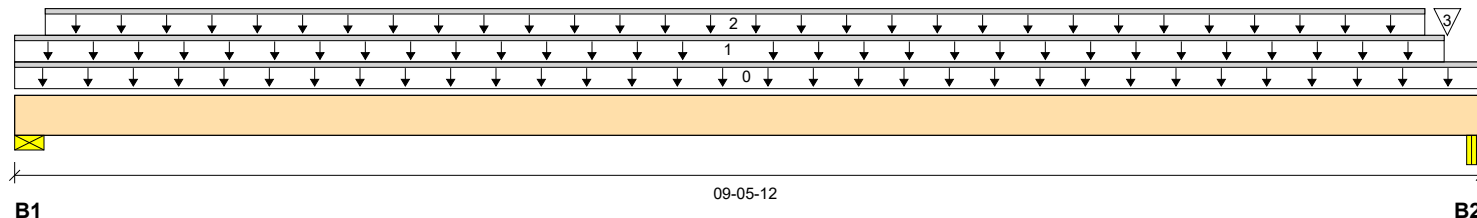
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-05-12

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 4-3/8" | 250 / 0 | 189 / 0 |      |      |           |
| B2, 5-3/4" | 303 / 0 | 230 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----------|
|     |                                    |                   |      |          |          |      | 100% | 90%  | 115% | 160% | 125%      |           |
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-05-12 | Top  |      | 10   |      |      |           | 00-00-00  |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-02-14 | Top  | 53   | 13   |      |      |           | n/a       |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-06 | 09-01-06 | Top  |      | 18   |      |      |           | n/a       |
| 3   | 6(i54)                             | Conc. Pt. (lbs)   | L    | 09-03-02 | 09-03-02 | Top  | 60   | 43   |      |      |           | n/a       |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 905 ft-lbs     | 6.5%        | 100%     | 1    | 04-08-03 |
| End Shear             | 347 lbs        | 5.5%        | 100%     | 1    | 01-01-14 |
| Total Load Deflection | L/999 (0.025") | n/a         | n/a      | 1    | 04-08-03 |
| Live Load Deflection  | L/999 (0.014") | n/a         | n/a      | 2    | 04-08-03 |
| Max Defl.             | 0.025"         | n/a         | n/a      | 1    | 04-08-03 |
| Span / Depth          | 11.1           |             |          |      |          |

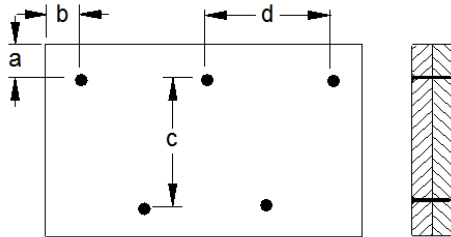
**Bearing Supports**

|    | Dim. (LxW)                 | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 3-1/2" | 438 lbs | 6.7%            | 3.8%           | Unspecified |
| B2 | Beam 5-3/4" x 3-1/2"       | 533 lbs | 6.5%            | 3.5%           | Unspecified |

**Notes**

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 08-07-10.

### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

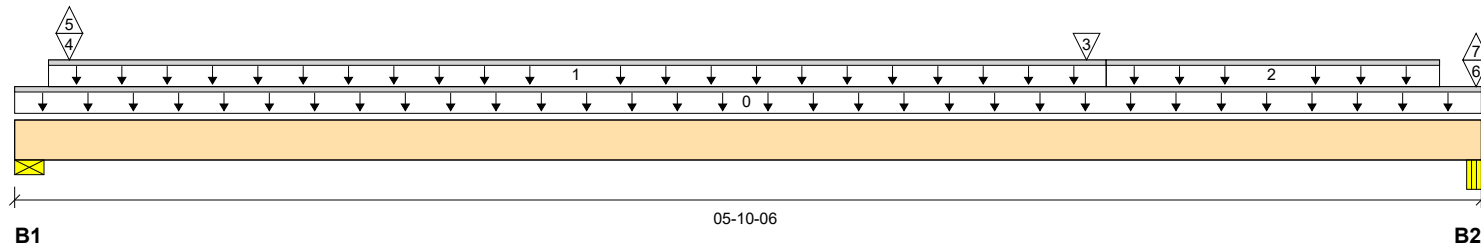
Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

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Total Horizontal Product Length = 05-10-06

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 4-3/8" | 153 / 13 | 144 / 0 |      |      |           |
| B2, 2"     | 289 / 25 | 271 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----------|
|     |                                    |                   |      |          |          |      | 100% | 90%  | 115% | 160% | 125%      |           |
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 05-10-06 | Top  |      | 5    |      |      |           | 00-00-00  |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-10 | 04-04-06 | Top  | 27   | 7    |      |      |           | n/a       |
| 2   | 22(i68)                            | Unf. Lin. (lb/ft) | L    | 04-04-06 | 05-08-06 | Top  |      | 57   |      |      |           | n/a       |
| 3   | -                                  | Conc. Pt. (lbs)   | L    | 04-03-07 | 04-03-07 | Back | 103  | 119  |      |      |           | n/a       |
| 4   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | 52   | 69   |      |      |           | n/a       |
| 5   | 4(i51)                             | Conc. Pt. (lbs)   | L    | 00-02-10 | 00-02-10 | Top  | -13  |      |      |      |           | n/a       |
| 6   | 9(i56)                             | Conc. Pt. (lbs)   | L    | 05-10-02 | 05-10-02 | Top  | 170  | 94   |      |      |           | n/a       |
| 7   | 9(i56)                             | Conc. Pt. (lbs)   | L    | 05-10-02 | 05-10-02 | Top  | -25  |      |      |      |           | n/a       |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 369 ft-lbs     | 5.3%        | 100%     | 1    | 04-03-08 |
| End Shear             | 243 lbs        | 7.7%        | 100%     | 1    | 04-10-14 |
| Total Load Deflection | L/999 (0.007") | n/a         | n/a      | 1    | 03-02-00 |
| Live Load Deflection  | L/999 (0.004") | n/a         | n/a      | 3    | 03-02-00 |
| Max Defl.             | 0.007"         | n/a         | n/a      | 1    | 03-02-00 |
| Span / Depth          | 6.9            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)                 | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-3/8" x 1-3/4" | 297 lbs | 9.1%            | 5.2%           | Unspecified |
| B2 | Beam 2" x 1-3/4"           | 560 lbs | 39.1%           | 21.1%          | Unspecified |

**Notes**

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 03-10-04.

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# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## Foundation\Flush Beams\B6-2(i1013) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B6-2(i1013)

City, State, Zip:

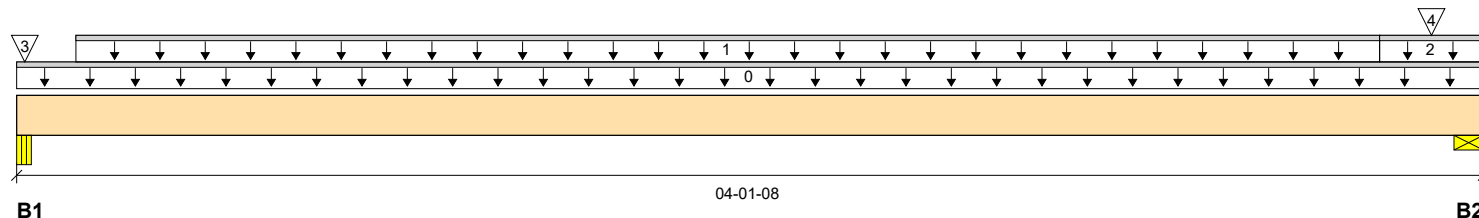
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 04-01-08

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 46 / 0  | 83 / 0 |      |      |           |
| B2, 3-1/2" | 141 / 0 | 79 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----------|
|     |                                    |                   |      |          |          |      | 100% | 90%  | 115% | 160% | 125%      |           |
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-01-08 | Top  |      | 10   |      |      |           | 00-00-00  |
| 1   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-00 | 03-10-00 | Top  | 13   | 3    |      |      |           | n/a       |
| 2   | FC1 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-10-00 | 04-01-08 | Top  | 16   |      |      |      |           | n/a       |
| 3   | -                                  | Conc. Pt. (lbs)   | L    | 00-00-04 | 00-00-04 | Top  | 23   | 57   |      |      |           | n/a       |
| 4   | 13(i62)                            | Conc. Pt. (lbs)   | L    | 03-11-12 | 03-11-12 | Top  | 113  | 52   |      |      |           | n/a       |

### Controls Summary

|                       | Value      | % Allowable | Duration | Case | Location |
|-----------------------|------------|-------------|----------|------|----------|
| Pos. Moment           | 46 ft-lbs  | 0.3%        | 100%     | 1    | 02-00-00 |
| End Shear             | 26 lbs     | 0.4%        | 100%     | 1    | 00-11-08 |
| Total Load Deflection | L/999 (0") | n/a         | n/a      | 1    | 02-00-00 |
| Live Load Deflection  | L/999 (0") | n/a         | n/a      | 2    | 02-00-00 |
| Max Defl.             | 0"         | n/a         | n/a      | 1    | 02-00-00 |
| Span / Depth          | 4.8        |             |          |      |          |

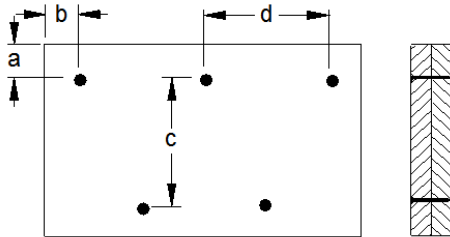
### Bearing Supports

|    | Dim. (LxW)                 | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2" x 3-1/2"           | 128 lbs | 4.5%            | 2.4%           | Unspecified |
| B2 | Wall/Plate 3-1/2" x 3-1/2" | 220 lbs | 4.2%            | 2.4%           | Unspecified |

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 03-08-00.

### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

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Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B7(i862)

City, State, Zip:

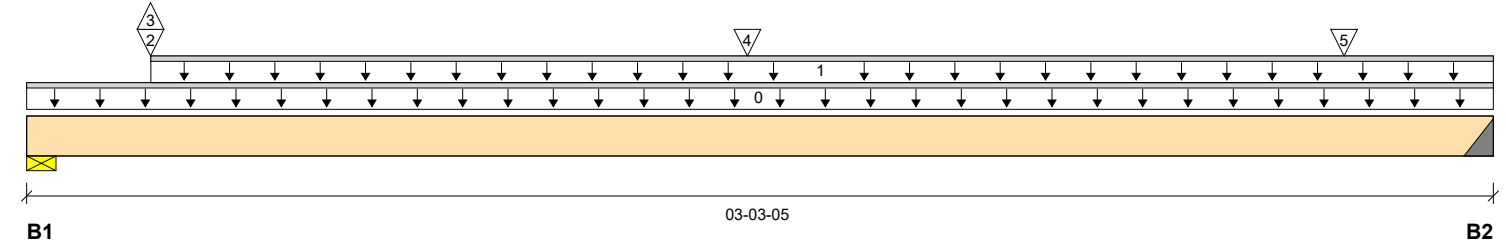
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 3-1/4" | 213 / 65 | 314 / 0 |      |      |           |
| B2, 2"     | 111 / 0  | 119 / 0 |      |      |           |

**Load Summary**

| Tag | Description        | Load Type         | Ref. | Start    | End      | Loc.  | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | Tributary |
|-----|--------------------|-------------------|------|----------|----------|-------|-----------|----------|-----------|-----------|----------------|-----------|
| 0   | Self-Weight        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 03-03-05 | Top   |           | 5        |           |           |                | 00-00-00  |
| 1   | 21(i69)            | Unf. Lin. (lb/ft) | L    | 00-03-05 | 03-03-05 | Top   |           | 57       |           |           |                | n/a       |
| 2   | -                  | Conc. Pt. (lbs)   | L    | 00-03-05 | 00-03-05 | Front | 151       | 212      |           |           |                | n/a       |
| 3   | -                  | Conc. Pt. (lbs)   | L    | 00-03-05 | 00-03-05 | Front | -65       |          |           |           |                | n/a       |
| 4   | J14-16" O.C.(i979) | Conc. Pt. (lbs)   | L    | 01-07-05 | 01-07-05 | Front | 107       | 24       |           |           |                | n/a       |
| 5   | J14-16" O.C.(i912) | Conc. Pt. (lbs)   | L    | 02-11-05 | 02-11-05 | Front | 66        | 11       |           |           |                | n/a       |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 172 ft-lbs     | 2.5%        | 100%     | 1    | 01-07-05 |
| End Shear             | 113 lbs        | 3.6%        | 100%     | 1    | 01-00-12 |
| Total Load Deflection | L/999 (0.001") | n/a         | n/a      | 1    | 01-08-06 |
| Live Load Deflection  | L/999 (0")     | n/a         | n/a      | 3    | 01-08-06 |
| Max Defl.             | 0.001"         | n/a         | n/a      | 1    | 01-08-06 |
| Span / Depth          | 3.7            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)                 | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-1/4" x 1-3/4" | 526 lbs | 21.8%           | 12.3%          | Unspecified |
| B2 | Hanger 2" x 1-3/4"         | 231 lbs | n/a             | 8.8%           | HU9         |

**Cautions**

Header for the hanger HU9 is a Single 1-3/4" x 9-1/2" LVL Beam.  
 Hanger model HU9 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

**Notes**

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Unassigned  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-02-00.

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# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## Foundation\Flush Beams\B8-2(i858) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: Foundation\Flush Beams\B8-2(i858)

City, State, Zip:

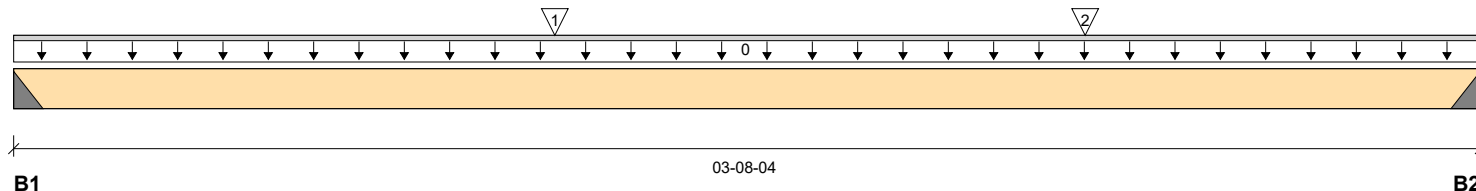
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 03-08-04

### Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live    | Dead   | Snow | Wind | Roof Live |
|---------|---------|--------|------|------|-----------|
| B1, 4"  | 122 / 0 | 48 / 0 |      |      |           |
| B2, 4"  | 146 / 0 | 54 / 0 |      |      |           |

### Load Summary

| Tag | Description        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | Tributary |
|-----|--------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----------|
| 0   | Self-Weight        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 03-08-04 | Top  |      | 10  |      |      |                | 00-00-00  |
| 1   | J14-16" O.C.(i919) | Conc. Pt. (lbs)   | L    | 01-04-05 | 01-04-05 | Back | 143  | 36  |      |      |                | n\la      |
| 2   | J14-16" O.C.(i970) | Conc. Pt. (lbs)   | L    | 02-08-05 | 02-08-05 | Back | 125  | 31  |      |      |                | n\la      |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 177 ft-lbs     | 1.3%        | 100%     | 1    | 01-04-05 |
| End Shear             | 163 lbs        | 2.6%        | 100%     | 1    | 02-06-12 |
| Total Load Deflection | L/999 (0.001") | n\la        | n\la     | 1    | 01-10-03 |
| Live Load Deflection  | L/999 (0")     | n\la        | n\la     | 2    | 01-10-03 |
| Max Defl.             | 0.001"         | n\la        | n\la     | 1    | 01-10-03 |
| Span / Depth          | 4.0            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)         | Value   | % Allow Support | % Allow Member | Material |
|----|--------------------|---------|-----------------|----------------|----------|
| B1 | Hanger 4" x 3-1/2" | 171 lbs | 2.2%            | 1.6%           | HGUS410  |
| B2 | Hanger 4" x 3-1/2" | 200 lbs | 2.6%            | 1.9%           | HGUS410  |

### Cautions

Header for the hanger HGUS410 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger HGUS410 requires (46) 10d face nails, (16) 10d joist nails.

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

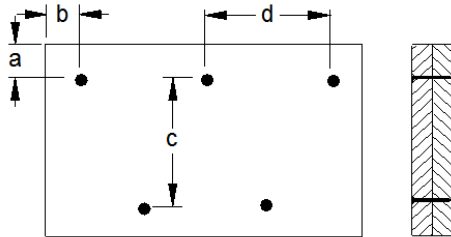
Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-03-05.

### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

Calculated Side Load = 89.5 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J1-16" O.C.(i1004) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i1004)

City, State, Zip:

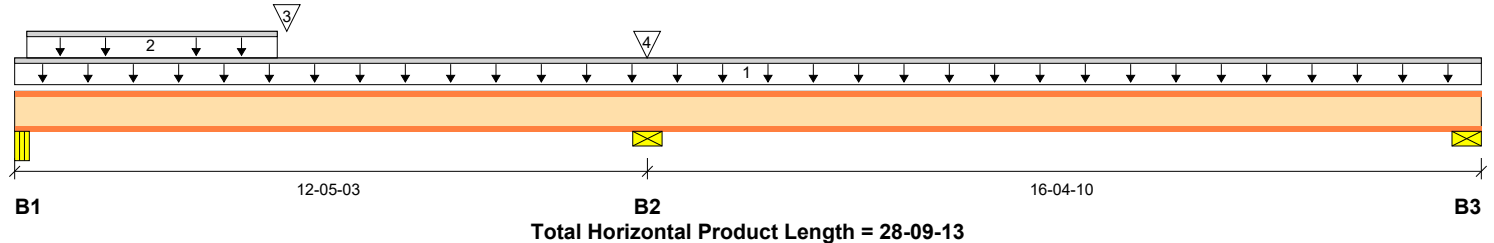
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 281 / 74 | 191 / 0 |      |      |           |
| B2, 3-1/2"  | 896 / 0  | 318 / 0 |      |      |           |
| B3, 2-3/8"  | 356 / 24 | 74 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 28-09-13 | Top  | 50   | 12   |      |      |           | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |      | 25   |      |      |           | n/a |
| 3   | 67(i124)                           | Conc. Pt. (lbs)   | L    | 05-04-03 | 05-04-03 | Top  |      | 94   |      |      |           | n/a |
| 4   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |      | 9    |      |      |           | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1426 ft-lbs     | 52.3%       | 100%     | 3    | 21-11-07 |
| Neg. Moment           | -1762 ft-lbs    | 64.7%       | 100%     | 1    | 12-05-03 |
| End Reaction          | 472 lbs         | 45.8%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 1214 lbs        | 57.8%       | 100%     | 1    | 12-05-03 |
| End Shear             | 459 lbs         | 31.1%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 605 lbs         | 41.0%       | 100%     | 1    | 12-06-15 |
| Total Load Deflection | L/646 (0.302")  | 55.8%       | n/a      | 3    | 21-00-10 |
| Live Load Deflection  | L/734 (0.266")  | 65.4%       | n/a      | 6    | 21-00-10 |
| Total Neg. Defl.      | L/999 (-0.029") | n/a         | n/a      | 3    | 09-04-09 |
| Max Defl.             | 0.302"          | 30.2%       | n/a      | 3    | 21-00-10 |
| Span / Depth          | 20.5            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 472 lbs  | 24.2%           | 45.8%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 1214 lbs | 40.8%           | 57.8%          | Unspecified |
| B3 | Wall/Plate 2-3/8" x 2" | 430 lbs  | 21.3%           | 41.9%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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**1st Floor\Floor Joists\J1-16" O.C.(i1005) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i1005)

City, State, Zip:

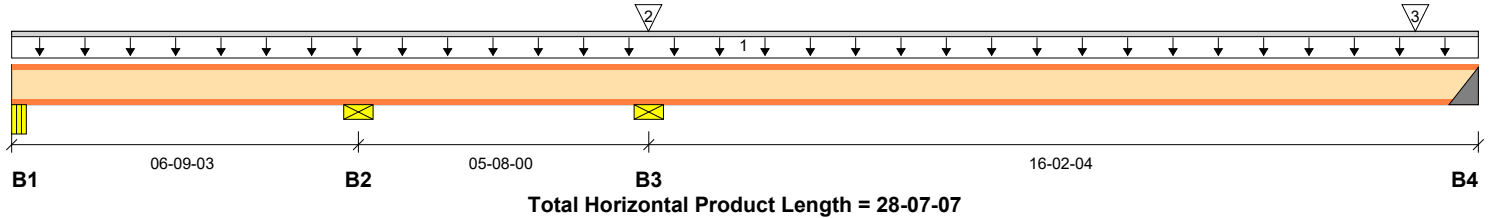
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 184 / 12 | 43 / 0  |      |      |           |
| B2, 3-1/2"  | 391 / 85 | 28 / 0  |      |      |           |
| B3, 3-1/2"  | 885 / 0  | 237 / 0 |      |      |           |
| B4, 2"      | 361 / 3  | 158 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 28-07-07 | Top  | 53   | 13  |      |      |                | n/a |
| 2   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |      | 9   |      |      |                | n/a |
| 3   | 53(i111)                           | Conc. Pt. (lbs)   | L    | 27-04-11 | 27-04-11 | Top  |      | 76  |      |      |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1513 ft-lbs     | 55.5%       | 100%     | 2    | 21-11-00 |
| Neg. Moment           | -1577 ft-lbs    | 57.9%       | 100%     | 5    | 12-05-03 |
| End Reaction          | 519 lbs         | 52.2%       | 100%     | 2    | 28-07-07 |
| Int. Reaction         | 1122 lbs        | 53.4%       | 100%     | 5    | 12-05-03 |
| End Shear             | 508 lbs         | 34.4%       | 100%     | 2    | 28-05-07 |
| Cont. Shear           | 630 lbs         | 42.7%       | 100%     | 5    | 12-06-15 |
| Total Load Deflection | L/617 (0.313")  | 58.4%       | n/a      | 2    | 21-00-07 |
| Live Load Deflection  | L/788 (0.245")  | 60.9%       | n/a      | 7    | 21-00-07 |
| Total Neg. Defl.      | L/999 (-0.022") | n/a         | n/a      | 2    | 10-00-14 |
| Max Defl.             | 0.313"          | 31.3%       | n/a      | 2    | 21-00-07 |
| Span / Depth          | 20.3            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 227 lbs  | 11.6%           | 22.1%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 419 lbs  | 14.1%           | 19.9%          | Unspecified |
| B3 | Wall/Plate 3-1/2" x 2" | 1122 lbs | 37.7%           | 53.4%          | Unspecified |
| B4 | Hanger 2" x 2"         | 519 lbs  | n/a             | 52.2%          | ITS2.06/9.5 |

**Cautions**

Uplift of -57 lbs found at bearing B2.

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

**1st Floor\Floor Joists\J1-16" O.C.(i1005) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i1005)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J1-16" O.C.(i1014) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i1014)

City, State, Zip:

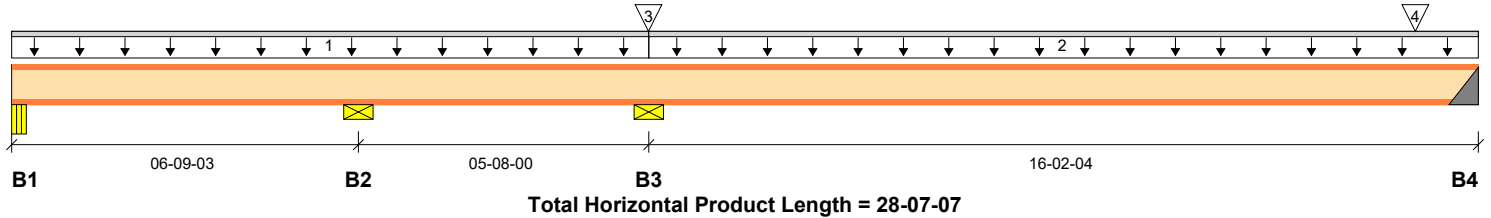
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 170 / 11 | 40 / 0  |      |      |           |
| B2, 3-1/2"  | 357 / 99 | 20 / 0  |      |      |           |
| B3, 3-1/2"  | 872 / 0  | 234 / 0 |      |      |           |
| B4, 2"      | 361 / 3  | 157 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-03 | Top  | 49   | 12  |      |      |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 12-05-03 | 28-07-07 | Top  | 53   | 13  |      |      |                | n/a |
| 3   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |      | 9   |      |      |                | n/a |
| 4   | 53(i111)                           | Conc. Pt. (lbs)   | L    | 27-04-11 | 27-04-11 | Top  |      | 74  |      |      |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1512 ft-lbs     | 55.5%       | 100%     | 2    | 21-11-00 |
| Neg. Moment           | -1571 ft-lbs    | 57.7%       | 100%     | 5    | 12-05-03 |
| End Reaction          | 517 lbs         | 52.1%       | 100%     | 2    | 28-07-07 |
| Int. Reaction         | 1106 lbs        | 52.7%       | 100%     | 5    | 12-05-03 |
| End Shear             | 506 lbs         | 34.3%       | 100%     | 2    | 28-05-07 |
| Cont. Shear           | 629 lbs         | 42.7%       | 100%     | 5    | 12-06-15 |
| Total Load Deflection | L/617 (0.313")  | 58.3%       | n/a      | 2    | 21-00-07 |
| Live Load Deflection  | L/788 (0.245")  | 60.9%       | n/a      | 7    | 21-00-07 |
| Total Neg. Defl.      | L/999 (-0.022") | n/a         | n/a      | 2    | 10-00-14 |
| Max Defl.             | 0.313"          | 31.3%       | n/a      | 2    | 21-00-07 |
| Span / Depth          | 20.3            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 210 lbs  | 10.7%           | 20.4%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 377 lbs  | 12.7%           | 18.0%          | Unspecified |
| B2 | Uplift                 | 79 lbs   |                 |                |             |
| B3 | Wall/Plate 3-1/2" x 2" | 1106 lbs | 37.2%           | 52.7%          | Unspecified |
| B4 | Hanger 2" x 2"         | 517 lbs  | n/a             | 52.1%          | ITS2.06/9.5 |

### Cautions

Uplift of -79 lbs found at bearing B2.

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

**1st Floor\Floor Joists\J1-16" O.C.(i1014) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i1014)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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**1st Floor\Floor Joists\J1-16" O.C.(i1034) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i1034)

City, State, Zip:

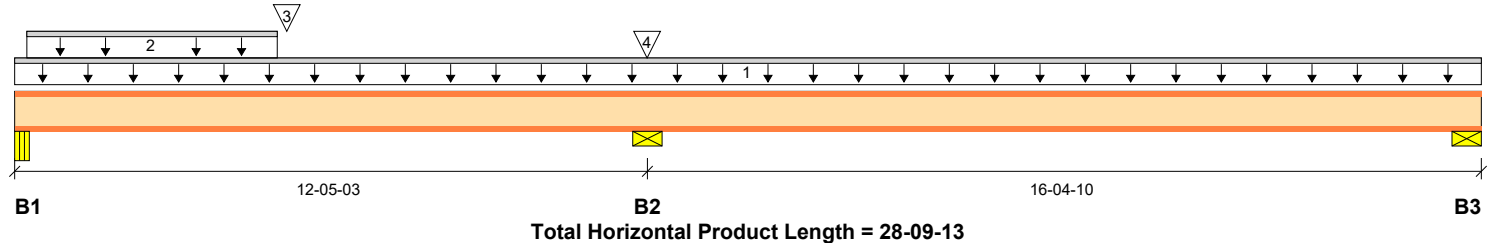
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 301 / 79 | 193 / 0 |      |      |           |
| B2, 3-1/2"  | 959 / 0  | 327 / 0 |      |      |           |
| B3, 2-3/8"  | 381 / 26 | 81 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 28-09-13 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |           | 27       |           |           |                | n/a |
| 3   | 67(i124)                           | Conc. Pt. (lbs)   | L    | 05-04-03 | 05-04-03 | Top  |           | 76       |           |           |                | n/a |
| 4   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |           | 9        |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1537 ft-lbs     | 56.4%       | 100%     | 3    | 21-11-07 |
| Neg. Moment           | -1866 ft-lbs    | 68.5%       | 100%     | 1    | 12-05-03 |
| End Reaction          | 494 lbs         | 47.9%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 1287 lbs        | 61.3%       | 100%     | 1    | 12-05-03 |
| End Shear             | 480 lbs         | 32.6%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 647 lbs         | 43.9%       | 100%     | 1    | 12-06-15 |
| Total Load Deflection | L/598 (0.326")  | 60.2%       | n/a      | 3    | 21-00-10 |
| Live Load Deflection  | L/685 (0.285")  | 70.0%       | n/a      | 6    | 21-00-10 |
| Total Neg. Defl.      | L/999 (-0.035") | n/a         | n/a      | 3    | 09-02-04 |
| Max Defl.             | 0.326"          | 32.6%       | n/a      | 3    | 21-00-10 |
| Span / Depth          | 20.5            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 494 lbs  | 25.3%           | 47.9%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 1287 lbs | 43.2%           | 61.3%          | Unspecified |
| B3 | Wall/Plate 2-3/8" x 2" | 462 lbs  | 22.9%           | 45.0%          | Unspecified |

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



**1st Floor\Floor Joists\J1-16" O.C.(i1034) - 01 (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i1034)

City, State, Zip:

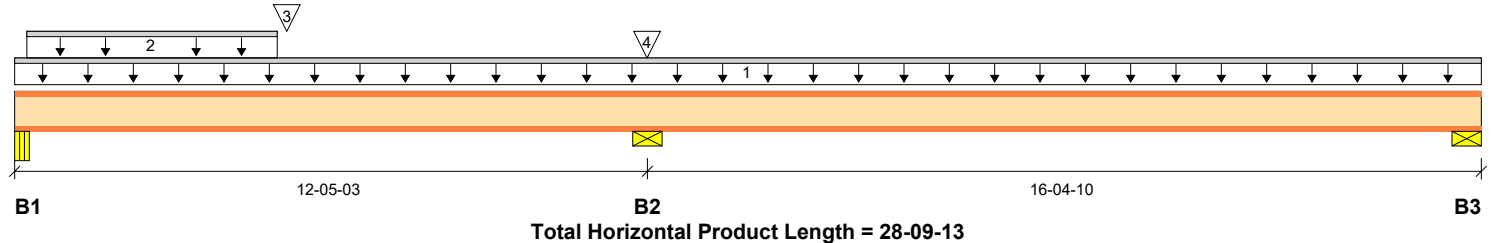
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 301 / 79 | 193 / 0 |      |      |           |
| B2, 3-1/2"  | 959 / 0  | 327 / 0 |      |      |           |
| B3, 2-3/8"  | 381 / 26 | 81 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 28-09-13 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |      | 27   |      |      |           | n/a |
| 3   | 67(i124)                           | Conc. Pt. (lbs)   | L    | 05-04-03 | 05-04-03 | Top  |      | 76   |      |      |           | n/a |
| 4   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |      | 9    |      |      |           | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1537 ft-lbs     | 56.4%       | 100%     | 3    | 21-11-07 |
| Neg. Moment           | -1866 ft-lbs    | 68.5%       | 100%     | 1    | 12-05-03 |
| End Reaction          | 494 lbs         | 47.9%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 1287 lbs        | 61.3%       | 100%     | 1    | 12-05-03 |
| End Shear             | 480 lbs         | 32.6%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 647 lbs         | 43.9%       | 100%     | 1    | 12-06-15 |
| Total Load Deflection | L/598 (0.326")  | 60.2%       | n/a      | 3    | 21-00-10 |
| Live Load Deflection  | L/685 (0.285")  | 70.0%       | n/a      | 6    | 21-00-10 |
| Total Neg. Defl.      | L/999 (-0.035") | n/a         | n/a      | 3    | 09-02-04 |
| Max Defl.             | 0.326"          | 32.6%       | n/a      | 3    | 21-00-10 |
| Span / Depth          | 20.5            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 494 lbs  | 25.3%           | 47.9%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 1287 lbs | 43.2%           | 61.3%          | Unspecified |
| B3 | Wall/Plate 2-3/8" x 2" | 462 lbs  | 22.9%           | 45.0%          | Unspecified |

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**1st Floor\Floor Joists\J1-16" O.C.(i1034) - 02 (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i1034)

City, State, Zip:

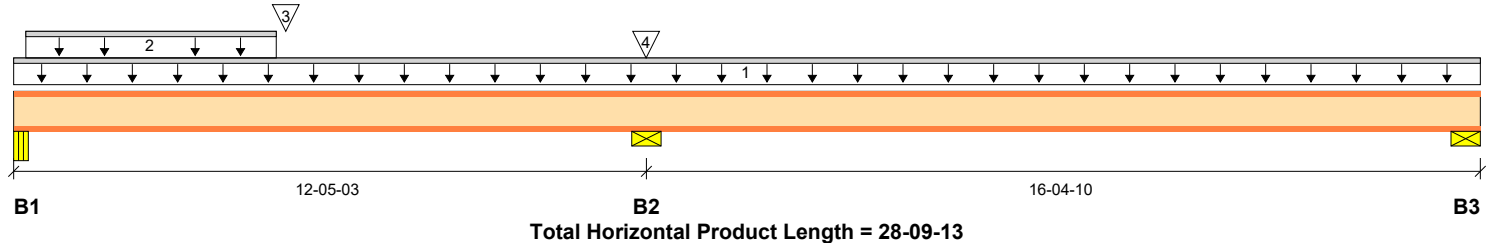
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 301 / 79 | 193 / 0 |      |      |           |
| B2, 3-1/2"  | 959 / 0  | 327 / 0 |      |      |           |
| B3, 2-3/8"  | 381 / 26 | 81 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 28-09-13 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |      | 27   |      |      |           | n/a |
| 3   | 67(i124)                           | Conc. Pt. (lbs)   | L    | 05-04-03 | 05-04-03 | Top  |      | 76   |      |      |           | n/a |
| 4   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |      | 9    |      |      |           | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1537 ft-lbs     | 56.4%       | 100%     | 3    | 21-11-07 |
| Neg. Moment           | -1866 ft-lbs    | 68.5%       | 100%     | 1    | 12-05-03 |
| End Reaction          | 494 lbs         | 47.9%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 1287 lbs        | 61.3%       | 100%     | 1    | 12-05-03 |
| End Shear             | 480 lbs         | 32.6%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 647 lbs         | 43.9%       | 100%     | 1    | 12-06-15 |
| Total Load Deflection | L/598 (0.326")  | 60.2%       | n/a      | 3    | 21-00-10 |
| Live Load Deflection  | L/685 (0.285")  | 70.0%       | n/a      | 6    | 21-00-10 |
| Total Neg. Defl.      | L/999 (-0.035") | n/a         | n/a      | 3    | 09-02-04 |
| Max Defl.             | 0.326"          | 32.6%       | n/a      | 3    | 21-00-10 |
| Span / Depth          | 20.5            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 494 lbs  | 25.3%           | 47.9%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 1287 lbs | 43.2%           | 61.3%          | Unspecified |
| B3 | Wall/Plate 2-3/8" x 2" | 462 lbs  | 22.9%           | 45.0%          | Unspecified |

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**1st Floor\Floor Joists\J1-16" O.C.(i1034) - 03 (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i1034)

City, State, Zip:

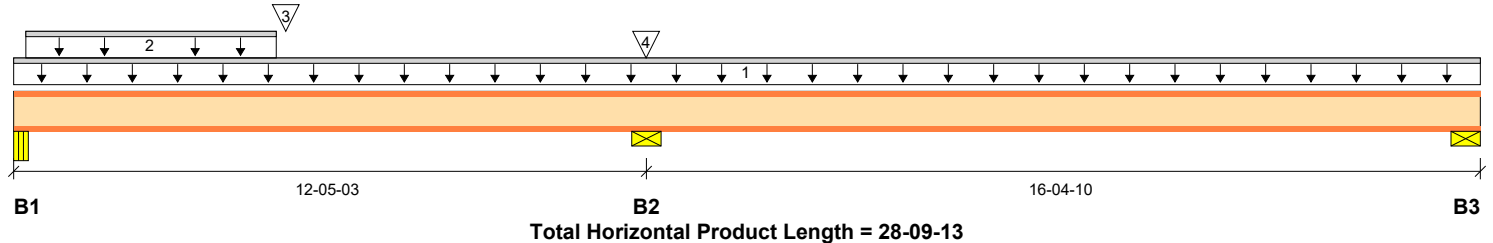
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 301 / 79 | 193 / 0 |      |      |           |
| B2, 3-1/2"  | 959 / 0  | 327 / 0 |      |      |           |
| B3, 2-3/8"  | 381 / 26 | 81 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 28-09-13 | Top  | 53           | 13          |              |              |                      | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |              | 27          |              |              |                      | n/a |
| 3   | 67(i124)                           | Conc. Pt. (lbs)   | L    | 05-04-03 | 05-04-03 | Top  |              | 76          |              |              |                      | n/a |
| 4   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |              | 9           |              |              |                      | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1537 ft-lbs     | 56.4%       | 100%     | 3    | 21-11-07 |
| Neg. Moment           | -1866 ft-lbs    | 68.5%       | 100%     | 1    | 12-05-03 |
| End Reaction          | 494 lbs         | 47.9%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 1287 lbs        | 61.3%       | 100%     | 1    | 12-05-03 |
| End Shear             | 480 lbs         | 32.6%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 647 lbs         | 43.9%       | 100%     | 1    | 12-06-15 |
| Total Load Deflection | L/598 (0.326")  | 60.2%       | n/a      | 3    | 21-00-10 |
| Live Load Deflection  | L/685 (0.285")  | 70.0%       | n/a      | 6    | 21-00-10 |
| Total Neg. Defl.      | L/999 (-0.035") | n/a         | n/a      | 3    | 09-02-04 |
| Max Defl.             | 0.326"          | 32.6%       | n/a      | 3    | 21-00-10 |
| Span / Depth          | 20.5            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow<br>Support | % Allow<br>Member | Material    |
|----|------------------------|----------|--------------------|-------------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 494 lbs  | 25.3%              | 47.9%             | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 1287 lbs | 43.2%              | 61.3%             | Unspecified |
| B3 | Wall/Plate 2-3/8" x 2" | 462 lbs  | 22.9%              | 45.0%             | Unspecified |

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**1st Floor\Floor Joists\J1-16" O.C.(i774) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i774)

City, State, Zip:

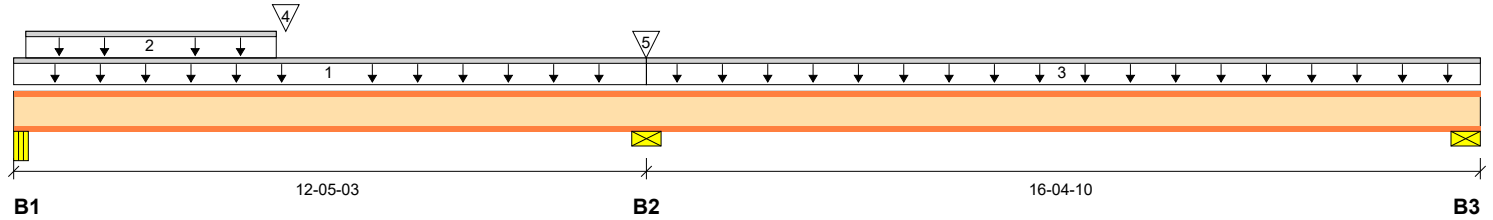
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 28-09-13

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 263 / 79 | 166 / 0 |      |      |           |
| B2, 3-1/2"  | 911 / 0  | 305 / 0 |      |      |           |
| B3, 2-3/8"  | 381 / 23 | 83 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-03 | Top  | 47        | 12       |           |           |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |           | 23       |           |           |                | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 12-05-03 | 28-09-13 | Top  | 53        | 13       |           |           |                | n/a |
| 4   | 67(i124)                           | Conc. Pt. (lbs)   | L    | 05-04-03 | 05-04-03 | Top  |           | 66       |           |           |                | n/a |
| 5   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |           | 9        |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1549 ft-lbs     | 56.8%       | 100%     | 3    | 21-11-07 |
| Neg. Moment           | -1784 ft-lbs    | 65.5%       | 100%     | 1    | 12-05-03 |
| End Reaction          | 464 lbs         | 45.2%       | 100%     | 3    | 28-09-13 |
| Int. Reaction         | 1216 lbs        | 57.9%       | 100%     | 1    | 12-05-03 |
| End Shear             | 450 lbs         | 30.5%       | 100%     | 3    | 28-07-07 |
| Cont. Shear           | 642 lbs         | 43.5%       | 100%     | 1    | 12-06-15 |
| Total Load Deflection | L/591 (0.33")   | 60.9%       | n/a      | 3    | 21-00-10 |
| Live Load Deflection  | L/685 (0.285")  | 70.0%       | n/a      | 6    | 21-00-10 |
| Total Neg. Defl.      | L/999 (-0.041") | n/a         | n/a      | 3    | 08-10-13 |
| Max Defl.             | 0.33"           | 33.0%       | n/a      | 3    | 21-00-10 |
| Span / Depth          | 20.5            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 429 lbs  | 22.0%           | 41.7%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 1216 lbs | 40.9%           | 57.9%          | Unspecified |
| B3 | Wall/Plate 2-3/8" x 2" | 464 lbs  | 23.0%           | 45.2%          | Unspecified |

**1st Floor\Floor Joists\J1-16" O.C.(i774) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i774)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

**1st Floor\Floor Joists\J1-16" O.C.(i775) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i775)

City, State, Zip:

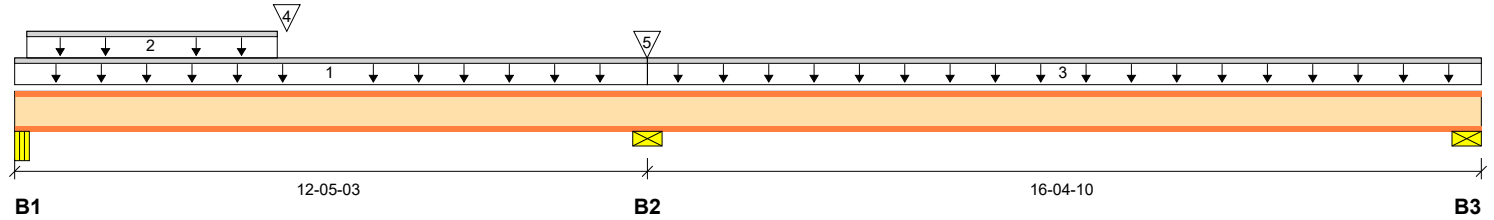
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 28-09-13

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 188 / 79 | 113 / 0 |      |      |           |
| B2, 3-1/2"  | 814 / 0  | 266 / 0 |      |      |           |
| B3, 2-3/8"  | 381 / 16 | 86 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-03 | Top  | 33        | 8        |           |           |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |           | 17       |           |           |                | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 12-05-03 | 28-09-13 | Top  | 53        | 13       |           |           |                | n/a |
| 4   | 67(i124)                           | Conc. Pt. (lbs)   | L    | 05-04-03 | 05-04-03 | Top  |           | 47       |           |           |                | n/a |
| 5   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |           | 14       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1574 ft-lbs     | 57.8%       | 100%     | 3    | 21-08-12 |
| Neg. Moment           | -1620 ft-lbs    | 59.4%       | 100%     | 1    | 12-05-03 |
| End Reaction          | 467 lbs         | 45.5%       | 100%     | 3    | 28-09-13 |
| Int. Reaction         | 1080 lbs        | 51.4%       | 100%     | 1    | 12-05-03 |
| End Shear             | 454 lbs         | 30.8%       | 100%     | 3    | 28-07-07 |
| Cont. Shear           | 632 lbs         | 42.8%       | 100%     | 1    | 12-06-15 |
| Total Load Deflection | L/578 (0.337")  | 62.3%       | n/a      | 3    | 21-00-10 |
| Live Load Deflection  | L/685 (0.285")  | 70.0%       | n/a      | 6    | 21-00-10 |
| Total Neg. Defl.      | L/999 (-0.054") | n/a         | n/a      | 3    | 08-03-14 |
| Max Defl.             | 0.337"          | 33.7%       | n/a      | 3    | 21-00-10 |
| Span / Depth          | 20.5            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 301 lbs  | 15.4%           | 29.2%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 1080 lbs | 36.3%           | 51.4%          | Unspecified |
| B3 | Wall/Plate 2-3/8" x 2" | 467 lbs  | 23.1%           | 45.5%          | Unspecified |

**1st Floor\Floor Joists\J1-16" O.C.(i775) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i775)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA).

Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods.

Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

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**1st Floor\Floor Joists\J1-16" O.C.(i779) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i779)

City, State, Zip:

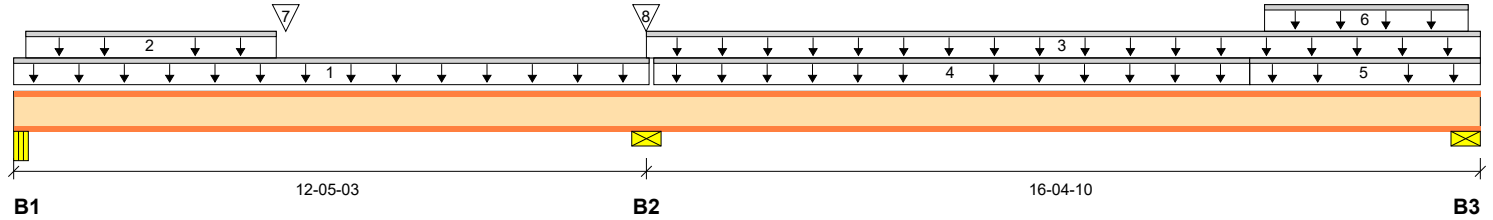
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 208 / 62 | 127 / 0 |      |      |           |
| B2, 3-1/2"  | 710 / 0  | 282 / 0 |      |      |           |
| B3, 2-3/8"  | 336 / 18 | 189 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-13 | Top  | 37        | 9        |           |           |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |           | 18       |           |           |                | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 12-05-03 | 28-09-13 | Top  | 27        | 7        |           |           |                | n/a |
| 4   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 12-06-15 | 24-03-07 | Top  | 13        | 3        |           |           |                | n/a |
| 5   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 24-03-07 | 28-09-13 | Top  | 27        | 7        |           |           |                | n/a |
| 6   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 24-06-15 | 28-06-15 | Top  |           | 35       |           |           |                | n/a |
| 7   | 67(i124)                           | Conc. Pt. (lbs)   | L    | 05-04-03 | 05-04-03 | Top  |           | 57       |           |           |                | n/a |
| 8   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |           | 19       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1382 ft-lbs     | 50.7%       | 100%     | 3    | 22-06-15 |
| Neg. Moment           | -1485 ft-lbs    | 54.5%       | 100%     | 1    | 12-05-03 |
| End Reaction          | 525 lbs         | 51.2%       | 100%     | 3    | 28-09-13 |
| Int. Reaction         | 993 lbs         | 47.3%       | 100%     | 1    | 12-05-03 |
| End Shear             | 512 lbs         | 34.7%       | 100%     | 3    | 28-07-07 |
| Cont. Shear           | 518 lbs         | 35.1%       | 100%     | 1    | 12-06-15 |
| Total Load Deflection | L/669 (0.292")  | 53.8%       | n/a      | 3    | 21-02-10 |
| Live Load Deflection  | L/862 (0.226")  | 55.7%       | n/a      | 6    | 21-00-09 |
| Total Neg. Defl.      | L/999 (-0.037") | n/a         | n/a      | 3    | 08-09-11 |
| Max Defl.             | 0.292"          | 29.2%       | n/a      | 3    | 21-02-10 |
| Span / Depth          | 20.5            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 335 lbs | 17.2%           | 32.6%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 993 lbs | 33.4%           | 47.3%          | Unspecified |
| B3 | Wall/Plate 2-3/8" x 2" | 525 lbs | 26.0%           | 51.2%          | Unspecified |



**1st Floor\Floor Joists\J1-16" O.C.(i779) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i779)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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**1st Floor\Floor Joists\J1-16" O.C.(i815) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | L cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i815)

City, State, Zip:

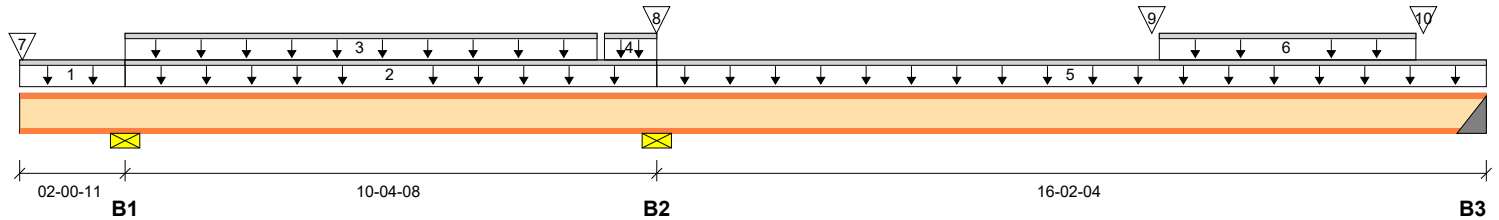
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 28-07-07

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 3-1/2" | 373 / 0  | 151 / 0 |      |      |           |
| B2, 3-1/2" | 747 / 0  | 253 / 0 |      |      |           |
| B3, 2"     | 280 / 17 | 212 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 02-00-11 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 02-00-11 | 12-05-03 | Top  | 27        | 7        |           |           |                | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 02-00-11 | 11-03-03 | Top  | 27        | 7        |           |           |                | n/a |
| 4   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 11-04-15 | 12-05-03 | Top  | 13        |          |           |           |                | n/a |
| 5   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 12-05-03 | 28-07-07 | Top  | 40        | 10       |           |           |                | n/a |
| 6   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 22-02-14 | 27-02-15 | Top  |           | 18       |           |           |                | n/a |
| 7   | E32(i100)                          | Conc. Pt. (lbs)   | L    | 00-00-10 | 00-00-10 | Top  |           | 78       |           |           |                | n/a |
| 8   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |           | 9        |           |           |                | n/a |
| 9   | 58(i115)                           | Conc. Pt. (lbs)   | L    | 22-01-02 | 22-01-02 | Top  |           | 57       |           |           |                | n/a |
| 10  | 53(i111)                           | Conc. Pt. (lbs)   | L    | 27-04-11 | 27-04-11 | Top  |           | 57       |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1553 ft-lbs     | 57.0%       | 100%     | 2    | 22-01-02 |
| Neg. Moment           | -1449 ft-lbs    | 53.2%       | 100%     | 5    | 12-05-03 |
| End Reaction          | 492 lbs         | 49.6%       | 100%     | 2    | 28-07-07 |
| Int. Reaction         | 1000 lbs        | 47.6%       | 100%     | 5    | 12-05-03 |
| End Shear             | 484 lbs         | 32.8%       | 100%     | 2    | 28-05-07 |
| Cont. Shear           | 533 lbs         | 36.1%       | 100%     | 5    | 12-06-15 |
| Total Load Deflection | L/613 (0.315")  | 58.7%       | n/a      | 2    | 21-03-05 |
| Live Load Deflection  | L/954 (0.202")  | 50.3%       | n/a      | 7    | 21-00-00 |
| Total Neg. Defl.      | L/999 (-0.058") | n/a         | n/a      | 2    | 07-10-14 |
| Max Defl.             | 0.315"          | 31.5%       | n/a      | 2    | 21-03-05 |
| Cant. Max Defl.       | 0.044"          | n/a         | n/a      | 2    | 00-00-00 |
| Span / Depth          | 20.3            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-1/2" x 2" | 524 lbs  | 17.6%           | 24.9%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 1000 lbs | 33.6%           | 47.6%          | Unspecified |



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J1-16" O.C.(i815) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | L cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i815)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

| Bearing Supports | Dim. (LxW) | Value   | % Allow Support | % Allow Member | Material    |
|------------------|------------|---------|-----------------|----------------|-------------|
| B3 Hanger        | 2" x 2"    | 492 lbs | n/a             | 49.6%          | ITS2.06/9.5 |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Design assumes Top and Bottom flanges to be restrained.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (1") Cantilever Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Cantilevers require sheathed bottom flanges, blocking at cantilever support and closure at ends.

Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J1-16" O.C.(i977) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | L cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i977)

City, State, Zip:

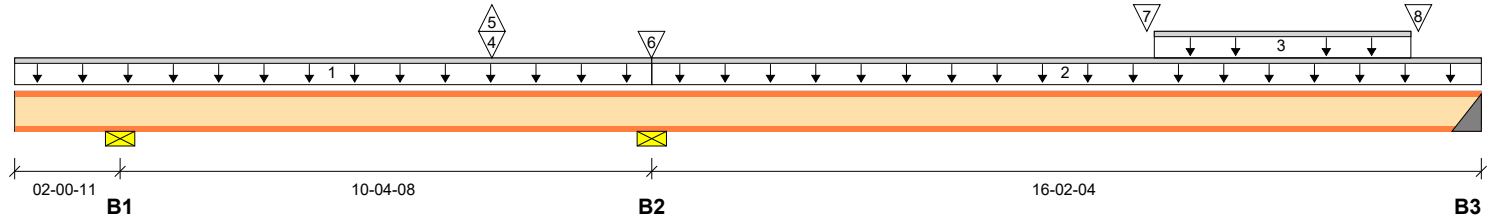
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 3-1/2" | 366 / 99 | 40 / 0  |      |      |           |
| B2, 3-1/2" | 943 / 19 | 351 / 0 |      |      |           |
| B3, 2"     | 373 / 19 | 290 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | -                                  | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-03 | Top  | 50        | 13       |           |           |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 12-05-03 | 28-07-07 | Top  | 53        | 13       |           |           |                | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 22-02-14 | 27-02-15 | Top  |           | 27       |           |           |                | n/a |
| 4   | J8-16" O.C.(i1064)                 | Conc. Pt. (lbs)   | L    | 09-03-12 | 09-03-12 | Back | 68        | 15       |           |           |                | n/a |
| 5   | J8-16" O.C.(i1064)                 | Conc. Pt. (lbs)   | L    | 09-03-12 | 09-03-12 | Back | -8        |          |           |           |                | n/a |
| 6   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |           | 9        |           |           |                | n/a |
| 7   | 58(i115)                           | Conc. Pt. (lbs)   | L    | 22-01-02 | 22-01-02 | Top  |           | 76       |           |           |                | n/a |
| 8   | 53(i111)                           | Conc. Pt. (lbs)   | L    | 27-04-11 | 27-04-11 | Top  |           | 76       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 2083 ft-lbs     | 76.4%       | 100%     | 3    | 22-01-02 |
| Neg. Moment           | -1907 ft-lbs    | 70.0%       | 100%     | 6    | 12-05-03 |
| End Reaction          | 663 lbs         | 66.7%       | 100%     | 3    | 28-07-07 |
| Int. Reaction         | 1294 lbs        | 61.6%       | 100%     | 6    | 12-05-03 |
| End Shear             | 652 lbs         | 44.2%       | 100%     | 3    | 28-05-07 |
| Cont. Shear           | 712 lbs         | 48.3%       | 100%     | 6    | 12-06-15 |
| Total Load Deflection | L/459 (0.421")  | 78.5%       | n/a      | 3    | 21-03-05 |
| Live Load Deflection  | L/716 (0.269")  | 67.0%       | n/a      | 11   | 21-00-00 |
| Total Neg. Defl.      | L/999 (-0.073") | n/a         | n/a      | 3    | 08-01-09 |
| Max Defl.             | 0.421"          | 42.1%       | n/a      | 3    | 21-03-05 |
| Cant. Max Defl.       | 0.039"          | n/a         | n/a      | 3    | 00-00-00 |
| Span / Depth          | 20.3            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-1/2" x 2" | 405 lbs  | 13.6%           | 19.3%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 1294 lbs | 43.5%           | 61.6%          | Unspecified |
| B3 | Hanger 2" x 2"         | 663 lbs  | n/a             | 66.7%          | ITS2.06/9.5 |

**1st Floor\Floor Joists\J1-16" O.C.(i977) (Floor Joist)**

Dry | 3 spans | L cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

Address:

City, State, Zip:

Customer: KC-Truss &amp; Panel

Code reports: ESR-1336

File name: Lot 323 Park Ridge.mmdl

Description: 1st Floor\Floor Joists\J1-16" O.C.(i977)

Specifier:

Designer: Don Happel

Company: Boise Cascade BMD - Lee's Summit

**Cautions**

Uplift of -59 lbs found at bearing B1.

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Design assumes Top and Bottom flanges to be restrained.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (1") Cantilever Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Cantilevers require sheathed bottom flanges, blocking at cantilever support and closure at ends.

Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J1-16" O.C.(i987) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i987)

City, State, Zip:

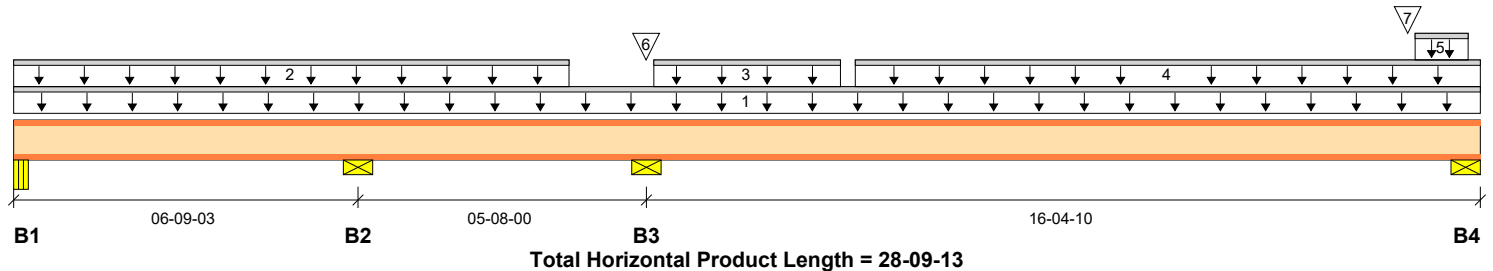
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live      | Dead    | Snow | Wind | Roof Live |
|-------------|-----------|---------|------|------|-----------|
| B1, 2-7/16" | 118 / 7   | 28 / 0  |      |      |           |
| B2, 3-1/2"  | 234 / 262 | 0 / 13  |      |      |           |
| B3, 3-1/2"  | 838 / 15  | 231 / 0 |      |      |           |
| B4, 2-3/8"  | 371 / 2   | 182 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 28-09-13 | Top  | 27        | 7        |           |           |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 10-10-15 | Top  | 5         | 1        |           |           |                | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 12-06-15 | 16-02-15 | Top  | 26        | 7        |           |           |                | n/a |
| 4   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 16-06-07 | 28-09-13 | Top  | 28        | 7        |           |           |                | n/a |
| 5   | 54(i110)                           | Unf. Lin. (lb/ft) | L    | 27-06-07 | 28-06-15 | Top  |           | 57       |           |           |                | n/a |
| 6   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |           | 12       |           |           |                | n/a |
| 7   | 53(i111)                           | Conc. Pt. (lbs)   | L    | 27-04-11 | 27-04-11 | Top  |           | 38       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1561 ft-lbs     | 57.3%       | 100%     | 3    | 22-01-10 |
| Neg. Moment           | -1603 ft-lbs    | 58.8%       | 100%     | 6    | 12-05-03 |
| End Reaction          | 553 lbs         | 53.9%       | 100%     | 3    | 28-09-13 |
| Int. Reaction         | 1069 lbs        | 50.9%       | 100%     | 6    | 12-05-03 |
| End Shear             | 540 lbs         | 36.6%       | 100%     | 3    | 28-07-07 |
| Cont. Shear           | 636 lbs         | 43.1%       | 100%     | 6    | 12-06-15 |
| Total Load Deflection | L/594 (0.328")  | 60.6%       | n/a      | 3    | 21-03-07 |
| Live Load Deflection  | L/760 (0.256")  | 63.1%       | n/a      | 11   | 21-01-06 |
| Total Neg. Defl.      | L/999 (-0.023") | n/a         | n/a      | 3    | 10-01-05 |
| Max Defl.             | 0.328"          | 32.8%       | n/a      | 3    | 21-03-07 |
| Span / Depth          | 20.5            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 147 lbs  | 7.5%            | 14.2%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 221 lbs  | 7.4%            | 10.5%          | Unspecified |
| B2 | Uplift                 | 275 lbs  |                 |                |             |
| B3 | Wall/Plate 3-1/2" x 2" | 1069 lbs | 35.9%           | 50.9%          | Unspecified |
| B4 | Wall/Plate 2-3/8" x 2" | 553 lbs  | 27.4%           | 53.9%          | Unspecified |

**1st Floor\Floor Joists\J1-16" O.C.(i987) (Floor Joist)**

BC CALC® Member Report

Dry | 3 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J1-16" O.C.(i987)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Cautions**

Uplift of -275 lbs found at bearing B2.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA).

Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

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# Double 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J3-16" O.C.(i1002) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J3-16" O.C.(i1002)

City, State, Zip:

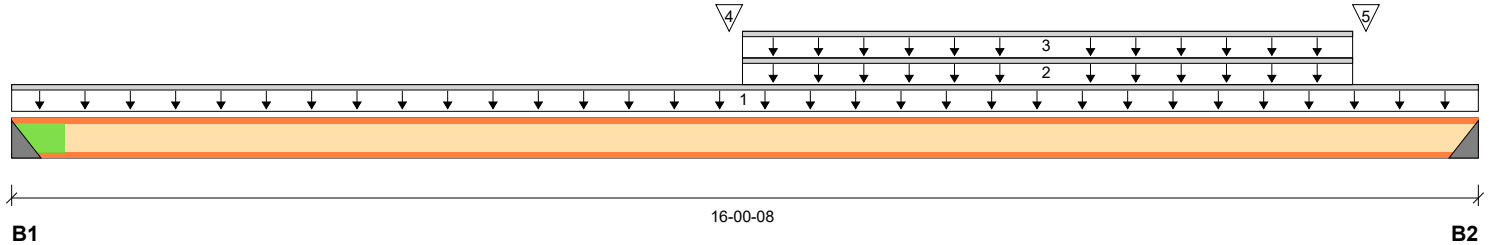
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-00-08

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 2-1/2" | 429 / 0 | 204 / 0 |      |      |           |
| B2, 2"     | 427 / 0 | 343 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-00-08 | Top  | 53           | 13          |              |              |                      | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 07-11-15 | 14-08-00 | Top  |              | 13          |              |              |                      | n/a |
| 3   | -                                  | Unf. Lin. (lb/ft) | L    | 07-11-15 | 14-08-00 | Top  |              | 13          |              |              |                      | n/a |
| 4   | 56(i114)                           | Conc. Pt. (lbs)   | L    | 07-10-03 | 07-10-03 | Top  |              | 78          |              |              |                      | n/a |
| 5   | 53(i111)                           | Conc. Pt. (lbs)   | L    | 14-09-12 | 14-09-12 | Top  |              | 78          |              |              |                      | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2833 ft-lbs    | 52.0%       | 100%     | 1    | 08-02-07 |
| End Reaction          | 770 lbs        | 38.7%       | 100%     | 1    | 16-00-08 |
| End Shear             | 759 lbs        | 25.7%       | 100%     | 1    | 15-10-08 |
| Total Load Deflection | L/558 (0.34")  | 64.5%       | n/a      | 1    | 08-02-07 |
| Live Load Deflection  | L/935 (0.203") | 51.3%       | n/a      | 2    | 07-11-15 |
| Max Defl.             | 0.34"          | 34.0%       | n/a      | 1    | 08-02-07 |
| Span / Depth          | 19.9           |             |          |      |          |

### Bearing Supports

|           | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|-----------|-------------|---------|-----------------|----------------|-------------|
| B1 Hanger | 2-1/2" x 4" | 633 lbs | 24.7%           | 26.4%          | MIT4.12/9.5 |
| B2 Hanger | 2" x 4"     | 770 lbs | n/a             | 38.7%          | MIT4.12/9.5 |

### Cautions

Web stiffeners required at bearing B1.

Header for the hanger MIT4.12/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger MIT4.12/9.5 requires (4) 16d face nails, (4) 16d TF nails, (2) 10dx1.5 joist nails.

Hanger model MIT4.12/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.



**Double 9-1/2" BCI® 5000s-1.8****PASSED****1st Floor\Floor Joists\J3-16" O.C.(i1002) (Floor Joist)**

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J3-16" O.C.(i1002)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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**1st Floor\Floor Joists\J3-16" O.C.(i1018) (Floor Joist)**

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J3-16" O.C.(i1018)

City, State, Zip:

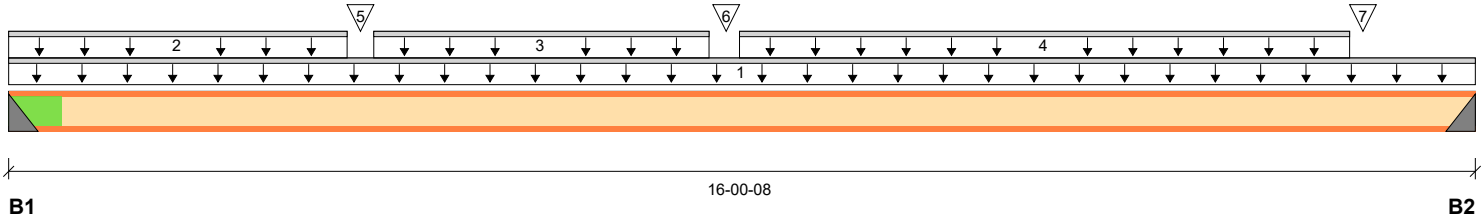
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 16-00-08

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 2-1/2" | 429 / 0 | 429 / 0 |      |      |           |
| B2, 2"     | 427 / 0 | 427 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-00-08 | Top  | 53           | 13          |              |              |                      | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 03-08-07 | Top  |              | 13          |              |              |                      | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-11-15 | 07-07-15 | Top  |              | 43          |              |              |                      | n/a |
| 4   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 07-11-15 | 14-08-00 | Top  |              | 27          |              |              |                      | n/a |
| 5   | 59(i117)                           | Conc. Pt. (lbs)   | L    | 03-10-03 | 03-10-03 | Top  |              | 104         |              |              |                      | n/a |
| 6   | 56(i114)                           | Conc. Pt. (lbs)   | L    | 07-10-03 | 07-10-03 | Top  |              | 76          |              |              |                      | n/a |
| 7   | 53(i111)                           | Conc. Pt. (lbs)   | L    | 14-09-12 | 14-09-12 | Top  |              | 76          |              |              |                      | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 3522 ft-lbs    | 64.6%       | 100%     | 1    | 07-10-03 |
| End Reaction          | 854 lbs        | 43.0%       | 100%     | 1    | 16-00-08 |
| End Shear             | 843 lbs        | 28.6%       | 100%     | 1    | 15-10-08 |
| Total Load Deflection | L/447 (0.424") | 80.6%       | n/a      | 1    | 07-11-14 |
| Live Load Deflection  | L/935 (0.203") | 51.3%       | n/a      | 2    | 07-11-15 |
| Max Defl.             | 0.424"         | 42.4%       | n/a      | 1    | 07-11-14 |
| Span / Depth          | 19.9           |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)         | Value   | % Allow Support | % Allow Member | Material    |
|----|--------------------|---------|-----------------|----------------|-------------|
| B1 | Hanger 2-1/2" x 4" | 858 lbs | 33.4%           | 35.7%          | MIT4.12/9.5 |
| B2 | Hanger 2" x 4"     | 854 lbs | n/a             | 43.0%          | MIT4.12/9.5 |

**Cautions**

Web stiffeners required at bearing B1.

Header for the hanger MIT4.12/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger MIT4.12/9.5 requires (4) 16d face nails, (4) 16d TF nails, (2) 10dx1.5 joist nails.

Hanger model MIT4.12/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

**Double 9-1/2" BCI® 5000s-1.8****PASSED****1st Floor\Floor Joists\J3-16" O.C.(i1018) (Floor Joist)**

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

Address:

City, State, Zip:

Customer: KC-Truss &amp; Panel

Code reports: ESR-1336

File name: Lot 323 Park Ridge.mmdl

Description: 1st Floor\Floor Joists\J3-16" O.C.(i1018)

Specifier:

Designer: Don Happel

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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## 1st Floor\Floor Joists\J3-16" O.C.(i1024) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued & nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J3-16" O.C.(i1024)

City, State, Zip:

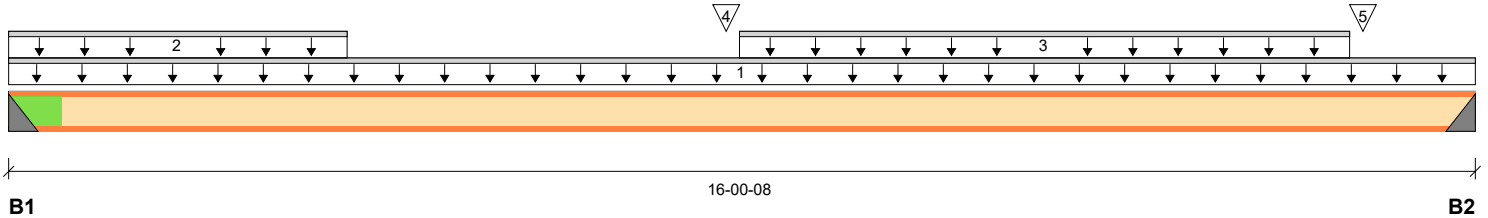
Specifier:

Customer: KC-Truss & Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 2-1/2" | 429 / 0 | 347 / 0 |      |      |           |
| B2, 2"     | 427 / 0 | 358 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
|     |                                    |                   |      |          |          |      | 100% | 90%  | 115% | 160% | 125%      |     |
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-00-08 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 03-08-07 | Top  |      | 43   |      |      |           | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 07-11-15 | 14-08-00 | Top  |      | 27   |      |      |           | n/a |
| 4   | 56(i114)                           | Conc. Pt. (lbs)   | L    | 07-10-03 | 07-10-03 | Top  |      | 76   |      |      |           | n/a |
| 5   | 53(i111)                           | Conc. Pt. (lbs)   | L    | 14-09-12 | 14-09-12 | Top  |      | 76   |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 2961 ft-lbs    | 54.3%       | 100%     | 1    | 07-11-15 |
| End Reaction          | 784 lbs        | 39.5%       | 100%     | 1    | 16-00-08 |
| End Shear             | 773 lbs        | 26.2%       | 100%     | 1    | 15-10-08 |
| Total Load Deflection | L/530 (0.358") | 68.0%       | n/a      | 1    | 07-11-15 |
| Live Load Deflection  | L/935 (0.203") | 51.3%       | n/a      | 2    | 07-11-15 |
| Max Defl.             | 0.358"         | 35.8%       | n/a      | 1    | 07-11-15 |
| Span / Depth          | 19.9           |             |          |      |          |

### Bearing Supports

|           | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|-----------|-------------|---------|-----------------|----------------|-------------|
| B1 Hanger | 2-1/2" x 4" | 776 lbs | 30.2%           | 32.3%          | MIT4.12/9.5 |
| B2 Hanger | 2" x 4"     | 784 lbs | n/a             | 39.5%          | MIT4.12/9.5 |

### Cautions

Web stiffeners required at bearing B1.

Header for the hanger MIT4.12/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger MIT4.12/9.5 requires (4) 16d face nails, (4) 16d TF nails, (2) 10dx1.5 joist nails.

Hanger model MIT4.12/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

**Double 9-1/2" BCI® 5000s-1.8****PASSED****1st Floor\Floor Joists\J3-16" O.C.(i1024) (Floor Joist)**

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J3-16" O.C.(i1024)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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**1st Floor\Floor Joists\J3-16" O.C.(i859) (Floor Joist)**

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J3-16" O.C.(i859)

City, State, Zip:

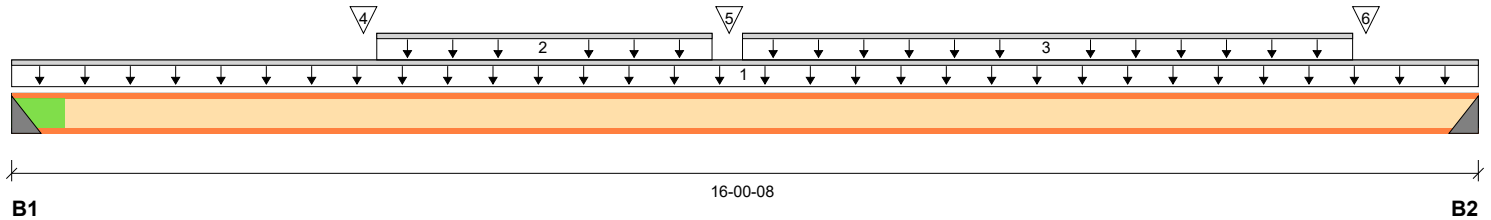
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 2-1/2" | 563 / 0 | 378 / 0 |      |      |           |
| B2, 2"     | 560 / 0 | 469 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-00-08 | Top  | 70           | 18          |              |              |                      | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-11-15 | 07-07-15 | Top  |              | 13          |              |              |                      | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 07-11-15 | 14-08-00 | Top  |              | 35          |              |              |                      | n/a |
| 4   | 59(i117)                           | Conc. Pt. (lbs)   | L    | 03-10-03 | 03-10-03 | Top  |              | 104         |              |              |                      | n/a |
| 5   | 56(i114)                           | Conc. Pt. (lbs)   | L    | 07-10-03 | 07-10-03 | Top  |              | 104         |              |              |                      | n/a |
| 6   | 53(i111)                           | Conc. Pt. (lbs)   | L    | 14-09-12 | 14-09-12 | Top  |              | 76          |              |              |                      | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 4042 ft-lbs    | 74.2%       | 100%     | 1    | 07-10-03 |
| End Reaction          | 1029 lbs       | 51.8%       | 100%     | 1    | 16-00-08 |
| End Shear             | 1014 lbs       | 34.4%       | 100%     | 1    | 15-10-08 |
| Total Load Deflection | L/389 (0.487") | 92.4%       | n/a      | 1    | 07-11-15 |
| Live Load Deflection  | L/713 (0.266") | 67.4%       | n/a      | 2    | 07-11-15 |
| Max Defl.             | 0.487"         | 48.7%       | n/a      | 1    | 07-11-15 |
| Span / Depth          | 19.9           |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)         | Value    | % Allow Support | % Allow Member | Material    |
|----|--------------------|----------|-----------------|----------------|-------------|
| B1 | Hanger 2-1/2" x 4" | 941 lbs  | 36.7%           | 39.2%          | MIT4.12/9.5 |
| B2 | Hanger 2" x 4"     | 1029 lbs | n/a             | 51.8%          | MIT4.12/9.5 |

**Cautions**

Web stiffeners required at bearing B1.

Header for the hanger MIT4.12/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger MIT4.12/9.5 requires (4) 16d face nails, (4) 16d TF nails, (2) 10dx1.5 joist nails.

Hanger model MIT4.12/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

**1st Floor\Floor Joists\J3-16" O.C.(i859) (Floor Joist)**

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J3-16" O.C.(i859)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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## 1st Floor\Floor Joists\J4-16" O.C.(i1006) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued & nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i1006)

City, State, Zip:

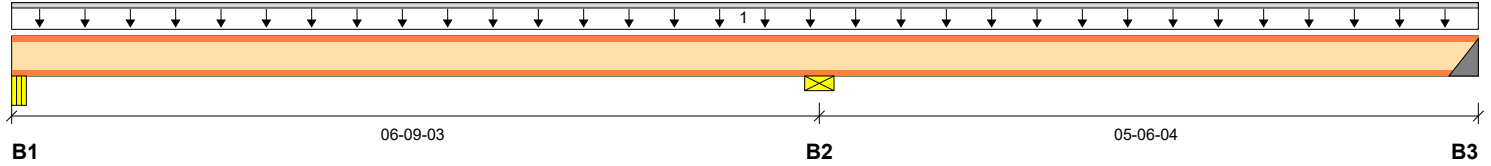
Specifier:

Customer: KC-Truss & Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live     | Dead   | Snow | Wind | Roof Live |
|-------------|----------|--------|------|------|-----------|
| B1, 2-7/16" | 164 / 11 | 38 / 0 |      |      |           |
| B2, 3-1/2"  | 391 / 0  | 98 / 0 |      |      |           |
| B3, 2"      | 136 / 25 | 28 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-03-07 | Top  | 53        | 13       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 279 ft-lbs      | 10.2%       | 100%     | 2    | 03-00-06 |
| Neg. Moment           | -261 ft-lbs     | 9.6%        | 100%     | 1    | 06-09-03 |
| End Reaction          | 202 lbs         | 19.6%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 489 lbs         | 23.3%       | 100%     | 1    | 06-09-03 |
| End Shear             | 189 lbs         | 12.8%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 251 lbs         | 17.0%       | 100%     | 1    | 06-07-07 |
| Total Load Deflection | L/999 (0.016")  | n/a         | n/a      | 2    | 03-04-00 |
| Live Load Deflection  | L/999 (0.013")  | n/a         | n/a      | 5    | 03-04-00 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 2    | 08-03-15 |
| Max Defl.             | 0.016"          | n/a         | n/a      | 2    | 03-04-00 |
| Span / Depth          | 8.4             |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 202 lbs | 10.3%           | 19.6%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 489 lbs | 16.4%           | 23.3%          | Unspecified |
| B3 | Hanger 2" x 2"         | 164 lbs | 10.6%           | 16.5%          | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i1006) - 01 (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i1006)

City, State, Zip:

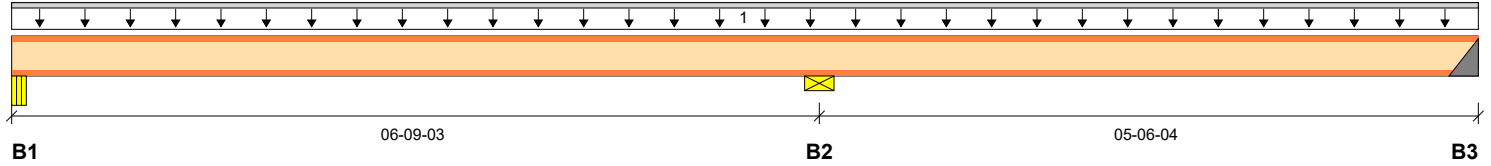
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live     | Dead   | Snow | Wind | Roof Live |
|-------------|----------|--------|------|------|-----------|
| B1, 2-7/16" | 164 / 11 | 38 / 0 |      |      |           |
| B2, 3-1/2"  | 391 / 0  | 98 / 0 |      |      |           |
| B3, 2"      | 136 / 25 | 28 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-03-07 | Top  | 53        | 13       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 279 ft-lbs      | 10.2%       | 100%     | 2    | 03-00-06 |
| Neg. Moment           | -261 ft-lbs     | 9.6%        | 100%     | 1    | 06-09-03 |
| End Reaction          | 202 lbs         | 19.6%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 489 lbs         | 23.3%       | 100%     | 1    | 06-09-03 |
| End Shear             | 189 lbs         | 12.8%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 251 lbs         | 17.0%       | 100%     | 1    | 06-07-07 |
| Total Load Deflection | L/999 (0.016")  | n/a         | n/a      | 2    | 03-04-00 |
| Live Load Deflection  | L/999 (0.013")  | n/a         | n/a      | 5    | 03-04-00 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 2    | 08-03-15 |
| Max Defl.             | 0.016"          | n/a         | n/a      | 2    | 03-04-00 |
| Span / Depth          | 8.4             |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 202 lbs | 10.3%           | 19.6%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 489 lbs | 16.4%           | 23.3%          | Unspecified |
| B3 | Hanger 2" x 2"         | 164 lbs | 10.6%           | 16.5%          | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.  
 Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i1012) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i1012)

City, State, Zip:

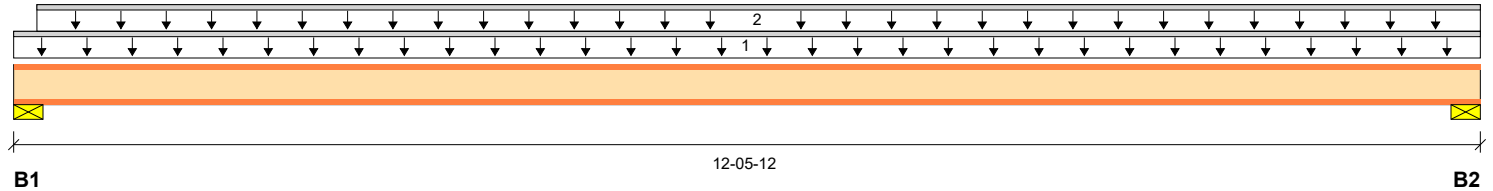
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12-05-12

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2-3/8" | 328 / 0 | 82 / 0 |      |      |           |
| B2, 2-3/8" | 333 / 0 | 83 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-12 | Top  | 26           | 7           |              |              |                      | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-06 | 12-05-12 | Top  | 28           | 7           |              |              |                      | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1242 ft-lbs     | 45.6%       | 100%     | 1    | 06-02-14 |
| End Reaction          | 416 lbs         | 40.5%       | 100%     | 1    | 12-05-12 |
| End Shear             | 403 lbs         | 27.3%       | 100%     | 1    | 00-02-06 |
| Total Load Deflection | L/852 (0.172")  | 42.3%       | n/a      | 1    | 06-02-14 |
| Live Load Deflection  | L/1065 (0.138") | 45.1%       | n/a      | 2    | 06-02-14 |
| Max Defl.             | 0.172"          | 17.2%       | n/a      | 1    | 06-02-14 |
| Span / Depth          | 15.4            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 410 lbs | 20.3%           | 40.0%          | Unspecified |
| B2 | Wall/Plate 2-3/8" x 2" | 416 lbs | 20.6%           | 40.5%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i1021) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i1021)

City, State, Zip:

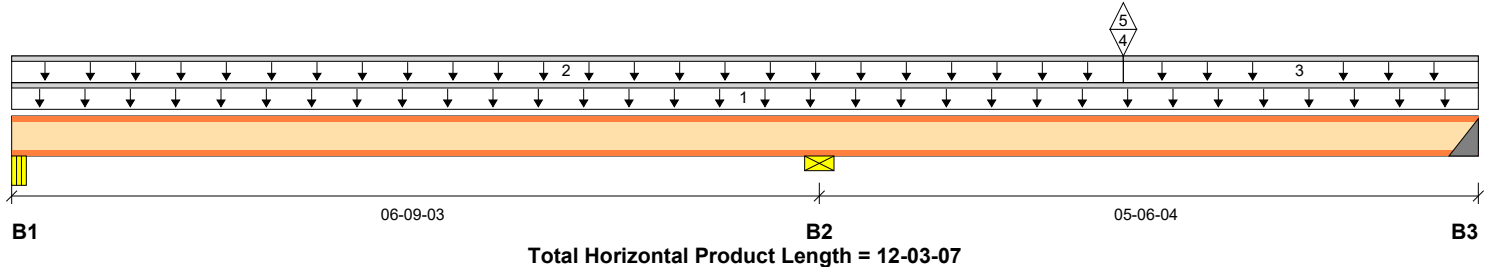
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 174 / 17 | 39 / 0  |      |      |           |
| B2, 3-1/2"  | 469 / 4  | 116 / 0 |      |      |           |
| B3, 2"      | 207 / 29 | 44 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc.  | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|-------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-03-07 | Top   | 27        | 7        |           |           |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-03-12 | Top   | 30        | 8        |           |           |                | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 09-03-12 | 12-03-07 | Top   | 50        | 13       |           |           |                | n/a |
| 4   | J8-16" O.C.(i1064)                 | Conc. Pt. (lbs)   | L    | 09-03-12 | 09-03-12 | Front | 52        | 11       |           |           |                | n/a |
| 5   | J8-16" O.C.(i1064)                 | Conc. Pt. (lbs)   | L    | 09-03-12 | 09-03-12 | Front | -6        |          |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 305 ft-lbs      | 11.2%       | 100%     | 4    | 09-07-09 |
| Neg. Moment           | -318 ft-lbs     | 11.7%       | 100%     | 1    | 06-09-03 |
| End Reaction          | 252 lbs         | 25.3%       | 100%     | 4    | 12-03-07 |
| Int. Reaction         | 585 lbs         | 27.9%       | 100%     | 1    | 06-09-03 |
| End Shear             | 236 lbs         | 16.0%       | 100%     | 4    | 12-01-07 |
| Cont. Shear           | 292 lbs         | 19.8%       | 100%     | 1    | 06-10-15 |
| Total Load Deflection | L/999 (0.017")  | n/a         | n/a      | 3    | 03-04-00 |
| Live Load Deflection  | L/999 (0.014")  | n/a         | n/a      | 7    | 03-04-00 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 3    | 07-10-14 |
| Max Defl.             | 0.017"          | n/a         | n/a      | 3    | 03-04-00 |
| Span / Depth          | 8.4             |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 214 lbs | 11.0%           | 20.8%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 585 lbs | 19.7%           | 27.9%          | Unspecified |
| B3 | Hanger 2" x 2"         | 252 lbs | 16.2%           | 25.3%          | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

**1st Floor\Floor Joists\J4-16" O.C.(i1021) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i1021)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i1028) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i1028)

City, State, Zip:

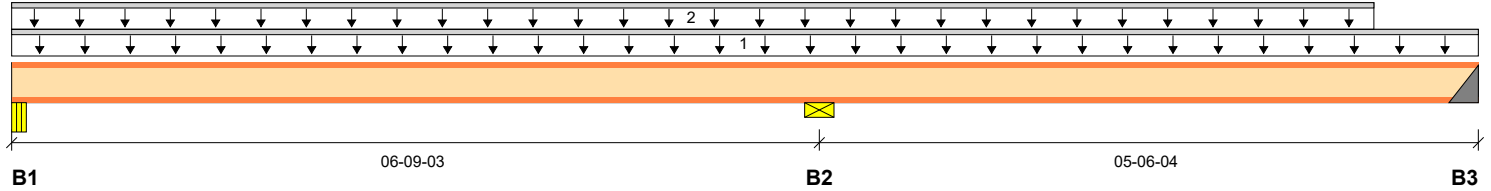
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12-03-07

### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 178 / 12 | 42 / 0  |      |      |           |
| B2, 3-1/2"  | 422 / 0  | 106 / 0 |      |      |           |
| B3, 2"      | 123 / 27 | 24 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-03-07 | Top  | 27           | 7           |              |              |                      | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 11-04-15 | Top  | 31           | 8           |              |              |                      | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 303 ft-lbs      | 11.1%       | 100%     | 2    | 03-00-06 |
| Neg. Moment           | -281 ft-lbs     | 10.3%       | 100%     | 1    | 06-09-03 |
| End Reaction          | 219 lbs         | 21.3%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 528 lbs         | 25.1%       | 100%     | 1    | 06-09-03 |
| End Shear             | 205 lbs         | 13.9%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 272 lbs         | 18.4%       | 100%     | 1    | 06-07-07 |
| Total Load Deflection | L/999 (0.017")  | n/a         | n/a      | 2    | 03-04-00 |
| Live Load Deflection  | L/999 (0.014")  | n/a         | n/a      | 5    | 03-04-00 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 2    | 08-03-15 |
| Max Defl.             | 0.017"          | n/a         | n/a      | 2    | 03-04-00 |
| Span / Depth          | 8.4             |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 219 lbs | 11.2%           | 21.3%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 528 lbs | 17.8%           | 25.1%          | Unspecified |
| B3 | Hanger 2" x 2"         | 147 lbs | 9.5%            | 14.8%          | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

**1st Floor\Floor Joists\J4-16" O.C.(i1028) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i1028)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i1039) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i1039)

City, State, Zip:

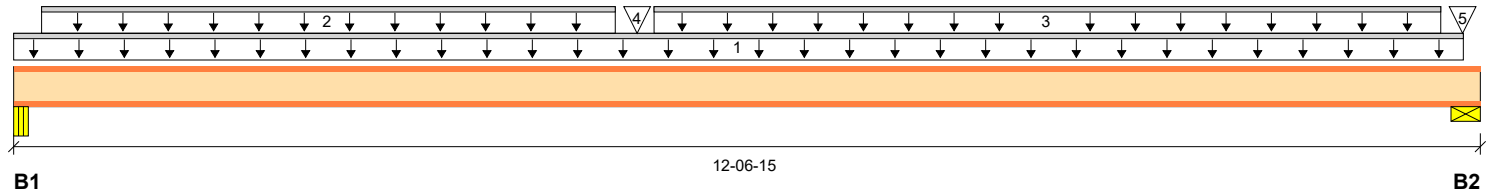
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12-06-15

### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live    | Dead    | Snow | Wind | Roof Live |
|-------------|---------|---------|------|------|-----------|
| B1, 2-7/16" | 167 / 0 | 224 / 0 |      |      |           |
| B2, 3-1/2"  | 165 / 0 | 359 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-03 | Top  | 27   | 7   |      |      |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |      | 13  |      |      |                | n/a |
| 3   | 68(i125)                           | Unf. Lin. (lb/ft) | L    | 05-05-15 | 12-02-14 | Top  |      | 57  |      |      |                | n/a |
| 4   | 67(i124)                           | Conc. Pt. (lbs)   | L    | 05-04-03 | 05-04-03 | Top  |      | 38  |      |      |                | n/a |
| 5   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |      | 14  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 1462 ft-lbs    | 53.7%       | 100%     | 1    | 06-07-07 |
| End Reaction          | 524 lbs        | 46.5%       | 100%     | 1    | 12-06-15 |
| End Shear             | 505 lbs        | 34.2%       | 100%     | 1    | 12-03-07 |
| Total Load Deflection | L/737 (0.199") | 48.9%       | n/a      | 1    | 06-05-03 |
| Live Load Deflection  | L/999 (0.069") | n/a         | n/a      | 2    | 06-02-15 |
| Max Defl.             | 0.199"         | 19.9%       | n/a      | 1    | 06-05-03 |
| Span / Depth          | 15.4           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 391 lbs | 20.0%           | 38.0%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 524 lbs | 17.6%           | 46.5%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i780) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i780)

City, State, Zip:

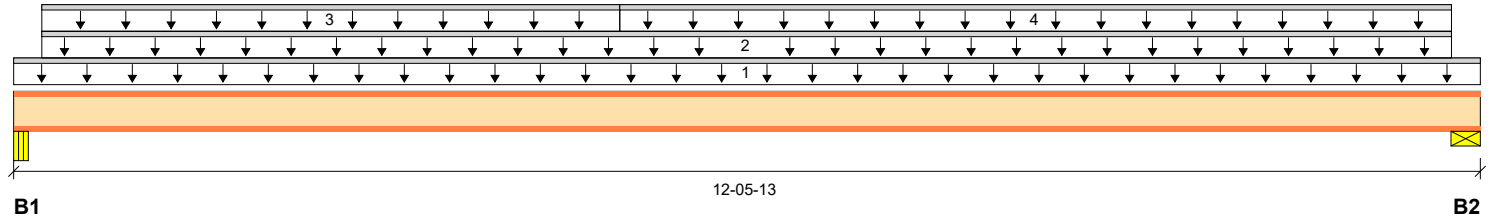
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12-05-13

### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live    | Dead    | Snow | Wind | Roof Live |
|-------------|---------|---------|------|------|-----------|
| B1, 2-7/16" | 269 / 0 | 196 / 0 |      |      |           |
| B2, 2-3/8"  | 269 / 0 | 195 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-13 | Top  | 43   | 11   |      |      |           | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 12-02-14 | Top  |      | 13   |      |      |           | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |      | 8    |      |      |           | n/a |
| 4   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 05-01-15 | 12-02-14 | Top  |      | 8    |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 1403 ft-lbs    | 51.5%       | 100%     | 1    | 06-03-00 |
| End Reaction          | 464 lbs        | 45.2%       | 100%     | 1    | 12-05-13 |
| End Shear             | 455 lbs        | 30.8%       | 100%     | 1    | 00-02-07 |
| Total Load Deflection | L/754 (0.194") | 47.7%       | n/a      | 1    | 06-03-00 |
| Live Load Deflection  | L/999 (0.111") | n/a         | n/a      | 2    | 06-03-00 |
| Max Defl.             | 0.194"         | 19.4%       | n/a      | 1    | 06-03-00 |
| Span / Depth          | 15.4           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 465 lbs | 23.8%           | 45.2%          | Unspecified |
| B2 | Wall/Plate 2-3/8" x 2" | 464 lbs | 23.0%           | 45.2%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i786) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i786)

City, State, Zip:

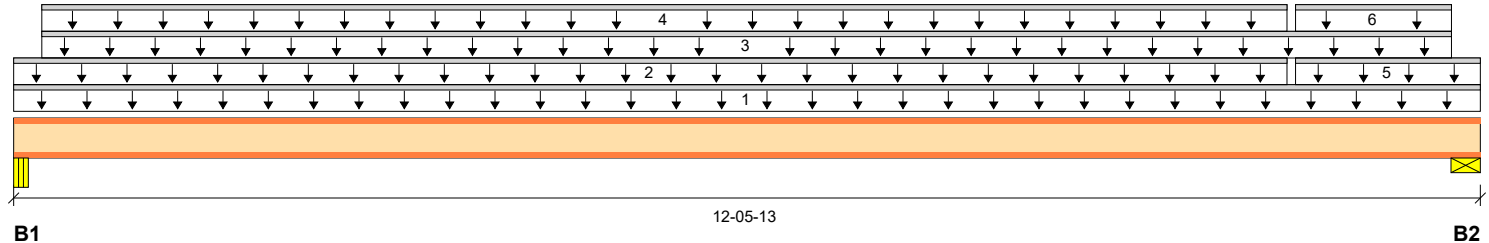
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12-05-13

### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live    | Dead    | Snow | Wind | Roof Live |
|-------------|---------|---------|------|------|-----------|
| B1, 2-7/16" | 229 / 0 | 164 / 0 |      |      |           |
| B2, 2-3/8"  | 233 / 0 | 165 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-13 | Top  | 27           | 7           |              |              |                      | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 10-10-01 | Top  | 10           | 3           |              |              |                      | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 12-02-14 | Top  |              | 13          |              |              |                      | n/a |
| 4   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 10-10-01 | Top  |              | 4           |              |              |                      | n/a |
| 5   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 10-10-15 | 12-05-13 | Top  | 13           | 3           |              |              |                      | n/a |
| 6   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 10-10-15 | 12-02-14 | Top  |              | 5           |              |              |                      | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 1187 ft-lbs    | 43.6%       | 100%     | 1    | 06-02-11 |
| End Reaction          | 398 lbs        | 38.8%       | 100%     | 1    | 12-05-13 |
| End Shear             | 389 lbs        | 26.3%       | 100%     | 1    | 12-03-07 |
| Total Load Deflection | L/891 (0.164") | 40.4%       | n/a      | 1    | 06-02-11 |
| Live Load Deflection  | L/999 (0.095") | n/a         | n/a      | 2    | 06-02-11 |
| Max Defl.             | 0.164"         | 16.4%       | n/a      | 1    | 06-02-11 |
| Span / Depth          | 15.4           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 393 lbs | 20.1%           | 38.2%          | Unspecified |
| B2 | Wall/Plate 2-3/8" x 2" | 398 lbs | 19.7%           | 38.8%          | Unspecified |

**1st Floor\Floor Joists\J4-16" O.C.(i786) (Floor Joist)**

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i786)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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**1st Floor\Floor Joists\J4-16" O.C.(i787) (Floor Joist)**

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i787)

City, State, Zip:

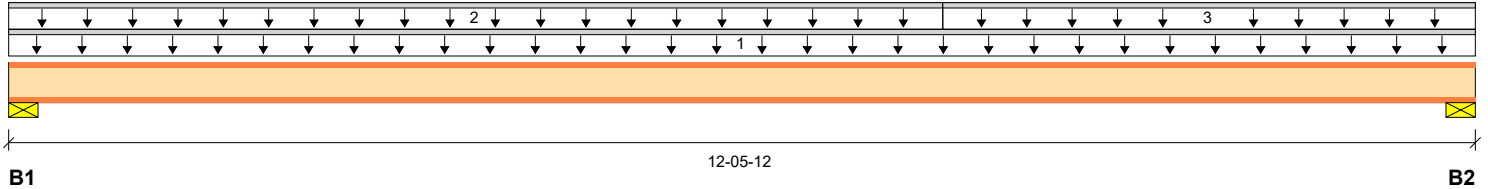
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12-05-12

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2-3/8" | 296 / 0 | 74 / 0 |      |      |           |
| B2, 2-3/8" | 316 / 0 | 79 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-12 | Top  | 27        | 7        |           |           |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 07-11-06 | Top  | 20        | 5        |           |           |                | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 07-11-06 | 12-05-12 | Top  | 27        | 7        |           |           |                | n/a |

**Controls Summary**

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1127 ft-lbs     | 41.4%       | 100%     | 1    | 06-05-02 |
| End Reaction          | 395 lbs         | 38.5%       | 100%     | 1    | 12-05-12 |
| End Shear             | 382 lbs         | 25.9%       | 100%     | 1    | 12-03-06 |
| Total Load Deflection | L/936 (0.157")  | 38.5%       | n/a      | 1    | 06-02-08 |
| Live Load Deflection  | L/1170 (0.125") | 41.0%       | n/a      | 2    | 06-02-08 |
| Max Defl.             | 0.157"          | 15.7%       | n/a      | 1    | 06-02-08 |
| Span / Depth          | 15.4            |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 371 lbs | 18.4%           | 36.1%          | Unspecified |
| B2 | Wall/Plate 2-3/8" x 2" | 395 lbs | 19.6%           | 38.5%          | Unspecified |

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i789) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i789)

City, State, Zip:

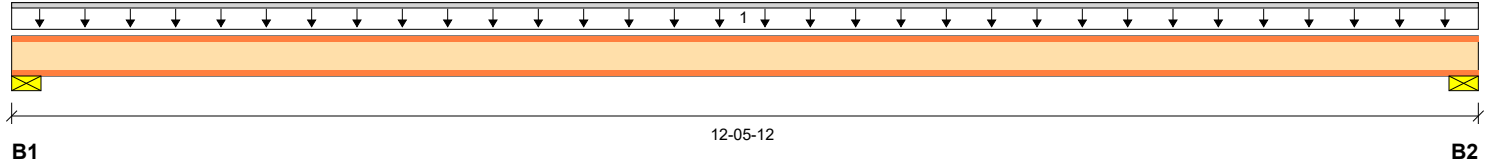
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2-3/8" | 328 / 0 | 82 / 0 |      |      |           |
| B2, 2-3/8" | 328 / 0 | 82 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-12 | Top  | 53           | 13          |              |              |                      | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1223 ft-lbs     | 44.9%       | 100%     | 1    | 06-02-14 |
| End Reaction          | 409 lbs         | 39.9%       | 100%     | 1    | 00-00-00 |
| End Shear             | 396 lbs         | 26.9%       | 100%     | 1    | 00-02-06 |
| Total Load Deflection | L/865 (0.169")  | 41.6%       | n/a      | 1    | 06-02-14 |
| Live Load Deflection  | L/1082 (0.135") | 44.4%       | n/a      | 2    | 06-02-14 |
| Max Defl.             | 0.169"          | 16.9%       | n/a      | 1    | 06-02-14 |
| Span / Depth          | 15.4            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow<br>Support | % Allow<br>Member | Material    |
|----|------------------------|---------|--------------------|-------------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 409 lbs | 20.3%              | 39.9%             | Unspecified |
| B2 | Wall/Plate 2-3/8" x 2" | 409 lbs | 20.3%              | 39.9%             | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i849) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i849)

City, State, Zip:

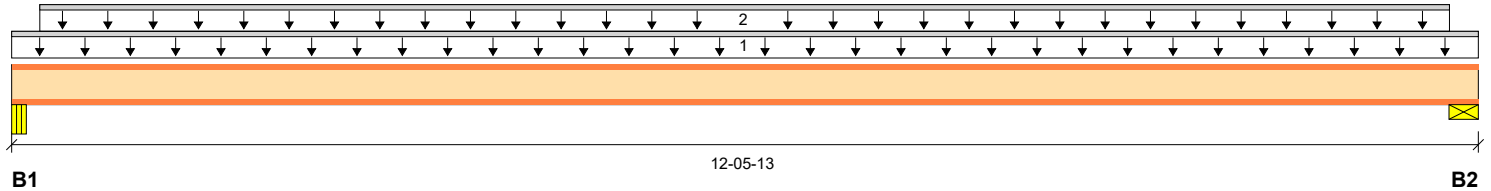
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12-05-13

### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live    | Dead    | Snow | Wind | Roof Live |
|-------------|---------|---------|------|------|-----------|
| B1, 2-7/16" | 333 / 0 | 243 / 0 |      |      |           |
| B2, 2-3/8"  | 333 / 0 | 243 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-13 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 12-02-14 | Top  |      | 27   |      |      |           | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1740 ft-lbs     | 63.8%       | 100%     | 1    | 06-02-15 |
| End Reaction          | 576 lbs         | 56.1%       | 100%     | 1    | 12-05-13 |
| End Shear             | 563 lbs         | 38.2%       | 100%     | 1    | 00-02-07 |
| Total Load Deflection | L/608 (0.241")  | 59.2%       | n/a      | 1    | 06-02-15 |
| Live Load Deflection  | L/1064 (0.138") | 45.1%       | n/a      | 2    | 06-02-15 |
| Max Defl.             | 0.241"          | 24.1%       | n/a      | 1    | 06-02-15 |
| Span / Depth          | 15.4            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 576 lbs | 29.5%           | 56.0%          | Unspecified |
| B2 | Wall/Plate 2-3/8" x 2" | 576 lbs | 28.5%           | 56.1%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i849) - 01 (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i849)

City, State, Zip:

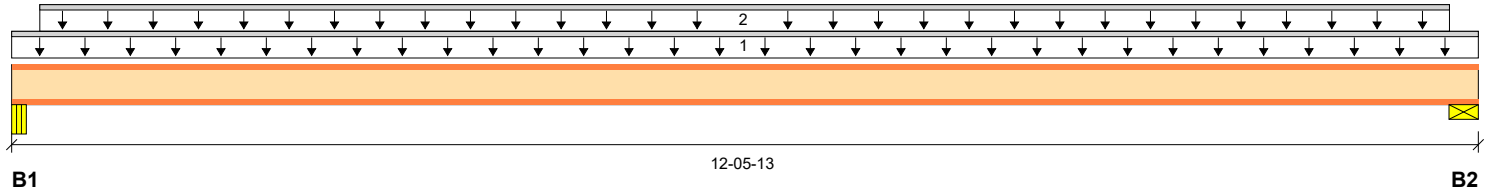
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 12-05-13

### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live    | Dead    | Snow | Wind | Roof Live |
|-------------|---------|---------|------|------|-----------|
| B1, 2-7/16" | 333 / 0 | 243 / 0 |      |      |           |
| B2, 2-3/8"  | 333 / 0 | 243 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-13 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 12-02-14 | Top  |      | 27   |      |      |           | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1740 ft-lbs     | 63.8%       | 100%     | 1    | 06-02-15 |
| End Reaction          | 576 lbs         | 56.1%       | 100%     | 1    | 12-05-13 |
| End Shear             | 563 lbs         | 38.2%       | 100%     | 1    | 00-02-07 |
| Total Load Deflection | L/608 (0.241")  | 59.2%       | n/a      | 1    | 06-02-15 |
| Live Load Deflection  | L/1064 (0.138") | 45.1%       | n/a      | 2    | 06-02-15 |
| Max Defl.             | 0.241"          | 24.1%       | n/a      | 1    | 06-02-15 |
| Span / Depth          | 15.4            |             |          |      |          |

| Bearing Supports | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|------------------|------------------------|---------|-----------------|----------------|-------------|
| B1               | Beam 2-7/16" x 2"      | 576 lbs | 29.5%           | 56.0%          | Unspecified |
| B2               | Wall/Plate 2-3/8" x 2" | 576 lbs | 28.5%           | 56.1%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i852) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i852)

City, State, Zip:

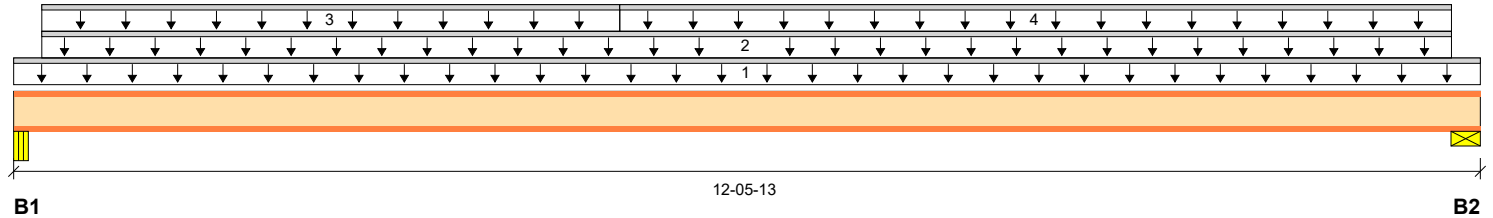
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live    | Dead    | Snow | Wind | Roof Live |
|-------------|---------|---------|------|------|-----------|
| B1, 2-7/16" | 167 / 0 | 445 / 0 |      |      |           |
| B2, 2-3/8"  | 166 / 0 | 422 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-13 | Top  | 27   | 7   |      |      | 125%      | n/a |
| 2   | 62(i119)                           | Unf. Lin. (lb/ft) | L    | 00-02-14 | 12-02-14 | Top  |      | 57  |      |      |           | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 05-01-15 | Top  |      | 13  |      |      |           | n/a |
| 4   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 05-01-15 | 12-02-14 | Top  |      | 5   |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 1829 ft-lbs    | 67.1%       | 100%     | 1    | 06-01-13 |
| End Reaction          | 612 lbs        | 59.4%       | 100%     | 1    | 00-00-00 |
| End Shear             | 605 lbs        | 41.0%       | 100%     | 1    | 00-02-07 |
| Total Load Deflection | L/578 (0.254") | 62.3%       | n/a      | 1    | 06-03-00 |
| Live Load Deflection  | L/999 (0.069") | n/a         | n/a      | 2    | 06-03-00 |
| Max Defl.             | 0.254"         | 25.4%       | n/a      | 1    | 06-03-00 |
| Span / Depth          | 15.4           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 612 lbs | 31.3%           | 59.4%          | Unspecified |
| B2 | Wall/Plate 2-3/8" x 2" | 588 lbs | 29.1%           | 57.3%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J4-16" O.C.(i982) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J4-16" O.C.(i982)

City, State, Zip:

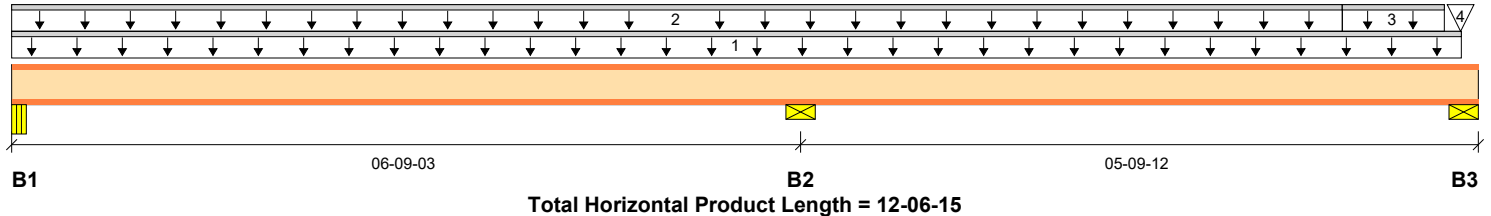
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live     | Dead   | Snow | Wind | Roof Live |
|-------------|----------|--------|------|------|-----------|
| B1, 2-7/16" | 164 / 12 | 38 / 0 |      |      |           |
| B2, 3-1/2"  | 395 / 0  | 99 / 0 |      |      |           |
| B3, 3-1/2"  | 126 / 24 | 34 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-05-03 | Top  | 22   | 6   |      |      |                | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 11-04-15 | Top  | 31   | 8   |      |      |                | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 11-04-15 | 12-03-07 | Top  | 19   | 5   |      |      |                | n/a |
| 4   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |      | 9   |      |      |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 279 ft-lbs      | 10.2%       | 100%     | 2    | 03-00-06 |
| Neg. Moment           | -266 ft-lbs     | 9.7%        | 100%     | 1    | 06-09-03 |
| End Reaction          | 202 lbs         | 19.6%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 494 lbs         | 23.5%       | 100%     | 1    | 06-09-03 |
| End Shear             | 189 lbs         | 12.8%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 251 lbs         | 17.0%       | 100%     | 1    | 06-07-07 |
| Total Load Deflection | L/999 (0.016")  | n/a         | n/a      | 2    | 03-04-00 |
| Live Load Deflection  | L/999 (0.013")  | n/a         | n/a      | 5    | 03-04-00 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 2    | 08-04-02 |
| Max Defl.             | 0.016"          | n/a         | n/a      | 2    | 03-04-00 |
| Span / Depth          | 8.4             |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 202 lbs | 10.3%           | 19.6%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 494 lbs | 16.6%           | 23.5%          | Unspecified |
| B3 | Wall/Plate 3-1/2" x 2" | 160 lbs | 5.4%            | 14.2%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J5-16" O.C.(i1035) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J5-16" O.C.(i1035)

City, State, Zip:

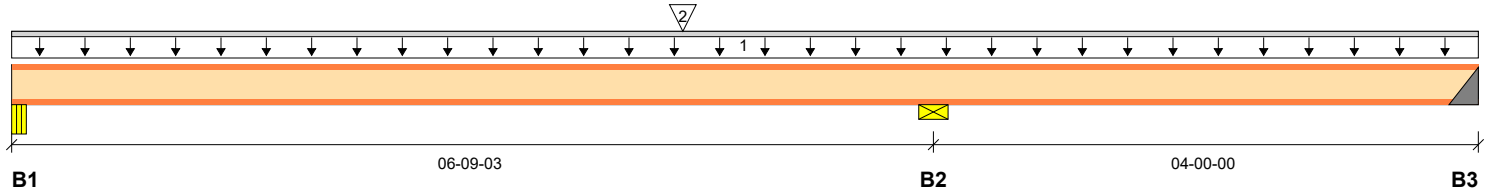
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live    | Dead    | Snow | Wind | Roof Live |
|-------------|---------|---------|------|------|-----------|
| B1, 2-7/16" | 146 / 4 | 54 / 0  |      |      |           |
| B2, 3-1/2"  | 317 / 0 | 169 / 0 |      |      |           |
| B3, 2"      | 92 / 34 | 1 / 0   |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 10-09-03 | Top  | 48        | 12       |           |           |                | n/a |
| 2   | 66(i123)                           | Conc. Pt. (lbs)   | L    | 04-11-02 | 04-11-02 | Top  |           | 94       |           |           |                | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 305 ft-lbs      | 11.2%       | 100%     | 2    | 03-03-15 |
| Neg. Moment           | -250 ft-lbs     | 9.2%        | 100%     | 1    | 06-09-03 |
| End Reaction          | 200 lbs         | 19.4%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 486 lbs         | 23.2%       | 100%     | 1    | 06-09-03 |
| End Shear             | 188 lbs         | 12.7%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 296 lbs         | 20.1%       | 100%     | 1    | 06-07-07 |
| Total Load Deflection | L/999 (0.018")  | n/a         | n/a      | 2    | 03-06-02 |
| Live Load Deflection  | L/999 (0.011")  | n/a         | n/a      | 5    | 03-03-15 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 2    | 08-02-12 |
| Max Defl.             | 0.018"          | n/a         | n/a      | 2    | 03-06-02 |
| Span / Depth          | 8.4             |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 200 lbs | 10.2%           | 19.4%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 486 lbs | 16.3%           | 23.2%          | Unspecified |
| B3 | Hanger 2" x 2"         | 93 lbs  | 6.7%            | 9.3%           | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Single 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10dx1.5 face nails, (4) 10dx1.5 TF nails, (2) Strong-Grip joist nails.

**1st Floor\Floor Joists\J5-16" O.C.(i1035) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J5-16" O.C.(i1035)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

**Disclosure**

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J5-16" O.C.(i818) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | L cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J5-16" O.C.(i818)

City, State, Zip:

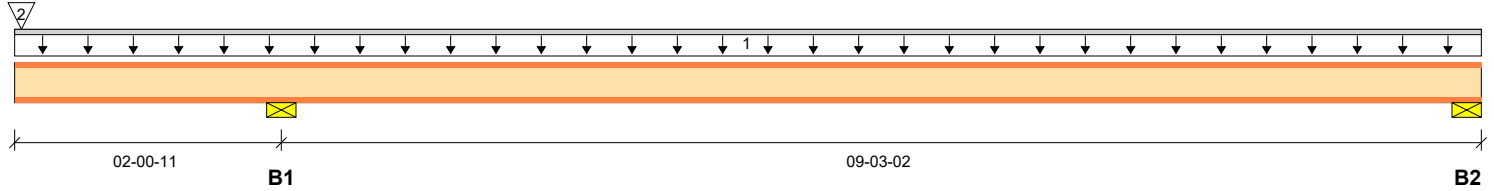
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 11-03-13

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 3-1/2" | 391 / 0  | 194 / 0 |      |      |           |
| B2, 2-3/8" | 268 / 13 | 46 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 11-03-13 | Top  | 57           | 14          |              |              |                      | n/a |
| 2   | E32(i100)                          | Conc. Pt. (lbs)   | L    | 00-00-10 | 00-00-10 | Top  |              | 79          |              |              |                      | n/a |

### Controls Summary

|                       | Value              | % Allowable | Duration | Case | Location |
|-----------------------|--------------------|-------------|----------|------|----------|
| Pos. Moment           | 651 ft-lbs         | 23.9%       | 100%     | 3    | 06-10-11 |
| Neg. Moment           | -309 ft-lbs        | 11.4%       | 100%     | 1    | 02-00-11 |
| End Reaction          | 315 lbs            | 30.6%       | 100%     | 3    | 11-03-13 |
| Int. Reaction         | 585 lbs            | 27.9%       | 100%     | 1    | 02-00-11 |
| End Shear             | 300 lbs            | 20.4%       | 100%     | 3    | 11-01-07 |
| Cont. Shear           | 349 lbs            | 23.7%       | 100%     | 1    | 02-02-07 |
| Total Load Deflection | L/999 (0.056")     | n/a         | n/a      | 3    | 06-07-15 |
| Live Load Deflection  | L/999 (0.051")     | n/a         | n/a      | 6    | 06-07-15 |
| Total Neg. Defl.      | 2xL/1998 (-0.021") | n/a         | n/a      | 3    | 00-00-00 |
| Max Defl.             | 0.056"             | n/a         | n/a      | 3    | 06-07-15 |
| Cant. Max Defl.       | -0.021"            | n/a         | n/a      | 3    | 00-00-00 |
| Span / Depth          | 11.5               |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-1/2" x 2" | 585 lbs | 19.7%           | 27.9%          | Unspecified |
| B2 | Wall/Plate 2-3/8" x 2" | 315 lbs | 15.6%           | 30.6%          | Unspecified |

### Cautions

Design assumes Top and Bottom flanges to be restrained.



BC CALC® Member Report

Dry | 2 spans | L cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J5-16" O.C.(i818)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

## Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (1") Cantilever Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Cantilevers require sheathed bottom flanges, blocking at cantilever support and closure at ends.

Calculations assume member is fully braced.

## Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J5-16" O.C.(i971) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J5-16" O.C.(i971)

City, State, Zip:

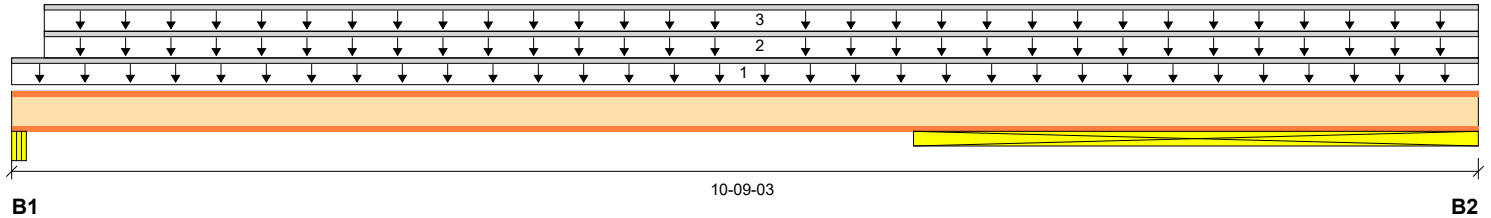
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 10-09-03

### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live    | Dead    | Snow | Wind | Roof Live |
|-------------|---------|---------|------|------|-----------|
| B1, 2-7/16" | 91 / 0  | 210 / 0 |      |      |           |
| B2, 49-3/4" | 197 / 0 | 483 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 10-09-03 | Top  | 27   | 7    |      |      |           | n/a |
| 2   | 63(i120)                           | Unf. Lin. (lb/ft) | L    | 00-02-14 | 10-09-03 | Top  |      | 57   |      |      |           | n/a |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-14 | 10-09-03 | Top  |      | 2    |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 494 ft-lbs     | 18.1%       | 100%     | 1    | 03-04-15 |
| End Reaction          | 680 lbs        | 60.4%       | 100%     | 1    | 10-09-03 |
| End Shear             | 296 lbs        | 20.1%       | 100%     | 1    | 06-07-07 |
| Total Load Deflection | L/999 (0.026") | n/a         | n/a      | 1    | 03-04-15 |
| Live Load Deflection  | L/999 (0.008") | n/a         | n/a      | 2    | 03-04-15 |
| Max Defl.             | 0.026"         | n/a         | n/a      | 1    | 03-04-15 |
| Span / Depth          | 8.3            |             |          |      |          |
| Dist. Load (B2)       | 92.26 lb/ft    | 4.0%        | 100%     |      |          |
| Conc. Load (B2)       | 1 lbs          | n/a         | 100%     |      |          |

### Bearing Supports

|    | Dim. (LxW)              | Value   | % Allow Support | % Allow Member | Material    |
|----|-------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"       | 301 lbs | 15.4%           | 29.2%          | Unspecified |
| B2 | Wall/Plate 49-3/4" x 2" | 680 lbs | 1.6%            | 60.4%          | Unspecified |

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J5-16" O.C.(i996) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J5-16" O.C.(i996)

City, State, Zip:

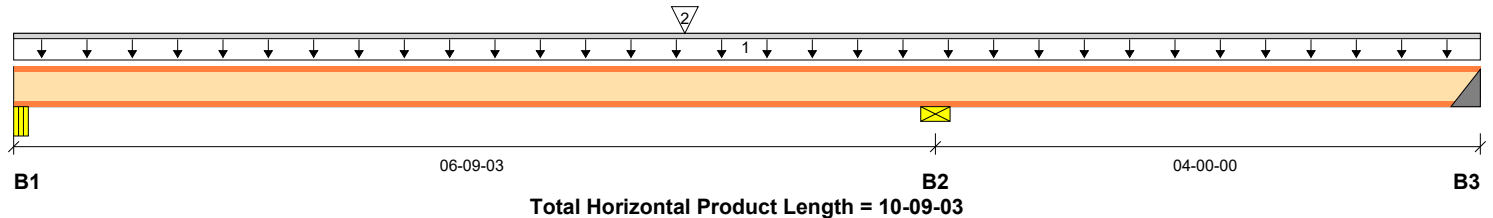
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live    | Dead    | Snow | Wind | Roof Live |
|-------------|---------|---------|------|------|-----------|
| B1, 2-7/16" | 132 / 4 | 47 / 0  |      |      |           |
| B2, 3-1/2"  | 286 / 0 | 144 / 0 |      |      |           |
| B3, 2"      | 83 / 30 | 2 / 0   |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 10-09-03 | Top  | 43   | 11   | 115% | 160% | 125%      | n/a |
| 2   | 66(i123)                           | Conc. Pt. (lbs)   | L    | 04-11-02 | 04-11-02 | Top  |      | 76   |      |      |           | n/a |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 270 ft-lbs      | 9.9%        | 100%     | 2    | 03-03-03 |
| Neg. Moment           | -220 ft-lbs     | 8.1%        | 100%     | 1    | 06-09-03 |
| End Reaction          | 178 lbs         | 17.3%       | 100%     | 2    | 00-00-00 |
| Int. Reaction         | 430 lbs         | 20.5%       | 100%     | 1    | 06-09-03 |
| End Shear             | 168 lbs         | 11.4%       | 100%     | 2    | 00-02-07 |
| Cont. Shear           | 260 lbs         | 17.6%       | 100%     | 1    | 06-07-07 |
| Total Load Deflection | L/999 (0.016")  | n/a         | n/a      | 2    | 03-06-02 |
| Live Load Deflection  | L/999 (0.01")   | n/a         | n/a      | 5    | 03-03-15 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 2    | 08-02-12 |
| Max Defl.             | 0.016"          | n/a         | n/a      | 2    | 03-06-02 |
| Span / Depth          | 8.4             |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 2"      | 178 lbs | 9.1%            | 17.3%          | Unspecified |
| B2 | Wall/Plate 3-1/2" x 2" | 430 lbs | 14.4%           | 20.5%          | Unspecified |
| B3 | Hanger 2" x 2"         | 85 lbs  | 6.1%            | 8.5%           | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Single 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10dx1.5 face nails, (4) 10dx1.5 TF nails, (2) Strong-Grip joist nails.

**1st Floor\Floor Joists\J5-16" O.C.(i996) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J5-16" O.C.(i996)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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**1st Floor\Floor Joists\J5-16" O.C.(i997) (Floor Joist)**

BC CALC® Member Report

Dry | 2 spans | L cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J5-16" O.C.(i997)

City, State, Zip:

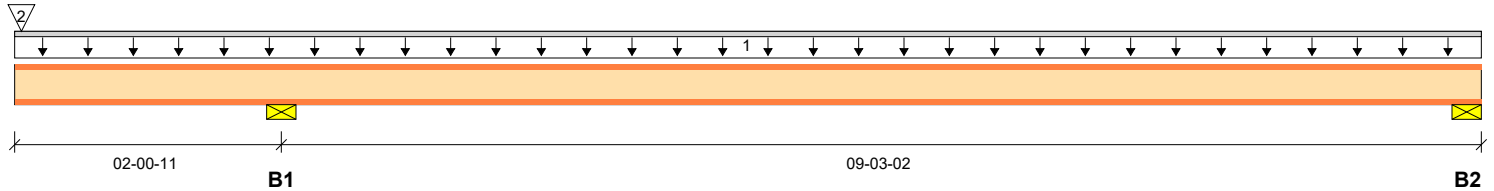
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live     | Dead    | Snow | Wind | Roof Live |
|------------|----------|---------|------|------|-----------|
| B1, 3-1/2" | 365 / 0  | 184 / 0 |      |      |           |
| B2, 2-3/8" | 249 / 12 | 42 / 0  |      |      |           |

**Load Summary**

| Tag | Description | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | OCS |
|-----|-------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----|
| 1   | -           | Unf. Lin. (lb/ft) | L    | 00-00-00 | 11-03-13 | Top  | 53        | 13       |           |           |                | n/a |
| 2   | E32(i100)   | Conc. Pt. (lbs)   | L    | 00-00-10 | 00-00-10 | Top  |           | 76       |           |           |                | n/a |

**Controls Summary**

|                       | Value              | % Allowable | Duration | Case | Location |
|-----------------------|--------------------|-------------|----------|------|----------|
| Pos. Moment           | 607 ft-lbs         | 22.3%       | 100%     | 3    | 06-10-11 |
| Neg. Moment           | -294 ft-lbs        | 10.8%       | 100%     | 1    | 02-00-11 |
| End Reaction          | 292 lbs            | 28.4%       | 100%     | 3    | 11-03-13 |
| Int. Reaction         | 550 lbs            | 26.2%       | 100%     | 1    | 02-00-11 |
| End Shear             | 280 lbs            | 19.0%       | 100%     | 3    | 11-01-07 |
| Cont. Shear           | 327 lbs            | 22.1%       | 100%     | 1    | 02-02-07 |
| Total Load Deflection | L/999 (0.052")     | n/a         | n/a      | 3    | 06-07-15 |
| Live Load Deflection  | L/999 (0.047")     | n/a         | n/a      | 6    | 06-07-15 |
| Total Neg. Defl.      | 2xL/1998 (-0.019") | n/a         | n/a      | 3    | 00-00-00 |
| Max Defl.             | 0.052"             | n/a         | n/a      | 3    | 06-07-15 |
| Cant. Max Defl.       | -0.019"            | n/a         | n/a      | 3    | 00-00-00 |
| Span / Depth          | 11.5               |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-1/2" x 2" | 550 lbs | 18.5%           | 26.2%          | Unspecified |
| B2 | Wall/Plate 2-3/8" x 2" | 292 lbs | 14.4%           | 28.4%          | Unspecified |

**Cautions**

Design assumes Top and Bottom flanges to be restrained.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (1") Cantilever Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Cantilevers require sheathed bottom flanges, blocking at cantilever support and closure at ends.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1027) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1027)

City, State, Zip:

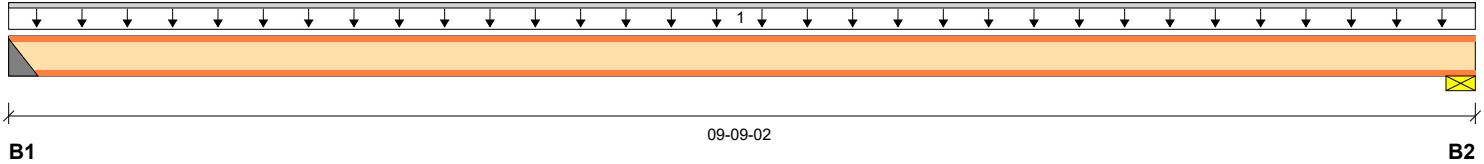
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-09-02

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 259 / 0 | 65 / 0 |      |      |           |
| B2, 2-3/8" | 261 / 0 | 65 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 53           | 13          |              |              |                      | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 755 ft-lbs     | 27.7%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 324 lbs        | 32.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 313 lbs        | 21.2%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.069") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.055") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.069"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

| Bearing Supports | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|------------------|-------------|---------|-----------------|----------------|-------------|
| B1 Hanger        | 2" x 2"     | 324 lbs | n/a             | 32.6%          | ITS2.06/9.5 |
| B2 Wall/Plate    | 2-3/8" x 2" | 326 lbs | 16.2%           | 31.8%          | Unspecified |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1027) - 01 (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1027)

City, State, Zip:

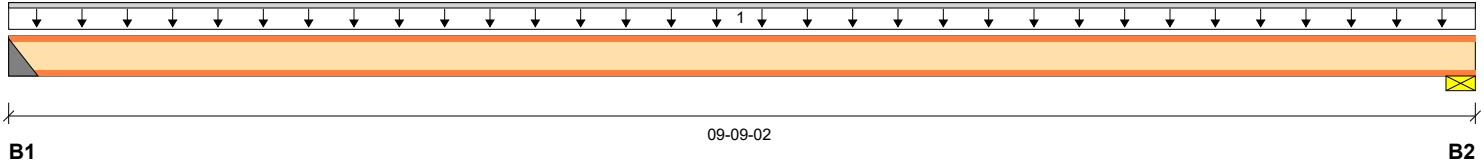
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-09-02

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 259 / 0 | 65 / 0 |      |      |           |
| B2, 2-3/8" | 261 / 0 | 65 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 755 ft-lbs     | 27.7%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 324 lbs        | 32.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 313 lbs        | 21.2%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.069") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.055") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.069"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Hanger 2" x 2"         | 324 lbs | n/a             | 32.6%          | ITS2.06/9.5 |
| B2 | Wall/Plate 2-3/8" x 2" | 326 lbs | 16.2%           | 31.8%          | Unspecified |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1027) - 02 (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1027)

City, State, Zip:

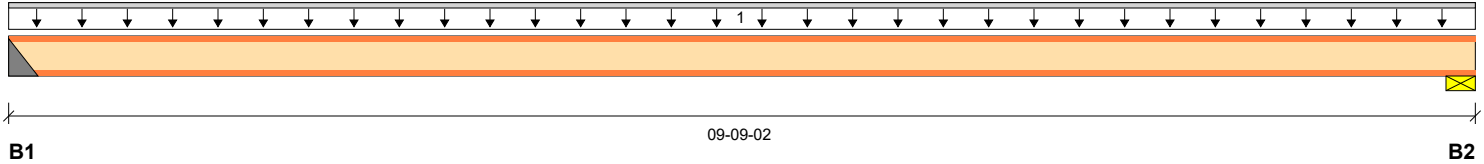
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-09-02

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 259 / 0 | 65 / 0 |      |      |           |
| B2, 2-3/8" | 261 / 0 | 65 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 755 ft-lbs     | 27.7%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 324 lbs        | 32.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 313 lbs        | 21.2%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.069") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.055") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.069"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

| Bearing Supports | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|------------------|-------------|---------|-----------------|----------------|-------------|
| B1 Hanger        | 2" x 2"     | 324 lbs | n/a             | 32.6%          | ITS2.06/9.5 |
| B2 Wall/Plate    | 2-3/8" x 2" | 326 lbs | 16.2%           | 31.8%          | Unspecified |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1027) - 03 (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1027)

City, State, Zip:

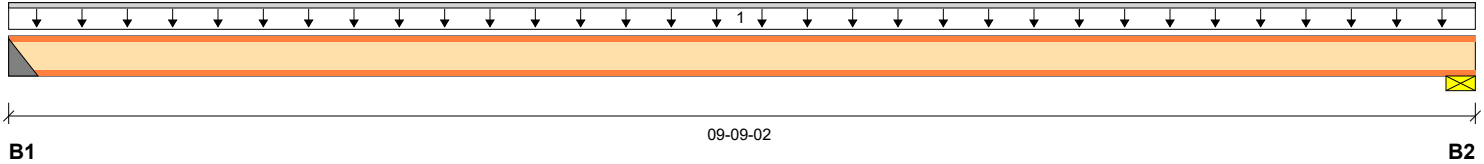
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-09-02

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 259 / 0 | 65 / 0 |      |      |           |
| B2, 2-3/8" | 261 / 0 | 65 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 755 ft-lbs     | 27.7%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 324 lbs        | 32.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 313 lbs        | 21.2%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.069") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.055") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.069"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Hanger 2" x 2"         | 324 lbs | n/a             | 32.6%          | ITS2.06/9.5 |
| B2 | Wall/Plate 2-3/8" x 2" | 326 lbs | 16.2%           | 31.8%          | Unspecified |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1027) - 04 (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1027)

City, State, Zip:

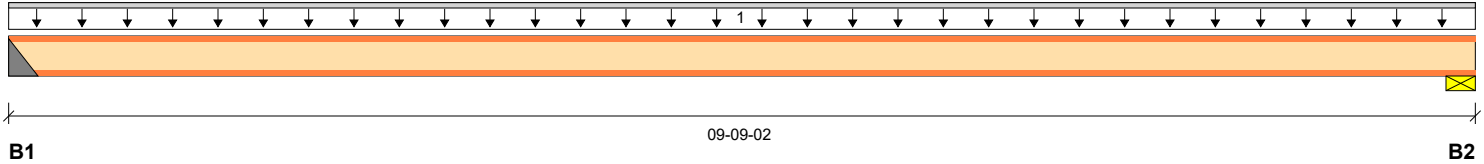
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-09-02

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 259 / 0 | 65 / 0 |      |      |           |
| B2, 2-3/8" | 261 / 0 | 65 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 755 ft-lbs     | 27.7%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 324 lbs        | 32.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 313 lbs        | 21.2%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.069") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.055") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.069"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

| Bearing Supports | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|------------------|-------------|---------|-----------------|----------------|-------------|
| B1 Hanger        | 2" x 2"     | 324 lbs | n/a             | 32.6%          | ITS2.06/9.5 |
| B2 Wall/Plate    | 2-3/8" x 2" | 326 lbs | 16.2%           | 31.8%          | Unspecified |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1027) - 05 (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1027)

City, State, Zip:

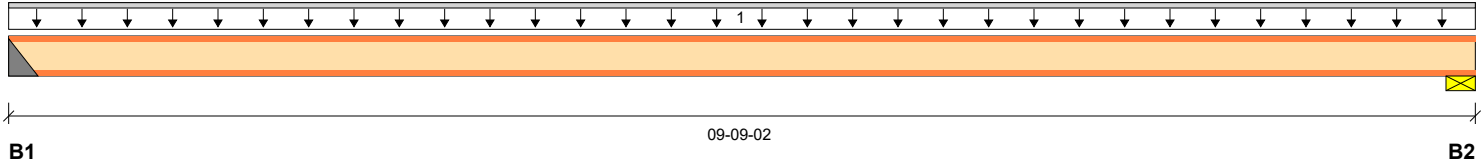
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-09-02

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 259 / 0 | 65 / 0 |      |      |           |
| B2, 2-3/8" | 261 / 0 | 65 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 755 ft-lbs     | 27.7%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 324 lbs        | 32.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 313 lbs        | 21.2%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.069") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.055") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.069"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

| Bearing Supports | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|------------------|-------------|---------|-----------------|----------------|-------------|
| B1 Hanger        | 2" x 2"     | 324 lbs | n/a             | 32.6%          | ITS2.06/9.5 |
| B2 Wall/Plate    | 2-3/8" x 2" | 326 lbs | 16.2%           | 31.8%          | Unspecified |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1027) - 06 (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1027)

City, State, Zip:

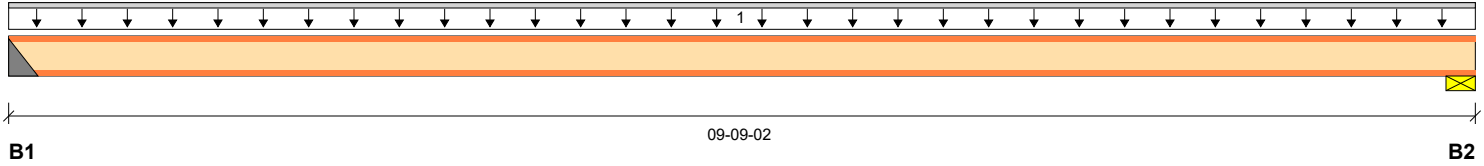
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-09-02

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 259 / 0 | 65 / 0 |      |      |           |
| B2, 2-3/8" | 261 / 0 | 65 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 755 ft-lbs     | 27.7%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 324 lbs        | 32.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 313 lbs        | 21.2%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.069") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.055") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.069"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

| Bearing Supports | Dim. (LxW)  | Value   | % Allow Support | % Allow Member | Material    |
|------------------|-------------|---------|-----------------|----------------|-------------|
| B1 Hanger        | 2" x 2"     | 324 lbs | n/a             | 32.6%          | ITS2.06/9.5 |
| B2 Wall/Plate    | 2-3/8" x 2" | 326 lbs | 16.2%           | 31.8%          | Unspecified |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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**1st Floor\Floor Joists\J6-16" O.C.(i1027) - 07 (Floor Joist)**

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1027)

City, State, Zip:

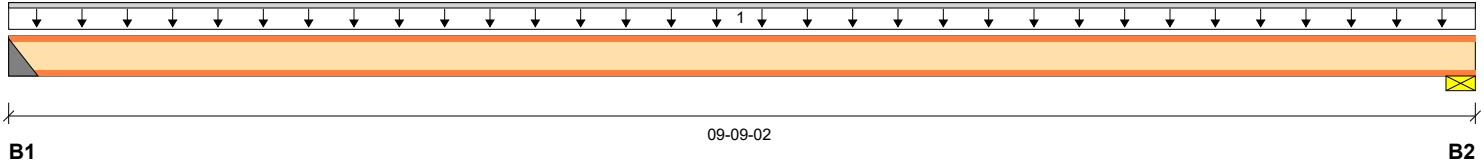
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 259 / 0 | 65 / 0 |      |      |           |
| B2, 2-3/8" | 261 / 0 | 65 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 53           | 13          |              |              |                      | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 755 ft-lbs     | 27.7%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 324 lbs        | 32.6%       | 100%     | 1    | 00-00-00 |
| End Shear             | 313 lbs        | 21.2%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.069") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.055") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.069"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow<br>Support | % Allow<br>Member | Material    |
|----|------------------------|---------|--------------------|-------------------|-------------|
| B1 | Hanger 2" x 2"         | 324 lbs | n/a                | 32.6%             | ITS2.06/9.5 |
| B2 | Wall/Plate 2-3/8" x 2" | 326 lbs | 16.2%              | 31.8%             | Unspecified |

**Cautions**

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

**Disclosure**

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,





# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1049) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1049)

City, State, Zip:

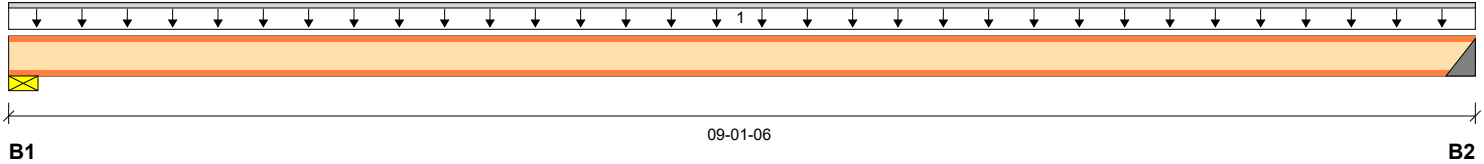
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-01-06

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2-3/8" | 254 / 0 | 64 / 0 |      |      |           |
| B2, 2"     | 253 / 0 | 63 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-01-06 | Top  | 56   | 14  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 685 ft-lbs     | 25.1%       | 100%     | 1    | 04-06-14 |
| End Reaction          | 316 lbs        | 31.8%       | 100%     | 1    | 09-01-06 |
| End Shear             | 304 lbs        | 20.6%       | 100%     | 1    | 00-02-06 |
| Total Load Deflection | L/999 (0.056") | n/a         | n/a      | 1    | 04-06-14 |
| Live Load Deflection  | L/999 (0.045") | n/a         | n/a      | 2    | 04-06-14 |
| Max Defl.             | 0.056"         | n/a         | n/a      | 1    | 04-06-14 |
| Span / Depth          | 11.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 318 lbs | 15.8%           | 31.0%          | Unspecified |
| B2 | Hanger 2" x 2"         | 316 lbs | 20.4%           | 31.8%          | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1055) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1055)

City, State, Zip:

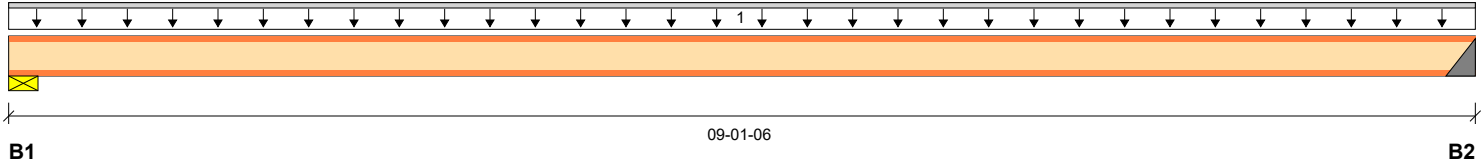
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2-3/8" | 244 / 0 | 61 / 0 |      |      |           |
| B2, 2"     | 242 / 0 | 61 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-01-06 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 656 ft-lbs     | 24.1%       | 100%     | 1    | 04-06-14 |
| End Reaction          | 303 lbs        | 30.5%       | 100%     | 1    | 09-01-06 |
| End Shear             | 292 lbs        | 19.8%       | 100%     | 1    | 00-02-06 |
| Total Load Deflection | L/999 (0.054") | n/a         | n/a      | 1    | 04-06-14 |
| Live Load Deflection  | L/999 (0.043") | n/a         | n/a      | 2    | 04-06-14 |
| Max Defl.             | 0.054"         | n/a         | n/a      | 1    | 04-06-14 |
| Span / Depth          | 11.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 305 lbs | 15.1%           | 29.7%          | Unspecified |
| B2 | Hanger 2" x 2"         | 303 lbs | 19.5%           | 30.5%          | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i1055) - 01 (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1055)

City, State, Zip:

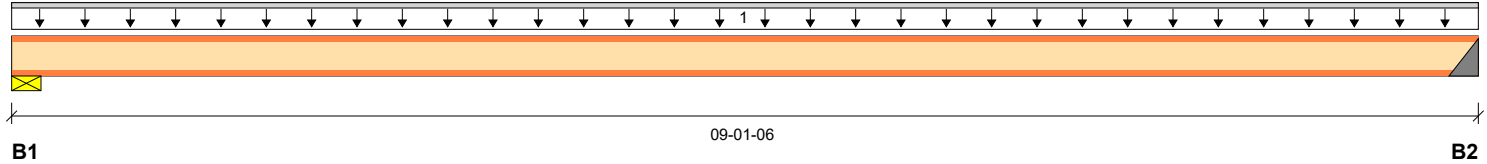
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2-3/8" | 244 / 0 | 61 / 0 |      |      |           |
| B2, 2"     | 242 / 0 | 61 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-01-06 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 656 ft-lbs     | 24.1%       | 100%     | 1    | 04-06-14 |
| End Reaction          | 303 lbs        | 30.5%       | 100%     | 1    | 09-01-06 |
| End Shear             | 292 lbs        | 19.8%       | 100%     | 1    | 00-02-06 |
| Total Load Deflection | L/999 (0.054") | n/a         | n/a      | 1    | 04-06-14 |
| Live Load Deflection  | L/999 (0.043") | n/a         | n/a      | 2    | 04-06-14 |
| Max Defl.             | 0.054"         | n/a         | n/a      | 1    | 04-06-14 |
| Span / Depth          | 11.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 305 lbs | 15.1%           | 29.7%          | Unspecified |
| B2 | Hanger 2" x 2"         | 303 lbs | 19.5%           | 30.5%          | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

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**1st Floor\Floor Joists\J6-16" O.C.(i1055) - 02 (Floor Joist)**

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1055)

City, State, Zip:

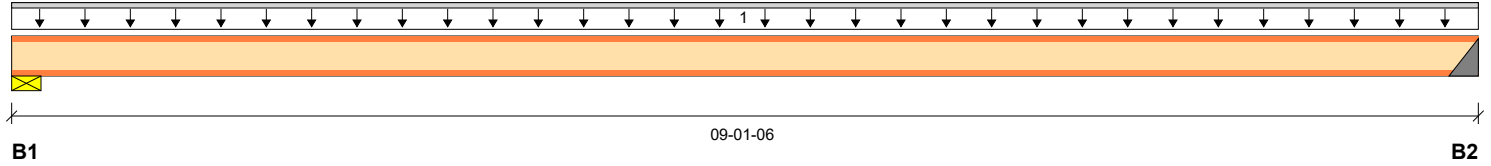
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2-3/8" | 244 / 0 | 61 / 0 |      |      |           |
| B2, 2"     | 242 / 0 | 61 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-01-06 | Top  | 53   | 13  |      |      |                | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 656 ft-lbs     | 24.1%       | 100%     | 1    | 04-06-14 |
| End Reaction          | 303 lbs        | 30.5%       | 100%     | 1    | 09-01-06 |
| End Shear             | 292 lbs        | 19.8%       | 100%     | 1    | 00-02-06 |
| Total Load Deflection | L/999 (0.054") | n/a         | n/a      | 1    | 04-06-14 |
| Live Load Deflection  | L/999 (0.043") | n/a         | n/a      | 2    | 04-06-14 |
| Max Defl.             | 0.054"         | n/a         | n/a      | 1    | 04-06-14 |
| Span / Depth          | 11.2           |             |          |      |          |

**Bearing Supports**

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 305 lbs | 15.1%           | 29.7%          | Unspecified |
| B2 | Hanger 2" x 2"         | 303 lbs | 19.5%           | 30.5%          | ITS2.06/9.5 |

**Cautions**

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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**1st Floor\Floor Joists\J6-16" O.C.(i1080) (Floor Joist)**

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i1080)

City, State, Zip:

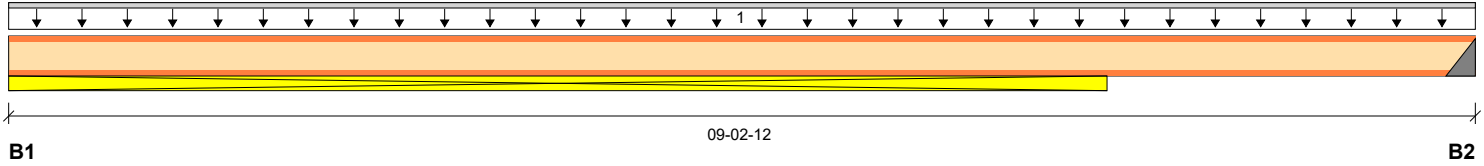
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit


**Reaction Summary (Down / Uplift) (lbs)**

| Bearing       | Live    | Dead    | Snow | Wind | Roof Live |
|---------------|---------|---------|------|------|-----------|
| B1, 82-15/16" | 426 / 0 | 107 / 0 |      |      |           |
| B2, 2"        | 66 / 0  | 17 / 0  |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-02-12 | Top  | 53   | 13  |      |      |                | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 43 ft-lbs      | 1.6%        | 100%     | 1    | 07-11-14 |
| End Reaction          | 533 lbs        | 47.3%       | 100%     | 1    | 00-00-00 |
| End Shear             | 72 lbs         | 4.9%        | 100%     | 1    | 06-10-15 |
| Total Load Deflection | L/999 (0.001") | n/a         | n/a      | 1    | 07-11-14 |
| Live Load Deflection  | L/999 (0.001") | n/a         | n/a      | 2    | 07-11-14 |
| Max Defl.             | 0.001"         | n/a         | n/a      | 1    | 07-11-14 |
| Span / Depth          | 2.9            |             |          |      |          |
| Dist. Load (B1)       | 66.67 lb/ft    | 2.9%        | 100%     |      |          |

**Bearing Supports**

|    | Dim. (LxW)                | Value   | % Allow Support | % Allow Member | Material    |
|----|---------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 82-15/16" x 2" | 533 lbs | 0.8%            | 47.3%          | Unspecified |
| B2 | Hanger 2" x 2"            | 83 lbs  | 10.2%           | 8.3%           | ITS2.06/9.5 |

**Cautions**

Hanger ITS2.06/9.5 requires (2) 10dx1.5 face nails, (4) 10dx1.5 TF nails, (2) Strong-Grip joist nails.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

**Disclosure**

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i819) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i819)

City, State, Zip:

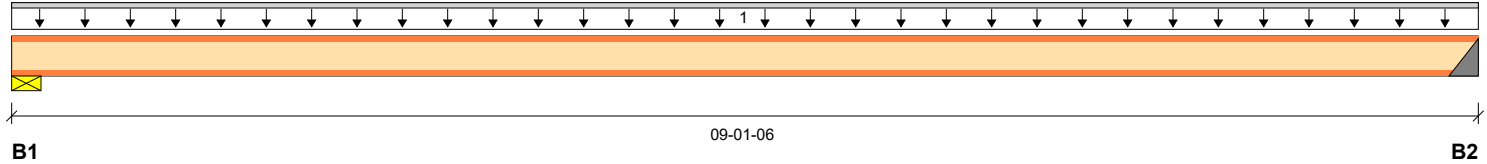
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2-3/8" | 227 / 0 | 57 / 0 |      |      |           |
| B2, 2"     | 225 / 0 | 56 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-01-06 | Top  | 50           | 12          |              |              |                      | n/a |

### Controls Summary

|                       | Value         | % Allowable | Duration | Case | Location |
|-----------------------|---------------|-------------|----------|------|----------|
| Pos. Moment           | 610 ft-lbs    | 22.4%       | 100%     | 1    | 04-06-14 |
| End Reaction          | 281 lbs       | 28.3%       | 100%     | 1    | 09-01-06 |
| End Shear             | 271 lbs       | 18.4%       | 100%     | 1    | 00-02-06 |
| Total Load Deflection | L/999 (0.05") | n/a         | n/a      | 1    | 04-06-14 |
| Live Load Deflection  | L/999 (0.04") | n/a         | n/a      | 2    | 04-06-14 |
| Max Defl.             | 0.05"         | n/a         | n/a      | 1    | 04-06-14 |
| Span / Depth          | 11.2          |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow<br>Support | % Allow<br>Member | Material    |
|----|------------------------|---------|--------------------|-------------------|-------------|
| B1 | Wall/Plate 2-3/8" x 2" | 283 lbs | 14.0%              | 27.6%             | Unspecified |
| B2 | Hanger 2" x 2"         | 281 lbs | 18.2%              | 28.3%             | ITS2.06/9.5 |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i861) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i861)

City, State, Zip:

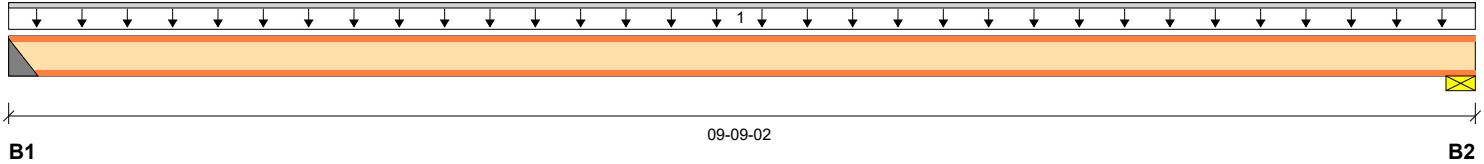
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 09-09-02

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 177 / 0 | 44 / 0 |      |      |           |
| B2, 2-3/8" | 178 / 0 | 45 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 37   | 9   |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 516 ft-lbs     | 18.9%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 222 lbs        | 22.3%       | 100%     | 1    | 00-00-00 |
| End Shear             | 214 lbs        | 14.5%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.047") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.038") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.047"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Hanger 2" x 2"         | 222 lbs | n/a             | 22.3%          | ITS2.06/9.5 |
| B2 | Wall/Plate 2-3/8" x 2" | 223 lbs | 11.0%           | 21.7%          | Unspecified |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J6-16" O.C.(i973) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J6-16" O.C.(i973)

City, State, Zip:

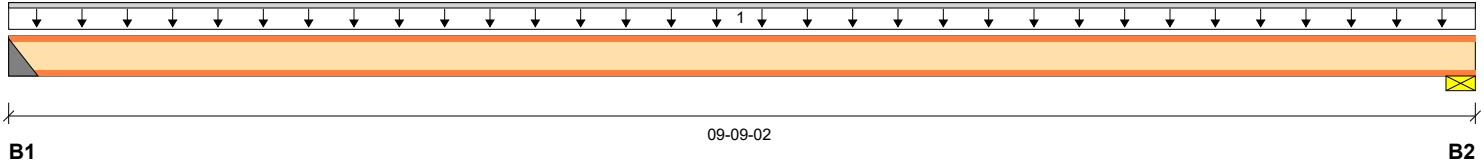
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 242 / 0 | 61 / 0 |      |      |           |
| B2, 2-3/8" | 244 / 0 | 61 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 09-09-02 | Top  | 50   | 12  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 705 ft-lbs     | 25.9%       | 100%     | 1    | 04-10-06 |
| End Reaction          | 303 lbs        | 30.5%       | 100%     | 1    | 00-00-00 |
| End Shear             | 292 lbs        | 19.8%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.064") | n/a         | n/a      | 1    | 04-10-06 |
| Live Load Deflection  | L/999 (0.051") | n/a         | n/a      | 2    | 04-10-06 |
| Max Defl.             | 0.064"         | n/a         | n/a      | 1    | 04-10-06 |
| Span / Depth          | 12.0           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Hanger 2" x 2"         | 303 lbs | n/a             | 30.5%          | ITS2.06/9.5 |
| B2 | Wall/Plate 2-3/8" x 2" | 305 lbs | 15.1%           | 29.7%          | Unspecified |

### Cautions

Hanger model ITS2.06/9.5 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J7-16" O.C.(i783) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J7-16" O.C.(i783)

City, State, Zip:

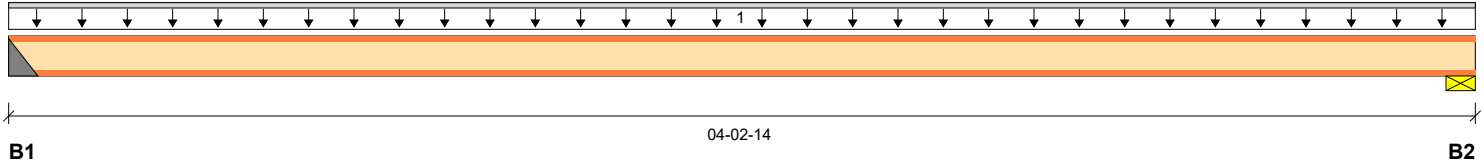
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 112 / 0 | 28 / 0 |      |      |           |
| B2, 2-3/8" | 114 / 0 | 28 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-02-14 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 133 ft-lbs     | 4.9%        | 100%     | 1    | 02-01-04 |
| End Reaction          | 140 lbs        | 14.1%       | 100%     | 1    | 00-00-00 |
| End Shear             | 129 lbs        | 8.8%        | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.004") | n/a         | n/a      | 1    | 02-01-04 |
| Live Load Deflection  | L/999 (0.003") | n/a         | n/a      | 2    | 02-01-04 |
| Max Defl.             | 0.004"         | n/a         | n/a      | 1    | 02-01-04 |
| Span / Depth          | 5.1            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Hanger 2" x 2"         | 140 lbs | 9.1%            | 14.1%          | ITS2.06/9.5 |
| B2 | Wall/Plate 2-3/8" x 2" | 142 lbs | 7.1%            | 13.9%          | Unspecified |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

### Disclosure

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J7-16" O.C.(i783) - 01 (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J7-16" O.C.(i783)

City, State, Zip:

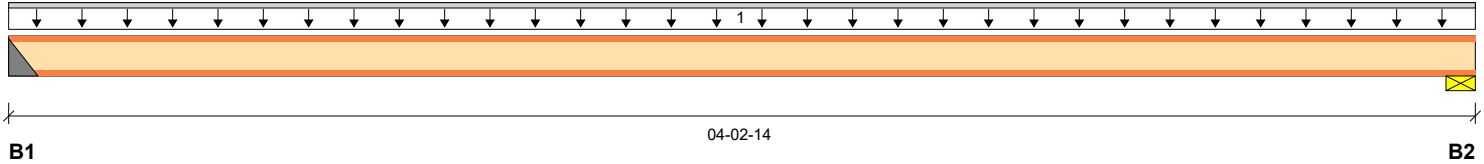
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 112 / 0 | 28 / 0 |      |      |           |
| B2, 2-3/8" | 114 / 0 | 28 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|-----|------|------|----------------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-02-14 | Top  | 53   | 13  |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 133 ft-lbs     | 4.9%        | 100%     | 1    | 02-01-04 |
| End Reaction          | 140 lbs        | 14.1%       | 100%     | 1    | 00-00-00 |
| End Shear             | 129 lbs        | 8.8%        | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.004") | n/a         | n/a      | 1    | 02-01-04 |
| Live Load Deflection  | L/999 (0.003") | n/a         | n/a      | 2    | 02-01-04 |
| Max Defl.             | 0.004"         | n/a         | n/a      | 1    | 02-01-04 |
| Span / Depth          | 5.1            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|----|------------------------|---------|-----------------|----------------|-------------|
| B1 | Hanger 2" x 2"         | 140 lbs | 9.1%            | 14.1%          | ITS2.06/9.5 |
| B2 | Wall/Plate 2-3/8" x 2" | 142 lbs | 7.1%            | 13.9%          | Unspecified |

### Cautions

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.

Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Calculations assume member is fully braced.

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**1st Floor\Floor Joists\J7-16" O.C.(i863) (Floor Joist)**

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J7-16" O.C.(i863)

City, State, Zip:

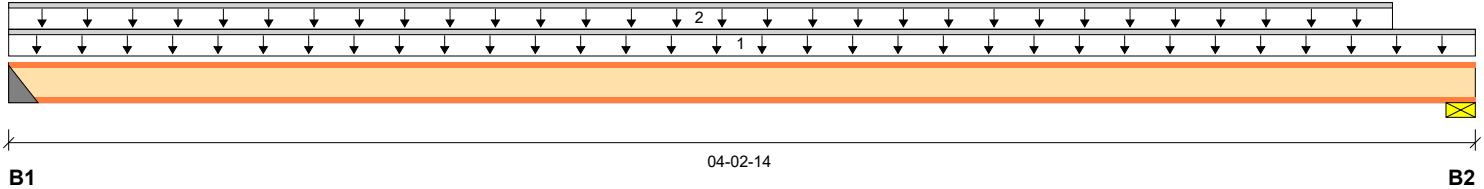
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 04-02-14

**Reaction Summary (Down / Uplift) (lbs)**

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 2"     | 112 / 0 | 75 / 0 |      |      |           |
| B2, 2-3/8" | 114 / 0 | 70 / 0 |      |      |           |

**Load Summary**

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-02-14 | Top  | 53   | 13   |      |      |           | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-00-00 | Top  |      | 22   |      |      |           | n/a |

**Controls Summary**

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 178 ft-lbs     | 6.5%        | 100%     | 1    | 02-01-04 |
| End Reaction          | 187 lbs        | 18.8%       | 100%     | 1    | 00-00-00 |
| End Shear             | 172 lbs        | 11.7%       | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.006") | n/a         | n/a      | 1    | 02-01-04 |
| Live Load Deflection  | L/999 (0.003") | n/a         | n/a      | 2    | 02-01-04 |
| Max Defl.             | 0.006"         | n/a         | n/a      | 1    | 02-01-04 |
| Span / Depth          | 5.1            |             |          |      |          |

| Bearing Supports | Dim. (LxW)             | Value   | % Allow Support | % Allow Member | Material    |
|------------------|------------------------|---------|-----------------|----------------|-------------|
| B1               | Hanger 2" x 2"         | 187 lbs | 12.1%           | 18.8%          | ITS2.06/9.5 |
| B2               | Wall/Plate 2-3/8" x 2" | 184 lbs | 9.1%            | 18.0%          | Unspecified |

**Cautions**

Header for the hanger ITS2.06/9.5 is a Double 1-3/4" x 9-1/2" LVL Beam.  
 Hanger ITS2.06/9.5 requires (2) 10d face nails, (4) 10d TF nails, (2) Strong-Grip joist nails.

**Notes**

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

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# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J8-16" O.C.(i1064) (Floor Joist)

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J8-16" O.C.(i1064)

City, State, Zip:

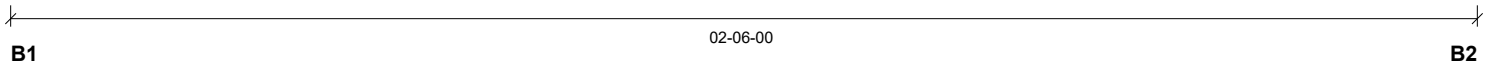
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 02-06-00

### Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live   | Dead   | Snow | Wind | Roof Live |
|---------|--------|--------|------|------|-----------|
| B1, 2"  | 51 / 6 | 11 / 0 |      |      |           |
| B2, 2"  | 69 / 8 | 15 / 0 |      |      |           |

### Load Summary

| Tag | Description | Load Type       | Ref. | Start    | End      | Loc.  | 100% | 90% | 115% | 160% | Roof Live 125% | OCS |
|-----|-------------|-----------------|------|----------|----------|-------|------|-----|------|------|----------------|-----|
| 1   | -           | Conc. Pt. (lbs) | L    | 01-05-00 | 01-05-00 | Front | 120  | 26  |      |      |                | n/a |
| 2   | -           | Conc. Pt. (lbs) | L    | 01-05-00 | 01-05-00 | Front | -14  |     |      |      |                | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 82 ft-lbs      | 3.0%        | 100%     | 1    | 01-05-00 |
| End Reaction          | 84 lbs         | 8.4%        | 100%     | 1    | 02-06-00 |
| End Shear             | 84 lbs         | 5.7%        | 100%     | 1    | 02-04-00 |
| Total Load Deflection | L/999 (0.002") | n/a         | n/a      | 1    | 01-05-00 |
| Live Load Deflection  | L/999 (0.001") | n/a         | n/a      | 3    | 01-05-00 |
| Max Defl.             | 0.002"         | n/a         | n/a      | 1    | 01-05-00 |
| Span / Depth          | 2.9            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)     | Value  | % Allow Support | % Allow Member | Material    |
|----|----------------|--------|-----------------|----------------|-------------|
| B1 | Hanger 2" x 2" | 62 lbs | 7.7%            | 6.3%           | ITS2.06/9.5 |
| B2 | Hanger 2" x 2" | 84 lbs | 10.3%           | 8.4%           | ITS2.06/9.5 |

### Cautions

Hanger ITS2.06/9.5 requires (2) 10dx1.5 face nails, (4) 10dx1.5 TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 9-1/2" BCI® 5000s-1.8

**PASSED**

## 1st Floor\Floor Joists\J8-16" O.C.(i965) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 16 OCS | Repetitive | Glued &amp; nailed

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Floor Joists\J8-16" O.C.(i965)

City, State, Zip:

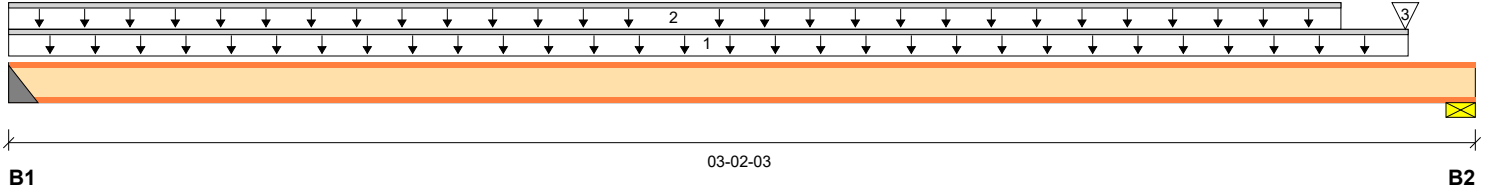
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1336

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 03-02-03

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live   | Dead   | Snow | Wind | Roof Live |
|------------|--------|--------|------|------|-----------|
| B1, 2"     | 51 / 0 | 13 / 0 |      |      |           |
| B2, 3-1/2" | 49 / 0 | 21 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | OCS |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----|
|     |                                    |                   |      |          |          |      | 100% | 90%  | 115% | 160% | 125%      |     |
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 03-00-07 | Top  | 23   | 6    |      |      |           | n/a |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 02-10-11 | Top  | 10   | 3    |      |      |           | n/a |
| 3   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 03-00-06 | 03-00-06 | Top  |      | 9    |      |      |           | n/a |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 42 ft-lbs      | 1.6%        | 100%     | 1    | 01-06-06 |
| End Reaction          | 64 lbs         | 6.4%        | 100%     | 1    | 00-00-00 |
| End Shear             | 57 lbs         | 3.9%        | 100%     | 1    | 00-02-00 |
| Total Load Deflection | L/999 (0.001") | n/a         | n/a      | 1    | 01-06-06 |
| Live Load Deflection  | L/999 (0.001") | n/a         | n/a      | 2    | 01-06-06 |
| Max Defl.             | 0.001"         | n/a         | n/a      | 1    | 01-06-06 |
| Span / Depth          | 3.6            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value  | % Allow Support | % Allow Member | Material    |
|----|------------------------|--------|-----------------|----------------|-------------|
| B1 | Hanger 2" x 2"         | 64 lbs | 7.9%            | 6.4%           | ITS2.06/9.5 |
| B2 | Wall/Plate 3-1/2" x 2" | 71 lbs | 2.4%            | 6.3%           | Unspecified |

### Cautions

Hanger ITS2.06/9.5 requires (2) 10dx1.5 face nails, (4) 10dx1.5 TF nails, (2) Strong-Grip joist nails.

### Notes

Design meets User specified (L/360) Total load deflection criteria.  
 Design meets User specified (L/480) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 Hanger Manufacturer: Simpson Strong-Tie, Inc.  
 BC CALC® analysis is based on IBC 2009.  
 Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.  
 Design based on Dry Service Condition.  
 Calculations assume member is fully braced.

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## 1st Floor\Flush Beams\B1-2(i1026) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B1-2(i1026)

City, State, Zip:

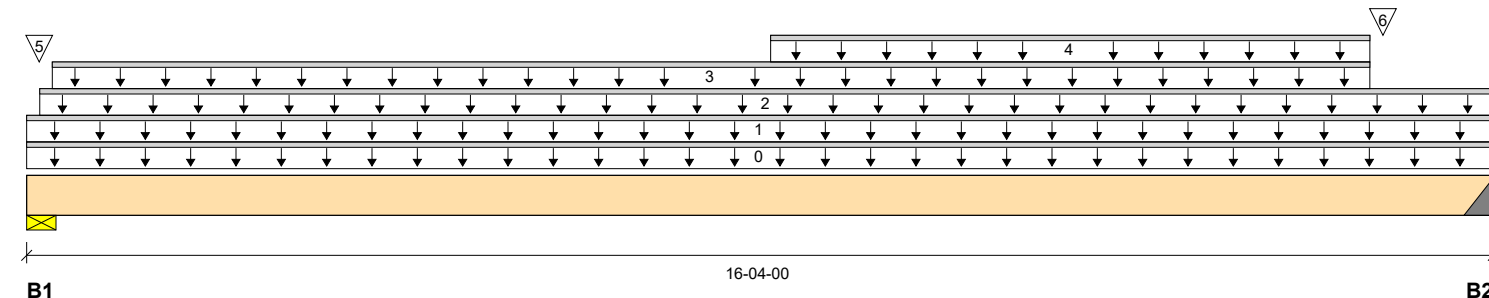
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 3-1/2" | 299 / 0 | 629 / 0 |      |      |           |
| B2, 2"     | 297 / 0 | 616 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-04-00 | Top  |              | 10          |              |              |                      | 00-00-00  |
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 16-04-00 | Top  | 10           | 3           |              |              |                      | n/a       |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-01-12 | 16-04-00 | Top  | 27           | 7           |              |              |                      | n/a       |
| 3   | 55(i112)                           | Unf. Lin. (lb/ft) | L    | 00-03-07 | 14-11-08 | Top  |              | 57          |              |              |                      | n/a       |
| 4   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 08-03-07 | 14-11-08 | Top  |              | 2           |              |              |                      | n/a       |
| 5   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 00-01-11 | 00-01-11 | Top  |              | 19          |              |              |                      | n/a       |
| 6   | 53(i111)                           | Conc. Pt. (lbs)   | L    | 15-01-04 | 15-01-04 | Top  |              | 77          |              |              |                      | n/a       |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 3635 ft-lbs    | 26.0%       | 100%     | 1    | 08-03-06 |
| End Shear             | 868 lbs        | 13.7%       | 100%     | 1    | 15-04-08 |
| Total Load Deflection | L/573 (0.335") | 41.9%       | n/a      | 1    | 08-03-06 |
| Live Load Deflection  | L/999 (0.108") | n/a         | n/a      | 2    | 08-03-06 |
| Max Defl.             | 0.335"         | 33.5%       | n/a      | 1    | 08-03-06 |
| Span / Depth          | 20.2           |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)                 | Value   | % Allow<br>Support | % Allow<br>Member | Material    |
|----|----------------------------|---------|--------------------|-------------------|-------------|
| B1 | Wall/Plate 3-1/2" x 3-1/2" | 928 lbs | 17.8%              | 10.1%             | Unspecified |
| B2 | Hanger 2" x 3-1/2"         | 913 lbs | n/a                | 17.4%             | HGUS410     |

### Cautions

Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

## 1st Floor\Flush Beams\B1-2(i1026) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B1-2(i1026)

City, State, Zip:

Specifier:

Customer: KC-Truss & Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

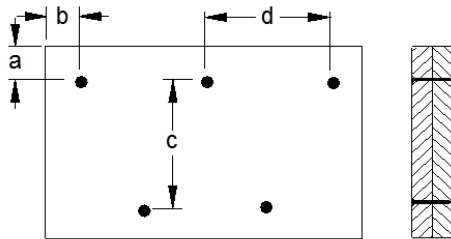
Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

Calculations assume unbraced length of Top: 00-00-00, Bottom: 16-00-08.

### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

### Disclosure

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# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## 1st Floor\Flush Beams\B1-2(i1038) (Flush Beam)

BC CALC® Member Report

Dry | 2 spans | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B1-2(i1038)

City, State, Zip:

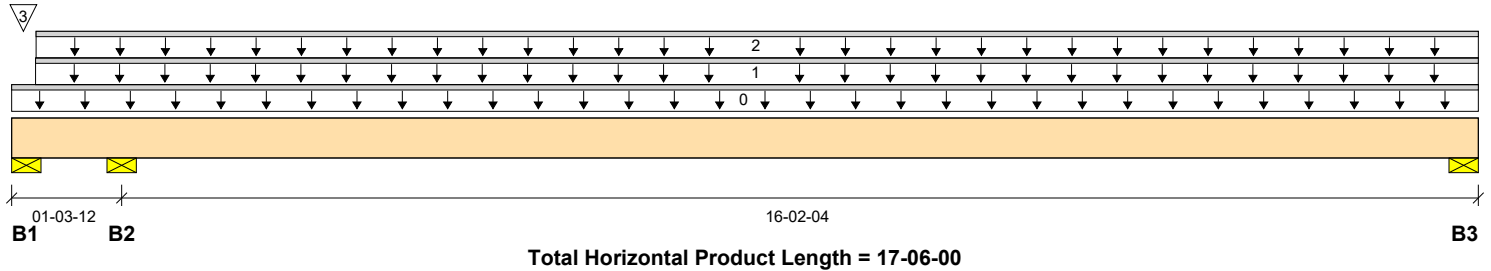
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead     | Snow | Wind | Roof Live |
|------------|---------|----------|------|------|-----------|
| B1, 3-1/2" | 6 / 373 | 0 / 1907 |      |      |           |
| B2, 3-1/2" | 512 / 0 | 2693 / 0 |      |      |           |
| B3, 2"     | 83 / 0  | 442 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----------|
|     |                                    |                   |      |          |          |      | 100% | 90%  | 115% | 160% | 125%      |           |
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 17-06-00 | Top  |      | 10   |      |      |           | 00-00-00  |
| 1   | E27(i103)                          | Unf. Lin. (lb/ft) | L    | 00-03-07 | 17-06-00 | Top  |      | 57   |      |      |           | n/a       |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-03-08 | 17-06-00 | Top  | 13   | 3    |      |      |           | n/a       |
| 3   | E28(i98)                           | Conc. Pt. (lbs)   | L    | 00-01-11 | 00-01-11 | Top  |      | 17   |      |      |           | n/a       |

### Controls Summary

|                       | Value           | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment           | 1588 ft-lbs     | 11.4%       | 100%     | 3    | 11-03-05 |
| Neg. Moment           | -2529 ft-lbs    | 31.8%       | 100%     | 3    | 01-03-12 |
| End Shear             | 2245 lbs        | 35.5%       | 100%     | 3    | 01-01-00 |
| Cont. Shear           | 2306 lbs        | 36.5%       | 100%     | 3    | 00-04-08 |
| Total Load Deflection | L/999 (0.114")  | n/a         | n/a      | 3    | 10-06-12 |
| Live Load Deflection  | L/999 (0.018")  | n/a         | n/a      | 6    | 10-06-12 |
| Total Neg. Defl.      | L/999 (-0.001") | n/a         | n/a      | 3    | 00-10-03 |
| Max Defl.             | 0.114"          | n/a         | n/a      | 3    | 10-06-12 |
| Span / Depth          | 20.3            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)                 | Value    | % Allow Support | % Allow Member | Material    |
|----|----------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-1/2" x 3-1/2" | 0 lbs    | n/a             | n/a            | Unspecified |
| B1 | Uplift                     | 2280 lbs |                 |                |             |
| B2 | Wall/Plate 3-1/2" x 3-1/2" | 3205 lbs | 61.6%           | 34.9%          | Unspecified |
| B3 | Wall/Plate 2" x 3-1/2"     | 525 lbs  | 17.7%           | 10.0%          | Unspecified |

### Cautions

Uplift of -2280 lbs found at bearing B1.



## 1st Floor\Flush Beams\B1-2(i1038) (Flush Beam)

BC CALC® Member Report

Dry | 2 spans | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B1-2(i1038)

City, State, Zip:

Specifier:

Customer: KC-Truss & Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

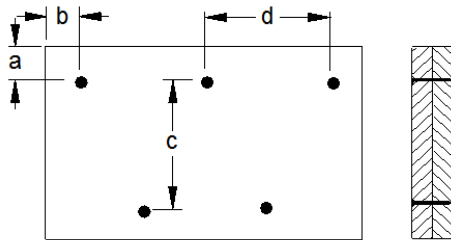
Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

Calculations assume unbraced length of Top: 00-00-00, Bottom: 15-10-08.

### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

### Disclosure

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## 1st Floor\Flush Beams\B2(i733) (Flush Beam)

BC CALC® Member Report

Dry | 2 spans | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B2(i733)

City, State, Zip:

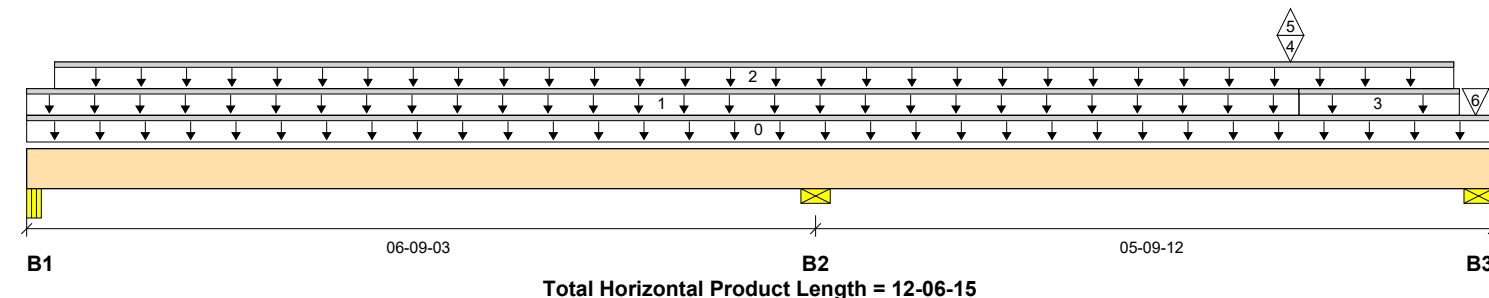
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing     | Live     | Dead    | Snow | Wind | Roof Live |
|-------------|----------|---------|------|------|-----------|
| B1, 2-7/16" | 82 / 11  | 169 / 0 |      |      |           |
| B2, 3-1/2"  | 231 / 14 | 556 / 0 |      |      |           |
| B3, 3-1/2"  | 100 / 39 | 194 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 12-06-15 | Top  |           | 5        |           |           |                | 00-00-00  |
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 10-10-15 | Top  | 27        | 7        |           |           |                | n/a       |
| 2   | 64(i121)                           | Unf. Lin. (lb/ft) | L    | 00-02-14 | 12-02-14 | Top  |           | 57       |           |           |                | n/a       |
| 3   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 10-10-15 | 12-03-07 | Top  | 7         |          |           |           |                | n/a       |
| 4   | B6(i1041)                          | Conc. Pt. (lbs)   | L    | 10-10-01 | 10-10-01 | Back | 84        | 91       |           |           |                | n/a       |
| 5   | B6(i1041)                          | Conc. Pt. (lbs)   | L    | 10-10-01 | 10-10-01 | Back | -37       |          |           |           |                | n/a       |
| 6   | 51(i108)                           | Conc. Pt. (lbs)   | L    | 12-05-02 | 12-05-02 | Top  |           | 11       |           |           |                | n/a       |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 351 ft-lbs     | 5.0%        | 100%     | 4    | 10-08-14 |
| Neg. Moment           | -502 ft-lbs    | 7.6%        | 100%     | 1    | 06-09-03 |
| End Shear             | 268 lbs        | 8.5%        | 100%     | 4    | 11-05-15 |
| Cont. Shear           | 308 lbs        | 9.8%        | 100%     | 1    | 07-08-07 |
| Total Load Deflection | L/999 (0.009") | n/a         | n/a      | 3    | 03-01-05 |
| Live Load Deflection  | L/999 (0.003") | n/a         | n/a      | 7    | 03-03-02 |
| Total Neg. Defl.      | L/999 (0")     | n/a         | n/a      | 3    | 07-05-08 |
| Max Defl.             | 0.009"         | n/a         | n/a      | 3    | 03-01-05 |
| Span / Depth          | 8.4            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)                 | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------------|---------|-----------------|----------------|-------------|
| B1 | Beam 2-7/16" x 1-3/4"      | 250 lbs | 14.7%           | 7.9%           | Unspecified |
| B2 | Wall/Plate 3-1/2" x 1-3/4" | 787 lbs | 30.2%           | 17.1%          | Unspecified |
| B3 | Wall/Plate 3-1/2" x 1-3/4" | 294 lbs | 11.3%           | 6.4%           | Unspecified |

**1st Floor\Flush Beams\B2(i733) (Flush Beam)**

BC CALC® Member Report

Dry | 2 spans | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B2(i733)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit

---

**Notes**

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

Calculations assume unbraced length of Top: 00-00-00, Bottom: 06-05-01.

---

**Disclosure**

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Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

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# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## 1st Floor\Flush Beams\B3-2(i753) (Flush Beam)

BC CALC® Member Report

Dry | 2 spans | L cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B3-2(i753)

City, State, Zip:

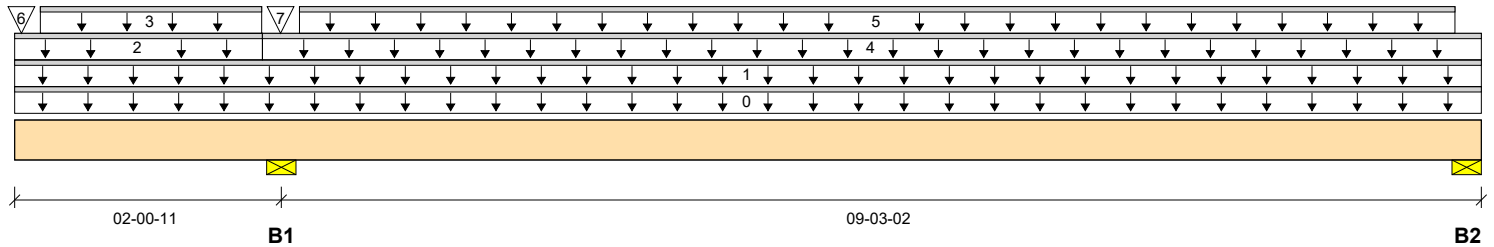
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 11-03-13

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 3-1/2" | 329 / 0 | 588 / 0 |      |      |           |
| B2, 2-3/8" | 251 / 8 | 336 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live | Dead | Snow | Wind | Roof Live | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|------|------|------|------|-----------|-----------|
|     |                                    |                   |      |          |          |      | 100% | 90%  | 115% | 160% | 125%      |           |
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 11-03-13 | Top  |      | 10   |      |      |           | 00-00-00  |
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 11-03-13 | Top  | 30   | 8    |      |      |           | n/a       |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 01-10-15 | Top  | 6    |      |      |      |           | n/a       |
| 3   | E31(i101)                          | Unf. Lin. (lb/ft) | L    | 00-02-06 | 01-10-14 | Top  |      | 57   |      |      |           | n/a       |
| 4   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 01-10-15 | 11-03-13 | Top  | 23   | 6    |      |      |           | n/a       |
| 5   | 69(i126)                           | Unf. Lin. (lb/ft) | L    | 02-02-06 | 11-01-06 | Top  |      | 57   |      |      |           | n/a       |
| 6   | E32(i100)                          | Conc. Pt. (lbs)   | L    | 00-00-10 | 00-00-10 | Top  |      | 53   |      |      |           | n/a       |
| 7   | E30(i99)                           | Conc. Pt. (lbs)   | L    | 02-00-10 | 02-00-10 | Top  |      | 17   |      |      |           | n/a       |

### Controls Summary

|                       | Value              | % Allowable | Duration | Case | Location |
|-----------------------|--------------------|-------------|----------|------|----------|
| Pos. Moment           | 1265 ft-lbs        | 9.1%        | 100%     | 3    | 06-09-05 |
| Neg. Moment           | -320 ft-lbs        | 3.4%        | 100%     | 1    | 02-00-11 |
| End Shear             | 466 lbs            | 7.4%        | 100%     | 3    | 10-03-15 |
| Cont. Shear           | 518 lbs            | 8.2%        | 100%     | 1    | 02-11-15 |
| Total Load Deflection | L/999 (0.037")     | n/a         | n/a      | 3    | 06-07-15 |
| Live Load Deflection  | L/999 (0.017")     | n/a         | n/a      | 6    | 06-07-15 |
| Total Neg. Defl.      | 2xL/1998 (-0.024") | n/a         | n/a      | 3    | 00-00-00 |
| Max Defl.             | 0.037"             | n/a         | n/a      | 3    | 06-07-15 |
| Cant. Max Defl.       | -0.024"            | n/a         | n/a      | 3    | 00-00-00 |
| Span / Depth          | 11.5               |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)                 | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-1/2" x 3-1/2" | 917 lbs | 17.6%           | 10.0%          | Unspecified |
| B2 | Wall/Plate 2-3/8" x 3-1/2" | 587 lbs | 16.6%           | 9.4%           | Unspecified |

## 1st Floor\Flush Beams\B3-2(i753) (Flush Beam)

BC CALC® Member Report

Dry | 2 spans | L cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B3-2(i753)

City, State, Zip:

Specifier:

Customer: KC-Truss & Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (1") Cantilever Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

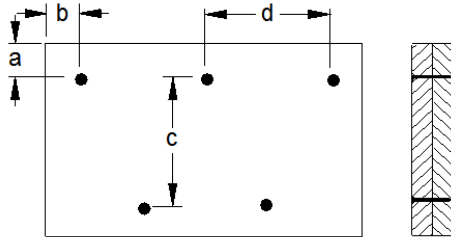
BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

Cantilevers require sheathed bottom flanges, blocking at cantilever support and closure at ends.

Calculations assume unbraced length of Top: 00-00-00, Bottom: 08-11-00.

### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

### Disclosure

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## 1st Floor\Flush Beams\B4-2(i1040) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B4-2(i1040)

City, State, Zip:

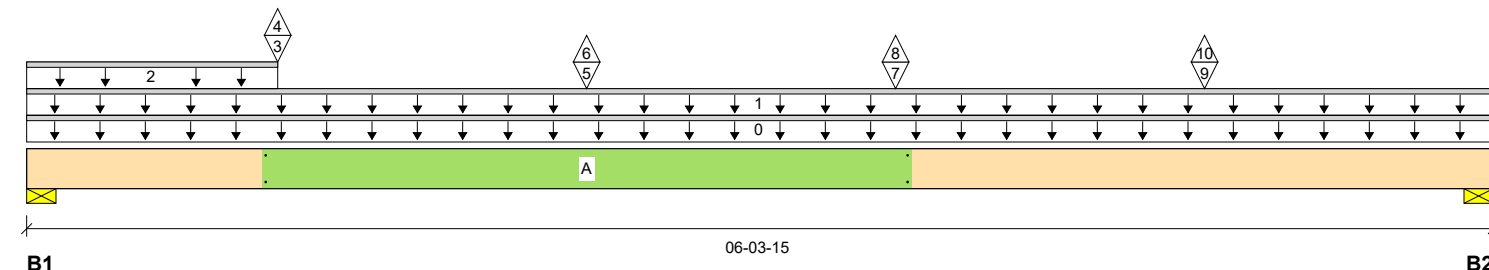
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live      | Dead     | Snow | Wind | Roof Live |
|---------|-----------|----------|------|------|-----------|
| B1, 3"  | 1335 / 63 | 1045 / 0 |      |      |           |
| B2, 3"  | 1195 / 58 | 870 / 0  |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc.  | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|-------|-----------|----------|-----------|-----------|----------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 06-03-15 | Top   |           | 10       |           |           |                | 00-00-00  |
| 1   | 51(i108)                           | Unf. Lin. (lb/ft) | L    | 00-00-00 | 06-03-15 | Top   |           | 57       |           |           |                | n/a       |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-00-00 | 01-01-00 | Top   | 41        |          |           |           |                | n/a       |
| 3   | -                                  | Conc. Pt. (lbs)   | L    | 01-01-00 | 01-01-00 | Front | 693       | 402      |           |           |                | n/a       |
| 4   | -                                  | Conc. Pt. (lbs)   | L    | 01-01-00 | 01-01-00 | Front | -32       |          |           |           |                | n/a       |
| 5   | -                                  | Conc. Pt. (lbs)   | L    | 02-05-00 | 02-05-00 | Front | 574       | 456      |           |           |                | n/a       |
| 6   | -                                  | Conc. Pt. (lbs)   | L    | 02-05-00 | 02-05-00 | Front | -29       |          |           |           |                | n/a       |
| 7   | -                                  | Conc. Pt. (lbs)   | L    | 03-09-00 | 03-09-00 | Front | 574       | 374      |           |           |                | n/a       |
| 8   | -                                  | Conc. Pt. (lbs)   | L    | 03-09-00 | 03-09-00 | Front | -29       |          |           |           |                | n/a       |
| 9   | -                                  | Conc. Pt. (lbs)   | L    | 05-01-00 | 05-01-00 | Front | 645       | 249      |           |           |                | n/a       |
| 10  | -                                  | Conc. Pt. (lbs)   | L    | 05-01-00 | 05-01-00 | Front | -31       |          |           |           |                | n/a       |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 3550 ft-lbs    | 25.4%       | 100%     | 1    | 03-00-00 |
| End Shear             | 2254 lbs       | 35.7%       | 100%     | 1    | 01-00-08 |
| Total Load Deflection | L/999 (0.046") | n/a         | n/a      | 1    | 03-02-00 |
| Live Load Deflection  | L/999 (0.026") | n/a         | n/a      | 3    | 03-02-00 |
| Max Defl.             | 0.046"         | n/a         | n/a      | 1    | 03-02-00 |
| Span / Depth          | 7.5            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3" x 3-1/2" | 2380 lbs | 53.3%           | 30.2%          | Unspecified |
| B2 | Wall/Plate 3" x 3-1/2" | 2066 lbs | 46.3%           | 26.2%          | Unspecified |

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

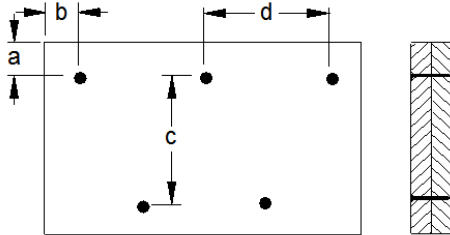
Design meets arbitrary (0.75") Maximum live load deflection criteria.

BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-00-15.

### Connection Diagram: Full Length of Member

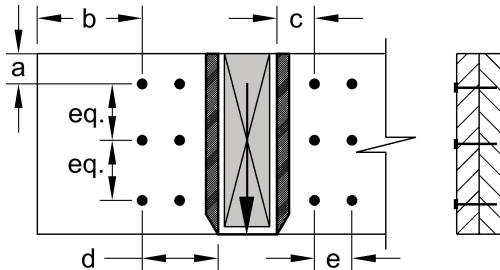


a minimum = 2"  
b minimum = 3"  
c = 5-1/2"  
d = 12"

Calculated Side Load = 476.0 lb/ft  
Connectors are: 16d Common Nails

### Connection Diagrams: Concentrated Side Loads

Connection Tag: A Applies to load tag(s): 7+5+6+8+9+10+7+8+11+12



a minimum = 2"  
b minimum = 4"  
c minimum = 4"  
d maximum = 12"  
e minimum = 4"  
Connectors are: 12 x 16d Box Nails

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# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## 1st Floor\Flush Beams\B4-2(i864) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B4-2(i864)

City, State, Zip:

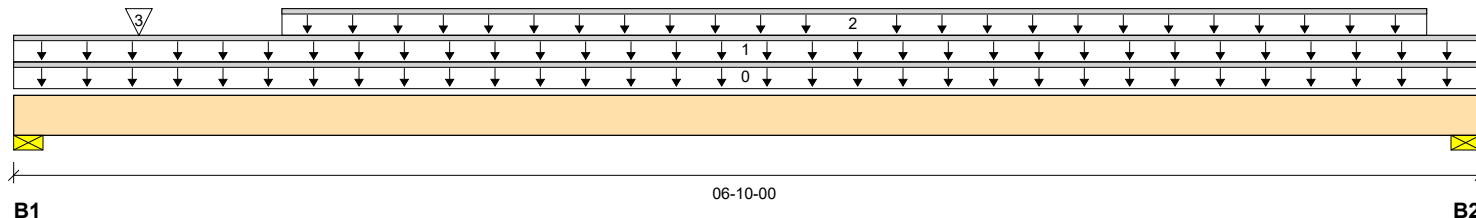
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 06-10-00

### Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live    | Dead    | Snow | Wind | Roof Live |
|---------|---------|---------|------|------|-----------|
| B1, 3"  | 655 / 0 | 391 / 0 |      |      |           |
| B2, 3"  | 613 / 0 | 381 / 0 |      |      |           |

### Load Summary

| Tag | Description       | Load Type         | Ref. | Start    | End      | Loc.  | 100% | 90% | 115% | 160% | Roof Live 125% | Tributary |
|-----|-------------------|-------------------|------|----------|----------|-------|------|-----|------|------|----------------|-----------|
| 0   | Self-Weight       | Unf. Lin. (lb/ft) | L    | 00-00-00 | 06-10-00 | Top   |      | 10  |      |      |                | 00-00-00  |
| 1   | E28(i98)          | Unf. Lin. (lb/ft) | L    | 00-00-00 | 06-10-00 | Top   |      | 57  |      |      |                | n/a       |
| 2   | Smoothed Load     | Unf. Lin. (lb/ft) | L    | 01-03-00 | 06-07-00 | Front | 193  | 49  |      |      |                | n/a       |
| 3   | J6-16" O.C.(i819) | Conc. Pt. (lbs)   | L    | 00-07-00 | 00-07-00 | Front | 237  | 59  |      |      |                | n/a       |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 1637 ft-lbs    | 11.7%       | 100%     | 1    | 03-03-00 |
| End Shear             | 872 lbs        | 13.8%       | 100%     | 1    | 05-09-08 |
| Total Load Deflection | L/999 (0.024") | n/a         | n/a      | 1    | 03-05-00 |
| Live Load Deflection  | L/999 (0.015") | n/a         | n/a      | 2    | 03-05-00 |
| Max Defl.             | 0.024"         | n/a         | n/a      | 1    | 03-05-00 |
| Span / Depth          | 8.2            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)             | Value    | % Allow Support | % Allow Member | Material    |
|----|------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3" x 3-1/2" | 1045 lbs | 23.4%           | 13.3%          | Unspecified |
| B2 | Wall/Plate 3" x 3-1/2" | 994 lbs  | 22.3%           | 12.6%          | Unspecified |

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-02-00.





BC CALC® Member Report

Build 8014

Job name: Lot 323 Park Ridge

Address:

City, State, Zip:

Customer: KC-Truss & Panel

Code reports: ESR-1040

File name: Lot 323 Park Ridge.mmdl

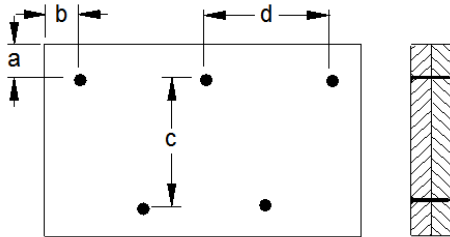
Description: 1st Floor\Flush Beams\B4-2(i864)

Specifier:

Designer: Don Happel

Company: Boise Cascade BMD - Lee's Summit

### Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 12"

Calculated Side Load = 561.0 lb/ft

Connectors are: 16d Common Nails

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# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## 1st Floor\Flush Beams\B5-2(i1054) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B5-2(i1054)

City, State, Zip:

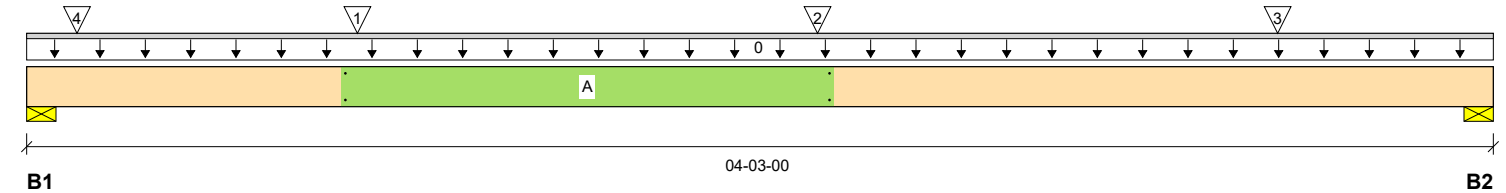
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 04-03-00

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead    | Snow | Wind | Roof Live |
|------------|---------|---------|------|------|-----------|
| B1, 3-1/2" | 171 / 0 | 116 / 0 |      |      |           |
| B2, 3-1/2" | 204 / 0 | 80 / 0  |      |      |           |

### Load Summary

| Tag | Description       | Load Type         | Ref. | Start    | End      | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | Tributary |
|-----|-------------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----------|
| 0   | Self-Weight       | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-03-00 | Top  |           | 10       |           |           |                | 00-00-00  |
| 1   | J7-16" O.C.(i863) | Conc. Pt. (lbs)   | L    | 00-11-08 | 00-11-08 | Back | 125       | 76       |           |           |                | n/a       |
| 2   | J7-16" O.C.(i783) | Conc. Pt. (lbs)   | L    | 02-03-08 | 02-03-08 | Back | 125       | 31       |           |           |                | n/a       |
| 3   | J7-16" O.C.(i785) | Conc. Pt. (lbs)   | L    | 03-07-08 | 03-07-08 | Back | 125       | 31       |           |           |                | n/a       |
| 4   | 52(i109)          | Conc. Pt. (lbs)   | L    | 00-01-12 | 00-01-12 | Top  |           | 17       |           |           |                | n/a       |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 264 ft-lbs     | 1.9%        | 100%     | 1    | 02-03-08 |
| End Shear             | 228 lbs        | 3.6%        | 100%     | 1    | 01-01-00 |
| Total Load Deflection | L/999 (0.001") | n/a         | n/a      | 1    | 02-01-04 |
| Live Load Deflection  | L/999 (0.001") | n/a         | n/a      | 2    | 02-01-11 |
| Max Defl.             | 0.001"         | n/a         | n/a      | 1    | 02-01-04 |
| Span / Depth          | 4.8            |             |          |      |          |

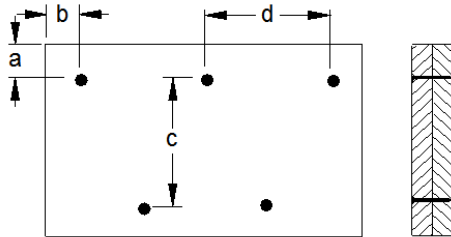
### Bearing Supports

|    | Dim. (LxW)                 | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-1/2" x 3-1/2" | 287 lbs | 5.5%            | 3.1%           | Unspecified |
| B2 | Wall/Plate 3-1/2" x 3-1/2" | 284 lbs | 5.4%            | 3.1%           | Unspecified |

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-02-00.

## Connection Diagram: Full Length of Member



a minimum = 2"  
b minimum = 3"  
c = 5-1/2"  
d = 24"

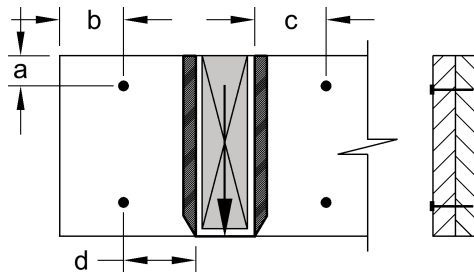
Calculated Side Load = 100.5 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

## Connection Diagrams: Concentrated Side Loads

Connection Tag: A

Applies to load tag(s): 2+3



a minimum = 2"  
b minimum = 4"  
c minimum = 4"  
d maximum = 12"

Connectors are: 4 x 3-1/4 in. Pneumatic Gun Nails

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BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## 1st Floor\Flush Beams\B5-2(i759) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B5-2(i759)

City, State, Zip:

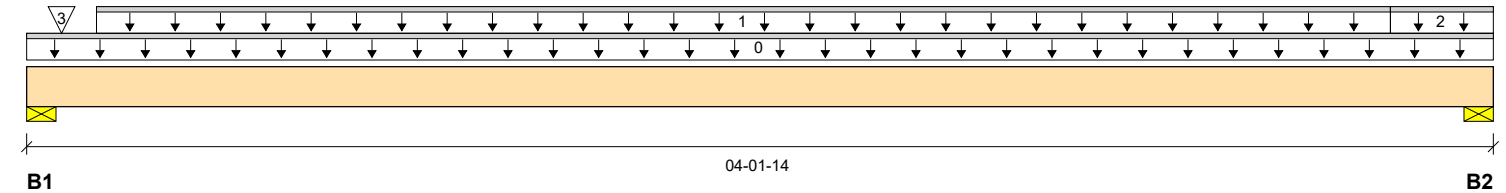
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



Total Horizontal Product Length = 04-01-14

### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live   | Dead   | Snow | Wind | Roof Live |
|------------|--------|--------|------|------|-----------|
| B1, 2-3/8" | 49 / 0 | 32 / 0 |      |      |           |
| B2, 3-1/2" | 55 / 0 | 34 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc. | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|------|--------------|-------------|--------------|--------------|----------------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 04-01-14 | Top  |              | 10          |              |              |                      | 00-00-00  |
| 1   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-02-06 | 03-10-06 | Top  | 26           | 7           |              |              |                      | n/a       |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 03-10-06 | 04-01-14 | Top  | 28           | 7           |              |              |                      | n/a       |
| 3   | FC2 Floor Decking (Plan View Fill) | Conc. Pt. (lbs)   | L    | 00-01-03 | 00-01-03 | Top  | 1            | 0           |              |              |                      | n/a       |

### Controls Summary

|                       | Value      | % Allowable | Duration | Case | Location |
|-----------------------|------------|-------------|----------|------|----------|
| Pos. Moment           | 75 ft-lbs  | 0.5%        | 100%     | 1    | 02-00-06 |
| End Shear             | 44 lbs     | 0.7%        | 100%     | 1    | 00-11-14 |
| Total Load Deflection | L/999 (0") | n/a         | n/a      | 1    | 02-00-06 |
| Live Load Deflection  | L/999 (0") | n/a         | n/a      | 2    | 02-00-06 |
| Max Defl.             | 0"         | n/a         | n/a      | 1    | 02-00-06 |
| Span / Depth          | 4.8        |             |          |      |          |

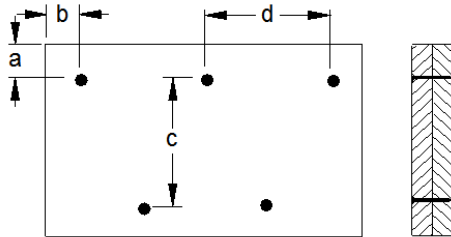
### Bearing Supports

|    | Dim. (LxW)                 | Value  | % Allow Support | % Allow Member | Material    |
|----|----------------------------|--------|-----------------|----------------|-------------|
| B1 | Wall/Plate 2-3/8" x 3-1/2" | 80 lbs | 2.3%            | 1.3%           | Unspecified |
| B2 | Wall/Plate 3-1/2" x 3-1/2" | 90 lbs | 1.7%            | 1.0%           | Unspecified |

### Notes

Design meets Code minimum (L/240) Total load deflection criteria.  
 Design meets Code minimum (L/360) Live load deflection criteria.  
 Design meets arbitrary (1") Maximum Total load deflection criteria.  
 Design meets arbitrary (0.75") Maximum live load deflection criteria.  
 BC CALC® analysis is based on IBC 2009.  
 Design based on Dry Service Condition.  
 Calculations assume unbraced length of Top: 00-00-00, Bottom: 03-08-00.

## Connection Diagram: Full Length of Member



a minimum = 2"

c = 5-1/2"

b minimum = 3"

d = 24"

Calculated Side Load = 0.0 lb/ft

Connectors are: 3-1/4 in. Pneumatic Gun Nails

## Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



# Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED**

## 1st Floor\Flush Beams\B6(i1041) (Flush Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B6(i1041)

City, State, Zip:

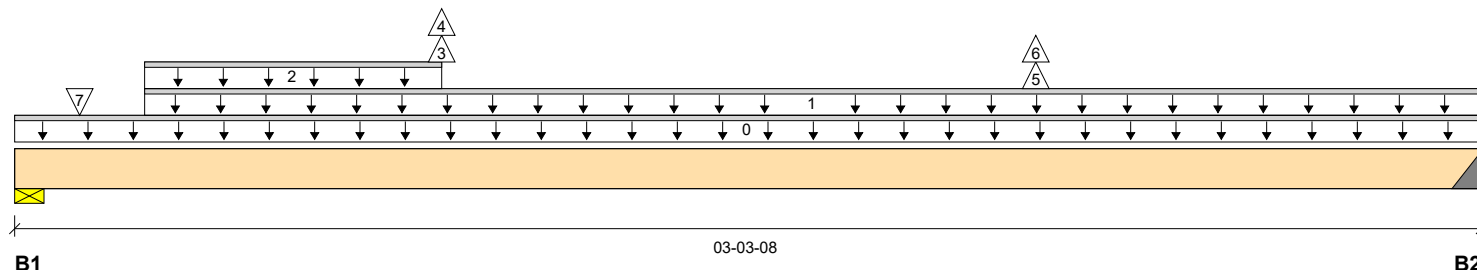
Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit



### Reaction Summary (Down / Uplift) (lbs)

| Bearing    | Live    | Dead   | Snow | Wind | Roof Live |
|------------|---------|--------|------|------|-----------|
| B1, 3-1/2" | 94 / 40 | 95 / 0 |      |      |           |
| B2, 2"     | 87 / 38 | 94 / 0 |      |      |           |

### Load Summary

| Tag | Description                        | Load Type         | Ref. | Start    | End      | Loc.  | Live<br>100% | Dead<br>90% | Snow<br>115% | Wind<br>160% | Roof<br>Live<br>125% | Tributary |
|-----|------------------------------------|-------------------|------|----------|----------|-------|--------------|-------------|--------------|--------------|----------------------|-----------|
| 0   | Self-Weight                        | Unf. Lin. (lb/ft) | L    | 00-00-00 | 03-03-08 | Top   |              | 5           |              |              |                      | 00-00-00  |
| 1   | 65(i122)                           | Unf. Lin. (lb/ft) | L    | 00-03-08 | 03-03-08 | Top   |              | 57          |              |              |                      | n/a       |
| 2   | FC2 Floor Decking (Plan View Fill) | Unf. Lin. (lb/ft) | L    | 00-03-08 | 00-11-08 | Top   | 3            |             |              |              |                      | n/a       |
| 3   | J5-16" O.C.(i996)                  | Conc. Pt. (lbs)   | L    | 00-11-08 | 00-11-08 | Front | 84           | -2          |              |              |                      | n/a       |
| 4   | J5-16" O.C.(i996)                  | Conc. Pt. (lbs)   | L    | 00-11-08 | 00-11-08 | Front | -37          |             |              |              |                      | n/a       |
| 5   | J5-16" O.C.(i1035)                 | Conc. Pt. (lbs)   | L    | 02-03-08 | 02-03-08 | Front | 94           | -4          |              |              |                      | n/a       |
| 6   | J5-16" O.C.(i1035)                 | Conc. Pt. (lbs)   | L    | 02-03-08 | 02-03-08 | Front | -41          |             |              |              |                      | n/a       |
| 7   | 63(i120)                           | Conc. Pt. (lbs)   | L    | 00-01-12 | 00-01-12 | Top   |              | 8           |              |              |                      | n/a       |

### Controls Summary

|                       | Value          | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment           | 138 ft-lbs     | 2.0%        | 100%     | 1    | 01-09-10 |
| End Shear             | 122 lbs        | 3.9%        | 100%     | 1    | 02-04-00 |
| Total Load Deflection | L/999 (0.001") | n/a         | n/a      | 1    | 01-08-11 |
| Live Load Deflection  | L/999 (0")     | n/a         | n/a      | 3    | 01-08-11 |
| Max Defl.             | 0.001"         | n/a         | n/a      | 1    | 01-08-11 |
| Span / Depth          | 3.7            |             |          |      |          |

### Bearing Supports

|    | Dim. (LxW)                 | Value   | % Allow Support | % Allow Member | Material    |
|----|----------------------------|---------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3-1/2" x 1-3/4" | 189 lbs | 7.2%            | 4.1%           | Unspecified |
| B2 | Hanger 2" x 1-3/4"         | 181 lbs | n/a             | 6.9%           | HU9         |

### Cautions

Header for the hanger HU9 is a Single 1-3/4" x 9-1/2" LVL Beam.

Hanger model HU9 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

**1st Floor\Flush Beams\B6(i1041) (Flush Beam)**

BC CALC® Member Report

Dry | 1 span | No cant.

December 22, 2021 10:31:03

Build 8014

Job name: Lot 323 Park Ridge

File name: Lot 323 Park Ridge.mmdl

Address:

Description: 1st Floor\Flush Beams\B6(i1041)

City, State, Zip:

Specifier:

Customer: KC-Truss &amp; Panel

Designer: Don Happel

Code reports: ESR-1040

Company: Boise Cascade BMD - Lee's Summit

**Notes**

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets arbitrary (1") Maximum Total load deflection criteria.

Design meets arbitrary (0.75") Maximum live load deflection criteria.

Hanger Manufacturer: Unassigned

BC CALC® analysis is based on IBC 2009.

Design based on Dry Service Condition.

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-02-00.

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