

MiTek, Inc. RE: B240069 - Lot 183 HT 16023 Swinalev Ridae Rd. Site Information: Chesterfield, MO 63017 Project Customer: Summit Homes Project Name: 314.434.1200 Lot/Block: 183 Subdivision: Hawthorn Ridge Model: Carbondale - Craftsman Address: 1613 SW Arborway Terr City: Lee's Summit State: MO General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions): Design Code: IRC2021/TPI2014 Design Program: MiTek 20/20 8.7 Wind Code: ASCE 7-16 [IV/indRSpeced: 115 mph Roof Load: 45.0 psf Floor Load: N/A psf Mean Roof Height (feet): 25 Exposure Category: C No. Seal# Truss Name Date No. Seal# Truss Name Date 164799572 4/11/24 35 36 37 38 39 40 164799606 4/11/24 12345678910112 A1 I64799573 I64799574 I64799575 A2 164799607 Ĵ2 4/11/24 4/11/24 4/11/24 J2 J3 J4 J5 J6 164799608 A3 4/11/24 A4 164799609 4/11/24 4/11/ l64799576 l64799577 A5 A6 A7 164799610 4/11/24 164799611 11/24 I64799578 I64799579 41 42 43 44 45 46 47 164799612 Ĵ7 4/11/24 A8 164799613 J8 4/11/24 164799580 A9 164799614 Ĵ9 4/11/24 4/11 164799581 A10 4/11/24 164799615 J10 A11 A12 164799616 J11 J12 164799582 4/11/24 164799583 164799617 4/11/24 13 14 A13 164799618 J13 164799584 4/11/24 164799585 A14 48 164799619 J14 4/11/24 15 16 17 18 164799586 A15 4555555555556 164799620 4/11/24 Ĵ15 164799621 164799587 A16 J16 4/11/24 A17 B1 164799588 164799622 4/11/24 164799589 4/11/24 164799623 J18 19 20 21 22 23 24 25 26 27 29 30 32 33 33 33 164799590 B2 4/11/24 164799624 J19 B3 164799591 164799625 J20 B4 B5 J21 J22 164799592 164799626 4/11/24 164799593 164799627 164799594 B6 164799628 J23 4/11/24 164799595 B7 164799629 J24 164799596 B8 11/24 164799630 J25 B9 C1 C2 C3 C4 D1 164799597 164799631 J26 61 62 63 164799598 164799632 J27 164799599 164799633 J28 164799600 164799634 J29 64 65 66 67 164799601 164799635 J30 164799602 164799636 LAY1 D2 D3 164799637 LAY2 164799603 164799604 164799638 LAY3 68 164799639 164799605 D4

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Johnson, Andrew My license renewal date for the state of Missouri is December 31, 2025.

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



Johnson, Andrew

Design Method: MWFRS (Envelope) ASCE 7-16 [Low Rise]



RE: B240069 - Lot 183 HT

MiTek, Inc. 16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200

| No. | Seal# | Truss Name | e Date |
|----------|-----------|------------|---------|
| 69 | 164799640 | LAY5 | 4/11/24 |
| 70 | 164799641 | | 4/11/24 |
| 72 | 104799042 | R1 | 4/11/24 |
| 73 | 164799644 | V1 | 4/11/24 |
| 74 | 164799645 | V2 | 4/11/24 |
| 75 | 164799646 | V3 | 4/11/24 |
| 76 | 164799647 | V4 | 4/11/24 |
| // 78 | 164799648 | | 4/11/24 |
| 79 | 164799650 | V7 | 4/11/24 |
| 80 | 164799651 | V8 | 4/11/24 |
| | | | |

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A1 | Hip Girder | 1 | 4 | Job Reference (optional) | 164799572 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:44:58 ID:xtkJ_ecVQwTrluO9vs_d4czX58I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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ONALE and April 11,2024

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Scale = 1:82.1

| Plate Offsets (| (X, Y): [1:0-2-13,0-1-1 | 3], [1:2-6-9,0-0-7], [| 15:0-3-8,0-4 | 4-0], [17:0-8-4 | ,Edge], [18:0-6-5 | 5,0-2-0], [2 | 1:0-6-2,Edge |] | | | | | |
|---|--|--|--|--|--|---|--|--------------------------------------|--|---------------------------------------|---------------------------------|--|---|
| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 NO IRC202 ⁻ | I/TPI2014 | CSI TC BC WB Matrix-S | 0.66 0.84 0.92 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.69 -1.24 0.33 0.62 | (loc) 17-19 17-19 10 17-19 | l/defl >791 >441 n/a >882 | L/d 360 240 n/a 240 | PLATES MT20 M18AHS Weight: 980 lb | GRIP 197/144 186/179 FT = 10% |
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD | 2x6 SPF No.2 2x6 SP 2400F 2.0E No.2, 16-14,14-10:2 2x4 SPF No.2 Structural wood she 6-0-0 oc purlins, exc 2-0-0 oc purlins (6-0 Rigid ceiling directly | *Except* 5-16:2x4 S x6 SPF No.2 athing directly applie xept -0 max.): 3-9. applied or 10-0-0 or | 1) SPF ed or c 2) | 4-ply truss to (0.131"x3") r Top chords of staggered at Bottom chorn staggered at Web connect Attach BC w center of the All loads are | b be connected t hails as follows: connected as fol 0-9-0 oc. ds connected as 0-9-0 oc, 2x4 - ted as follows: 2 / 1/2" diam. bolt member w/was considered equ | ogether wi lows: 2x6 - follows: 2: 1 row at 0- 2x4 - 1 row s (ASTM A hers at 4-0 vally applied | th 10d 2 rows 6 - 2 rows 9-0 oc. at 0-9-0 oc. -307) in the -0 oc. d to all plies, acceint the 10 | | 12) Gra or ti bott | phical p ne orient om chor | urlin re tation c rd. | presentation doe f the purlin along | s not depict the size the top and/or |
| REACTIONS | Rigid ceiling directly applied or 10-0-0 corbracing. 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD (size) 1=0-3-8, 10=0-3-8 CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated. Max Uplift 1=-875 (LC 4), 10=-901 (LC 5) Was Gray 1=3953 (LC 1), 10=4022 (LC 1) Max Gray 1=3953 (LC 1), 10=4022 (LC 1) Unbalanced roof live loads have been considered for this design. | | | | | | | | | | | | |
| FORCES | (lb) - Maximum Com Tension 1-2=-17603/3980, 2- 3-4=-18216/4317, 4- 5-7=-22969/5475, 7- 8-9=-11919/2841, 9- 10-11=0/12 | apression/Maximum -3=-12784/2959, -5=-18213/4316, -8=-11917/2840, -10=-8811/2024, | 5) | this design. Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 Provide adequate drainage to prevent water ponding. | | | | | | | | | |
| BOT CHORD | 1-21=-3624/16107, 2 19-20=-2701/11894, 16-17=0/247, 5-17= 15-16=-415/1739, 12 12-13=-1777/7946. | 20-21=-3247/14428, , 17-19=-5510/23520 -35/1038, 3-15=-3294/14218, 10-12=-1781/7984 | , 7) 6, 8) | All plates are MT20 plates unless otherwise indicated. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle | | | | | | | | AISSOL | |
| WEBS | 2-21=-972/4396, 2-2 3-20=-305/1835, 3-1 4-19=-1055/524, 5-1 15-17=-2950/12788, 7-15=-2655/821, 7-1 8-13=-791/401, 9-13 9-12=-95/835 | 20=-2447/225, 19=-1611/6742, 19=-5571/1339, , 7-17=-2210/9242, 3=-2660/625, 3=-1111/4645, | 9) 10 11 | ANDREW thord and any other members. Bearings are assumed to be: Joint 1 SP 2400F 2.0E , Joint 10 SPF No.2 . Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. Provide mechanical connection (by others) of truss to | | | | | | | | EW AS DI BER DI 18993 | |
| NULES | | | | 10 and 875 l | b uplift at joint 1 | | or in upilit at | Joint | | | Y | 1980 | NON B |

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to dury with with where outputs into design is based only door parameters shown, and is for an individual building design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TPH1 Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A1 | Hip Girder | 1 | 4 | Job Reference (optional) | 164799572 |

13) Hanger(s) or other connection device(s) shall be

| provided sufficient to support concentrated load(s) 138 |
|---|
| lb down and 93 lb up at 9-0-0, 138 lb down and 93 lb up |
| at 11-0-0, 138 lb down and 93 lb up at 13-0-0, 138 lb |
| down and 93 lb up at 15-0-0, 138 lb down and 93 lb up |
| at 17-0-0, 138 lb down and 93 lb up at 19-0-0, 138 lb |
| down and 93 lb up at 21-0-0, 137 lb down and 92 lb up |
| at 23-0-0, 137 lb down and 92 lb up at 25-0-0, 137 lb |
| down and 92 lb up at 27-0-0, 137 lb down and 92 lb up |
| at 29-0-0, 137 lb down and 92 lb up at 31-0-0, 137 lb |
| down and 92 lb up at 33-0-0, and 137 lb down and 92 lb |
| up at 35-0-0, and 137 lb down and 92 lb up at 37-0-0 |
| on top chord, and 456 lb down and 132 lb up at 5-0-0, |
| 232 lb down and 76 lb up at 7-0-0, 68 lb down at 9-0-0, |
| 68 lb down at 11-0-0, 68 lb down at 13-0-0, 68 lb down |
| at 15-0-0, 68 lb down at 17-0-0, 68 lb down at 19-0-0, |
| 68 lb down at 21-0-0, 68 lb down at 23-0-0, 68 lb down |
| at 25-0-0, 68 lb down at 27-0-0, 68 lb down at 29-0-0, |
| 68 lb down at 31-0-0, 68 lb down at 33-0-0, 68 lb down |
| at 35-0-0, 68 lb down at 37-0-0, and 230 lb down and |
| 73 lb up at 39-0-0, and 451 lb down and 132 lb up at |
| 41-0-0 on bottom chord. The design/selection of such |
| connection device(s) is the responsibility of others. |
| LOAD CASE(S) Standard |
| 1) Dead + Roof Live (balanced): Lumber Increase=1.15. |
| Plate Increase=1.15 |
| Uniform Loads (Ib/ft) |
| Vert 1-3=-70 3-9=-70 9-11=-70 1-21=-20 |
| 17-21=-20, 10-16=-20 |
| Concentrated Loads (lb) |

Concentrated Loads (lb) Vert: 18=-51 (F), 20=-232 (F), 15=-52 (F), 7=-110 (F), 8=-110 (F), 13=-52 (F), 12=-230 (F), 22=-110 (F), 23=-110 (F), 24=-110 (F), 25=-110 (F), 26=-110 (F), 27=-110 (F), 28=-110 (F), 29=-110 (F), 30=-110 (F), 31=-110 (F), 32=-110 (F), 33=-110 (F), 34=-110 (F), 35=-456 (F), 36=-51 (F), 37=-51 (F), 43=-51 (F), 39=-51 (F), 40=-51 (F), 41=-51 (F), 42=-52 (F), 43=-52 (F), 44=-52 (F), 45=-52 (F), 46=-52 (F), 47=-52 (F), 48=-451 (F) Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:44:58 ID:xtlkJ_ecVQwTrluO9vs_d4czX58I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A2 | Нір | 1 | 2 | Job Reference (optional) | 164799573 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:44:59 ID:K0gbVLoPlqa7lqwK6LIR?zzX5Ae-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:82.2

| Plate Offsets (| X, Y): [1:0-2-13,0-2-13 | 3], [10:0-2-8,0-5-8], | [15:0-2-8,0 | -3-0], [21:0-6-1 | 12,0-2-4] | | | | | | | | | | |
|--|---|---|---|--|---|---|--|--------------------------------------|--|---------------------------------------|---------------------------------|--|---|--|--|
| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2027 | I/TPI2014 | CSI TC BC WB Matrix-S | 0.66 0.87 0.84 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.54 -0.99 0.38 0.41 | (loc) 17-19 17-19 12 17-19 | l/defl >999 >553 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 M18AHS Weight: 353 lb | GRIP 197/144 142/136 FT = 10% | | |
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD | 2x4 SPF No.2 *Exce 2x4 SPF No.2 *Exce 21-18:2x4 SPF 2100 No.2 2x3 SPF No.2 *Exce 12-10:2x8 SP 2400F Structural wood shee | pt* 1-3:2x6 SPF No pt* 1-21:2x6 SPF N F 1.8E, 5-16:2x3 SI pt* 21-2:2x4 SPF N 2.0E athing directly applie | 1) .2 0.2, PF 10.2, | 2-ply truss to (0.131"x3") n Top chords c staggered at rows stagger Bottom chord staggered at row at 0-9-0 Web connect | 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc, 2x3 - 1 row at 0-9-0 oc. Web connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x3 - 1 row at 0-9-0 oc. | | | | | | | | | | |
| BOT CHORD | Structural wood sheathing directly applied or 4-1-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-6 max.): 3-8. veb connected as follows: 2x4 - 1 fow at 0-9-0 oc, 2x3 - 1 row at 0-9-0 oc. Rigid ceiling directly applied or 10-0-0 oc bracing. All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to dirtibute only loads to reduce on the produce of the ref. | | | | | | | | | | | | | | |
| REACTIONS | (size) 1=0-3-8, 1 Max Horiz 1=-68 (LC Max Uplift 1=-271 (LI Max Grav 1=2049 (L | 2=0-3-8 9) C 4), 12=-309 (LC 5 .C 1), 12=2133 (LC | 5) 1) 4) | provided to distribute only loads noted as (F) or (B), unless otherwise indicated. Unbalanced roof live loads have been considered for this design. | | | | | | | | | | | |
| FORCES | (lb) - Maximum Com Tension 1-2=-9096/1230, 2-3 3-4=-4770/759, 4-5= 5-7=-7055/1204, 7-8 8-9=-3896/608, 9-10 | pression/Maximum =-5208/789, -7102/1206, =-3551/582, =-986/103, 10-11=0 | 5) (/32, 6) | Vasd=91mph II; Exp C; En cantilever lef right exposed Provide adec All plates are | rToDL=6.0psf; Bi closed; MWFRS (d t and right exposed d; Lumber DOL=1. uate drainage to p MT20 plates unle | CDL=6.0 envelope d ; end v 60 plate prevent v ss other | Opsif; h=25ft; i exterior zoi vertical left an grip DOL=1. water ponding wise indicate | Cat. ne; id 60 g. d. | | | | | | | |
| BOT CHORD | 10-12=-653/116 1-21=-1105/8314, 20 19-20=-948/6407, 17 16-17=0/143, 5-17=- 13-15=-774/5168, 22 | 0-21=-996/7376, 7-19=-948/6407, 452/184, 15-16=-37 2-13=-490/3467 | 7) 8) 7/348, | This truss ha chord live loa * This truss h on the botton 3-06-00 tall b | s been designed for ad nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will | or a 10.0 with any I for a liv s where Il fit betw | 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto | ds. Opsf om | | | E. | STATE OF M | EW CLEAR | | |
| NOTES | 2-21=-200/2001, 2-2 3-20=-142/1367, 4-2 4-19=0/246, 4-17=-1 15-17=-744/4865, 7- 7-15=-525/194, 7-13 8-13=-87/1044, 9-13 | 0=-2003/370, 0=-2003/370, 65/891, 17=-340/2079, =-1961/376, =0/356, 9-12=-2975 | 9) 10 9/524 11 | chord and an Bearings are SPF No.2.) Bearing at jo using ANSI/T designer sho) Provide mecl bearing plate 1 and 309 lb | y other members. assumed to be: Ju- int(s) 1 considers p PI 1 angle to grain uld verify capacity hanical connection capable of withsta uplift at joint 12. | oint 1 SF parallel t n formula of beari n (by oth anding 2 | PF No.2 , Joir to grain value a. Building ng surface. ers) of truss t 71 lb uplift at | nt 12 o joint | | l | * Spirit | NUME PE-2017(PSSIONA | ER 18993 | | |

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A3 | Нір | 1 | 1 | Job Reference (optional) | 164799574 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:44:59 ID:kzBAjVbJ3P5ANdsIp30EV5zX5CB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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46-10-8 3-4-12 7-8-6 16-9-0 21-5-12 27-7-8 33-10-8 39-10-0 46-0-0 12-1-8 4-8-12 6-1-12 3-4-12 4-3-10 4-5-2 4-7-8 5-11-8 6-2-0 6-3-0 0-10-8 4x8= 8x8= 3x6= 3x4 II 3x6= 5x8= 5 6 9 4 8 5¹² 4x8 3x6. 3 10 5-6-15 5-6-15 5-8-13 11 è ĕ́∏ 20 22 21 F. ੱਕ 5x8= M18AHS 4x14 = 16 15 17 14 M18AHS 4x14 7x12= 8x8. 6x6= 6x8= 4x8= 3x4 II M18AHS 10x12 = MT18HS 3x10 = _4 12 0-<u>3</u>-8₃₋₃₋₈ 12-0-4 21-4-8 27-7-8 33-11-12 39-10-0 46-0-0 0-3-83-0-0 8-8-12 9-4-4 6-3-0 6-4-4 5-10-4 6-2-0

Scale = 1:82.4

WEBS

WEBS

FORCES

TOP CHORD

BOT CHORD

WEBS

BRACING

TOP CHORD

BOT CHORD

REACTIONS (size)

bracing.

Tension

1 Row at midpt

Max Horiz 1=-86 (LC 9)

2400F 2.0E, 6-18:2x3 SPF No.2

2x3 SPF No.2 *Except* 17-19:2x4 SPF 2100F 1.8E, 13-11:2x8 SP 2400F 2.0E

Structural wood sheathing directly applied or

5-21.8-15

2-2-0 oc purlins, except end verticals, and

Rigid ceiling directly applied or 9-5-14 oc

1=0-3-8, 13=0-3-8

Max Uplift 1=-242 (LC 4), 13=-280 (LC 5)

Max Grav 1=2049 (LC 1), 13=2133 (LC 1)

(Ib) - Maximum Compression/Maximum

1-2=-8701/1016, 2-3=-7766/977,

3-4=-4719/662, 4-5=-4249/624,

5-6=-5450/865, 6-8=-5435/867,

10-11=-3991/513, 11-12=0/32,

11-13=-2046/308

13-14=-119/978

8-9=-3372/541, 9-10=-3736/563,

1-22=-903/7898, 21-22=-665/5404,

19-21=-672/5039, 18-19=0/111,

6-19=-369/151, 17-18=-40/119, 15-17=-554/4278, 14-15=-410/3596,

2-22=-103/1485, 3-22=-248/2145,

3-21=-1265/298, 4-21=-154/1525, 5-21=-1187/279, 5-19=-71/674,

17-19=-521/4213, 8-19=-201/1430, 8-17=-559/169, 8-15=-1307/232, 9-15=-84/1002, 10-15=-253/178,

10-14=-146/105, 11-14=-302/2627

2-0-0 oc purlins (2-11-10 max.): 4-9.

| Plate Offsets (2 | X, Y): [1:0-3-13,0-1-5] |], [13:0-3-12,0-2-12] |], [14:0-2-8,0-3-0], [17:0- | 4-0,0-2-8], [22:0 |)-6-4,Edge] | | | | | | | | |
|------------------|---|-----------------------|-----------------------------|-------------------|-------------|-----------|-------|-------|--------|-----|----------------|----------|--|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.81 | Vert(LL) | -0.60 | 19-21 | >916 | 360 | M18AHS | 186/179 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.81 | Vert(CT) | -1.18 | 19-21 | >462 | 240 | MT20 | 197/144 | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.90 | Horz(CT) | 0.48 | 13 | n/a | n/a | MT18HS | 197/144 | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.43 | 19-21 | >999 | 240 | Weight: 194 lb | FT = 10% | |
| LUMBER | | | NOTES | | | | | | | | | | |
| TOP CHORD | 2x4 SPF 2100F 1.8E *Except* 1-4:2x6 SP 1) Unbalanced roof live loads have been considered for 2400F 2.0E this design. | | | | | | | | | | | | |
| BOT CHORD | 2x4 SPF 2100F 1.8E | *Except* 1-22:2x6 | SP 2) Wind: ASC | E 7-16; Vult=115 | 5mph (3-sec | ond gust) | | | | | | | |

| ·) | Chibalanced 1001 live loads have been considered for |
|----|--|
| | this design. |
| 2) | Wind: ASCE 7-16; Vult=115mph (3-second gust) |
| | Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. |
| | II; Exp C; Enclosed; MWFRS (envelope) exterior zone; |
| | cantilever left and right exposed ; end vertical left and |
| | right exposed: Lumber $DOI = 1.60$ plate aria $DOI = 1.60$ |

- Provide adequate drainage to prevent water ponding. 3)
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
- chord and any other members. Bearings are assumed to be: Joint 1 SP 2400F 2.0E , 7) Joint 13 SPF 2100F 1.8E
- 8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to 9) bearing plate capable of withstanding 242 lb uplift at joint 1 and 280 lb uplift at joint 13.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A4 | Нір | 1 | 1 | Job Reference (optional) | 164799575 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:44:59 ID:i?OUUZK06yYjRu3MMHANPfzX5F6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:82.5

| Loading | (psf) | Spacing | 2-0-0 | | CSI TC | 0.79 | DEFL | in -0.54 | (loc) | l/defl | L/d | PLATES | GRIP | _ |
|-----------|--|--|-----------------|---|---|-------------------------------|--|-----------------|-------|-------------|-----------------|-----------------------|----------------|---|
| | 20.0 | | 1.15 | | BC | 0.73 | Vert(CT) | -0.34 | 10-21 | ~565 | 240 | MT20 | 107/1// | |
| BCU | 0.0* | Ren Stress Incr | VES | | WB | 0.37 | Horz(CT) | 0.50 | 13-21 | >303 n/a | 240 n/a | MT18HS | 197/144 | |
| BCDI | 10.0 | Code | IPC2024 | I/TPI2014 | Matrix-S | 0.00 | Wind(LL) | 0.37 | 10-21 | ~000 | 2/0 | Weight: 203 lb | FT = 10% | |
| DODL | 10.0 | Code | 11(0202 | 1/11/2014 | Matrix-0 | | Wind(LL) | 0.57 | 13-21 | 2333 | 240 | weight. 200 ib | 11 = 1070 | |
| LUMBER | | | NC | DTES | | | | | | | | | | |
| TOP CHORD | 2x4 SPF 2100F 1.8E 2400F 2.0E. 6-8:2x4 | E *Except* 1-4:2x6 SF SPF No.2 | ⊃ 1) | Unbalanced this design. | roof live loads have | e been | considered fo | or | | | | | | |
| BOT CHORD | 2x4 SPF No.2 *Exce 2.0E, 23-20:2x4 SPF SPF No.2 20-19:2x4 | ept* 1-23:2x6 SP 2400 F 2400F 2.0E, 5-18:2: 4 SPE 2100F 1 8E | 0F 2) x3 | Wind: ASCE Vasd=91mpl II: Exp.C: En | 7-16; Vult=115mpl n; TCDL=6.0psf; BC closed: MWFRS (e | n (3-sec CDL=6. nvelope | cond gust) Opsf; h=25ft; (a) exterior zor | Cat. | | | | | | |
| WEBS | 2x3 SPF No.2 *Exce 13-11:2x8 SP 2400F | ept* 17-19:2x4 SPF N 2.0E | 0.2, | cantilever lef | t and right exposed d; Lumber DOL=1.6 | i ; end v 50 plate | ertical left an grip DOL=1. | nd 60 | | | | | | |
| BRACING | | | 3) | Provide adec | uate drainage to p | revent | water ponding | g. | | | | | | |
| TOP CHORD | Structural wood she 2-2-0 oc purlins, ex 2-0-0 oc purlins (2-5 | athing directly applied cept end verticals, an i-13 max.): 4-8. | dor 4) Id 5) | This truss ha | s been designed fo ad nonconcurrent w | or a 10.0 vith any | other live loa | a. Ids. | | | | | | |
| BOT CHORD | B Rigid ceiling directly applied or 2-2-0 oc bracing. 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle | | | | | | | | | | | | | |
| WEBS | 1 Row at midpt | 2-22, 3-21, 5-21, 7-1 | 5 | 3-06-00 tall b | y 2-00-00 wide will | fit betv | veen the botto | om | | | | | | |
| REACTIONS | (size) 1=0-3-8, 1 |) 1=0-3-8, 13=0-3-8 critical and any other intermetines. | | | | | | | | | | | | |
| | Max Horiz 1=-104 (L | .C 9) | 7) | Bearings are | assumed to be: Jo | oint 1 Si | 2400F 2.0E | , | | | | | | |
| | Max Uplift 1=-213 (L | C 4), 13=-250 (LC 5) | 0) | Joint 13 SPF | INU.∠. | امالم | | | | | | | | |
| | Max Grav 1=2049 (L | _C 1), 13=2133 (LC 1 |) 8) | Bearing at jo | TPL 1 angle to grain | formul | o grain value | | | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | 9) | designer sho | uld verify capacity | of bear (by oth | ng surface. | 'n | | | | | | |
| TOP CHORD | 1-2=-8605/908, 2-3= 3-4=-4206/570, 4-5= 5-7=-4531/676, 7-8= | =-5380/629, =-3820/548, =-3171/482, | 10 | bearing plate 1 and 250 lb) Graphical pu | capable of withsta uplift at joint 13. | nding 2 | 13 lb uplift at | i joint size | | | | - | all a | |
| | 8-10=-3542/496, 10- | -11=-4043/463, -2050/286 | | or the orienta | ation of the purlin al | long the | top and/or | | | | 9 | TE OF M | IISSO | |
| BOT CHORD | 1-23=-815/7812, 22- 21-22=-504/5010, 19 18-19=0/93, 5-19=-1 15-17=-381/3627, 14 13-14=-171/1057 | -23=-745/7062, 9-21=-500/4544, 10/229, 17-18=-26/13 4-15=-356/3635, | LC 8, | DAD CASE(S) | Standard | | | | | / | | ANDR THOM JOHNS | EW E | |
| WEBS | 2-23=-185/2422, 2-2 3-22=0/420, 3-21=-1 5-21=-1078/183, 17- 7-19=-169/1307, 7-1 7-15=-882/148, 8-15 10-15=-527/223, 10- 11-14=-239/2584 | 22=-2067/351, 1386/289, 4-21=-78/1 19=-365/3584, 17=-735/148, 5=-62/917, -14=-54/166, | 218, | | | | | | | C | Phy Contraction | NUME PE-2017(| ER 118993 E | |
| | | | | | | | | | | | | April | 11,2024 | |

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Plate Offsets (X, Y): [1:0-3-13,0-1-5], [13:0-3-8,0-2-12], [14:0-2-8,0-3-0], [17:0-2-8,Edge], [19:0-8-0,0-5-0], [22:0-2-8,0-1-8], [23:0-10-2,Edge]



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A5 | Нір | 1 | 1 | Job Reference (optional) | 164799576 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:00 ID:g0bnEc4j8V_FW8GQvWJWKDzX5I1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

April 11,2024

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Scale = 1:82.7

| Plate Offsets (2 | X, Y): [1:0-3-9,0-1-5], | [3:0-4-0,Edge], [11: | :0-3-9,0-5- | 11], [21:0-2-8,0 |)-2-0], [22:0-10-2,E | dge] | | | | | | | | |
|--|---|---|--|---|--|--|--|---------------------------------------|--|---------------------------------------|---------------------------------|--|--|--|
| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC202 | 21/TPI2014 | CSI TC BC WB Matrix-S | 0.88 0.97 0.99 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.50 -0.92 0.51 0.34 | (loc) 18-19 21-22 13 21-22 | l/defl >999 >597 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 M18AHS MT18HS Weight: 199 lb | GRIP 197/144 186/179 197/144 FT = 10% | |
| LUMBER TOP CHORD | 2x4 SPF No.2 *Exce 1.8E, 5-7:2x4 SPF 2 2400F 2.0E | pt* 3-5:2x4 SPF 210 400F 2.0E, 3-1:2x6 | V DOF SP | /EBS | 2-22=-244/2561, 2 4-21=0/481, 4-19= 6-19=-829/143, 16 7-18=-159/1188, 7 | -21=-24 -1387/3 -18=-21 -16=-65 | 79/443, 26, 5-19=-78/ 9/2870, /280, | /1128, | | | | | | |
| BOT CHORD | 2x4 SPF 2100F 1.8E 2400F 2.0E, 22-20:2 6-17:2x3 SPF No.2, | E *Except* 1-22:2x6 x4 SPF 2400F 2.0E 17-15:2x4 SPF No.2 | SP :, 2 N | OTES | 9-16=-586/229, 9- ⁻ 10-14=-135/177, 1 | 14=-17/3 0-13=-3 | 33, 075/321 | | | | | | | |
| WEBS | 2x3 SPF No.2 *Exce SPF No.2, 13-11:2x6 | ept* 22-2,21-2,13-10 6 SP 2400F 2.0E | :2x4 1 |) Unbalanced this design. | roof live loads hav | e been o | considered fo | or | | | | | | |
| BRACING | | | 2 |) Wind: ASCE | 7-16: Vult=115mc | h (3-sec | cond aust) | | | | | | | |
| TOP CHORD | Structural wood she 2-3-12 oc purlins, e 2-0-0 oc purlins (2-2 Rigid ceiling directly bracing, Except: 8-9-13 oc bracing: 2 | athing directly applie xcept end verticals, -0 max.): 5-7. applied or 10-0-0 or 1-22 | ed or and c 3 4 | Vasd=91mpl II; Exp C; En cantilever lef right expose Provide adeo All plates are | h; TCDL=6.0psf; B closed; MWFRS (t and right expose d; Lumber DOL=1. quate drainage to MT20 plates unle | CDL=6.0 envelope d ; end v .60 plate prevent v ess other | Opsf; h=25ft; exterior zor vertical left ar grip DOL=1. water ponding wise indicate | Cat. ne; nd .60 g. ed. | | | | | | |
| | 2-2-0 oc bracing: 14 | -16. | 5 |) This truss ha | as been designed f | or a 10.0 |) psf bottom | | | | | | | |
| WEBS | 1 Row at midpt | 2-21, 4-19, 6-19, 10 |)-13 | chord live loa | ad nonconcurrent | with any | other live loa | ads. | | | | | | |
| REACTIONS | (size) 1=0-3-8, 1 Max Horiz 1=122 (LC Max Uplift 1=-212 (L Max Grav 1=2052 (L | 13=0-3-8 C 12) C 8), 13=-237 (LC 9 _C 1), 13=2131 (LC | 6)) 1) _ |) * This truss I on the bottor 3-06-00 tall I chord and ar | nas been designed n chord in all area by 2-00-00 wide wi ny other members. | I for a liv s where II fit betv | e load of 20.0 a rectangle veen the bott | 0psf om - | | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | (| Joint 13 SPF | assumed to be: J | | 2400F 2.0E | , | | | | | m | |
| TOP CHORD | 1-2=-8905/988, 2-4= 4-5=-3855/468, 5-6= 6-7=-3835/530, 7-9= 9-10=-3900/408, 10- 11-12=0/30, 11-13=- 1-22=-996/8114, 21- 19-21=-454/4720, 18 17-18=0/137, 6-18=- 14-16=-274/3409, 13 | 5119/517, 3451/455, 3309/430, -11=-1024/174, -665/167 -22=-894/7183, 3-19=-324/3836, -210/128, 16-17=0/1 3-14=-323/3613 | 8 9 1 54, L | bearing at jo using ANSI/ designer sho Provide mec bearing plate 1 and 237 lb Graphical pu or the orienta bottom chore OAD CASE(S) | FIPI 1 angle to grain uld verify capacity hanical connection acapable of withst uplift at joint 13. Irlin representation ation of the purlin a Standard | parament n formula o (by oth anding 2 a does no along the | a. Building ang surface. ers) of truss t 12 lb uplift at ot depict the s top and/or | to t joint size | | (| | ANDR THOM JOHNS PE-20170 PE-20170 | IISSOLUTE EW LAS SON BER D18993 L ENGT | |

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A6 | Нір | 1 | 1 | Job Reference (optional) | 164799577 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:00 ID:05ihlehC?TdQqdYWEZGojBzX5Jp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:71.9

| Plate Offsets (X, Y): | [2:0-2-5,0-2-13], [5:0-4-0,Edge] | , [10:0-2-8,Edge], [11:0-3-8,Edge], [18:0-7-4,Edge] |
|-----------------------|----------------------------------|---|
| | | |

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC202 | 1/TPI2014 | CSI TC BC WB Matrix-S | 0.72 0.99 0.93 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.46 -0.82 0.32 0.29 | (loc) 17-18 17-18 11 17-18 | l/defl >993 >549 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 MT18HS M18AHS Weight: 170 lb | GRIP 197/144 197/144 142/136 FT = 10% |
|--|--|--|---|--|--|--|--|--|--|---------------------------------------|---------------------------------|--|--|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS | 2x4 SPF No.2 *Exce 1.8E, 1-5:2x6 SP 240 2x4 SPF 2100F 1.8E 2400F 2.0E, 16-14:2 2x3 SPF No.2 *Exce No.2 Structural wood shea 2-7-14 oc purlins, en 2-0-0 oc purlins (4-3 Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-3-8, 1 Max Horiz 2=182 (LC Max Uplift 2=-243 (LL Max Grav 2=1854 (L | pt* 7-8:2x4 SPF 210 00F 2.0E *Except* 2-18:2x6 : x4 SPF No.2 pt* 18-3,13-7:2x4 SI athing directly applie xcept end verticals, a -4 max.): 7-8. applied or 2-2-0 oc 6-15, 7-13 11=0-3-8 C 8), 11=-147 (LC 5 C 2), 11=1812 (LC 5 | 2) DOF SP PF 3) 4) 5) od or 6) 7) 8) () 8) () 2) () | Wind: ASCE Vasd=91mpl II; Exp C; En cantilever lef right expose Provide adec All plates are This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar Bearings are Joint 11 SPF Bearing at jo using ANSI/7 designer shoc | 7-16; Vult=115mp n; TCDL=6.0psf; Bi closed; MWFRS (et and right exposed d; Lumber DOL=1. quate drainage to p MT20 plates unle s been designed fi ad nonconcurrent v has been designed n chord in all areas by 2-00-00 wide will y other members, assumed to be: Jt 2100F 1.8E int(s) 2 considers p TPI 1 angle to grain uld verify capacity | h (3-sec CDL=6. envelope d; end v 60 plate prevent ss other or a 10. with any for a liv s where Il fit betw with BC point 2 SI parallel n formul of bear | ond gust) Dpsf; h=25ft; e) exterior zo rertical left ar grip DOL=1 water pondin wise indicate) psf bottom other live loa e load of 20. a rectangle veen the bott DL = 10.0ps P 2400F 2.0E o grain value a. Building ng surface. | Cat. ne; nd .60 g. ed. ads. Opsf com f. E, | | | | | |
| FORCES | (lb) - Maximum Com Tension 1-2=0/10, 2-3=-7487 4-6=-4003/498, 6-7= | pression/Maximum //1008, 3-4=-6620/99 2635/316, | 92, 10 | bearing plate 2 and 147 lb) Graphical pu or the orienta | capable of withsta uplift at joint 11. rlin representation ation of the purlin a | does no | 43 lb uplift a depict the top and/or | t joint size | | | | | |
| BOT CHORD | 7-8=-1993/272, 8-9= 9-10=-1449/145, 10- 2-18=-1062/6799, 17 15-17=-348/3037, 13 12-13=-186/1773, 11 | -2216/274, 11=-1801/145 7-18=-640/4296, 3-15=-199/2385, 1-12=-41/30 | L | bottom choro DAD CASE(S) | l. Standard | | | | | | B | ATE OF M | AISSOL |
| WEBS | 3-18=-63/1284, 4-18 4-17=-1018/317, 6-1 6-15=-925/270, 7-15 7-13=-643/147, 8-13 9-12=-1020/169, 10- | =-402/2136, 7=-137/1158, =-106/975, =-16/463, 9-13=0/44 12=-93/1679 | 42, | | | | | | | (| | ANDR THOM JOHNO NUMI | EW LAS SON BER |

NOTES

1) Unbalanced roof live loads have been considered for

this design.



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A7 | Нір | 1 | 1 | Job Reference (optional) | 164799578 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:00 ID:hPLDIEJCilT?sljuOTmMvLzX5OA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | A8 | Roof Special | 2 | 1 | Job Reference (optional) | 164799579 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:00

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | A9 | Roof Special | 1 | 1 | Job Reference (optional) | 164799580 |

Scale = 1:73.8



| Plate Offsets (X, Y): [| [2:0-3-9,Edge], [4:0-5-0,Edge], | [9:Edge,0-2-0], [13:0-2-8,0-2-0], [| 14:0-6-0,0-3-0] |
|-------------------------|---------------------------------|-------------------------------------|-----------------|
|-------------------------|---------------------------------|-------------------------------------|-----------------|

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|----------------|------------------------|------------------------|--------|----------------|----------------------|---------------------------------------|-----------------|---------|-------|--------|-----|----------------|------------------|----|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | тс | 0.90 | Vert(LL) | -0.39 | 13-14 | >872 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.96 | Vert(CT) | -0.78 | 13-14 | >433 | 240 | M18AHS | 142/136 | |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.87 | Horz(CT) | 0.33 | 9 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC202 | 1/TPI2014 | Matrix-S | | Wind(LL) | 0.34 | 13-14 | >978 | 240 | Weight: 144 lb | FT = 10% | |
| | | | | ., | | | | | | | | | | |
| LUMBER | | | 2) | Wind: ASCE | 7-16; Vult=115mph | n (3-seo | ond gust) | | | | | | | |
| TOP CHORD | 2x6 SPF No.2 *Exce | pt* 7-8:2x4 SPF No. | .2, | Vasd=91mpl | n; TCDL=6.0psf; BC | CDL=6. | Opsf; h=25ft; | Cat. | | | | | | |
| | 4-7:2x4 SPF 2100F | 1.8E | | II; Exp C; En | closed; MWFRS (e | nvelope | e) exterior zo | ne; | | | | | | |
| BOT CHORD | 2x4 SPF No.2 *Exce | pt* 2-14:2x6 SPF No | o.2, | cantilever lef | t and right exposed | l; end \ | ertical left ar | nd | | | | | | |
| | 14-12:2x4 SPF 2100 | F 1.8E, 6-10:2x3 SF | PF | right expose | d; Lumber DOL=1.6 | 60 plate | grip DOL=1. | .60 | | | | | | |
| | No.2 | | 3) | All plates are | MT20 plates unles | ss other | wise indicate | ed. | | | | | | |
| WEBS | 2x4 SPF No.2 *Exce | ept* | 4) | This truss ha | s been designed fo | or a 10.0 |) psf bottom | | | | | | | |
| | 5-13,11-7,9-8,9-11:2 | 2x3 SPF No.2 | | chord live loa | ad nonconcurrent w | ith any | other live loa | ids. | | | | | | |
| BRACING | | | 5) | * This truss h | has been designed | for a liv | e load of 20.0 | 0psf | | | | | | |
| TOP CHORD | Structural wood she | athing directly applie | ed or | on the bottor | n chord in all areas | where | a rectangle | | | | | | | |
| | 2-2-0 oc purlins, ex | cept end verticals. | | 3-06-00 tall t | by 2-00-00 wide will | fit betv | veen the bott | om | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 2-2-0 oc | 0) | chord and ar | ly other members. | | | - 1 0 | | | | | | |
| | bracing. Except: | | 6) | Bearings are | assumed to be: Jo | 1000000000000000000000000000000000000 | PF NO.2, JOI | nt 9 | | | | | | |
| 1 Row at midpl | t 6-11 | | 7) | SPF NO.2. | int(a) 2 considers a | orollol | | | | | | | | |
| WEBS | 1 Row at midpt | 3-13, 5-11, 8-9, 7-9 | () | | TPL 1 angle to grain | formul | o grain value | ; | | | | | | |
| REACTIONS | (size) 2=0-3-8, 9 | 9=0-3-8 | | designer sho | uld verify capacity | of bear | ng surface | | | | | | | |
| | Max Horiz 2=345 (LC | C 7) | 8) | Provide mec | hanical connection | (hy oth | ers) of truss t | to | | | | | | |
| | Max Uplift 2=-241 (L | .C 8), 9=-185 (LC 8) | 0, | bearing plate | canable of withsta | ndina 2 | 41 lb unlift at | t ioint | | | | | | |
| | Max Grav 2=1410 (L | _C 1), 9=1259 (LC 1) |) | 2 and 185 lb | uplift at joint 9. | inding 2 | | , joint | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | 1.0 | DAD CASE(S) | Standard | | | | | | | | | |
| | Tension | - | - | | olandara | | | | | | | | | |
| TOP CHORD | 1-2=0/38, 2-3=-5510 |)/1063, 3-5=-2350/37 | 72, | | | | | | | | | | | |
| | 5-6=-1051/208, 6-7= | -977/321, 7-8=-140/ | /139, | | | | | | | | | | 50 | |
| | 8-9=-172/96 | | | | | | | | | | | A | and | |
| BOT CHORD | 2-14=-1153/5034, 13 | 3-14=-1047/4450, | | | | | | | | | | B & OF M | 11Se W | |
| | 11-13=-388/2114, 10 | 0-11=0/149, | | | | | | | | | 1 | 9.20 | N.OS | |
| | 6-11=-502/279, 9-10 |)=-21/46 | | | | | | | | | B | ANTOP | EW X | |
| WEBS | 3-14=-260/1622, 3-1 | 3=-2343/660, | | | | | | | | | R | > ANDA | The A | 81 |
| | 5-13=0/542, 5-11=-1 | 1412/354, | | | | | | | | | 1. | THOM | | 4 |
| | 7-11=-356/1362, 9-1 | 1=-136/543, | | | | | | | | / | RJ. | JOHNS | $ VN $ \star | 2 |
| | 7-9=-1241/168 | | | | | | | | | (| | hin | Jun | 2 |
| NOTES | | | | | | | | | | | 10- | NUM | IFR /20 | 2 |

1) Unbalanced roof live loads have been considered for this design.

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April 11,2024

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PE-20170189

ONAL

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A10 | Нір | 1 | 1 | Job Reference (optional) | 164799581 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:00 ID:dEKiM5o6LI_J6CntzTgaB5zX5bI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|----------------------------------|--|---|--------------------------|---|--|---|---|--------------------------|-------|--------|-----|----------------|----------|--|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.60 | Vert(LL) | -0.38 | 13-15 | >882 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.91 | Vert(CT) | -0.67 | 13-15 | >502 | 240 | M18AHS | 142/136 | |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.67 | Horz(CT) | 0.24 | 10 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC202 | /TPI2014 | Matrix-S | | Wind(LL) | 0.23 | 15-16 | >999 | 240 | Weight: 144 lb | FT = 10% | |
| LUMBER TOP CHORD BOT CHORD | D 2x4 SPF No.2 *Except* 5-1:2x6 SP 2400F 2.0E D 2x6 SPF No.2 *Except* 14-13:2x4 SPF 2400F 2.0E, 17-12:2x3 SPF No.2, 12-10:2x4 | | | Wind: ASCE Vasd=91mp II; Exp C; Er cantilever le right expose | 7-16; Vult=11 h; TCDL=6.0ps nclosed; MWFR ft and right exp d; Lumber DOI | 5mph (3-sec sf; BCDL=6.0 SS (envelope osed ; end v L=1.60 plate | ond gust) Opsf; h=25ft; e) exterior zo rertical left ar grip DOL=1. | Cat. ne; nd .60 | | | | | | |
| WEBS BRACING | SPF No.2, 14-16:2x ² 2x3 SPF No.2 *Exce 16-3,0-0,0-0,0-0,10-0 | 4 SPF 2100F 1.8E pt* 8:2x4 SPF No.2 | 3) 4) 5) | All plates ar This truss his chord live lo | quate drainage e MT20 plates as been design ad nonconcurre | to prevent v unless other led for a 10.0 ent with any | water ponding wise indicate) psf bottom other live load e load of 20 (| g. ed. ads. | | | | | | |
| TOP CHORD | Structural wood she 2-11-10 oc purlins. | athing directly applie except end verticals. | dor ^{o)} and | on the botto | m chord in all a | areas where | a rectangle | υμοι | | | | | | |

| TOP CHORD | Structural wood sheathing directly applied or |
|-----------|---|
| | 2-11-10 oc purlins, except end verticals, and |
| | 2-0-0 oc purlins (6-0-0 max.): 7-8. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc |
| | bracing, Except: |
| | 7-7-1 oc bracing: 2-16. |
| WEBS | 1 Row at midpt 9-10, 8-10, 6-13 |
| REACTIONS | (size) 2=0-3-8, 10=0-3-8 |
| | Max Horiz 2=338 (LC 7) |
| | Max Uplift 2=-215 (LC 8), 10=-161 (LC 8) |
| | Max Grav 2=1384 (LC 2), 10=1337 (LC 2) |
| FORCES | (lb) - Maximum Compression/Maximum |
| | Tension |
| TOP CHORD | 1-2=0/10, 2-3=-5274/874, 3-4=-4689/871, |
| | 4-6=-2486/395, 6-7=-974/207, 7-8=-835/224, |
| | 8-9=-133/128, 9-10=-135/87 |
| BOT CHORD | 2-16=-949/4775, 15-16=-563/2793, |
| | 13-15=-247/1551, 11-12=0/0, 10-11=0/21 |
| WEBS | 3-16=-45/817, 8-10=-1280/194, |
| | 10-13=-144/489, 8-13=-172/1069, |
| | 11-13=0/149, 7-13=0/143, 6-13=-1039/303, |
| | 6-15=-128/1181, 4-15=-886/347, |
| | 4-16=-372/1767 |
| NOTES | |

NOTES

Scale = 1:73.6

Unbalanced roof live loads have been considered for 1) this design.

8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. Provide mechanical connection (by others) of truss to 9) bearing plate capable of withstanding 215 lb uplift at joint 2 and 161 lb uplift at joint 10. 10) Graphical purlin representation does not depict the size

3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 7) Bearings are assumed to be: Joint 2 SPF No.2, Joint 10

- or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard

SPF No.2.



April 11,2024



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A11 | Нір | 1 | 1 | Job Reference (optional) | 164799582 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:01

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NOTES

WEBS

Scale = 1:68.6

Loading

TCDL

BCLL

BCDL

WEBS

WEBS

FORCES

BOT CHORD

BRACING

TOP CHORD

BOT CHORD

LUMBER

BOT CHORD

TCLL (roof)

1) Unbalanced roof live loads have been considered for this design

3-15=-255/1640, 5-14=0/545,

3-14=-2319/638, 6-12=0/184,

10-12=-110/208, 8-10=-1222/297, 5-12=-1408/334, 8-12=-159/1194

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60



April 11,2024

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A12 | Half Hip | 1 | 1 | Job Reference (optional) | 164799583 |

0-1-11

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-0-10-8 0-10-8

8-7-5

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:01 ID:UFJXxeBV1_HKhnM1GxucKyzX5mt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

5-7-15

8-7-5 22-5-13 28-4-0 16-11-2 8-7-5 8-3-13 5-6-11 5-10-3 6x8= 2x4 u 6x6= 5 6 ⊠ \boxtimes \boxtimes 12 5 Г 3x4 🚽 3x4 🚽 Λ 3



8-2-9

| Scale = 1:56 | |
|-----------------------|--------------------|
| Plate Offsets (X, Y): | [13:0-1-10,0-3-13] |

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC202 | 1/TPI2014 | CSI TC BC WB Matrix-S | 0.88 0.82 0.63 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.23 -0.43 0.05 0.11 | (loc) 10-12 10-12 8 10-12 | l/defl >999 >780 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 113 lb | GRIP 197/144 FT = 10% | |
|---|---|---|--|--|---|---|---|--------------------------------------|---------------------------------------|---------------------------------------|---------------------------------|--|--|--|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS | 2x4 SPF 2100F 1.8E No.2 2x4 SPF 2100F 1.8E No.2 2x3 SPF No.2 *Exce 13-2:2x10 SP 2400F Structural wood she 2-2-0 oc purlins, exi 2-0-0 oc purlins, exi 2-2-0 oc purlins, exi 2-2- | E *Except* 5-7:2x4 S E *Except* 11-8:2x4 S E *Except* 11-8:2x4 S E *Except* 11-8:2x4 S E *Except* 11-8:2x4 S E * 2x4 SPF No. F 2.0E athing directly applie cept end verticals, ar I-15 max.): 5-7. applied or 10-0-0 oc 7-8, 3-10, 5-9 13=0-3-8 LC 5) C 5), 13=-203 (LC 8) C 2, 13=1371 (LC 8) | 5) PF 2, 6) 2, 7) ed or 8) 2 2 | * This truss h on the bottom 3-06-00 tall b chord and an Bearings are Joint 8 SPF I Provide mecl bearing plate 8 and 203 lb Graphical pu or the orienta bottom chorc DAD CASE(S) | has been designed in chord in all areas by 2-00-00 wide will by other members, assumed to be: Jo No.2. capable of withsta uplift at joint 13. rlin representation tion of the purlin a l. Standard | for a liv s where I fit between bint 13 S (by oth- anding 2 does no long the | e load of 20.0j a rectangle veen the botto DL = 10.0psf. SPF 2100F 1.8 ers) of truss to 07 lb uplift at j ot depict the si top and/or | psf m BE , joint ze | | | | | | |
| FORCES TOP CHORD BOT CHORD WEBS | (lb) - Maximum Com Tension 1-2=0/34, 2-3=-2277 5-6=-864/194, 6-7=- 2-13=-1226/248 12-13=-327/1996, 1(9-10=-234/1249, 8-9 3-12=0/320, 3-10=-8 5-9=-641/133, 6-9=- | pression/Maximum 7/302, 3-5=-1454/205 863/192, 7-8=-1229/ 0-12=-327/1996,)=-102/77 118/271, 5-10=-34/64 460/194, 7-9=-212/1 | 5, /228, 47, 379 | | | | | | | | H | TATE OF M | ALSSOLLS | |
| NOTES 1) Unbalance this design 2) Wind: ASC Vasd=91m II; Exp C; I cantilever I right expos 3) Provide ad 4) This truss chord live | ed roof live loads have CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (er left and right exposed sed; Lumber DOL=1.6 Jequate drainage to pr has been designed for load nonconcurrent wi | been considered for (3-second gust) DL=6.0psf; h=25ft; C vvelope) exterior zon ; end vertical left and 0 plate grip DOL=1.6 event water ponding r a 10.0 psf bottom th any other live load | cat. ce; d 30 ds. | | | | | | | (| | ANDR THOM JOHNS NUME PE-20170 PE-20170 PE-20170 April | EW AS DER D18993 L ENGI 11,2024 | |



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7

5-10-3

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A13 | Half Hip | 1 | 1 | Job Reference (optional) | 164799584 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:01 ID:M8n2jpGqeF7x_OJ?UgcPtKzX5tD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:57.4

| Plate Offsets | (X, Y): [2:Edge,0-0-8 |], [3:0-0-11,0-2-3], [5 | :0-4-0,Edg | e], [11:Edge,0- | 2-8], [14:0-6-0,0- | 2-12] | | | | | | | | |
|--|--|--|--|--|--|---|--|---|-------------------------------------|---------------------------------------|---------------------------------|----------------------------------|------------------------------------|--|
| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC202 | 1/TPI2014 | CSI TC BC WB Matrix-S | 0.93 0.64 0.71 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.34 -0.78 0.26 0.29 | (loc) 3-16 3-16 11 3-16 | l/defl >988 >430 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 130 lb | GRIP 197/144 FT = 10% | |
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SPF No.2 *Exc 2.0E 2x4 SPF No.2 *Exc SPF No.2, 3-16:2x- 2x3 SPF No.2 Structural wood sh 2-2-0 oc purlins, e 2-0-0 oc purlins, e 2-0-0 oc purlins, e 4-Rigid ceiling direct bracing, Except: 6-0-0 oc bracing: 2 (size) 2=0-3-8, Max Horiz 2=215 (I Max Uplift 2=-172 (Max Gray 2=1351) | xept* 5-1:2x6 SP 2400 xept* 17-3,6-15,13-9:: 4 SPF 2100F 1.8E eathing directly appli xcept end verticals, a 8-9 max.): 7-10. y applied or 10-0-0 o -17. 11=0-3-8 _C 8) LC 8), 11=-210 (LC 5 (LC 1), 11=-264 (LC 5 | 2) 0F 2x3 and 5) and 5) vc 6) 7) 5) 8) 1) | Wind: ASCE Vasd=91mpl II; Exp C; En cantilever lef right expose Provide ade This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar All bearings Provide mcc bearing plate 11 and 172 I Graphical pu | 7-16; Vult=115m n; TCDL=6.0psf; closed; MWFRS t and right expos d; Lumber DOL= quate drainage to is been designed ad nonconcurrent nas been designed ad nonconcurrent nas been designed y 2-00-00 wide v hanical connection thanical connection thanical connection than ical connection that ical c | https://www.analysian.com/ backgroups.com/ analysian.com/ backgroups.com/ back | ond gust) ppsf; h=25ft; e) exterior zo vertical left ar grip DOL=1. water pondin. b) psf bottom other live loze e load of 20. a rectangle veen the bott b).2. ers) of truss i 10 lb uplift ai | Cat. ne; nd .60 g. ads. 0psf om to t joint size | | | | | | |
| FORCES | (lb) - Maximum Co Tension | mpression/Maximum | L | or the orienta bottom chore DAD CASE(S) | ation of the purlin d. Standard | along the | top and/or | | | | | | | |
| TOP CHORD | 1-2=0/6, 2-3=-634/ 4-6=-2450/310, 6-7 7-8=-1258/212, 8-9 9-10=-1105/212, 1 | 0, 3-4=-3183/475, 7=-2317/364, 9=-1121/218, 0-11=-1216/217 | | (-) | | | | | | | | | <i>T</i> | |
| BOT CHORD | 2-17=-41/0, 3-17=0 15-16=0/141, 6-16 13-14=0/15, 12-13 11-12=-30/23 |)/82, 3-16=-580/3027 =-11/94, 14-15=-19/5 =0/111, 9-12=-284/12 | , 60, 23, | | | | | | | | Å | TATE OF M | AISSOLUS | |
| WEBS | 14-16=-228/1490, 7-14=-476/168, 8-1 12-14=-265/1528, 10-12=-282/1606, | 7-16=-226/1082, 4=-422/189, 8-12=-241/52, 4-16=-1034/318 | | | | | | | | / | | S ANDR THOM JOHNS | LAS SON | |
| NOTES | | | | | | | | | | | M | | | |

 Unbalanced roof live loads have been considered for this design.



PE-20170189

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A14 | Half Hip | 1 | 1 | Job Reference (optional) | 164799585 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:01 ID:vicEt9X?PJBnPvBctGZxrAzX5y2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:58.4

Plate Offsets (X, Y): [2:Edge,0-0-8], [3:0-0-11,0-2-3]

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-------------|---|------------------------------|--------------|----------------|-----------------------|------------|-----------------|--------------|-------|--------|-----|----------------|----------------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.94 | Vert(LL) | -0.34 | 3-13 | >991 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.67 | Vert(CT) | -0.80 | 3-13 | >422 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.71 | Horz(CT) | 0.41 | 20 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021 | /TPI2014 | Matrix-S | | Wind(LL) | 0.27 | 14 | >999 | 240 | Weight: 130 lb | FT = 10% |
| | | | 3) | Provide ade | wate drainage to p | rovent | vater pondin | a | | | | | |
| | 2V6 6D 2400E 2 0E | *Eveent* 5 9:0v4 CDI | = 4) | This trues ha | s been designed fo | 1 = 10 | nater portuint | y. | | | | | |
| TOP CHORD | 2X0 3F 2400F 2.0E | Except 5-6.2x4 5P1 | - +) | chord live los | ad nonconcurrent w | /ith anv | other live loa | ade | | | | | |
| | 2v4 SDE No 2 *Evoo | nt* | 5) | * This truss h | as been designed | for a liv | e load of 20 (| nas. Nasf | | | | | |
| BOT CHORD | 1/-3 15-16 17-18 7-4 | ;μι 10·2v3 SPE No 2 | 3) | on the bottor | n chord in all areas | where | a rectangle | 0001 | | | | | |
| | 12-3:2x4 SPF 2100F | 10.2X3 OFT 100.2, | | 3-06-00 tall b | v 2-00-00 wide wil | l fit betv | veen the bott | om | | | | | |
| WEBS | 2x3 SPE No 2 | 1.02 | | chord and ar | v other members. | | | | | | | | |
| OTHERS | 2x4 SPE No 2 | | 6) | All bearings | are assumed to be | SPF No | 0.2. | | | | | | |
| BRACING | | | 7) | Bearing at io | int(s) 20 considers | paralle | to grain valu | ie | | | | | |
| | Structural wood cho | athing directly applied | , d or | using ANSI/1 | PI 1 angle to grain | formul | a. Building | | | | | | |
| | | except and verticals | and | designer sho | uld verify capacity | of bear | ng surface. | | | | | | |
| | 2-0-0 oc purlins (3-3 | -3 max): 5-8 | 8) | Provide mec | hanical connection | (by oth | ers) of truss t | to | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 6-0-0 oc | | bearing plate | capable of withsta | nding 1 | 50 lb uplift at | t joint | | | | | |
| | bracing. | | | 2 and 214 lb | uplift at joint 20. | | | | | | | | |
| REACTIONS | (size) 2=0-3-8, 2 | 20=0-3-8 | 9) | Graphical pu | rlin representation | does no | ot depict the s | size | | | | | |
| | Max Horiz 2=182 (LC | C 8) | | or the orienta | ation of the purlin a | long the | e top and/or | | | | | | |
| | Max Uplift 2=-150 (L | .C 8), 20=-214 (LC 4) | | | l. Q | | | | | | | | |
| | Max Grav 2=1349 (L | _C 1), 20=1239 (LC 1 |) LO | DAD CASE(S) | Standard | | | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | | | | | | | | | | | |
| | Tension | | | | | | | | | | | | |
| TOP CHORD | 1-2=0/6, 2-3=-633/0, | , 3-4=-3190/414, | | | | | | | | | | | |
| | 4-5=-2337/299, 5-6= | -2080/290, | | | | | | | | | | | |
| | 6-7=-1600/273, 7-8= | -1602/279, 9-19=0/1 | 29, | | | | | | | | | | m |
| | 8-19=0/129 | | | | | | | | | | | A DE N | and the second |
| BOT CHORD | 2-14=-41/0, 3-14=0/8 | 82, 3-13=-484/3035, | | | | | | | | | | R OF M | IISS W |
| | 11-13=-366/2000, 10 | 0-11=0/133, | | | | | | | | | 4 | | N.S. |
| | 7-11=-447/186, 9-10 |)=0/19 244/4702 5 42 24/(| 0.7 | | | | | | | | H | ANDR | EW YPY |
| WEDS | 9-11=-40/70, 0-11=- | 511/1/93, 5-13=-21/0 | <i>b07</i> , | | | | | | | | B | THOM | TAS Y Y |
| | 0-13=-75/201, 0-11= 1-13=-1000/346 8-2 | =-555/105, 2012/1/215 | | | | | | | | | 1 1 | | |
| NOTES | 4-13-1033/340, 0-2 | 10=-12 44 /215 | | | | | | | | / | 2 | JOIN | |
| NUIES | ad reaf live loade have | haan annaidarad far | | | | | | | | - 1 | ٧٨ | pung | |
| this design | | been considered for | | | | | | | | C | 13 | NUM | BER / S |
| 2) Wind ASC | CF 7-16: Vult=115mph | (3-second qust) | | | | | | | | | N | ON PE-20170 | 018993 |
| Vasd=91m | nph: TCDL=6.0psf BC | DL=6.0psf: h=25ft C | at. | | | | | | | | N | 1 and | 18A |
| II: Exp C: | Enclosed: MWFRS (en | velope) exterior zone | e: | | | | | | | | X | Nº50- | NO'A |
| cantilever | left and right exposed | ; end vertical left and | , | | | | | | | | | ONA | LEFA |
| right expos | sed; Lumber DOL=1.6 | 0 plate grip DOL=1.6 | 0 | | | | | | | | | am | and a |
| | | | | | | | | | | | | | |

April 11,2024

Mitchek Chesterfield, MO 63017 314.434.1200 / MITek-US.com

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A15 | Half Hip | 1 | 1 | Job Reference (optional) | 164799586 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:01 ID:I3JDLGTEX4sS5GV2CiY9EJzX61I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:58.3

| Plate Offsets (X, Y): [2:Edge,0-0-8], [3:0-0-11 | ,0-2-3] |
|---|---------|
|---|---------|

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|--------------------------|--|---------------|-----------------------------------|---------------------|---------------|----------------|---------|-------|--------|--------------|-------------------|-------------------|--------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.89 | Vert(LL) | -0.29 | 3-15 | >999 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.76 | Vert(CT) | -0.61 | 3-15 | >552 | 240 | | | |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.79 | Horz(CT) | 0.38 | 22 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC202 | 1/TPI2014 | Matrix-S | | Wind(LL) | 0.23 | 3-15 | >999 | 240 | Weight: 125 lb | FT = 10% | |
| | | | 3 | Provide ade | nuate drainage to | nrevent | vater pondin | a | | | | | | |
| TOP CHORD | 2x4 SPE No 2 *Exce | nt* 1-5.2v6 SP 2400 | F 4 | All plates are | 2x4 MT20 unles | s otherwi | se indicated | 9. | | | | | | |
| | 2.0F | pt 1 0.2x0 01 2400 | 5 | This truss ha | is been designed | for a 10.0 |) psf bottom | | | | | | | |
| BOT CHORD | 2x4 SPE No 2 *Exce | nt* | - | chord live lo | ad nonconcurrent | with any | other live loa | ads. | | | | | | |
| | 16-3.17-18.19-20.8- | 11:2x3 SPF No.2. | 6 | * This truss I | has been designe | d for a liv | e load of 20. | 0psf | | | | | | |
| | 13-3:2x4 SPF 2100F | 1.8E | | on the bottor | n chord in all area | as where | a rectangle | • | | | | | | |
| WEBS | 2x3 SPF No.2 | | | 3-06-00 tall I | y 2-00-00 wide w | vill fit betv | veen the bott | om | | | | | | |
| OTHERS | 2x4 SPF No.2 | | | chord and a | y other members | S. | | | | | | | | |
| BRACING | | | 7 | All bearings | are assumed to b | e SPF N | o.2 . | | | | | | | |
| TOP CHORD | Structural wood she | athing directly applie | d or 8 | Bearing at jo | int(s) 22 consider | rs paralle | to grain valu | le | | | | | | |
| | 2-2-0 oc purlins, exe | cept end verticals, ar | nd | using ANSI/ | FPI 1 angle to gra | in formul | a. Building | | | | | | | |
| | 2-0-0 oc purlins (2-7 | -13 max.): 5-9. | | designer sho | ould verify capacit | y of bear | ng surface. | | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 6-0-0 oc | 9 | Provide med | hanical connectio | on (by oth | ers) of truss | to | | | | | | |
| | bracing. | | | bearing plate | capable of withs | tanding 1 | 60 lb uplift a | t joint | | | | | | |
| REACTIONS | (size) 2=0-3-8, 2 | 22=0-3-8 | 1 | 2 and 220 lb | uplift at joint 22. | n daaa ni | t donict the | 0.70 | | | | | | |
| | Max Horiz 2=148 (LC | C 5) | 1 | or the orient | tion of the purlin | along the | top and/or | SIZE | | | | | | |
| | Max Uplift 2=-160 (L | C 4), 22=-220 (LC 4) |) | bottom chore | | along the | top and/or | | | | | | | |
| | Max Grav 2=1349 (L | .C 1), 22=1239 (LC 1 | 1) | | Standard | | | | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | L | UAD CASE(S) | Stanuaru | | | | | | | | | |
| | Tension | | | | | | | | | | | | | |
| TOP CHORD | 1-2=0/6, 2-3=-633/2 | 1, 3-4=-3622/510, | | | | | | | | | | | | |
| | 4-5=-2728/394, 5-6= | -2481/380, | | | | | | | | | | | | |
| | 6-8=-2085/375, 8-9= | -2083/380, 10-21=0/ | /135, | | | | | | | | | | The second second | |
| | 9-21=0/135 | | | | | | | | | | | A SE | and the | |
| BOT CHORD | 2-16=-41/0, 3-16=0/ | 82, 3-15=-579/3497, | | | | | | | | | | B.F. OF I | 11SS Ch | |
| | 14-15=-490/2728, 12 | 2-14=-490/2728, | • | | | | | | | | 4 | - M | NS | |
| | 11-12=0/133, 8-12=- | 472/196, 10-11=0/68 | 8 | | | | | | | | H | ANDR | FW YP V | |
| WEB2 | 5-15=-39/748, 6-12= | -742/104, 10-12=-62 | 2/70, /404 | | | | | | | | Я | THON | IN Y A | |
| | 9-12=-400/2195, 0-1 | 4=0/210, 0-10=-400/ | 101, | | | | | | | | | | | (|
| | 4-15=-1154/291, 9-2 | 2=1200/222 | | | | | | | | / | X ^ | | | 1_ |
| NOTES | | | | | | | | | | | \mathbf{N} | mp | m | \sim |
| 1) Unbalance | ed root live loads have | been considered for | | | | | | | | V | 23 | NUMI | BER SER | |
| 2) Wind AS | ∩E 7-16· \/ult=115mph | (3-second quet) | | | | | | | | | N | O PE-2017 | 018993 / SA | |
| Vasd=01n | nnh: TCDI =6 0 nef: BC | (3-3600) mu gust) DI =6 0nsf: h=25ft: C | :at | | | | | | | | N | The second second | 12A | |
| II: Exp C | Enclosed: MWFRS (er | velope) exterior zon | e: | | | | | | | | X | NºSer- | NO'A | |
| cantilever | left and right exposed | : end vertical left and | -, 1 | | | | | | | | | ONA | LEFE | |
| right expo | sed; Lumber DOL=1.6 | 0 plate grip DOL=1.6 | 60 | | | | | | | | | am | and a | |

April 11,2024



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | A16 | Half Hip | 1 | 1 | Job Reference (optional) | 164799587 |

14-3-15

Wheeler Lumber, Waverly, KS - 66871,

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:01 ID:NrACUox8lsX6W91tSJI8GEzX64Z-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



19-3-14 21-2-12 28-4-0 4-11-15 1-10-14 7-1-4



Scale = 1:58.3

| Plate Offsets (X, Y): | [2:Edge,0-0-8], | [3:0-0-15,0-2-3] |
|-----------------------|-----------------|------------------|

7-3-14

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-------------|---|---|-----------------|----------------------------------|---|----------------------------|---------------------------------|----------------|-------|--------|-----|----------------|-------------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.85 | Vert(LL) | -0.39 | 13-14 | >870 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.68 | Vert(CT) | -0.70 | 13-14 | >481 | 240 | MT18HS | 197/144 |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.74 | Horz(CT) | 0.40 | 21 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC202 | 1/TPI2014 | Matrix-S | | Wind(LL) | 0.31 | 13-14 | >999 | 240 | Weight: 117 lb | FT = 10% |
| LUMBER | | | 4) | All plates are | MT20 plates un | less other | wise indicate | ed. | | | | | |
| TOP CHORD | 2x4 SPF 2100F 1.8E | E *Except* 1-4:2x6 S | SP 5) | This truss ha | s been designed | for a 10.0 |) psf bottom | | | | | | |
| | 2400F 2.0E | | , | chord live loa | ad nonconcurrent | t with any | other live loa | ads. | | | | | |
| BOT CHORD | 2x3 SPF No.2 *Exce SPF No.2, 12-11,12- | pt* 2-15,17-18,10-9 -3:2x4 SPF 2100F 1 | :2x4 6) .8E | * This truss h on the bottor | has been designe n chord in all area | ed for a liv as where | e load of 20. a rectangle | .0psf | | | | | |
| WEBS | 2x3 SPF No.2 *Exce | pt* 11-8:2x4 SPF N | 0.2 | 3-06-00 tall b | y 2-00-00 wide v | vill fit betv | veen the bot | tom | | | | | |
| OTHERS | 2x4 SPF No.2 | • | | chord and ar | y other members | s. | | | | | | | |
| BRACING | | | 7) | All bearings | are assumed to b | be SPF No | o.2 . | | | | | | |
| TOP CHORD | Structural wood sheat | athing directly applie | ed or 8) und | Bearing at jo using ANSI/1 | int(s) 21 conside PI 1 angle to gra | rs parallel ain formula | to grain val a. Building | ue | | | | | |
| | 2-0-0 oc purlins (3-1 | 0-11 max.): 4-8. | | designer sho | uld verify capacit | ty of beari | ng surface. | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 6-0-0 oc | 9) | Provide mec bearing plate | hanical connection capable of withs | on (by oth standing 1 | ers) of truss 83 lb uplift a | to at joint | | | | | |
| WEBS | 1 Row at midpt | 5-11, 5-14 | | 2 and 224 lb | uplift at joint 21. | | | | | | | | |
| REACTIONS | (size) 2=0-3-8 2 | 21=0-3-8 | 10 | Graphical pu | rlin representatio | on does no | ot depict the | size | | | | | |
| | Max Horiz 2=121 (I (| 2.5) | | or the orienta | ation of the purlin | along the | e top and/or | | | | | | |
| | Max Uplift 2=-183 (1) | C 4) 21=-224 (I C 5 | 5) | bottom chore | 1. | | | | | | | | |
| | Max Grav 2=1349 (L | _C 1), 21=1239 (LC | η L(| DAD CASE(S) | Standard | | | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | , | | | | | | | | | | |
| | Tension | | | | | | | | | | | | |
| TOP CHORD | 1-2=0/6, 2-3=-633/58 | 8, 3-4=-3253/497, | | | | | | | | | | | |
| | 4-5=-3095/500, 5-7= | -3025/561, | | | | | | | | | | | |
| | 7-8=-2995/565, 9-20 |)=0/134, 8-20=0/134 | ł | | | | | | | | | | Th |
| BOT CHORD | 2-15=-41/0, 3-15=0/8 | 82, 3-14=-531/3073 | , | | | | | | | | | OF M | ALA |
| | 13-14=-730/3981, 11 | 1-13=-730/3981, 510/212 0 10-0/75 | - | | | | | | | | 6 | AREUT | 115S |
| WERS | 10-11=0/132, 7-11=- | -519/213, 9-10=0/75 |) 74 | | | | | | | | A | | 1.51 |
| WEBS | 8-11-581/3010 5-1 | 3-0/284 | 74, | | | | | | | | A | ANDR | EW PN |
| | 5-14=-1101/213 8-2 | 21=-1267/231 | | | | | | | | | U | 7 THOM | AS VV |
| NOTES | 0 11- 1101/210, 0 2 | 1201/201 | | | | | | | | | | IOUN | SONA + |
| 1) Unbalanc | ed roof live loads have | been considered for | r | | | | | | | / | 1 | | |
| this desig | n | Secti considered IO | | | | | | | | C | \$ | And | |
| 2) Wind: AS | CE 7-16: Vult=115mph | (3-second gust) | | | | | | | | | 43 | S NUM | BER /SU |
| Vasd=91r | mph; TCDL=6.0psf; BC | DL=6.0psf; h=25ft; (| Cat. | | | | | | | | N. | OX PE-2017 | 018993 / 58 |
| II; Exp C; | Enclosed; MWFRS (en | velope) exterior zor | ne; | | | | | | | | Q | 1 Carl | 188 |
| cantilever | left and right exposed | ; end vertical left an | d | | | | | | | | | 13°50 | - NUB |
| right expo | sed: Lumber DOL=1.6 | 0 plate grip DOL=1.0 | 60 | | | | | | | | | UNA NA | LEY |

Provide adequate drainage to prevent water ponding.

annes April 11,2024



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|-----------------|-----|-----|--------------------------|-----------|
| B240069 | A17 | Half Hip Girder | 1 | 2 | Job Reference (optional) | 164799588 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:02 ID:gPRZAFt?fwKeqgwUKSnaBbzX69o-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:55.1

| Plate Offsets (| (X, Y): [3:0-0-12,0 | -2-3], [3:0-10-7,0-3 | 3-7], [4:0-4-0,0 | -3-3], [9:0-2-8,E | dge], [13:0-2-8,0 |)-1-8], [15:0 |)-2-0,0-0-8], | [18:0-2-0 | ,Edge] | | | | | | |
|----------------------------------|--|---|----------------------------|---|---|---|--|------------------------|--|---|--|---|--|--|--|
| Loading TCLL (roof) TCDL | (ps 25. 10. | Spacing Plate Grip D Lumber DOL | 2-0-0 OL 1.15 . 1.15 | | CSI TC BC | 1.00 0.82 | DEFL Vert(LL) Vert(CT) | in -0.64 -1.16 | (loc) 13-15 13-15 | l/defl >523 >291 | L/d 360 240 | PLATES MT20 | GRIP 197/144 | | |
| BCLL BCDL | 0. 10. | 0* Rep Stress I 0 Code | ncr NO IRC20 | 21/TPI2014 | WB Matrix-S | 0.91 | Horz(CT) Wind(LL) | 0.37 0.61 | 10 13-15 | n/a >555 | n/a 240 | Weight: 288 lb |) FT = 10% | | |
| LUMBER TOP CHORD BOT CHORD | 2x6 SP 2400F 2 No.2, 7-9:2x4 SI 2x3 SPF No.2 *E No.2, 14-12,14-2 17-16,11-10:2x6 | 0E *Except* 4-7:2 PF 2100F 1.8E Except* 2-21,8-11: 3:2x6 SP 2400F 2. SPF No.2 | x4 SPF 2x4 SPF 0E, | 2-ply truss t (0.131"x3") Top chords staggered a row at 0-9-0 Bottom choi | o be connected t nails as follows: connected as fol t 0-9-0 oc, 2x4 -) oc. rds connected as | together wi llows: 2x6 - 1 row at 0- s follows: 2: | th 10d • 2 rows 9-0 oc, 2x3 x4 - 1 row at | - 1 | 11) Har pro dov 7-0 67 86 | nger(s) o vided su vn and 3 -0, 76 lb lb up at lb down | r other fficient 9 lb up down 11-0-0 and 66 | connection dev to support cond at 4-11-2, 76 l and 38 lb up at , 86 lb down an b lb up at 15-0-0 | vice(s) shall be centrated load(s) 71 lb b down and 38 lb up at 9-0-0, 86 lb down and d 67 lb up at 13-0-0, 0, and 86 lb down and | | |
| WEBS | 2x3 SPF No.2 *E No.2 | Except* 10-12,12-9 | :2x4 SPF | 0-9-0 oc, 2x at 0-9-0 oc. | 3 - 1 row at 0-9- | 0 OC, 2X6 - | 2 rows stage | gerea | 66 19- | o up at 0-0 on to | p choi | rd, and 86 lb dow rd, and 269 lb de | own and 111 lb up at | | |
| OTHERS BRACING | 2x3 SPF No.2 | | | Web conner 1 row at 0-9 | cted as follows: 2 -0 oc. | 2x4 - 1 row | at 0-9-0 oc, | 2x3 - | 4-1 and | 1-2, 55 l I 37 lb uj | b dowr b at 9- | and 37 lb up a 0-0, 32 lb down | t 7-0-0, 55 lb down at 10-11-4, 32 lb | | |
| TOP CHORD | Structural wood 6-0-0 oc purlins 2-0-0 oc purlins | sheathing directly except end vertic (2-8-10 max.): 4-9 | applied or als, and | All loads are except if no CASE(S) se | e considered equ ted as front (F) o ection. Ply to ply | ally applied or back (B) f connection | d to all plies, face in the L s have been | OAD | dov 17- 79 | vn at 13 0-0, and lb up at | -0-0, 3 30 lb (21-3-4 | 0 lb down at 15 down at 19-0-0 on bottom choi | , and 262 lb down at , and 262 lb down and rd. The design/ | | |
| BOT CHORD | Rigid ceiling dire bracing, Excep 6-0-0 oc bracing | ectly applied or 10- t: : 2-21. | 0-0 oc | provided to unless othe 3) Unbalanced | provided to distribute only loads noted as (F) or (B), unless otherwise indicated. Unbalanced roof live loads have been considered for Unbalanced roof live loads have been considered for | | | | | | | | ce(s) is the | | |
| REACTIONS | (size) 2=0-3 Max Horiz 2=102 Max Uplift 2=-45 Max Grav 2=19 | -8, 10=0-3-8 2 (LC 5) 8 (LC 4), 10=-413 9 (LC 1), 10=1730 | (LC 5)) (LC 1) | 4) Wind: ASCE Vasd=91mp II; Exp C; Ep captilever le | this design. Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; | | | | | | Dead + Roof Live (palanced): Lumber increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-3=-70, 3-4=-70, 4-9=-70, 2-21=-20, 3-18=-20, 10-45, 00-40-47, 00-40-44, 00-44 | | | | |
| FORCES | (lb) - Maximum (Tension | Compression/Maxi | mum | right expose | ed; Lumber DOL: | =1.60 plate | grip DOL=1 | .60 | 12-15=-20, 16-17=-20, 10-11=-20 Concentrated Loads (lb) | | | | | | |
| TOP CHORD | 1-2=0/6, 2-3=-92 4-5=-9162/2406 6-8=-10080/257 9-10=-1546/428 | 27/231, 3-4=-7121, 5-6=-9162/2406, 5, 8-9=-7397/1890 | /1876, , | a) This truss h b) Chord live lo chord live lo chord truss | as been designe ad nonconcurren has been design m chord in all ar | ed for a 10.0 nt with any ned for a liv | other live lost other live lost e load of 20 | ads. .0psf | | | | E OF | MISSO | | |
| BOT CHORD | 2-21=-44/0, 3-2 ⁻ 19-20=-1820/66 15-18=-2569/98 12-13=-2087/80 | =0/94, 3-20=-184 85, 18-19=-2612/1 96, 13-15=-2612/1 82, 17-18=0/49, | 6/6787, 0080, 0080, | 3-06-00 tall chord and a Bearings an SPF No 2 | by 2-00-00 wide ny other membe e assumed to be | will fit betw ers. e: Joint 2 SF | veen the bot PF No.2 , Jo | tom int 10 | | | | AND THO | REW MAS VSON | | |
| WEBS | 16-17=-43/184, 8-12=-939/340, 10-12=-789/195 4-20=-305/1215 | 15-16=0/49, 11-12 10-11=-200/884 , 9-12=-1912/7408 , 5-19=-448/218, | =0/144, , | Provide me bearing plat 10 and 458 Graphical p | chanical connect e capable of with lb uplift at joint 2 urlin representati | tion (by othenstanding 4 2. ion does no | ers) of truss 13 lb uplift a ot depict the | to at joint size | | l | A. | NUM PE-201 | IBER 7018993 | | |
| NOTES | 6-13=-270/221, 6-19=-1001/186 | 4-19=-654/2630, , 8-13=-538/2047 | | or the orient bottom chor | tation of the purli | in along the | top and/or | | | | Ø | FESSION A | AL ENGLES | | |

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/ITPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)



April 11,2024

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|-------------------------------|--------|--------------------|---------------|-------------|---|-----------|
| B240069 | A17 | Half Hip Girder | 1 | 2 | Job Reference (optional) | 164799588 |
| Wheeler Lumber, Waverly, KS - | 66871. | Run: 8.73 S Mar 21 | 2024 Print: 8 | 730 S Mar 2 | 1 2024 MiTek Industries, Inc. Tue Apr 09 15:45:02 | Page: 2 |

ID:gPRZAFt?fwKeqgwUKSnaBbzX69o-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Wheeler Lumber, Waverly, KS - 66871,

Vert: 4=-17 (B), 7=-45 (B), 14=-23 (B), 18=-23 (B), 12=-262 (B), 20=-269 (B), 22=-17 (B), 23=-17 (B), 24=-48 (B), 25=-48 (B), 26=-45 (B), 27=-45 (B), 28=-54 (B), 29=-54 (B), 30=-23 (B), 31=-23 (B), 32=-23 (B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------------------|-----|-----|--------------------------|-----------|
| B240069 | B1 | Common Supported Gable | 1 | 1 | Job Reference (optional) | 164799589 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:02 ID:p6BPZ7Ybm_3YaxR7zAJGq9zX7L6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:50.7

Plate Offsets (X, Y): [13:Edge,0-3-8]

| Loading | | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|--|---|---|--|---------------------------------|-------|--------|-----|----------------|----------|
| TCLL (roof) | | 25.0 | Plate Grip DOL | 1.15 | | тс | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | | 10.0 | Lumber DOL | 1.15 | | BC | 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | | WB | 0.13 | Horz(CT) | 0.01 | 13 | n/a | n/a | | |
| BCDL | | 10.0 | Code | IRC20 | 21/TPI2014 | Matrix-R | | | | | | | Weight: 103 lb | FT = 10% |
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING | 2x4 SPF 2x4 SPF 2x4 SPF 2x4 SPF 2x4 SPF | No.2 No.2 No.2 No.2 | | ļ | VEBS 2 5 10TES) Unbalanced this design. | 4-20=-134/41, 3 5-19=-150/79, 6 3-16=-140/81, 9 roof live loads h | -21=-152/8 -18=-138/7 -15=-140/6 nave been (| 80, 2-22=-134 79, 7-17=-140 67, 10-14=-13 considered fo | 1/86, 0/77, 89/121 or | | | | | |
| TOP CHORD | Structura | l wood she | athing directly applie | d or |) Wind: ASCE | 7-16; Vult=115 | mph (3-seo | cond gust) | | | | | | |
| BOT CHORD | 6-0-0 oc Rigid ceil bracing. | purlins, exe ing directly | cept end verticals. applied or 10-0-0 oc |) | Vasd=91mph II; Exp C; En cantilever lef | n; TCDL=6.0psf closed; MWFRS t and right expo | ; BCDL=6.0 S (envelope sed ; end v | Opsf; h=25ft; e) exterior zo vertical left ar | Cat. ne; id | | | | | |
| REACTIONS | (size) Max Horiz Max Uplift Max Grav | 13=20-0-0 16=20-0-0 19=20-0-0 22=20-0-0 23=-242 (1 13=-38 (L 15=-35 (L) 17=-53 (L) 19=-55 (L) 12=-55 (L) 13=210 (L 13=179 (L) 13=190 (L) 21=192 (L) 23=67 (L) | 0, 14=20-0-0, 15=20- 0, 17=20-0-0, 18=20- 0, 20=20-0-0, 21=20- 0, 23=20-0-0 LC 4) C 5), 14=-125 (LC 9), C 9), 16=-59 (LC 9), C 9), 21=-59 (LC 8), C 8), 23=-31 (LC 9) LC 15), 14=182 (LC 2 LC 1), 16=180 (LC 22 LC 2), 18=178 (LC 12 C 22), 20=174 (LC 12 C 21), 22=173 (LC 12) C 15) | -0-0, -0-0, -0-0,), 22), 22), 10, 11, 1, | right exposer riuss design only. For stu see Standarc or consult qu All plates are Gable requirin Truss to be fi braced again Gable studs This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and are | d; Lumber DOL- ned for wind loa dids exposed to v d Industry Gable lalified building of 2X4 MT20 unle es continuous b ully sheathed fro sist lateral mover spaced at 2-0-0 is been designe ad nonconcurrer nas been design n chord in all arr by 2-00-00 wide ny other membe | =1.60 plate ds in the p wind (norm e End Deta designer as ass otherwi ottom chor om one fac ment (i.e. d oc. d for a 10.0 t with any ued for a liv eas where will fit betw rs. | e grip DOL=1. Iane of the tri Iane of the tri Iane of the face ils as applica s per ANSI/TI se indicated. d bearing. te or securely liagonal web) 0 psf bottom other live loas re load of 20.1 a rectangle veen the bott | 60 Jss ble, Pl 1. , | | | | TE OF M | MISSO |
| | (lb) - Max Tension | | pression/Maximum | | All bearings a Provide mech bearing plate | are assumed to hanical connect a capable of with | be SPF No ion (by oth standing 3 | o.2 . ers) of truss t 31 lb uplift at i | to oint | | | A | ANDR | EW |
| TOP CHORD | 1-23=-74 3-4=-83/1 6-7=-118 9-10=-15 11-13=-1 | /51, 1-2=-8 126, 4-5=-8 /106, 7-8=- 9/72, 10-11 75/44 | o//0,2-3=-81/97, 7/131,5-6=-104/119 133/92,8-9=-148/79 =-207/78,11-12=0/3 | , , 32, | 23, 38 lb upli uplift at joint 18, 53 lb upli uplift at joint | ft at joint 13, 59 22, 55 lb uplift a ft at joint 17, 59 15 and 125 lb u | Ib uplift at at joint 19, s Ib uplift at plift at joint | joint 21, 47 ll 55 lb uplift at joint 16, 35 ll t 14. | o joint o | | l | | JOHN | SER |
| BOT CHORD | 22-23=-6 20-21=-6 18-19=-6 16-17=-6 14-15=-6 | 8/200, 21-2 8/200, 19-2 8/200, 17-1 8/200, 15-1 8/200, 13-1 | 22=-68/200, 20=-68/200, 8=-68/200, 6=-68/200, 4=-68/200 | | UAD CASE(S) | Siandard | | | | | | Ø | PE-2017 | L ENGINE |

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent toulsable personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | B2 | Common | 1 | 1 | Job Reference (optional) | 164799590 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:02 ID:3TPMs4uDd52oO?QSz_olqZzX7JN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Plate Offsets (X, Y): [6:0-3-5,0-5-12]

| Loading | (psf) | Spacing | 2-0-0 | csi | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-------------|---|--|------------------|----------------------|-----------|----------------|----------|-------|--------|-----|---------------|-----------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.77 | Vert(LL) | -0.32 | 7-9 | >732 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.51 | Vert(CT) | -0.49 | 7-9 | >477 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.62 | Horz(CT) | 0.02 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-S | | Wind(LL) | 0.03 | 7-9 | >999 | 240 | Weight: 74 lb | FT = 10% |
| LUMBER | | | 6) Provide me | chanical connection | n (by oth | ers) of truss | to | | | | | |
| TOP CHORD | 2x4 SPF No.2 | | bearing plat | e capable of withst | tanding 1 | 49 lb uplift a | it joint | | | | | |
| BOT CHORD | 2x4 SPF 2400F 2.0E | | 6 and 107 lt | o uplift at joint 9. | | | | | | | | |
| WEBS | 2x3 SPF No.2 *Exce 6-4:2x6 SP 2400F 2. | pt* 9-1:2x4 SPF No .0E | .2, LOAD CASE(S) | Standard | | | | | | | | |
| BRACING | | | | | | | | | | | | |
| TOP CHORD | Structural wood shea | athing directly applie | ed or | | | | | | | | | |
| | 3-11-13 oc purlins, | except end verticals | | | | | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 10-0-0 or | C | | | | | | | | | |
| | bracing. | ~ ~ | | | | | | | | | | |
| WEBS | 1 Row at midpt | 2-9 | | | | | | | | | | |
| REACTIONS | (size) 6=0-3-8, 9 | 9=0-3-8 | | | | | | | | | | |
| | Max Horiz 9=-243 (L | | | | | | | | | | | |
| | Max Uplift 6=-149 (L Max Grav 6=993 (L | C 9), 9=-107 (LC 9) C 2) 9=960 (LC 2) | | | | | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | | | | | | | | | | |
| | Tension | • | | | | | | | | | | |
| TOP CHORD | 1-2=-174/110, 2-3=- | 1080/202, | | | | | | | | | | |
| | 3-4=-1314/207, 4-5= | 0/35, 1-9=-210/89, | | | | | | | | | | |
| | 4-6=-862/202 | | | | | | | | | | | |
| BOT CHORD | 7-9=0/546, 6-7=-90/ | 1084 | | | | | | | | | | |
| WEBS | 2-9=-769/118, 2-7=- | 102/817, 3-7=-450/2 | 274 | | | | | | | | | |
| NOTES | | | | | | | | | | | 000 | TOP |
| 1) Unbalanc | ed roof live loads have | been considered fo | r | | | | | | | | 8 OF I | MISSIN |
| this desig | n. 05 7 40: V/uk 445-uuk | (0 | | | | | | | | 4 | 9. TE | -050.0 |
| 2) Wind: AS | CE (-16; Vuit=1.15mpn) | (3-second gust) | Cat | | | | | | | A | 15/ | New r |
| | Enclosed MW/ERS (or | $DL=0.0psi, \Pi=25\Pi, U$ | Jai. | | | | | | | B | S' ANDE | KEW / CAN |
| cantilever | left and right exposed | · end vertical left an | d | | | | | | | И | / THOM | AAS \ Y |
| right expo | sed; Lumber DOL=1.6 | 0 plate grip DOL=1.0 | <u> </u> | | | | | | | 🛛 🖈 | JOAN | SON X |

- 3) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcernent with any other live loads. * This truss has been designed for a live load of 20.0psf 4) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
- chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SPF 2400F 2.0E 5)



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April 11,2024

NUMBER

PE-2017018993

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5

Page: 1

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent oulgase with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | B3 | Common | 2 | 1 | Job Reference (optional) | 164799591 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:02 ID:rvaNWVQtj62n7Wesv9a4ULzX7HO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:51.1

| Plate Offsets | (X, | Y): | [4:Edge,0-5-8] |
|---------------|-----|-----|----------------|
|---------------|-----|-----|----------------|

| | | | | | - | | | | | | | |
|------------------------------------|---|---------------------------|----------------|--------------------------|------------|----------------|---------|-------|--------|-------|---------------|----------------|
| Loading | (psf) | Spacing | 2-0-0 | csi | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.61 | Vert(LL) | -0.33 | 6-8 | >705 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.50 | Vert(CT) | -0.53 | 6-8 | >444 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.61 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI201 | 4 Matrix-S | | Wind(LL) | 0.07 | 6-8 | >999 | 240 | Weight: 73 lb | FT = 10% |
| LUMBER | | | 7) Provide | e mechanical connectio | on (by oth | ers) of truss | to | | | | | |
| TOP CHORD | 2x4 SPF No.2 | | bearing | plate capable of withs | standing 1 | 06 lb uplift a | t joint | | | | | |
| BOT CHORD | 2x4 SPF 2400F 2.0E | | 8 and 7 | 22 lb uplift at joint 5. | | | | | | | | |
| WEBS | 2x3 SPF No.2 *Exce 5-4:2x6 SP 2400F 2. | pt* 8-1:2x4 SPF No .0E | .2, LOAD CAS | SE(S) Standard | | | | | | | | |
| BRACING | | | | | | | | | | | | |
| TOP CHORD | Structural wood shea | athing directly applie | ed or | | | | | | | | | |
| | 4-2-9 oc purlins, exe | cept end verticals. | | | | | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 10-0-0 or | с | | | | | | | | | |
| | bracing. | | | | | | | | | | | |
| WEBS | 1 Row at midpt | 2-8 | | | | | | | | | | |
| REACTIONS | (size) 5= Mecha | nical, 8=0-3-8 | | | | | | | | | | |
| | Max Horiz 8=-232 (L | C 6) | | | | | | | | | | |
| | Max Uplift 5=-122 (L | C 9), 8=-106 (LC 9) | | | | | | | | | | |
| | Max Grav 5=922 (LC | 2), 8=954 (LC 2) | | | | | | | | | | |
| FORCES | (Ib) - Maximum Com | pression/Maximum | | | | | | | | | | |
| | | 1061/100 | | | | | | | | | | |
| TOP CHORD | 3-4-1293/205 1-8- | -211/89 <i>4</i> -5762/1 | 170 | | | | | | | | | |
| BOT CHORD | 6-8=0/532 5-6=-112 | 2/1071 | 110 | | | | | | | | | |
| WEBS | 2-8=-756/116. 2-6=- | 99/797.3-6=-459/27 | 76 | | | | | | | | | |
| NOTES | | | | | | | | | | | | |
| 1) Unbalance | ed roof live loads have | been considered fo | r | | | | | | | | | The |
| this design | n. | | | | | | | | | | O TE I | and the second |
| 2) Wind: ASC | CE 7-16; Vult=115mph | (3-second gust) | | | | | | | | | F. OF I | NISS N |
| Vasd=91n | nph; TCDL=6.0psf; BC | DL=6.0psf; h=25ft; (| Cat. | | | | | | | Å | A | N.S. |
| II; Exp C; | Enclosed; MWFRS (en | velope) exterior zor | ne; | | | | | | | A | AND | EW YPY |
| cantilever | left and right exposed | ; end vertical left an | d | | | | | | | H | THOM | IAS V V |
| right expo | sed; Lumber DOL=1.6 | 0 plate grip DOL=1. | 60 | | | | | | | N 🔸 | IOHN | SON I + A |
| 3) This truss | has been designed for | a 10.0 pst bottom | do | | | | | | / | H ^ | | |
| A) * This true | ioau nonconcurrent wi | or a live load of 20 (| us. Inef | | | | | | | N | me | K WWW |
| 4) IIIS IIUS | is has been designed in | or a rive road of 20.0 | hai | | | | | | | 11 -0 | A NUM | BER / AZ U |

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

- 5) Bearings are assumed to be: Joint 8 SPF 2400F 2.0E , Joint 5 SPF No.2 .
- 6) Refer to girder(s) for truss to truss connections.



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PE-2017018993

SSIONAL EN

Page: 1

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|---------------------|-----|-----|--------------------------|-----------|
| B240069 | B4 | Roof Special Girder | 1 | 2 | Job Reference (optional) | 164799592 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:02 ID:nMoVswEWIrgwz4XecUXWKDzX6Q7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:64.6

| Plate Offsets (X, Y): | [4:0-6-4,Edge], | [6:0-6-0,0-0-15], [7:Ec | ige,0-0-13], [12:0-2-4,0- | -2-4], [15:0-3-8,0- | 4-0] | |
|-----------------------|-----------------|-------------------------|---------------------------|---------------------|------|---|
| | | | - | | | - |

| | | i i | | | | | | | | | | | | _ |
|-------------|------------------------|---------------------------------|-------------------|-----------------|-----------------------|------------|------------------|---|--------|------------|-------------|-------------------------------------|-------------------------------|-----|
| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | тс | 0.55 | Vert(LL) | -0.47 | 13-14 | >763 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.80 | Vert(CT) | -0.83 | 13-14 | >427 | 240 | | | |
| BCLL | 0.0* | Rep Stress Incr | NO | | WB | 0.96 | Horz(CT) | 0.14 | 7 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC202 | 1/TPI2014 | Matrix-S | | Wind(LL) | 0.36 | 13-14 | >997 | 240 | Weight: 359 lb | FT = 10% | |
| | | | 1) | 2-nly truss to | be connected tog | othor wi | th 10d | | 11) Ha | naer(s) c | r othe | connection devi | ice(s) shall be | |
| | 2v4 SPE No 2 *Evo | ont* 2-1.2v6 SPE No | 2 '' | (0 131"x3") n | ails as follows: | | un rou | | pro | vided su | fficient | to support conc | entrated load(s) 131 | |
| | 4-6-2x4 SPE 2100E | 1 8F | Ζ, | Top chords c | onnected as follow | /s: 2x4 · | 1 row at 0-6- | 0 | lb c | lown and | 173 lb | up at 30-2-4, an | 131 lb down and 73 | |
| BOT CHORD | 2x6 SPF No.2 *Exce | ept* 13-11:2x4 SPF N | No.2. | oc, 2x6 - 2 ro | ws staggered at 0 | -9-0 oc. | | | lb u | ip at 32 | 2-4, a | nd 131 lb down a | and 75 lb up at | |
| | 16-12:2x8 SP 2400 | F 2.0E | , | Bottom chord | is connected as fo | llows: 2 | x6 - 2 rows | | 34- | 3-10 on | top ch | ord, and 958 lb d | own and 127 lb up at | |
| WEBS | 2x4 SPF No.2 *Exce | ept* 11-12:2x3 SPF N | Vo.2 | staggered at | 0-9-0 oc, 2x8 - 2 r | ows sta | ggered at 0-9- | -0 | 28- | 1-4, 51 I | b dowr | n at 30-2-4, and | 51 lb down at 32-2-4, | |
| WEDGE | Right: 2x3 SPF No.2 | 2 | | oc, 2x4 - 1 ro | w at 0-9-0 oc. | | | | and | d 258 lb (| down a | and 53 lb up at 3 | 4-2-4 on bottom | |
| BRACING | | | | Web connect | ed as follows: 2x4 | - 1 row | at 0-9-0 oc, 2 | x3 - | cho | ord. The | desig | n/selection of suc | h connection device | |
| TOP CHORD | Structural wood she | athing directly applie | ed or | 1 row at 0-9-0 | 0 oc. | | | | (s) | is the re | sponsi | bility of others. | | |
| | 5-9-11 oc purlins, e | except end verticals, a | and ²⁾ | All loads are | considered equally | / applie | d to all plies, | | LOAD | CASE(S |) Sta | ndard | | |
| | 2-0-0 oc purlins (4-2 | 2-11 max.): 4-6. | | except if note | ed as front (F) or ba | ack (B) | ace in the LC | DAD | 1) D | ead + Ro | of Live | e (balanced): Lur | nber Increase=1.15, | |
| BOT CHORD | Rigid ceiling directly | applied or 10-0-0 oc | 5 | Drovided to d | istribute only loads | noted | s liave beell | | P | ate Incre | ease=1 | .15 | | |
| | bracing. | | | unless other | vise indicated | Shoteu | as (i) oi (b), | | U | niform Lo | bads (I | D/TT) | | |
| REACTIONS | (size) 7=0-3-8, | 18=0-3-8 | 3) | Unbalanced | roof live loads have | e heen i | considered for | r | | Vert: 1-2 | 2=-70, | 2-4=-70, 4-6=-70 |), 6-8=-70, 13-18=-20, | |
| | Max Horiz 18=-257 | (LC 4) | 0) | this design. | | 0 00011 | | | c | 7-11=-2 | U tod Lo | ada (lb) | | |
| | Max Uplift 7=-468 (L | _C 9), 18=-247 (LC 9 |) 4) | Wind: ASCE | 7-16: Vult=115mp | h (3-seo | ond aust) | | C | Vort: 6- | | aus (ID) \ 12_ 990 (E) 0. | - 259 (E) 10- 91 (E) | |
| | Max Grav 7=2477 (| LC 1), 18=1732 (LC ⁻ | 1) ′ | Vasd=91mph | ; TCDL=6.0psf; B | CDL=6. | Opsf; h=25ft; (| Cat. | | 20=-81 | -01 (F | , 13=-009 (F), 9 =-37 (F) 22=-37 | =-236 (F), 19=-61 (F), (F) | |
| FORCES | (lb) - Maximum Con | npression/Maximum | | II; Exp C; En | closed; MWFRS (e | envelope | e) exterior zor | ne; | | 20- 01 | (,), 2, | - 01 (1), 22- 01 | (1) | |
| | Tension | | | cantilever left | t and right exposed | d;end \ | ertical left and | d | | | | | | |
| TOP CHORD | 1-2=-1319/272, 2-3= | =-1354/241, | | right exposed | l; Lumber DOL=1. | 60 plate | grip DOL=1.6 | 50 | | | | | | |
| | 3-4=-4515/721, 4-5= | =-12157/1987, | 5) | Provide adec | uate drainage to p | vevent | water ponding | | | | | | | |
| | 0-0=-9/32/1008, 0-1 | /=-4020/841, /-8=0/0 | o, 6) | This truss ha | s been designed fo | or a 10.0 |) psf bottom | | | | | | | |
| | 17-18-51/236 15- | 17500/4022 | | chord live loa | id nonconcurrent v | vith any | other live load | ds. | | | | 000 | ADD | |
| | 14-151886/12118 | 13-14-1601/9972 | () | " I his truss h | as been designed | tor a liv | e load of 20.0 | psr | | | | 8. OF | MIG | |
| | 12-13=-1494/9356 | 11-13=-529/2933 | | | v 2 00 00 wido wil | l fit botu | a rectangle | m | | | 6 | BIE | 1080 M | |
| | 10-11=-600/3480.9 | -10=-646/3858. | | chord and an | v other members | i ili beli | veen the bollo | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | 6 | AT | N SY | |
| | 7-9=-670/3946 | , | 8) | All bearings a | are assumed to be | SPF N | 2 | | | | 8 | S' ANDI | KEW / K | |
| WEBS | 1-17=-200/1433, 2-2 | 17=-95/741, | 9) | Provide mech | nanical connection | (by oth | ers) of truss to | 5 | | | 8 | / THOM | MAS Y | |
| | 3-17=-3326/666, 3-1 | 15=-308/2483, | - / | bearing plate | capable of withsta | anding 2 | 47 lb uplift at | joint | | | 1 🗙 🖈 | JOHN | SDN 🖌 | |
| | 4-14=-307/299, 5-14 | 4=-310/2311, | | 18 and 468 lt | o uplift at joint 7. | Ū | • | | | / | MA A | 4444 | - A AN | • |
| | 9-12=-51/85, 6-12=- | -929/5968, 6-9=-6/49 | 15, 10 |) Graphical pu | rlin representation | does no | ot depict the s | ize | | | M- | NUM | KED ON | Ĩ., |
| | 10-12=-305/169, 5- | 12=-1219/315, | | or the orienta | tion of the purlin a | long the | e top and/or | | | | 27 | DE 2017 | DER AND | |
| | 4-15=-8288/1418, 1 | 1-12=-3826/659 | | bottom chord | l. | | | | | | N. | PE-2017 | 018993 | |
| NOTES | | | | | | | | | | | Y | Nº0 | 1.SA | |
| | | | | | | | | | | | 6 | SION | TENS | |
| | | | | | | | | | | | | UNA A | L | |
| | | | | | | | | | | | | Un | | |



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | B5 | Roof Special | 1 | 1 | Job Reference (optional) | 164799593 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:02 ID:LpJgzyxKVTktAt?7Ua7zd9zX6T5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



| | 1.0 |
|-----------|---|
| BOT CHORD | 2x4 SPF No.2 *Except* 5-11:2x3 SPF No.2, |
| | 14-12:2x4 SPF 2100F 1.8E |
| WEBS | 2x3 SPF No.2 *Except* 13-3,16-2:2x4 SPF |
| | No.2, 9-7:2x6 SPF No.2 |
| BRACING | |
| TOP CHORD | Structural wood sheathing directly applied or |
| | 3-0-5 oc purlins, except end verticals, and |
| | 2-0-0 oc purlins (2-2-0 max.): 4-6. |
| BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc |
| | bracing. |
| WEBS | 1 Row at midpt 3-15, 2-16 |
| REACTIONS | (size) 9=0-3-8, 16=0-3-8 |
| | Max Horiz 16=-267 (LC 4) |
| | Max Uplift 9=-248 (LC 9), 16=-177 (LC 9) |
| | Max Grav 9=1446 (LC 2), 16=1419 (LC 2) |
| FORCES | (lb) - Maximum Compression/Maximum |
| | Tension |
| TOP CHORD | 1-2=-153/112, 2-3=-1590/293, |
| | 3-4=-5154/818, 4-5=-4674/689, |
| | 5-6=-4607/739, 6-7=-2242/360, 7-8=0/35, |
| | 1-16=-198/86, 7-9=-1354/275 |
| BOT CHORD | 15-16=0/894, 13-15=-143/1992, |
| | 12-13=-627/4661, 11-12=0/84, |
| | 5-12=-421/106, 10-11=-13/170, |
| | 9-10=-151/496 |
| WEBS | 2-15=-230/1578, 3-15=-1312/371, |
| | 3-13=-558/3519, 4-13=-2447/462, |
| | 5-13=-49/147, 10-12=-239/1840, |
| | 6-12=-411/2897 6-10=-486/138 |

NOTES

 Unbalanced roof live loads have been considered for this design.

2-16=-1393/188, 7-10=-90/1460

Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 Provide adequate drainage to prevent water ponding. All plates are MT20 plates unless otherwise indicated.

- All plates are MT20 plates unless otherwise indicated.
 This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.
 * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
- chord and any other members, with BCDL = 10.0 psf. 7) All bearings are assumed to be SPF No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 248 lb uplift at joint 9 and 177 lb uplift at joint 16.

 Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

3)



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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI Claulity Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | B6 | Roof Special | 2 | 1 | Job Reference (optional) | 164799594 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:03 ID:Z6cEljB?PEaJul?S2LYCoozX6VL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com



| | 5-7-12 | 14-9-14 | 19-8-8 | 22-9-14 | 30-0-0 |
|----------------|--------|---------|---------|---------|--------|
| | 5-7-12 | 9-2-2 | 4-10-10 | 3-1-6 | 7-2-2 |
| Scale = 1:60.1 | | | | | |

Plate Offsets (X, Y): [8:0-3-4,0-2-12], [11:0-5-12,0-4-4]

cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--------------|------------------------------|--|--------------|----------------|-----------------------|-----------|-----------------|---------|--------------------|--------|------------|----------------------------|------------|------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | тс | 0.75 | Vert(LL) | -0.25 | 11-12 [́] | >999 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.94 | Vert(CT) | -0.48 | 12-14 | >734 | 240 | | | |
| BCLI | 0.0* | Rep Stress Incr | YES | | WB | 0.89 | Horz(CT) | 0.13 | | n/a | n/a | | | |
| BCDI | 10.0 | Code | IRC2021/ | TPI2014 | Matrix-S | 0.00 | Wind(LL) | 0.19 | 11-12 | ~aaa | 240 | Weight [,] 133 lb | FT – 10% | |
| BODE | 10.0 | Obac | 11(02021) | 11 12014 | | | Wind(LL) | 0.15 | 11 12 | 2000 | 240 | Weight. 100 lb | 11 = 1070 | |
| LUMBER | | | 3) | Provide adeq | uate drainage to p | revent v | water ponding | g. | | | | | | |
| TOP CHORD | 2x4 SPF No.2 *Exce | ept* 2-3:2x6 SPF No.2 | 24) | This truss ha | s been designed fo | r a 10.0 |) psf bottom | | | | | | | |
| BOT CHORD | 2x4 SPF No.2 *Exce | ept* 15-13:2x4 SPF | | chord live loa | d nonconcurrent w | ith any | other live loa | ids. | | | | | | |
| | 2100F 1.8E, 4-10:2x | 3 SPF No.2 | 5) | * This truss h | as been designed | for a liv | e load of 20.0 | Opsf | | | | | | |
| WEBS | 2x3 SPF No.2 *Exce | ept* 14-3:2x4 SPF No | o.2, (| on the bottom | n chord in all areas | where | a rectangle | | | | | | | |
| | 15-1:2x4 SP No.2, 8 | -6:2x6 SPF No.2 | : | 3-06-00 tall b | y 2-00-00 wide will | fit betv | veen the botto | om | | | | | | |
| BRACING | | | | chord and an | y other members. | | | | | | | | | |
| TOP CHORD | Structural wood she | athing directly applie | dor 6) I | Bearings are | assumed to be: Jo | int 15 S | SPF 2100F 1. | .8E , | | | | | | |
| | 2-2-0 oc purlins, exe | cept end verticals, ar | nd ' | Joint 8 SPF N | lo.2 . | | | | | | | | | |
| | 2-0-0 oc purlins (2-9 |)-2 max.): 3-5. | 7) | Provide mech | nanical connection | (by oth | ers) of truss t | to | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 2-2-0 oc | 1 | bearing plate | capable of withsta | nding 1 | 77 lb uplift at | t joint | | | | | | |
| | bracing. | | | 15 and 248 lt | o uplift at joint 8. | | | | | | | | | |
| WEBS | 2 Rows at 1/3 pts | 3-14 | 8) | Graphical pu | lin representation | does no | of depict the s | size | | | | | | |
| REACTIONS | (size) 8=0-3-8, 1 | 15=0-3-8 | | or the orienta | tion of the purlin al | ong the | e top and/or | | | | | | | |
| | Max Horiz 15=-267 (| (LC 4) | | bottom chord | | | | | | | | | | |
| | Max Uplift 8=-248 (L | C 9), 15=-177 (LC 9) | LOA | AD CASE(S) | Standard | | | | | | | | | |
| | Max Grav 8=1412 (L | LC 1), 15=1332 (LC 1 |) | | | | | | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | | | | | | | | | | | | |
| | Tension | | | | | | | | | | | | | |
| TOP CHORD | 1-2=-1012/214, 2-3= | =-1077/162, | | | | | | | | | | | | |
| | 3-4=-3379/542, 4-5= | =-3156/546, | | | | | | | | | | | | |
| | 5-6=-2145/357, 6-7= | =0/35, 1-15=-1297/20 | 0, | | | | | | | | | | | |
| | 6-8=-1340/288 | | | | | | | | | | | | The second | |
| BOT CHORD | 14-15=-69/228, 12-1 | 14=-394/3381, | - / | | | | | | | | | 8 OF 1 | ALL OF | |
| | 11-12=-401/3184, 10 | 0-11=0/20, 4-11=-438 | 3/96, | | | | | | | | | RE OF IN | IISS W | |
| | 9-10=-15/73, 8-9=-2 | 04/103 | 40 | | | | | | | | A | A. | NSY | 6 |
| WEB2 | 2-14=0/413, 3-14=-2 | 2010/543, 3-12=-80/1 | 40, | | | | | | | | H | ANDR | EW YPY | h |
| | 4-1Z=U/Z4U, 9-11=-2 | 219/1000, - 666/155 | | | | | | | | | B | THOM | IAS Y | Y |
| | 1-1/-136/1001 6 0 | =-000/100, 42/1051 | | | | | | | | 1 | VI _ | | | N |
| NOTEO | 1-1 | +2/1001 | | | | | | | | / | 1 | JUTIN | | 12 - |
| | al as a fille as the sale of | have considered to | | | | | | | | | K A | M | | A - |
| i) Unbalance | eu root live loads have | been considered for | | | | | | | | U | 113 | NUME | BER /× | N |
| | 1. CE 7 16: \/ult_115mph | (2 accord quat) | | | | | | | | | N2 | PE-20170 | 18993 | 4 |
| Vacd_01p | D = 1 - 10, $Vuit= 1.10mpn$ | 1 (3-5800110 gust) DI -6 Opef: b-25#: 0 | at | | | | | | | | N | The second | 12L | 1 |
| II. Evp C | Enclosed: MW/ERS (or | 0 -0.0 p_{si} , $n=2011, 0$ | αι. ο' | | | | | | | | Y | 080 | JO'B | |
| cantilever | left and right exposed | : end vertical left and | , | | | | | | | | | UNIA ONIA | LENA | |
| Cantilevel | ion and nym exposed | , one ventical left allu | • | | | | | | | | | A | - 0 | |



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | B7 | Roof Special | 2 | 1 | Job Reference (optional) | 164799595 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:03 ID:J0xi1a22YLkeclpOYbs9_zzX6Wp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



| | 5-9-0 | 12-11-6 | 19-8-8 | 21-1-14 | 30-0-0 |
|----------------|-------|---------|--------|---------|--------|
| | 5-9-0 | 7-2-6 | 6-9-2 | 1-5-6 | 8-10-2 |
| Scale = 1:62.1 | | | | | |

Plate Offsets (X, Y): [1:0-2-0,0-1-8], [3:0-6-0,0-2-1], [5:0-4-12,Edge], [7:Edge,0-3-4]

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2021 | I/TPI2014 | CSI TC BC WB Matrix-S | 0.92 0.75 0.80 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.19 -0.39 0.14 0.14 | (loc) 12-13 12-13 9 12-13 | l/defl >999 >921 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 126 lb | GRIP 197/144 FT = 10% | |
|---|--|---|--|--|--|---|---|--|---------------------------------------|---------------------------------------|---------------------------------|----------------------------------|------------------------------------|---|
| LUMBER TOP CHORD BOT CHORD WEBS TOP CHORD BOT CHORD WEBS REACTIONS | 2x4 SPF No.2 *Exce 1.8E 2x4 SPF No.2 *Exce 2x3 SPF No.2 *Exce No.2 Structural wood sheat except end verticals, (4-1-11 max.): 3-5. Rigid ceiling directly bracing, Except: 6-0-0 cb bracing: 10- 1 Row at midpt (size) 9=0-3-8, 1 Max Horiz 15=-267 (Li Max Uplift 9=-247 (Li Max Grav 9=1411 (Li (lb) - Maximum Com | pt* 3-5:2x4 SPF 210 pt* 4-11:2x3 SPF No pt* 14-3,9-7:2x4 SPF athing directly applied , and 2-0-0 oc purlins applied or 10-0-0 oc -11. 3-14, 6-9 15=0-3-8 LC 4) C 9), 15=-177 (LC 9) .C 1), 15=1338 (LC 1 pression/Maximum | 2) DF 22 3) 4) 4, 5) 6) 7) 8) | Wind: ASCE Vasd=91mph II; Exp C; Enc cantilever left right exposed Provide adec Chis truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an All bearings a Provide mect bearing plate 15 and 247 lt Graphical pu or the orienta bottom chord | 7-16; Vult=115mpl ; TCDL=6.0psf; BC closed; MWFRS (e and right exposec t; Lumber DOL=1.6 uate drainage to p s been designed for d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide wil y other members. are assumed to be nanical connection capable of withsta o uplift at joint 9. clin representation tion of the purlin a Standard | h (3-sec CDL=6.0 nivelope 1; end v 60 plate revent v for a 10.0 <i>i</i> th any for a 110.0 <i>i</i> th any for a 110.0 <i>i</i> th betw SPF No (by oth unding 1 does no long the | cond gust) opsf; h=25ft; a) exterior zor ertical left ar grip DOL=1 water pondin b) psf bottom other live loz e load of 20. a rectangle veen the bott 0.2. ers) of truss 77 lb uplift a bt depict the top and/or | Cat. one; nd .60 g. ads. .0psf tom to t joint size | | | | | | |
| TOP CHORD | Tension 1-2=-1002/222, 2-3= 3-4=-2607/440, 4-5= 5-6=-2014/362, 6-7= 1-15=-1291/207, 7-9 | 1061/185, 2533/472, 601/110, 7-8=0/32,)=-481/130 | | | | | | | | | | | an . | |
| BOT CHORD | 14-15=-67/228, 13-1 12-13=-289/2556, 11 4-12=-528/204, 10-1 9-10=-296/1840 | 4=-251/2606, 1-12=-182/0, 1=-33/58, | | | | | | | | | ł | STATE OF M | AISSOLR EW | |
| WEBS NOTES | 2-14=-24/435, 3-14= 4-13=-7/82, 10-12=- 5-12=-343/2308, 5-1 1-14=-142/1085, 6-9 6-10=-115/151 | 1994/417, 3-13=0/2 189/2336, 0=-1334/186, I=-1614/309, | 13, | | | | | | | C | AL PA | NUME PE-20170 | AS BER 018993 | J |

1) Unbalanced roof live loads have been considered for this design.



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | B8 | Roof Special | 2 | 1 | Job Reference (optional) | 164799596 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:03 ID:?Woe0hKLDPjxyKNvf3ndhpzX6Z2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: AŠCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | В9 | Roof Special | 1 | 1 | Job Reference (optional) | 164799597 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:03 ID:xHgqy_b4IHTPYE_mFSHxLMzX6f9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Plate Offsets (X, Y): [4:0-4-0,0-1-15], [9:0-5-6,0-7-6], [10:0-2-8,0-1-8]

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2021 | I/TPI2014 | CSI TC BC WB Matrix-S | 0.96 0.90 0.97 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.38 -0.72 0.08 0.12 | (loc) 12-14 12-14 9 12-14 | l/defl >925 >488 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 130 lb | GRIP 197/144 FT = 10% | |
|--|--|--|--|--|---|--|---|---|---------------------------------------|---------------------------------------|---------------------------------|---|------------------------------------|--|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS | 2x4 SPF No.2 *Exce 1.8E, 4-8:2x4 SPF 2 2x4 SPF 2100F 1.8E SPF No.2, 5-11:2x3 2x3 SPF No.2, *Exce 15-1:2x4 SP No.2, 9 Structural wood shear except end verticals. (3-11-15 max.): 3-4. Rigid ceiling directly bracing, Except: 6-0-0 cc bracing: 10 1 Row at midpt (size) 9=0-3-8, 1 Max Horiz 15=-269 (L Max Gray 9=1468 (L | apt* 3-4:2x4 SPF 210 400F 2.0E * "Except* 13-12:2x4 SPF No.2 pt* 15-2:2x4 SPF No -7:2x10 SP 2400F 2. athing directly applied , and 2-0-0 oc purlins applied or 10-0-0 oc -11. 2-15, 4-14 15=0-3-8 LC 4) C 9), 15=-176 (LC 9) C 2), 15=-176 (LC 9). | 2) OF (1,2, 3) (0E 4) (1, 5) (1, 5) (1, 6) (1, 7) (1, 7)(1, 7) (1, 7) (1 | Wind: ASCE Vasd=91mpl II; Exp C; En cantilever lef right exposed Provide ader This truss ha chord live loa * This truss h on the bottor a,06-00 tall 1 chord and ar All bearings Provide mec bearing plate 9 and 176 lb Graphical pu or the orienta | 7-16; Vult=115mp n; TCDL=6.0psf; B closed; MWFRS (it and right expose d; Lumber DOL=1. uate drainage to p s been designed f ad nonconcurrent to as been designed n chord in all area yo 2-00-00 wide wi yo other members, are assumed to be hanical connectior e capable of withst uplift at joint 15. rlin representation ation of the purlin a | ch (3-sec CDL=6.0 cDL=6.0 convelope d; end v. 60 plate prevent v. for a 10.0 with any d for a 10.0 with any d for a liv s where d for a liv s a liv s where d for a liv s a li | ond gust) opsf; h=25ft; exterior zo ertical left ar grip DOL=1. vater pondin opsf bottom other live loze e load of 20. a rectangle veen the bott DL = 10.0ps 00F 1.8E . ers) of truss 50 lb uplift a ot depict the set top and/or | Cat. ne; nd .60 g. ads. 0psf om f. to t joint size | | | | | | |
| FORCES TOP CHORD BOT CHORD WEBS | (lb) - Maximum Com Tension 1-2=-173/113, 2-3=- 3-4=-1767/290, 4-5= 5-6=-2357/392, 6-7= 1-15=-210/91, 7-9=- 14-15=0/894, 12-14= 5-12=-201/99, 10-11 2-15=-1364/188, 2-1 3-14=-1244/349, 4-1 4-12=-96/781, 10-12 6-12=-28/343, 6-10= | 2018/381, -2327/443, -2327/443, -2327/443, -2136/349, 7-8=0/39 1288/263 =-137/1828, 11-12=0 =-67/33, 9-10=-230/ ² 4=-315/1962, 4=-180/121, 2=-192/1835, -371/125 | , LC , /117, 1780 | AD CASE(S) | Standard | | | | | / | * | STATE OF M STATE OF M ANDR THOM JOHNS | AISSOLUTE EW LAS DN | |

NOI

1) Unbalanced roof live loads have been considered for this design.



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|-----------------|-----|-----|--------------------------|-----------|
| B240069 | C1 | Half Hip Girder | 1 | 1 | Job Reference (optional) | 164799598 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:03 ID:9JRz9xe5DpAGkUBpK8uAJPzX6hg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:32.9

Plate Offsets (X, Y): [4:0-4-0,0-1-13]

| Loa | ading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|----------------------|--|---|--|-------------------------------------|---|---|--------------------------------|--|-----------------------|-------|--------|------|---------------|----------------------------|
| TCL | L (roof) | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.84 | Vert(LL) | -0.09 | 8 | >999 | 360 | MT20 | 197/144 |
| TC | DL | 10.0 | Lumber DOL | 1.15 | | BC | 0.64 | Vert(CT) | -0.15 | 7-8 | >632 | 240 | | |
| BCI | LL | 0.0* | Rep Stress Incr | NO | | WB | 0.36 | Horz(CT) | 0.08 | 6 | n/a | n/a | | |
| BCI | DL | 10.0 | Code | IRC202 | 1/TPI2014 | Matrix-S | | Wind(LL) | 0.08 | 8 | >999 | 240 | Weight: 27 lb | FT = 10% |
| LUN TOP BO | MBER P CHORD T CHORD BS | 2x4 SPF No.2 2x4 SPF No.2 2x3 SPF No.2 *Exce | nt* 9-2·2x6 SP 2400 | 7) IF 8) | Provide mech bearing plate 9 and 150 lb Graphical pu | nanical connection capable of withsta uplift at joint 6. rlin representation | (by oth anding 1 does no | ers) of truss t 28 lb uplift at ot depict the s | to t joint size | | | | | |
| | 20 | 2.0E | | , | or the orienta | tion of the purlin a | long the | top and/or | | | | | | |
| BR/ | ACING | | | 0) | bottom chord | | , | | | | | | | |
| TOF | P CHORD | Structural wood sheat 3-11-13 oc purlins, e 2-0-0 oc purlins (6-0- | athing directly applie except end verticals -0 max.): 4-5. | d or ⁹⁾ and | Hanger(s) or provided suff down and 67 | other connection of icient to support co lb up at 4-11-2, a | ncentra nd 86 lt | shall be ated load(s) 8 down and 6 | 31 lb 6 lb | | | | | |
| BO | T CHORD | Rigid ceiling directly bracing. | applied or 10-0-0 or | ; | up at 7-0-0 c at 4-11-2, ar | on top chord, and 2 nd 30 lb down at 7 | 237 lb d -0-0 on | own and 64 ll bottom chore | bup d. | | | | | |
| RE/ | ACTIONS | (size) 6=0-3-8, 9 Max Horiz 9=97 (LC Max Uplift 6=-150 (L0 Max Grav 6=575 (L0 | 9=0-3-8 22) C 5), 9=-128 (LC 8) C 1), 9=573 (LC 1) | 10 |) In the LOAD of the truss a | of others. CASE(S) section, re noted as front (I | loads a F) or ba | pplied to the t ck (B). | face | | | | | |
| FO | RCES | (lb) - Maximum Com Tension | pression/Maximum | L0 1) | Dead + Roc | of Live (balanced): | Lumbei | Increase=1. | 15, | | | | | |
| TOF | P CHORD | 2-9=-845/220, 1-2=0 3-4=-1034/272, 4-5= | /30, 2-3=-1251/278, -49/25, 5-6=-134/70 | | Uniform Loa | ads (lb/ft) | 70.0 | | 20 | | | | | |
| BO WE | T CHORD BS | 8-9=-299/1080, 7-8= 3-8=-53/265, 4-7=-50 | -270/984, 6-7=-267/ 0/388, 4-6=-1000/28 | 955 1 | Concentrate | =-70, 2-4=-70, 4-5= ed Loads (lb) | =-70, 8- | 9=-20, 0-8=-2 | 20 (D) | | | | | |
| NO | TES | | | | vert. /= | 237 (D), 4=-45 (D), | 10=-40 | (D), TT=-23 | (D) | | | | | |
| 1) 2) 3) 4) | Wind: AS0 Vasd=91m II; Exp C; cantilever right expo Provide ao This truss chord live * This trus | CE 7-16; Vult=115mph nph; TCDL=6.0psf; BCI Enclosed; MWFRS (en left and right exposed sed; Lumber DOL=1.6(dequate drainage to pro has been designed for load nonconcurrent wii s has been designed for | (3-second gust) DL=6.0psf; h=25ft; C velope) exterior zon ; end vertical left and 0 plate grip DOL=1.6 event water ponding a 10.0 psf bottom th any other live load or a live load of 20.0 | Cat. e; d 50 ds. psf | | | | | | | (| * | STATE OF M | AISSOUR EW AAS ON |
| , | on the bot | tom chord in all areas | where a rectangle | • | | | | | | | - U | 12-3 | NUM | BER A |

- 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 . 5)
- 6) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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April 11,2024

EL

PE-20170189

SIONAL

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | C2 | Half Hip | 1 | 1 | Job Reference (optional) | 164799599 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:03

Wheeler Lumber, Waverly, KS - 66871,





| Scale = 1:35.5 | |
|----------------|--|
|----------------|--|

Plate Offsets (X, Y): [4:0-6-0,0-3-4], [8:0-2-12,0-1-8]

| Loadin | g | (psf) | Spacing | 2-0-0 | | csi | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--|--|--|--|-----------------------------------|--|--|--|---|---------------------|-------|--------|--|---------------|----------|---|
| TCLL (| roof) | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.76 | Vert(LL) | -0.20 | 6-7 | >486 | 360 | MT20 | 197/144 | |
| TCDL | | 10.0 | Lumber DOL | 1.15 | | BC | 0.45 | Vert(CT) | -0.37 | 6-7 | >262 | 240 | | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | | WB | 0.11 | Horz(CT) | 0.15 | 6 | n/a | n/a | | | |
| BCDL | | 10.0 | Code | IRC2021 | /TPI2014 | Matrix-S | | Wind(LL) | 0.20 | 6-7 | >478 | 240 | Weight: 26 lb | FT = 10% | |
| -UMBE FOP CI 3OT CI WEBS BRACI FOP CI | ER HORD HORD HORD | 2x4 SPF No.2 *Exce 2x4 SPF No.2 2x3 SPF No.2 *Exce Structural wood she 6-0-0 oc purlins, exc 2-0-0 oc purlins (6-0 Digid oc jurnins (6-0 | pt* 4-5:2x6 SPF No. pt* 8-2:2x4 SPF No. athing directly applie cept end verticals, ar -0 max.): 4-5. | 7) 2 2 8) ed or nd 9) | Bearing at jo using ANSI/T designer sho Provide mec bearing plate 8 and 68 lb u Graphical pu or the orienta bottom chore | int(s) 8 considers int(s) 8 considers int(s) angle to grain uld verify capacity hanical connection capable of withsta plift at joint 6. rlin representation tion of the purlin a l. | parallel t n formula of beari n (by oth anding 7 does no along the | o grain value a. Building ng surface. ers) of truss t 6 lb uplift at j ot depict the s top and/or | to joint size | | | | | | |
| 301.01 | HORD | bracing. | applied or 10-0-0 oc | LC | AD CASE(S) | Standard | | | | | | | | | |
| REACT | TIONS | (size) 6=0-3-8, 8 Max Horiz 8=137 (LC Max Uplift 6=-68 (LC Max Grav 6=359 (LC | 8=0-3-8 C 5) S 8), 8=-76 (LC 8) C 1), 8=440 (LC 1) | | | | | | | | | | | | |
| FORCE | S | (lb) - Maximum Com Tension | pression/Maximum | | | | | | | | | | | | |
| TOP CI BOT CI | HORD HORD | 2-8=-439/83, 1-2=0/2 3-4=-241/58, 4-5=-49 7-8=-63/237, 6-7=-60 3-7=0/172, 4-6=-518 | 27, 2-3=-359/0, 9/25, 5-6=-83/223 6/223 | | | | | | | | | | | | |
| | | 3-7=0/172, 4-0=-310 | / 102 | | | | | | | | | | | | |
| NOTES | 5 | | | | | | | | | | | | | | |
| 1) Un | balanc | ed roof live loads have | been considered for | ſ | | | | | | | | | | | |
| this 2) Wir Vas II; E car righ | adesig nd: AS sd=91r Exp C; ntilever | n. CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (er left and right exposed ised: Lumber DOL=1.6(| (3-second gust) DL=6.0psf; h=25ft; (velope) exterior zon ; end vertical left and 0 plate grip DOL=1.6 | Cat. ne; d 50 | | | | | | | | a de la compañía de la | STATE OF M | AISSOLA | |
| 3) Pro 1) Thi cho | ovide a s truss ord live | dequate drainage to pro has been designed for load nonconcurrent wi | event water ponding a 10.0 psf bottom th any other live load | l. ds. | | | | | | | (| L. | JOHN | on | 1 |
| on (c | the bo | ttom chord in all areas | where a rectangle | psr | | | | | | | Ŭ | NF | NUMI | BER | |

3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

All bearings are assumed to be SPF No.2 . 6)



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | C3 | Monopitch | 2 | 1 | Job Reference (optional) | 164799600 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:03 ID:sAzw?S1sZyC4WUjxOHICAtzX717-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





| Scale = | 1:34.7 |
|---------|--------|
|---------|--------|

Plate Offsets (X, Y): [4:0-3-3,Edge], [5:Edge,0-2-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | - | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-------------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.63 | Vert(LL) | -0.22 | 5-6 | >437 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.37 | Vert(CT) | -0.39 | 5-6 | >246 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.16 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.22 | 5-6 | >429 | 240 | Weight: 24 lb | FT = 10% |

LOAD CASE(S) Standard

| LUMBER | | | | | | | | | |
|-----------|---|---|--|--|--|--|--|--|--|
| TOP CHORD | 2x4 SPF 2100F 1.8E | | | | | | | | |
| BOT CHORD | 2x4 SPF 2100F 1.8E | | | | | | | | |
| WEBS | 2x3 SPF No.2 *Except* 7-2:2x6 SPF No.2 | | | | | | | | |
| BRACING | | | | | | | | | |
| TOP CHORD | Structural wood sheathing directly applied of | r | | | | | | | |
| | 6-0-0 oc purlins, except end verticals. | | | | | | | | |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc | | | | | | | | |
| | bracing. | | | | | | | | |
| REACTIONS | (size) 5=0-3-8, 7=0-3-8 | | | | | | | | |
| | Max Horiz 7=157 (LC 5) | | | | | | | | |
| | Max Uplift 5=-85 (LC 8), 7=-74 (LC 8) | | | | | | | | |
| | Max Grav 5=355 (LC 1), 7=443 (LC 1) | | | | | | | | |
| FORCES | (lb) - Maximum Compression/Maximum | | | | | | | | |
| | Tension | | | | | | | | |
| TOP CHORD | 2-7=-347/45, 1-2=0/30, 2-3=-192/0, | | | | | | | | |
| | 3-4=-131/17, 4-5=-238/97 | | | | | | | | |
| BOT CHORD | 6-7=-28/82, 5-6=-36/80 | | | | | | | | |
| WEBS | 3-6=-54/116 | | | | | | | | |
| | | | | | | | | | |

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 This terms has a description of the order of the terms.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF 2100F 1.8E .
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 7 and 85 lb uplift at joint 5.



April 11,2024

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | C4 | Roof Special | 1 | 1 | Job Reference (optional) | 164799601 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:04 ID:OK2gdB2Ynmn9bP84JwGvaazX7?p-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



3x4 =

| Scale = 1:26.3 | | | | | | | | | | | | | |
|----------------|--------------|-----------------|--|------------------|---------------|-----------------|---------|-------|--------|-----|---------------|----------|--|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.26 | Vert(LL) | -0.14 | 4-5 | >583 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.56 | Vert(CT) | -0.29 | 4-5 | >292 | 240 | | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.14 | Horz(CT) | 0.00 | 4 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | | | | | | Weight: 26 lb | FT = 10% | |
| LUMBER | | | 7) Provide me | chanical connec | ction (by oth | ers) of truss | to | | | | | | |
| TOP CHORD | 2x4 SPF No.2 | | bearing pla | te capable of wi | thstanding 2 | lb uplift at jo | pint 5, | | | | | | |
| BOT CHORD | 2x4 SPF No.2 | | 53 lb uplift at joint 1 and 62 lb uplift at joint 4. | | | | | | | | | | |

7-2-8

| WEBS | 2x3 SPF | No.2 |
|-----------|------------|--------------------------------------|
| BRACING | | |
| TOP CHORD | Structura | I wood sheathing directly applied or |
| | 7-2-8 oc | ourlins, except end verticals, and |
| | 2-0-0 oc | ourlins: 1-2. |
| BOT CHORD | Rigid ceil | ing directly applied or 10-0-0 oc |
| | bracing. | |
| REACTIONS | (size) | 1= Mechanical, 4=0-3-8, 5= |
| | | |

3-1-11

- Mechanical, 4=0-3-8, 5= Mechanical Max Horiz 5=114 (LC 5) Max Uplift 1=-53 (LC 4), 4=-62 (LC 8), 5=-2 (LC 8) Max Grav 1=129 (LC 1), 4=315 (LC 1), 5=186
- (LC 1) FORCES (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-5=0/0, 1-2=-20/15, 2-3=-70/35, 3-4=-116/48 BOT CHORD 4-5=-104/301 WEBS 2-5=-322/122, 2-4=-328/144
- NOTES
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding. 2)
- 3) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
- chord and any other members.
- All bearings are assumed to be SPF No.2 5)
- 6) Refer to girder(s) for truss to truss connections.

53 lb uplift at joint 1 and 62 lb uplift at joint 4. 8) Graphical purlin representation does not depict the size

- or the orientation of the purlin along the top and/or
- bottom chord.
- Gap between inside of top chord bearing and first 9)
- diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | D1 | Hip Girder | 1 | 1 | Job Reference (optional) | 164799602 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:04 ID:9mO61JEmDMu4fGaHK?HCxEzX6iC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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Scale = 1:37.4

Plate Offsets (X, Y): [2:0-3-8,Edge], [3:0-1-8,0-3-7], [4:0-6-0,0-2-2], [7:0-3-8,Edge]

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|-------------|--------------------------|------------------------|---------------------|----------------|-----------------------|-----------------------|----------------|----------|-------|------------|------------|---------------|----------|-----|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.80 | Vert(LL) | -0.06 | 11-12 | >999 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.61 | Vert(CT) | -0.12 | 11-12 | >999 | 240 | | | |
| BCLL | 0.0* | Rep Stress Incr | NO | | WB | 0.10 | Horz(CT) | 0.06 | 7 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC202 | /TPI2014 | Matrix-S | | Wind(LL) | 0.06 | 11-12 | >999 | 240 | Weight: 48 lb | FT = 10% | |
| UMBER | | | 5) | * This truss h | as been designed | for a liv | e load of 20. | .0psf | | | | | | |
| TOP CHORE | 2x6 SPF No 2 *Exce | nt* 4-5·2x4 SPF No | 2 | on the botton | n chord in all areas | where | a rectangle | | | | | | | |
| BOT CHORE | 2x4 SPF No.2 *Exce | pt* 14-3.6-9:2x6 SP | - | 3-06-00 tall b | y 2-00-00 wide wil | l fit betv | veen the bott | tom | | | | | | |
| | 2400F 2.0E | | | chord and an | y other members. | | | | | | | | | |
| NEBS | 2x3 SPF No.2 | | 6) | All bearings a | are assumed to be | SPF No | o.2 . | | | | | | | |
| WEDGE | Left: 2x3 SPF No.2 | | 7) | Provide mech | nanical connection | (by oth | ers) of truss | to | | | | | | |
| | Right: 2x3 SPF No.2 | | | bearing plate | capable of withsta | anding 1 | 88 lb uplift a | it joint | | | | | | |
| BRACING | • | | | 2 and 185 lb | uplift at joint 7. | | | | | | | | | |
| TOP CHORE | Structural wood shear | athing directly applie | ed or ⁸⁾ | Graphical pu | rlin representation | does no | ot depict the | size | | | | | | |
| | 5-6-9 oc purlins, exc | ept | | or the orienta | ition of the purlin a | long the | top and/or | | | | | | | |
| | 2-0-0 oc purlins (3-4 | -2 max.): 4-5. | | bottom chord | l. | | | | | | | | | |
| BOT CHORE | Rigid ceiling directly | applied or 9-3-13 oc | 9) | Hanger(s) or | other connection of | device(s |) shall be | | | | | | | |
| | bracing. | | | provided suff | icient to support co | oncentra | ted load(s) 1 | 159 | | | | | | |
| REACTIONS | (size) 2=0-3-8.7 | /=0-3-8 | | Ib down and | 93 lb up at 3-0-5, | 81 lb do | wn and 46 lt | o up | | | | | | |
| | Max Horiz 2=-34 (LC | ; 9) | | at 5-1-1, and | 81 lb down and 4 | 6 lb up | at 6-10-15, a | and | | | | | | |
| | Max Uplift 2=-188 (L | C 8), 7=-185 (LC 9) | | 74 lb down a | nd 47 lb up at 8-1 | 1-11 on | top chord, a | nd 78 | | | | | | |
| | Max Grav 2=789 (LC | C 1), 7=779 (LC 1) | | Ib down and | 43 lb up at 3-0-5, | 33 ID do | wn and 17 lt | o up | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | | 79 lb down o | nd 12 lb up of 9 1 | 7 ib up : 0 2 on h | at 6-10-15, a | and | | | | | | |
| ONOLO | Tension | | | The design/s | election of such co | nnectio | n device(s) i | e tha | | | | | | |
| TOP CHORE | 1-2=0/6. 2-3=-982/22 | 29. 3-4=-1698/440. | | responsibility | of others | mecuo | | 3 110 | | | | | | |
| | 4-5=-1572/404. 5-6= | -1664/417. | 10 |) In the LOAD | CASE(S) section | loads ai | onlied to the | face | | | | | | |
| | 6-7=-967/227, 7-8=0 | /6 | 10 | of the truss a | re noted as front (I | F) or ha | ck (B) | 1000 | | | | | | |
| BOT CHORE | 2-14=-169/690, 13-1 | 4=0/42, 3-13=-28/6, | 10 | | Standard | , | | | | | | | | |
| | 12-13=-403/1583, 11 | 1-12=-403/1605, | 1) | Dead + Roc | of Live (balanced). | lumber | Increase-1 | 15 | | | | COOL | m | |
| | 10-11=-361/1549, 9- | 10=0/42, 6-10=-33/6 | 6, ^י | Plate Increa | | Lumber | increase=1. | .15, | | | | A OF I | AIS ON | |
| | 7-9=-146/679 | | | Uniform Loa | ads (lb/ft) | | | | | | 1 | 750 | -00 M | |
| NEBS | 4-12=-9/295, 4-11=- | 115/56, 5-11=-16/31 | 0 | Vert: 1-4- | -70 4-5-70 5-8- | -70 2- | 1420 | | | | R | AT INTO | | 2 |
| NOTES | | | | 10-13=-2 | 0 7-9=-20 | - 70, 2 | 14-20, | | | | A | S ANDR | EW / | V) |
| 1) Unbalan | ced roof live loads have | been considered for | | Concentrate | ed Loads (lb) | | | | | | M. | / THOM | IAS | X |
| this desi | gn. | | | Vert: 4=- | 51 (B), 5=-33 (B), 1 | 2=-78 | B), 11=-78 (| B). | | / | X 🗙 | I JOHN | SON 🔰 | C N |
| 2) Wind: AS | SCE 7-16; Vult=115mph | (3-second gust) | | 15=-33 (E | 3), 16=-33 (B), 17= | -33 (B). | 18=-33 (B) | ,, | | / | 1 10 | hard | 2mp | 1hs |
| Vasd=91 | mph; TCDL=6.0psf; BC | DL=6.0psf; h=25ft; C | Cat. | - (| | | . / | | | | M- | NIM | | 10 |
| II; Exp C | ; Enclosed; MWFRS (en | velope) exterior zon | e; | | | | | | | Ŭ | 27 | DE 2017 | 12002 | B |
| cantileve | r left and right exposed | | | | | | | | N | ON PE-201/ | J10993 / Q | 0 | | |

right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- Provide adequate drainage to prevent water ponding. 3)
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 4)

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E

April 11,2024

SSIONAL

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | D2 | Нір | 1 | 1 | Job Reference (optional) | 164799603 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:04 ID:vQA9kMu8MGvqrCbyKBnAxqzX6jx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:34

Plate Offsets (X, Y): [9:Edge,0-3-8]

| Loa TCL TCD BCL BCD | ding L (roof) L L | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2021 | /TPI2014 | CSI TC BC WB Matrix-S | 0.33 0.48 0.05 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.05 -0.08 0.07 0.04 | (loc) 13-14 13-14 9 13-14 | l/defl >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 40 lb | GRIP 197/144 FT = 10% | |
|---|--|--|---|---|------------|--|----------------------|--|--------------------------------------|---------------------------------------|---------------------------------------|---------------------------------|---------------------------------|------------------------------------|---|
| LUM TOP BOT WEE BRA TOP | CHORD CHORD CHORD SS CHORD | 3ER 5) * This truss has been designed for a live load of 20.0psf CHORD 2x4 SPF No.2 CHORD 2x4 SPF No.2 S 2x3 SPF No.2 *Except* 16-2,9-7:2x4 SPF No.2 S CHORD Structural wood sheathing directly applied or 5-11-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5. CHORD Rigid ceiling directly applied or 10-0-0 oc (b) * This truss has been designed for a live load of 20.0psf (on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide will fit between the bottom (c) O tall by 2-00-00 wide | | | | | | | | | | | | | |
| REA | CTIONS | bracing. (size) 9=0-3-8, 1 Max Horiz 16=-55 (L Max Uplift 9=-79 (LC Max Grav 9=598 (LC | 16=0-3-8 C 6) : 9), 16=-79 (LC 8) C 1), 16=598 (LC 1) | LO | AD CASE(S) | Standard | | | | | | | | | |
| FOR | CES | (lb) - Maximum Com | pression/Maximum | | | | | | | | | | | | |
| TOP | CHORD | 1-2=0/32, 2-3=-585/6 4-5=-741/86, 5-6=-8 7-8=0/32, 2-16=-546 | 62, 3-4=-838/77, 38/65, 6-7=-585/62, 5/89, 7-9=-546/85 | | | | | | | | | | | | |
| вот | CHORD | 15-16=-48/417, 14-1 13-14=-27/746, 12-1 10-11=-19/14, 6-11= | 5=-19/15, 3-14=-48/ 3=-28/740, 11-12=0 -48/44, 9-10=-19/41 | '45, /746, 8 | | | | | | | | | | ~ | |
| WEE | 3S | 4-13=0/151, 4-12=-1 | 06/107, 5-12=0/152 | | | | | | | | | | OFA | ALC D | |
| NOT | ES | | | | | | | | | | | 0 | FE | J. OSEIL | |
| 1) 1 | Unbalance | ed roof live loads have | been considered for | | | | | | | | | A | ANDR | EW | 8 |
| 2) | Wind: ASC Vasd=91n II; Exp C; I cantilever right expos Provide ac This truss chord live | 2E 7-16; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en left and right exposed sed; Lumber DOL=1.6 dequate drainage to pri has been designed for load nonconcurrent wi | | | | | | | (| A STAN | THOM JOHN NUMI PE-20170 | IAS SOL BER D18993 | | | |
| | | | | | | | | | | | | 6 | SIONA | L ENCE | |

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April 11,2024
| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | D3 | Roof Special | 2 | 1 | Job Reference (optional) | 164799604 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:04 ID:JBH?fxJ1gWse4qwjW6ww?izX6kh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:37.2

Plate Offsets (X, Y): [8:Edge,0-3-8]

2x4 SPF No.2

| | | | - | | | | | | | | | |
|-------------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.42 | Vert(LL) | -0.08 | 10-11 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.50 | Vert(CT) | -0.14 | 10-11 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.11 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.08 | 11-12 | >999 | 240 | Weight: 37 lb | FT = 10% |

LUMBER

WEBS

TOP CHORD 2x4 SPF No.2 BOT CHORD

6) Provide mechanical connection (by others) of truss to

bearing plate capable of withstanding 88 lb uplift at joint

14 and 88 lb uplift at joint 8. LOAD CASE(S) Standard

| BRACING | | |
|-----------|-------------------|------------------------------------|
| TOP CHORD | Structural | wood sheathing directly applied or |
| | 5-10-1 oc | purlins, except end verticals. |
| BOT CHORD | Rigid ceili | ng directly applied or 10-0-0 oc |
| | bracing. | |
| REACTIONS | (size) | 8=0-3-8, 14=0-3-8 |
| | Max Horiz | 14=-64 (LC 6) |
| | Max Uplift | 8=-88 (LC 9), 14=-88 (LC 8) |
| | Max Grav | 8=598 (LC 1), 14=598 (LC 1) |
| FORCES | (lb) - Max | imum Compression/Maximum |
| | Tension | |
| TOP CHORD | 1-2=0/32, | 2-3=-584/75, 3-4=-753/91, |
| | 4-5=-753/ | 105, 5-6=-584/76, 6-7=0/32, |
| | 2-14=-544 | 4/97, 6-8=-544/93 |
| BOT CHORD | 13-14=-7 <i>°</i> | 1/416, 12-13=-20/18, 3-12=-55/55, |
| | 11-12=-24 | 4/653, 10-11=-24/653, 9-10=-20/16 |

2x4 SPF No.2 *Except* 11-4:2x3 SPF No.2

WEBS

- NOTES
- Unbalanced roof live loads have been considered for 1) this design.

5-10=-55/56, 8-9=-30/416

4-11=0/276

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 3) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf 4) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 . 5)





| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | D4 | Common | 1 | 1 | Job Reference (optional) | 164799605 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:04 ID:IfFhA9xatGi7AKrnbwwbrMzX6Db-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



| 6-0-0 | 12-0-0 |
|-------|--------|
| 6-0-0 | 6-0-0 |
| | |

Scale = 1:31.6

Plate Offsets (X, Y): [3:Edge,0-3-8]

OUL ODE N. C

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-------------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.47 | Vert(LL) | -0.03 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.26 | Vert(CT) | -0.06 | 4-5 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.01 | 5-6 | >999 | 240 | Weight: 33 lb | FT = 10% |

LUMBER

| I OP CHORD | 2X4 SPF I | N0.2 |
|------------|-------------|------------------------------------|
| BOT CHORD | 2x4 SPF I | No.2 |
| WEBS | 2x4 SPF I | No.2 *Except* 5-2:2x3 SPF No.2 |
| BRACING | | |
| TOP CHORD | Structural | wood sheathing directly applied or |
| | 6-0-0 oc p | ourlins, except end verticals. |
| BOT CHORD | Rigid ceili | ng directly applied or 10-0-0 oc |
| | bracing. | |
| REACTIONS | (size) | 4=0-3-8, 6=0-3-8 |
| | Max Horiz | 6=-57 (LC 4) |
| | Max Uplift | 4=-64 (LC 9), 6=-64 (LC 8) |
| | Max Grav | 4=527 (LC 1), 6=527 (LC 1) |
| FORCES | (lb) - Max | imum Compression/Maximum |
| | Tension | · |
| TOP CHORD | 1-2=-642/ | 89, 2-3=-642/89, 1-6=-458/102, |
| | 3-4=-458/ | 102 |
| BOT CHORD | 5-6=-24/4 | 88, 4-5=-24/488 |

WEBS

NOTES

1) Unbalanced roof live loads have been considered for this design.

2-5=0/236

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SPF No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 6 and 64 lb uplift at joint 4.

LOAD CASE(S) Standard



Page: 1

April 11,2024



| Job | Truss | Truss Type | | Ply | Lot 183 HT | |
|---------|-------|---------------------|---|-----|--------------------------|-----------|
| B240069 | J1 | Diagonal Hip Girder | 1 | 1 | Job Reference (optional) | 164799606 |





Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:04

| Scale = 1:24.7 | | | | | | | | | | | | | |
|----------------|-------|-----------------|-----------------|-------------------|--------------|------------|-------|-------|--------|-----|---------------|----------|--|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | тс | 0.49 | Vert(LL) | -0.04 | 4-5 | >999 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.09 | 4-5 | >745 | 240 | | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.02 | 4-5 | >999 | 240 | Weight: 18 lb | FT = 10% | |
| LUMBER | | | 7) Hanger(s) of | or other connecti | ion device(s |) shall be | | | | | | | |

LUMBER

- 2x4 SPF No.2 TOP CHORD
- BOT CHORD 2x4 SPF No.2

2x4 SPF No.2 *Except* 3-4:2x3 SPF No.2 WEBS BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-4-9 Max Horiz 5=112 (LC 7) Max Uplift 4=-54 (LC 8), 5=-112 (LC 4) Max Grav 4=247 (LC 1), 5=381 (LC 1) FORCES (Ib) - Maximum Compression/Maximum Tension TOP CHORD 2-5=-335/154, 1-2=0/32, 2-3=-145/15,

3-4=-176/79 BOT CHORD 4-5=-31/53

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom 2) chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 .
- Refer to girder(s) for truss to truss connections. 5)
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint 5 and 54 lb uplift at joint 4.

- provided sufficient to support concentrated load(s) 78 lb down and 46 lb up at 3-0-14, and 67 lb down and 43 lb up at 3-6-3 on top chord, and 6 lb down at 3-0-14, and 6 lb down at 3-6-3 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others. 8) In the LOAD CASE(S) section, loads applied to the face
- of the truss are noted as front (F) or back (B). LOAD CASE(S) Standard
- 1)
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-2=-70, 2-3=-70, 4-5=-20
 - Concentrated Loads (lb) Vert: 8=-1 (F), 9=0 (B)



April 11,2024

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J2 | Jack-Open | 1 | 1 | Job Reference (optional) | 164799607 |

2-2-6

2-2-6

2-2-6

-0-10-8

0-10-8

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:04 ID:xnkGUwOwtzy37YrMGw5sbOzX6n9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



NUMBER

PE-2017018993

16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)



| Scale : | = 1:23.4 |
|---------|----------|
|---------|----------|

| Loading | (psf) | Spacing | 2-0-0 | csi | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|--|-------------------------------|--------------------------|-----------------|----------|------|----------|------|-------|--------|--------|--------------|----------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | 0.00 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | 0.00 | 4-5 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 7 lb | FT = 10% |
| LUMBER | | | | | | | | | | | | |
| TOP CHORD | 2x4 SPF No.2 | | | | | | | | | | | |
| BOT CHORD | 2x4 SPF No.2 | | | | | | | | | | | |
| WEBS | 2x3 SPF No.2 | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | |
| TOP CHORD | Structural wood she | athing directly applie | ed or | | | | | | | | | |
| | 2-2-6 oc purlins, ex | cept end verticals. | | | | | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 10-0-0 o | C | | | | | | | | | |
| | bracing. | | | | | | | | | | | |
| REACTIONS | (size) 3= Mecha | anical, 4= Mechanica | al, | | | | | | | | | |
| | 5=0-3-8 Max Hariz 5-52 (LC | 0) | | | | | | | | | | |
| | Max Holiz 5=52 (LC | (0) | | | | | | | | | | |
| | Max Gray 3=56 (LC | (1) 1 - 38 (1 - 3) 5 - 3 | 177 | | | | | | | | | |
| | | 1), 4–30 (LO 3), 3– | | | | | | | | | | |
| FORCES | (lb) - Maximum Com | nression/Maximum | | | | | | | | | | |
| 1011020 | Tension | | | | | | | | | | | |
| TOP CHORD | 2-5=-155/44, 1-2=0/ | 31, 2-3=-42/19 | | | | | | | | | | |
| BOT CHORD | 4-5=0/0 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | |
| 1) Wind: AS | CE 7-16: Vult=115mph | (3-second aust) | | | | | | | | | | |
| Vasd=91r | mph; TCDL=6.0psf; BC | DL=6.0psf; h=25ft; (| Cat. | | | | | | | | | |
| II; Exp C; | Enclosed; MWFRS (er | nvelope) exterior zor | ne; | | | | | | | | | |
| cantilever | left and right exposed | ; end vertical left an | d | | | | | | | | | ~ |
| right exposed; Lumber DOL=1.60 plate grip DOL=1.60 | | | | | | | | | | | A | and |
| 2) This truss has been designed for a 10.0 psf bottom | | | | | | | | | | NISS W | | |
| chord live load nonconcurrent with any other live loads. | | | | | | | | | | NS | | |
| on the her | ss nas been designed t | where a rectangle | ipsi | | | | | | | B | ANDR | EW YPY |
| 3-06-00 t | all by 2-00-00 wide will | fit between the botto | m | | | | | | | B | THON | IAS Y X |
| chord and | any other members | in botween the boll | //// | | | | | | | R . | | |
| | | | | | | | | | | M S | ···· | |

- All bearings are assumed to be SPF No.2 . 4)
- 5) Refer to girder(s) for truss to truss connections. 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 5 and 37 lb uplift at joint 3.

LOAD CASE(S) Standard

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------------|-----|-----|--------------------------|-----------|
| B240069 | J3 | Jack-Closed Girder | 1 | 1 | Job Reference (optional) | 164799608 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:04 ID:t_RJc21AOFeY_hPYtYXIEZzX6mK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:27.7

Plate Offsets (X, Y): [3:0-3-0,0-2-0]

| - | | | | | | | | | | | | | |
|--|------------------------|------------------------|--------|----------------|---------------------|------------|----------------|-------------|-------|--------|---------|---------------|----------|
| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.29 | Vert(LL) | -0.01 | 6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.18 | Vert(CT) | -0.01 | 6-7 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | | WB | 0.13 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC202 | 21/TPI2014 | Matrix-S | | Wind(LL) | 0.01 | 6 | >999 | 240 | Weight: 21 lb | FT = 10% |
| LUMBER | | | 8 |) Graphical pu | rlin representatio | on does no | ot depict the | size | | | | | |
| TOP CHORD | 2x4 SPF No.2 | | | or the orienta | ation of the purlin | along the | top and/or | | | | | | |
| BOT CHORD | 2x4 SPF No.2 | | 0 | bottom chore | 1. | | | | | | | | |
| WEBS | 2x3 SPF No.2 *Exce | pt* 7-2:2x4 SPF No | .2 9 |) Hanger(s) or | other connection | 1 device(s |) snall be | 04 | | | | | |
| BRACING | | | | b down and | 75 lb up at 2 11 | 6 on ton | lied load(s) I | 01 50 lb | | | | | |
| TOP CHORD | Structural wood shea | athing directly applie | ed or | down and 53 | 15 10 up at 3-11-6 | on hottom | chord The | 0010 | | | | | |
| | 5-11-4 oc purlins, ex | cept end verticals, | and | design/selec | tion of such conn | ection de | vice(s) is the | | | | | | |
| | 2-0-0 oc purlins: 3-4. | applied of 10,0,0 a | | responsibility | of others. | | | | | | | | |
| BUICHURD | bracing | applied of 10-0-0 of | ິ 1 | 0) In the LOAD | CASE(S) section | n, loads a | plied to the | face | | | | | |
| REACTIONS | bracing. | | | of the truss a | are noted as front | (F) or ba | ck (B). | | | | | | |
| REACTIONS | Max Horiz 7=109 (I C | 2 7) | L | OAD CASE(S) | Standard | | | | | | | | |
| | Max Liplift 5=-120 (L) | (5) 7 = -95 (1 C 8) | 1 |) Dead + Ro | of Live (balanced |): Lumber | Increase=1. | 15, | | | | | |
| | Max Grav 5=471 (10 | (10, 7) = 451 (10, 1) | | Plate Increa | ase=1.15 | | | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | | Uniform Lo | ads (lb/ft) | | | | | | | | |
| TOROLO | Tension | pression/maximum | | Vert: 1-2 | =-70, 2-3=-70, 3- | 4=-70, 5- | 7=-20 | | | | | | |
| TOP CHORD | 2-7=-396/119, 1-2=0 | /32, 2-3=-426/91, | | Vort: 6- | 259 (E) 2_ 91 (E | - | | | | | | | |
| | 3-4=-37/28, 4-5=-60/ | /33 | | ven. o=- | 250 (1), 5=-01 (1 |) | | | | | | | |
| BOT CHORD | 6-7=-102/314, 5-6=-1 | 102/302 | | | | | | | | | | | |
| WEBS | 3-6=-18/287, 3-5=-48 | 83/137 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Wind: AS | CE 7-16; Vult=115mph | (3-second gust) | | | | | | | | | | | |
| Vasd=91n | nph; TCDL=6.0psf; BC | DL=6.0psf; h=25ft; (| Cat. | | | | | | | | | 000 | ADD |
| II; Exp C; | Enclosed; MWFRS (en | velope) exterior zor | ne; | | | | | | | | | 8 OF M | ALCON D |
| cantilever | left and right exposed | ; end vertical left an | d | | | | | | | | 4 | 9.TE | -050.0 |
| right exposed; Lumber DOL=1.60 plate grip DOL=1.60 | | | | | | | | | | | A | 15/ | New M |
| 3) This trues | has been designed for | J. | | | | | | | | H | S/ ANDR | TH / C V | |
| chord live | load nonconcurrent wit | ds. | | | | | | | | N. | / THOM | IAS V V | |
| 4) * This truss has been designed for a live load of 20.0psf 4) * This truss has been designed for a live load of 20.0psf | | | | | | | squ 🖈 g | | | | | | |

- 4 on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 . 5)
- Refer to girder(s) for truss to truss connections. 6)
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 7 and 120 lb uplift at joint 5.

NUMBER OFFSSIONAL ET PE-2017018993 April 11,2024

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|-------------|-----|-----|--------------------------|-----------|
| B240069 | J4 | Jack-Closed | 1 | 1 | Job Reference (optional) | 164799609 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:05 ID:hWd0TDty?IY9Tx35FOpnLKzX6nq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.3

Plate Offsets (X, Y): [3:Edge,0-2-7]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-------------------------------|--|-------------------------|-----------------------------|------------------------|------------|----------------|-------|-------|--------|-------|---------------|---------------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.44 | Vert(LL) | -0.04 | 5-6 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.27 | Vert(CT) | -0.09 | 5-6 | >738 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.03 | 5-6 | >999 | 240 | Weight: 18 lb | FT = 10% |
| | | | | | | | | | | | 5 | |
| LUMBER | | | Provide r | nechanical connection | on (by oth | ers) of truss | to | | | | | |
| TOP CHORE | 2x4 SPF No.2 | | bearing p | late capable of withs | standing 5 | 4 lb uplift at | joint | | | | | |
| BOT CHORE | 2x4 SPF No.2 | | 6 and 61 | lb uplift at joint 5. | | | | | | | | |
| WEBS | 2x4 SPF No.2 *Exce | pt* 4-5:2x3 SPF No. | 2 9) Graphica | l purlin representatio | n does no | ot depict the | size | | | | | |
| BRACING | | | or the ori | entation of the purlin | along the | top and/or | | | | | | |
| TOP CHORE | Structural wood she | athing directly applie | d or bottom c | hord. | | | | | | | | |
| | 5-11-4 oc purlins, e | xcept end verticals, a | and LOAD CASE | (S) Standard | | | | | | | | |
| | 2-0-0 oc purlins: 3-4 | | | | | | | | | | | |
| BOT CHORE | Rigid ceiling directly | applied or 10-0-0 oc | ; | | | | | | | | | |
| | bracing. | | | | | | | | | | | |
| REACTIONS | (size) 5= Mecha | nical, 6=0-3-8 | | | | | | | | | | |
| | Max Horiz 6=144 (LC | C 5) | | | | | | | | | | |
| | Max Uplift 5=-61 (LC | 3), 6=-54 (LC 8) | | | | | | | | | | |
| | Max Grav 5=250 (LC | C 1), 6=334 (LC 1) | | | | | | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | | | | | | | | | | |
| |) 2-6292/101 1-2-0 |)/32 2-3153/32 | | | | | | | | | | |
| | 3-4=-57/47 4-5=-17 | 7/83 | | | | | | | | | | |
| BOT CHORE | 5-6=-42/43 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | |
| 1) Unbolon | and roof live loads have | boon considered for | | | | | | | | | | |
| this desired | ceu looi live loaus liave | been considered for | | | | | | | | | | |
| 2) Wind AS | SCF 7-16: Vult–115mph | (3-second quist) | | | | | | | | | | |
| 2) Wind. /(c Vasd-01 | mph: TCDI -6 Opsf: BC | DI -6 Onsf: h-25ft: C | `at | | | | | | | | Con | ADR |
| II: Exp C | · Enclosed: MWERS (er | velone) exterior zon | ۵. | | | | | | | | A OF I | MISC |
| cantileve | r left and right exposed | · end vertical left and | 4 | | | | | | | 1 | 750 | -00 M |
| right exp | osed: Lumber DOL=1.6 | 0 plate grip DOL=1.6 | 50 | | | | | | | R | A AND | New Yest |
| 3) Provide a | adequate drainage to pr | event water ponding | | | | | | | | a | S/ ANDE | EW / Y |
| This trus |) This truss has been designed for a 10.0 psf bottom | | | | | | | | | | | |
| chord liv | e load nonconcurrent wi | th any other live load | ds. | | | | | | / | N 🛪 | JOHN | SON X |
| 5) * This tru | iss has been designed f | | | | | | - 1 | M | m | units | | |
| on the bo | ottom chord in all areas | where a rectangle | • | | | | | | U | 27 | | BER /~U |
| 3-06-00 | all by 2-00-00 wide will | fit between the botto | m | | | | | | | 47 | DE 2017 | 010002 1419 |
| chord an | d any other members. | | | | | | | | | N | PE-2017 | 010775 CCC010 |
| 6) All bearin | ngs are assumed to be S | SPF No.2 . | | | | | | | | Y | 1 Pa | 1SA |
| 7) Refer to | girder(s) for truss to tru | ss connections. | | | | | | | | 0 | Story. | TENA |
| | | | | | | | | | | | WINA | L |

April 11,2024

tran



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J5 | Jack-Open | 8 | 1 | Job Reference (optional) | 164799610 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:05 ID:hRWJCz2l0szpJUs0G6bqb_zX6ou-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







| Scale = 1:27.7 | | | | | | | | | | | | |
|---|--|-----------------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | тс | 0.52 | Vert(LL) | -0.05 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.31 | Vert(CT) | -0.11 | 4-5 | >610 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.04 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.06 | 4-5 | >999 | 240 | Weight: 16 lb | FT = 10% |
| TOP CHORD BOT CHORD WEBS BRACING | 2x4 SPF No.2 2x4 SPF No.2 2x4 SPF No.2 | | | | | | | | | | | |
| TOP CHORD | 5-11-4 oc purlins, e | except end verticals. | ed or | | | | | | | | | |
| BOT CHORD | Rigid ceiling directly bracing. | applied or 10-0-0 o | с | | | | | | | | | |
| REACTIONS | (size) 3= Mecha | anical 4- Mechanica | al | | | | | | | | | |

5-11-4

| | | 5=0-3-8 |
|--------|------------|-----------------------------------|
| | Max Horiz | 5=127 (LC 8) |
| | Max Uplift | 3=-99 (LC 8), 5=-33 (LC 8) |
| | Max Grav | 3=180 (LC 1), 4=108 (LC 3), 5=336 |
| | | (LC 1) |
| FORCES | (lb) - Max | imum Compression/Maximum |

Tension TOP CHORD 2-5=-293/89, 1-2=0/32, 2-3=-112/62 BOT CHORD 4-5=0/0

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom 2) chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf
- 3) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 . 4)
- 5) Refer to girder(s) for truss to truss connections. Provide mechanical connection (by others) of truss to 6) bearing plate capable of withstanding 33 lb uplift at joint
- 5 and 99 lb uplift at joint 3. LOAD CASE(S) Standard





 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to dury with with where outputs into design is based only door parameters shown, and is for an individual building design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TPH1 Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J6 | Jack-Open | 7 | 1 | Job Reference (optional) | 164799611 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:05 ID:sk6BoHZCRZxUWLoKwitSzYzX6pW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







Scale = 1:30.3

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2021/TPI2014 | CSI TC 0. BC 0. WB 0. Matrix-R | .53 .29 .00 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.05 -0.11 0.05 0.06 | (loc) 4-5 4-5 4 5-6 | l/defl >999 >598 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 16 lb | GRIP 197/144 FT = 10% |
|---|--|--|---|--|-------------------|--|--------------------------------------|---------------------------------|---------------------------------------|---------------------------------|---|---|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD | 2x4 SPF No.2 2x4 SPF No.2 2x4 SPF No.2 Structural wood she 5-11-4 oc purlins, e Rigid ceiling directly bracing. | athing directly applie xcept end verticals. applied or 6-0-0 oc | LOAD CASE(S) | Standard | | | | | | | | |
| FORCES | (size) 3= Mecha 6=0-3-8 Max Horiz 6=127 (LC Max Uplifit 3=-100 (L Max Grav 3=180 (LC (LC 1) (lb) - Maximum Com Tension 2-6=-292/88, 1-2=0/2 | anical, 4= Mechanica C 8) C 8), 6=-32 (LC 8) C 1), 4=108 (LC 3), 6 apression/Maximum 32, 2-3=-112/63 | l, 3=336 | | | | | | | | | |
| NOTES Wind: ASC Vasd=91m II; Exp C; I cantilever right expos This truss chord live * This truss on the bott a chord and All bearing Refer to gi Bearing at using ANS Bearing at using ANS Provide m bearing pla 3 and 32 li | 5-0=-40/1, 4-5=0/0 CE 7-16; Vult=115mph rph; TCDL=6.0psf; BC Enclosed; MWFRS (er left and right exposed sed; Lumber DOL=1.6 has been designed for load nonconcurrent wi s has been designed for tom chord in all areas i ll by 2-00-00 wide will by 2-00-00 wide will tow chord in all areas i ll by 2-00-00 wide will sare assumed to be S irder(s) for truss to tru- joint(s) 6 considers pa B/TPI 1 angle to grain i should verify capacity co echanical connection (ate capable of withstar b uplift at joint 6. | (3-second gust) DL=6.0psf; h=25f; (nvelope) exterior zon ; end vertical left and 0 plate grip DOL=1.6 r a 10.0 psf bottom th any other live load or a live load of 20.0 where a rectangle fit between the botto SPF No.2 . ss connections. arallel to grain value formula. Building of bearing surface. (by others) of truss to holing 100 lb uplift at | Cat. le; d 30 ds. lpsf om | | | | | | C | * | ANDR THOM JOHNS NUME PE-20170 | AISSOLUE EW IAS DIN BER DI8993 |

April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|-------------|-----|-----|--------------------------|-----------|
| B240069 | J7 | Jack-Closed | 1 | 1 | Job Reference (optional) | 164799612 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:05 ID:VVntBmIPdp9ctz76d5UI4vzX6ps-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:32.8

Plate Offsets (X, Y): [4:Edge,0-2-7]

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2021 | 1/TPI2014 | CSI TC BC WB Matrix-S | 0.39 0.25 0.09 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.03 -0.05 0.02 0.02 | (loc) 7 7 6 7 | l/defl >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 21 lb | GRIP 197/144 FT = 10% |
|--|--|---|---|--|--|--|---|--|---------------------------|---------------------------------------|---------------------------------|---------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD | 2x4 SPF No.2 2x4 SPF No.2 2x3 SPF No.2 Structural wood she 5-11-4 oc purlins, e 2-0-0 oc purlins: 4-5 Rigid ceiling directly bracing | athing directly applie xcept end verticals, a applied or 10-0-0 oc | 8) 9) and 10, LQ | Bearing at joi using ANSI/T designer sho Provide mech bearing plate 8 and 64 lb u) Graphical pur or the orienta bottom chord DAD CASE(S) | nt(s) 8 considers p PI 1 angle to grain uld verify capacity nanical connection capable of withsta plift at joint 6. rlin representation tion of the purlin al Standard | earallel t formula of beari (by othe inding 5 does no long the | o grain value a. Building ng surface. ers) of truss t 1 lb uplift at j ot depict the s top and/or | o oint size | | | | | |
| REACTIONS | (size) 6= Mecha Max Horiz 8=128 (LC Max Uplift 6=-64 (LC Max Grav 6=252 (LC | nical, 8=0-3-8 C 5) S 8), 8=-51 (LC 8) C 1), 8=332 (LC 1) | | | | | | | | | | | |
| FORCES TOP CHORD BOT CHORD WEBS | CES (lb) - Maximum Compression/Maximum Tension CHORD 2-8=-398/108, 1-2=0/31, 2-3=-452/103, 3-4=-72/25, 4-5=-37/27, 5-6=-118/40 CHORD 7-8=-135/360, 6-7=-123/325 S 3-7=-71/75, 3-6=-317/147 | | | | | | | | | | | | |
| NOTES 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding. 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. 6) All bearings are assumed to be SPF No.2. 7) Refer to girder(s) for truss to truss connections. | | | | | | | STE OF M ANDR THOM JOHN PE-20170 PE-20170 | AISSOLD EW AAS DIN BER DI8993 | | | | | |

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Page: 1

| MiTek [®] |
|-----------------------------|
| 16023 Swingley Ridge Rd. |
| Chesterfield, MO 63017 |
| 314.434.1200 / MiTek-US.com |

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------------|-----|-----|--------------------------|-----------|
| B240069 | J8 | Jack-Closed Girder | 1 | 1 | Job Reference (optional) | 164799613 |

-0-10-8

Wheeler Lumber, Waverly, KS - 66871,

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:05 ID:juB8EnNkWSaOIHJVA77T?tzX6r2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:33.3

Plate Offsets (X, Y): [4:0-3-0,0-2-0]

| - | | | | | | | | | | | | | |
|--|--|---|---|--|--|--|--|-----------------------|-------|--------|-----|------------------------------------|------------------------|
| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.54 | Vert(LL) | -0.03 | 8 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.41 | Vert(CT) | -0.05 | 8 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | | WB | 0.14 | Horz(CT) | 0.03 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC202 | 1/TPI2014 | Matrix-S | | Wind(LL) | 0.03 | 8 | >999 | 240 | Weight: 20 lb | FT = 10% |
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD | 2x4 SPF No.2 2x4 SPF No.2 2x3 SPF No.2 *Exce 1.8E Structural wood shea 5-11-4 oc purlins, e: 2-0-0 oc purlins: 4-5 Rigid ceiling directly bracing. | pt* 9-2:2x4 SPF 21(athing directly applie xcept end verticals, applied or 10-0-0 or | 7) 00F 8) ed or 9) and c 10 | Bearing at jo using ANSI/ designer sho Provide mec bearing plate 6 and 93 lb u Graphical pu or the orienta bottom chord D) Hanger(s) or provided suf | int(s) 9 consider IPI 1 angle to gra- puld verify capaci- hanical connectia c capable of with uplift at joint 9. Irlin representatica- ation of the purlind d. other connection ficient to support | s parallel t ain formula ity of beari on (by oth- standing 1 on does no along the n device(s concentra | o grain value a. Building ng surface. ers) of truss f 20 lb uplift at t depict the s top and/or) shall be ted load(s) 1 | to t joint size | | | | | |
| REACTIONS | (size) 6= Mecha Max Horiz 9=94 (LC Max Uplift 6=-120 (L Max Grav 6=476 (LC | nical, 9=0-3-8 22) C 5), 9=-93 (LC 8) C 1), 9=453 (LC 1) | 11 | lb down and down and 55 design/selec responsibility) In the LOAD | 75 lb up at 3-11 b lb up at 3-11-6 tion of such conr of others. CASE(S) sectio | -6 on top o on bottom nection de n. loads as | chord, and 26 chord. The vice(s) is the | 64 lb face | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | | of the truss a | are noted as fron | t (F) or ba | ck (B). | | | | | | |
| TOP CHORD | 2-9=-583/153, 1-2=0 3-4=-569/170, 4-5=-2 |)/32, 2-3=-730/157, 27/19, 5-6=-64/33 | L(1) | DAD CASE(S) Dead + Roo Plate Increa | Standard of Live (balanced ase=1.15 | l): Lumber | Increase=1. | 15, | | | | | |
| WEBS | 3-8=-17/148, 4-7=-7 | 5/340, 4-6=-632/195 | 5 | Uniform Lo | ads (lb/ft) 70_2-470_4 | -570 8-0 | | 20 | | | | | |
| NOTES 1) Wind: AS Vasd=91r II; Exp C; cantilever right expc 2) Provide a 3) This truss chord live 4) * This trus on the bo | CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (er left and right exposed sed; Lumber DOL=1.6 dequate drainage to pro- has been designed for load nonconcurrent wi shas been designed for tom chord in all areas v | (3-second gust) DL=6.0psf; h=25ft; (velope) exterior zor ; end vertical left and 0 plate grip DOL=1.6 event water ponding : a 10.0 psf bottom th any other live load or a live load of 20.0 where a rectangle | Cat. he; d 60 g. ds. 0psf | Concentrat Vert: 7=- | , 2 10, 4 ed Loads (lb) 264 (B), 4=-82 (l | B) | | | | Ĺ | | STATE OF I ANDI THOM JOIN | MISSOLUTE WASSOLUTE |

3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

All bearings are assumed to be SPF No.2 . 5)

6) Refer to girder(s) for truss to truss connections.

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April 11,2024

PE-2017018993

SIONAL ET

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|---------------------|-----|-----|--------------------------|-----------|
| B240069 | J9 | Diagonal Hip Girder | 1 | 1 | Job Reference (optional) | 164799614 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:05 ID:36eLx9FDUbLZYIjwUh8VOazX74i-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:30.6

Plate Offsets (X, Y): [5:Edge,0-2-8]

| | | _ | | | | | | | | | | | | |
|--|---|---------------------------------------|--|---------------------------|--|--|---|---|--|--------------|----------------|------------|----------------|------------------------|
| Loading TCLL (roof) | (p 29 | osf) 5.0 | Spacing Plate Grip DOL | 2-0-0 1.15 | | CSI TC | 0.41 | DEFL Vert(LL) | in -0.05 | (loc) 6-7 | l/defl >999 | L/d 360 | PLATES MT20 | GRIP 197/144 |
| TCDL | 10 | 0.0 | Lumber DOL | 1.15 NO | | BC | 0.25 | Vert(CT) | -0.09 | 6-7 | >/34 | 240 | | |
| BCLL | 1 | 0.0 | Rep Stress Incr | | | WB Motrix P | 0.02 | Mind(LL) | 0.03 | 5 6 7 | n/a | n/a 240 | Woight: 19 lb | ET - 10% |
| BCDL | | 0.0 | Coue | IKCZUZ | 1/1712014 | IVIAULX-IN | | WING(LL) | 0.05 | 0-7 | >999 | 240 | weight. To b | FT = 1076 |
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD | 2x4 SPF No.2 2x4 SPF No.2 2x3 SPF No.2 Structural woo 6-0-0 oc purlin | *Exce d shea s, exc | ot* 7-2:2x4 SPF No.2 thing directly applied ept end verticals. | 7) <u>2</u> 8) d or | Provide mec bearing plate 7 and 56 lb u Hanger(s) or provided suff down and 49 up at 3-6-3 o | hanical connection (capable of withstar plift at joint 5. other connection do icient to support col lb up at 3-0-14, an on top chord, and 7 | (by oth nding 1 evice(s ncentra d 67 lb lb dow | ers) of truss 10 lb uplift a) shall be tted load(s) 8 o down and 4 n at 3-0-14, | to t joint 30 lb -2 lb and | | | | | |
| BOT CHORD | Rigid ceiling di bracing. | irectly | applied or 10-0-0 oc | | 6 lb down an design/selec | d 0 lb up at 3-6-3 o tion of such connec | n botto tion de | m chord. Th vice(s) is the | he | | | | | |
| REACTIONS | (size) 5= M Max Horiz 7=9 Max Uplift 5=-5 Max Grav 5=2 | Mechai 6 (LC 2 56 (LC 49 (LC | nical, 7=0-3-11 22) 8), 7=-110 (LC 4) 1), 7=383 (LC 1) | 9) LC | In the LOAD of the truss a | CASE(S) section, lo re noted as front (F Standard | oads aj) or ba | oplied to the ck (B). | face | | | | | |
| FORCES | (lb) - Maximum Tension | n Com | pression/Maximum | 1) | Plate Increa | of Live (balanced): L ase=1.15 ads (lb/ft) | umber | Increase=1. | 15, | | | | | |
| TOP CHORD | 2-7=-353/134, 3-4=-126/44, 4 | 1-2=0/ -5=-14 | /32, 2-3=-208/9, 10/36 | | Vert: 1-2 | =-70, 2-4=-70, 6-7=- | -20, 5-0 | 6=-20 | | | | | | |
| BOT CHORD WEBS | 6-7=-48/142, 5 3-6=-18/76 | 6=-47 | 7/137 | | Vert: 10= | -6 (B), 11=0 (F) | | | | | | | | |
| NOTES | | | | | | | | | | | | | | |
| 1) Wind: ASC | CE 7-16; Vult=11 | 5mph | (3-second gust) | ~1 | | | | | | | | | | |

Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

This truss has been designed for a 10.0 psf bottom 2) chord live load nonconcurrent with any other live loads.

- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 . 4)
- Refer to girder(s) for truss to truss connections. 5)
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building 6) designer should verify capacity of bearing surface.

 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J10 | Jack-Open | 1 | 1 | Job Reference (optional) | 164799615 |

-0-10-8

0-10-8

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:05 ID:Lf_ii6jcs4opGXLTvSMBcIzX75O-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1







2-2-6

2-2-6

Scale = 1:26.1

| Loading TCLL (roof) TCDL | (| (psf) 25.0 10.0 | Spacing Plate Grip DOL Lumber DOL | 2-0-0 1.15 1.15 | CSI TC BC | 0.07 0.03 | DEFL Vert(LL) Vert(CT) | in 0.00 0.00 | (loc) 4-5 4-5 | l/defl >999 >999 | L/d 360 240 | PLATES MT20 | GRIP 197/144 |
|---|--|---------------------------------|---|------------------------|------------------------|--------------|-------------------------------------|--------------------|---------------------|------------------------|-------------------|---|------------------------|
| BCLL BCDL | | 0.0* 10.0 | Rep Stress Incr Code | YES IRC2021/TPI2014 | WB Matrix-R | 0.00 | Horz(CT) Wind(LL) | 0.00 0.00 | 3 4-5 | n/a >999 | n/a 240 | Weight: 7 lb | FT = 10% |
| LUMBER | | | | LOAD CASE(S) | Standard | | i | | | | | | |
| TOP CHORD BOT CHORD WEBS | 2x4 SPF No.2 2x4 SPF No.2 2x4 SPF No.2 | 2 2 2 | | | | | | | | | | | |
| BRACING TOP CHORD | Structural wo | od shea | thing directly applie | d or | | | | | | | | | |
| BOT CHORD | 2-2-6 oc purli Rigid ceiling o bracing. | ins, exc directly a | ept end verticals. applied or 6-0-0 oc | | | | | | | | | | |
| REACTIONS | (size) 3= | Mechar | nical, 4= Mechanica | I, | | | | | | | | | |
| | Max Horiz 5= Max Uplift 3= Max Grav 3= | 51 (LC 8 -37 (LC 54 (LC 1 | 3) 8), 5=-23 (LC 8) 1), 4=36 (LC 3), 5=1 | 79 | | | | | | | | | |
| FORCES | (lb) - Maximu | m Comp | pression/Maximum | | | | | | | | | | |
| TOP CHORD | 2-5=-157/44, | 1-2=0/3 | 2, 2-3=-42/18 | | | | | | | | | | |
| BOT CHORD | 4-5=-17/11 | | | | | | | | | | | | |
| NOTES | | 15mph | (2 accord quat) | | | | | | | | | | |
| Vasd=91n II; Exp C; cantilever | nph; TCDL=6.0p Enclosed; MWF left and right ex | psf; BCE RS (env posed ; | DL=6.0psf; h=25ft; C velope) exterior zon end vertical left and | Cat. e; J | | | | | | | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | <i>T</i> |
| right expo 2) This truss | sed; Lumber DC | DL=1.60 |) plate grip DOL=1.6 a 10.0 psf bottom | 60 | | | | | | | | OFA | ALC. |
| chord live | load nonconcur | rrent wit | h any other live load | ls. | | | | | | | | FIE | NOSCH SCIENCE |
| This trus | ss has been des | igned fo | or a live load of 20.0 | psf | | | | | | | R | AN ANDR | EW Con |
| on the bot | ttom chord in all | areas w | vhere a rectangle | ~ | | | | | | | R | > ANDR | EW YAY |
| chord and | any other mem | ide will li bers. | it between the botto | | | | | | | | 8+ | | |
| 4) All bearing | gs are assumed | l to be S | PF No.2 . | | | | | | | - / | | 6 | The date |
| Refer to g Reserved to g | irder(s) for trus | s to trus | s connections. | | | | | | | 6 | M -2 | NUM | BER A |
| using ANS | SI/TPI 1 angle to | o grain fo | ormula. Building | | | | | | | | 87 | PE-20170 | 018993 |
| designer s | should verify cap | pacity of | bearing surface. | | | | | | | | V | The second | 188 |
| Provide m bearing pl | nechanical conne late canable of v | ection (t | by others) of truss to ding 23 lb unlift at ic |) Jint | | | | | | | | SION | L ENUS |
| 5 and 37 l | lb uplift at joint 3 | 3. | | , | | | | | | | | A NA | |
| | | | | | | | | | | | | | |

ıg uρ 5 and 37 lb uplift at joint 3.



April 11,2024

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J11 | Jack-Open | 1 | 1 | Job Reference (optional) | 164799616 |

2-6-0

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:05 ID:ekNwbhbLC?YD3?aYJLArCBzX75Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:22.9

| Loading TCLL (roof) | | (psf) 25.0 | Spacing Plate Grip DOL | 2-0-0 1.15 | CSI TC | 0.08 | DEFL Vert(LL) | in 0.00 | (loc) 3-4 | l/defl >999 | L/d 360 | PLATES MT20 | GRIP 197/144 |
|--|----------------|-----------------------|----------------------------------|--------------------|-----------|------|------------------|------------|--------------|----------------|------------|----------------|------------------------|
| TCDL | | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 3-4 | >999 | 240 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.00 | 3-4 | >999 | 240 | Weight: 7 lb | FT = 10% |
| LUMBER | | | | LOAD CASE(S) | Standard | | | | | | | | |
| TOP CHORD | 2x4 SPF | No.2 | | | | | | | | | | | |
| BOT CHORD | 2x4 SPF | No.2 | | | | | | | | | | | |
| WEBS | 2x4 SPF | No.2 | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | | |
| TOP CHORD | Structura | wood shea | athing directly applie | ed or | | | | | | | | | |
| | 2-6-0 oc | ourlins, exc | cept end verticals. | | | | | | | | | | |
| BOT CHORD | Rigid ceil | ing directly | applied or 6-0-0 oc | | | | | | | | | | |
| | bracing. | | | | | | | | | | | | |
| REACTIONS | (size) | 2= Mecha | nical, 3= Mechanica | al, | | | | | | | | | |
| | Max Horiz | 4=0-3-0 4=36 (LC | 5) | | | | | | | | | | |
| | Max Linlift | 2-30 (LC | (3) | | | | | | | | | | |
| | Max Grav | 2= 00 (LO 2=75 (LC | 1) $3=44 (I C 3) 4=$ | 103 | | | | | | | | | |
| | max crav | (LC 1) | 1), 0=11 (20 0), 1= | 100 | | | | | | | | | |
| FORCES | (lb) - Max | imum Com | pression/Maximum | | | | | | | | | | |
| | Tension | | | | | | | | | | | | |
| TOP CHORD | 1-4=-86/2 | 7, 1-2=-38/ | /23 | | | | | | | | | | |
| BOT CHORD | 3-4=-12/1 | 1 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Wind: ASC | CE 7-16; Vu | lt=115mph | (3-second gust) | | | | | | | | | | |
| Vasd=91n | nph; TCDL= | 6.0psf; BC | DL=6.0psf; h=25ft; (| Cat. | | | | | | | | | |
| II; Exp C; | Enclosed; N | IWFRS (en | velope) exterior zor | ne; | | | | | | | | | |
| cantilever | left and righ | t exposed | ; end vertical left an | d | | | | | | | | | The |
| right expo | sed; Lumbe | r DOL=1.60 | D plate grip DOL=1. | 60 | | | | | | | | O DE I | ALC D |
| Inis truss chord live | has been u | esigned ior | th any other live loa | de | | | | | | | 6 | AREUTI | IISS W |
| 3) * This trus | s has been | designed for | or a live load of 20 (| us. Inef | | | | | | | A | | N.S |
| on the bot | tom chord i | n all areas i | where a rectangle | JP 31 | | | | | | | A | ANDE | EW PN |
| 3-06-00 ta | ll by 2-00-0 | 0 wide will 1 | fit between the botto | om | | | | | | | a | 7 THOM | IAS Y |
| chord and | any other r | nembers. | | | | | | | | | N A | JOHN | |
| 4) All bearing | js are assui | med to be S | SPF No.2 . | | | | | | | - 1 | K. | | |
| 5) Refer to g | irder(s) for | truss to trus | ss connections. | | | | | | | U | N/ | jung | |
| Bearing at | joint(s) 4 c | onsiders pa | arallel to grain value | | | | | | | | 13 | S NUM | BER ED |
| using ANS | SI/TPI 1 ang | le to grain f | formula. Building | | | | | | | | N. | OX PE-2017 | 018993 |
| designer s | hould verify | capacity o | t bearing surface. | _ | | | | | | | V | The second | 158 |
| Provide m | echanical C | orinection (| by others) of truss t | U int 4 | | | | | | | 0 | A Store | FNOA |
| and 39 lb | uplift at ioin | t 2. | iung 4 ib upint at jo | IIII. 4 | | | | | | | | O NA | L |

April 11,2024

org) Mittek-US.com

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J12 | Jack-Open | 1 | 1 | Job Reference (optional) | 164799617 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:06 ID:LNSH7IWyssfDjwYCPNYCQjzX75f-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







Scale = 1:25

| Loading TCLL (r TCDL BCLL | g roof) | | (psf) 25.0 10.0 0.0* | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr | 2-0-0 1.15 1.15 YES | CSI TC BC WB | 0.36 0.22 0.00 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.02 -0.05 0.02 | (loc) 4-5 4-5 2 | l/defl >999 >999 n/a | L/d 360 240 n/a | PLATES MT20 | GRIP 197/144 | |
|---|---|---|---|--|------------------------------|-----------------------|----------------------|---|------------------------------|--------------------------|-------------------------------|--------------------------|-----------------------|------------------------|---|
| BCDL | | | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.03 | 4-5 | >999 | 240 | Weight: 12 lb | FT = 10% | |
| LUMBE TOP CH BOT CH WEBS BRACIN | R Hord Hord Hord | 2x4 SPF No.: 2x4 SPF No.: 2x4 SPF No.: | 2 2 2 | | LOAD CASE(S) | Standard | | | | | | | | | |
| TOP CF | IORD | 4-11-4 oc pu | rlins, ex | cept end verticals. | a or | | | | | | | | | | |
| BOT CH | HORD | Rigid ceiling bracing. | directly | applied or 6-0-0 oc | | | | | | | | | | | |
| REACT | IONS | (size) 2= | Mechar | nical, 3= Mechanica | l, | | | | | | | | | | |
| | | 5= Max Horiz 5= Max Uplift 2= Max Grav 2= | =0-3-8 =74 (LC 8 =-76 (LC =152 (LC | 3) 8), 5=-15 (LC 8) 1), 3=90 (LC 3), 5= | 213 | | | | | | | | | | |
| FORCE | s | (lb) - Maximu | um Comp | pression/Maximum | | | | | | | | | | | |
| | | Tension | 4 0 70 | | | | | | | | | | | | |
| TOP CF | | 1-5=-179/60, 4-5=-31/7 3- | -1-2=-78 -4=0/0 | 6/46 | | | | | | | | | | | |
| NOTES | | 10-0111,0 | 1-0/0 | | | | | | | | | | | | |
| 1) Win Vas II; E can righ | nd: ASC sd=91m Exp C; E stilever I nt expos | E 7-16; Vult=1 ph; TCDL=6.0 Enclosed; MWF eft and right e sed; Lumber D0 | I15mph psf; BCI FRS (en xposed ; OL=1.60 | (3-second gust) DL=6.0psf; h=25ft; C velope) exterior zon end vertical left and plate grip DOL=1.6 | Cat. e; d | | | | | | | | | all a | |
| 2) This | s truss l | has been desig | gned for | a 10.0 psf bottom | le le | | | | | | | | FE OF M | IISS | |
| 3) * Th on t 3-06 cho | the bott 6-00 tal | s has been des om chord in all I by 2-00-00 w any other men | signed fo l areas v ide will f | vhere a rectangle it between the botto | psf m | | | | | | | | STANDR THOM | EW AS | 2 |
| All t All t Ref Bea usir des Pro bea | bearing er to gil aring at ng ANS signer sl vide me aring pla | s are assumed rder(s) for trus joint(s) 5 cons I/TPI 1 angle to hould verify ca echanical conn ate capable of v | d to be S s to trus iders pa o grain fu pacity of nection (b withstan | PF No.2. s connections. rallel to grain value ormula. Building bearing surface. by others) of truss to ding 15 lb uplift at ic |) bint | | | | | | l | Physic | PE-20170 | IER 118993 | ~ |
| 5 ar | nd 76 lb | o uplift at joint 2 | 2. | 5 | - | | | | | | | | Can | ALL STORE | |



April 11,2024

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J13 | Jack-Open | 2 | 1 | Job Reference (optional) | 164799618 |

3-11-4

3-11-4

3-11-4

-0-10-8

0-10-8

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:06 ID:6fPtFDPJz5XV8YMTN_u4YpzX75o-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





| Scale | = | 1:25.2 |
|-------|---|--------|
| Scale | - | 1.20.2 |

| Loading TCLL (roof) | (psf) 25.0 | Spacing Plate Grip DOL | 2-0-0 1.15 | CSI TC | 0.21 | DEFL Vert(LL) | in -0.01 | (loc) 4-5 | l/defl >999 | L/d 360 | PLATES MT20 | GRIP 197/144 |
|--|---|---|-----------------|-----------|------|-------------------------|-------------|--------------|----------------|------------|----------------|------------------------|
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.13 | Vert(CT) | -0.02 | 4-5 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.01 | 4-5 | >999 | 240 | Weight: 11 lb | FT = 10% |
| LUMBER TOP CHORD BOT CHORD WEBS | <pre></pre> | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | |
| TOP CHORD | Structural wood she 3-11-4 oc purlins, e | athing directly applie xcept end verticals. | ed or | | | | | | | | | |
| BOT CHORD | Rigid ceiling directly bracing. | applied or 10-0-0 oc | 2 | | | | | | | | | |
| REACTIONS | (size) 3= Mecha 5=0-3-8 Max Horiz 5=87 (LC Max Uplift 3=-68 (LC Max Grav 3=118 (LC | 3= Mechanical, 4= Mechanical, 5=0-3-8 Horiz 5=87 (LC 8) Uplift 3=-68 (LC 8), 5=-27 (LC 8) Grav 3=118 (LC 1), 4=72 (LC 3), 5=247 | | | | | | | | | | |
| FORCES | (LC 1) (Ib) - Maximum Corr | pression/Maximum | | | | | | | | | | |
| | Tension | | | | | | | | | | | |
| TOP CHORD | 2-5=-215/63, 1-2=0/ | 31, 2-3=-75/41 | | | | | | | | | | |
| BOT CHORD | 4-5=0/0 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | |
| Wind: ASC Vasd=91n II; Exp C; I cantilever right exposition This truss object lives | Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 This truss has been designed for a 10.0 psf bottom | | | | | | | | | | | |
| 3) * This trus on the bot 3-06-00 ta chord and 4) All bearing | * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. All bearings are assumed to be SPF No.2. | | | | | | | | | | | |
| Refer to gi | Refer to girder(s) for truss to truss connections. | | | | | | | | | | | |

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 5 and 68 lb uplift at joint 3.

LOAD CASE(S) Standard



PE-2017018993

SIONAL ET

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | | | |
|---------|-------|--------------------|-----|-----|--------------------------|-----------|--|--|
| B240069 | J14 | Jack-Closed Girder | 1 | 1 | Job Reference (optional) | 164799619 | | |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:06 ID:A5xqBA73KJ9nRi5lH3nsTfzX6ty-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:43.5

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|-------------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|--|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | тс | 0.26 | Vert(LL) | -0.01 | 6-7 | >999 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.41 | Vert(CT) | -0.02 | 6-7 | >999 | 240 | | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.01 | 4 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.01 | 6-7 | >999 | 240 | Weight: 12 lb | FT = 10% | |
| | | | | | | | | | - | | | | |

LUMBER

| TOP CHORD | 2x4 SPF I | No.2 |
|-----------|-------------|------------------------------------|
| BOT CHORD | 2x4 SPF I | No.2 *Except* 6-2:2x3 SPF No.2 |
| WEBS | 2x3 SPF I | No.2 |
| BRACING | | |
| TOP CHORD | Structural | wood sheathing directly applied or |
| | 3-11-4 oc | purlins, except end verticals. |
| BOT CHORD | Rigid ceili | ng directly applied or 10-0-0 oc |
| | bracing. | |
| REACTIONS | (size) | 4= Mechanical, 7=0-3-8 |
| | Max Horiz | 7=80 (LC 22) |
| | Max Uplift | 4=-67 (LC 8), 7=-34 (LC 8) |
| | Max Grav | 4=282 (LC 1), 7=278 (LC 1) |
| FORCES | (lb) - Max | imum Compression/Maximum |

Tension TOP CHORD 1-7=-217/35, 1-2=-222/28, 2-3=-43/15, 3-4=-68/20

BOT CHORD 6-7=-38/136, 5-6=-33/107, 2-5=-92/26, 4-5=-20/44

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom 2)
- chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf 3) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 . 4)
- 5) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to 6) bearing plate capable of withstanding 34 lb uplift at joint 7 and 67 lb uplift at joint 4.

- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 153 Ib down and 8 lb up at 2-0-0 on top chord, and 109 lb down and 65 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (lb/ft)
 - Vert: 1-3=-70, 6-7=-20, 4-5=-20 Concentrated Loads (lb)

Vert: 8=-116 (B), 9=-109 (B)



Page: 1



16023 Swingley Ridge Rd. Chesterfield MO 63017 314.434.1200 / MiTek-US.com

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|---------------------|-----|-----|--------------------------|-----------|
| B240069 | J15 | Diagonal Hip Girder | 1 | 1 | Job Reference (optional) | 164799620 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:06 ID:W8_Jb?dXH6KjrYu_3rDrQ6zX76p-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1



Scale = 1:27.3

Plate Offsets (X, Y): [5:Edge,0-2-8], [6:0-3-0,0-2-12]

| | | | | | | _ | | | | | | | |
|--|---|---|---------------------------------------|--|--|---|---|--|----------------------|---------------------------------------|---------------------------------|---------------------------------|------------------------------------|
| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 NO IRC202 | 1/TPI2014 | CSI TC BC WB Matrix-R | 0.40 0.27 0.03 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.06 -0.11 0.04 0.06 | (loc) 6 5 6 | l/defl >999 >604 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 18 lb | GRIP 197/144 FT = 10% |
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SPF No.2 2x4 SPF No.2 2x3 SPF No.2 *Exce Structural wood she 6-0-0 oc purlins, exx Rigid ceiling directly bracing. (size) 5= Mecha Max Horiz 7=95 (LC Max Uplift 5=-55 (LC Max Grav 5=245 (LC | ept* 7-2:2x4 SPF No.: athing directly applie cept end verticals. applied or 10-0-0 oc anical, 7=0-3-11 5) 5), 7=-109 (LC 4) C 1), 7=379 (LC 1) | 7) 2 8) d or 9) LC | Provide mec bearing plate 7 and 55 lb of Hanger(s) of provided suf down and 44 up at 3-6-3 6 lb down ar design/selec responsibility In the LOAD of the truss a DAD CASE(S) | chanical connection e capable of with uplift at joint 5. r other connection ficient to support 4 lb up at 2-11-1 on top chord, and d 0 lb up at 3-5- ction of such coni y of others. CASE(S) section are noted as from Standard of Live (happed | ion (by othe standing 1 in device(s t concentra 1, and 67 I d 4 Ib down -2 on botto nection dev in, loads ap tt (F) or bac | ers) of truss 09 lb uplift a) shall be ted load(s) 7 b down and n at 2-11-11 m chord. Th vice(s) is the oplied to the ck (B). | to t joint 76 lb 42 lb , and he face | | | | | |
| FORCES TOP CHORD BOT CHORD WEBS | (lb) - Maximum Com Tension 2-7=-348/127, 1-2=0 3-4=-122/36, 4-5=-1 6-7=-41/126, 5-6=-4 3-6=-11/80 | pression/Maximum)/32, 2-3=-195/0, 49/47 2/123 | 1) | Plate Incre Uniform Lo Vert: 1-2 Concentrat Vert: 6=0 | ase=1.15 ads (lb/ft) =-70, 2-4=-70, 6 ed Loads (lb) D (B), 9=-1 (F) | -7=-20, 5-6 | 5=-20 | . 13, | | | | | |

NOTES

Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

This truss has been designed for a 10.0 psf bottom 2) chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf 3) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 . 4)
- Refer to girder(s) for truss to truss connections. 5)
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building 6) designer should verify capacity of bearing surface.
 - WARNING Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to dury with with where outputs into design is based only door parameters shown, and is for an individual building design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TPH1 Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)





| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J16 | Jack-Open | 5 | 1 | Job Reference (optional) | 164799621 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:06 ID:GbMd0UuvPhnEeKISZE8m_SzX77I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





2-8-10

Page: 1



April 11,2024





Scale = 1:27.9

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2021/TPI2014 | CSI TC BC WB Matrix-R | 0.20 0.11 0.00 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.01 -0.02 -0.01 0.01 | (loc) 5-6 5-6 3 5-6 | l/defl >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 12 lb | GRIP 197/144 FT = 10% |
|--|--|---|--|---|--|----------------------|--|---------------------------------------|---------------------------------|---------------------------------------|---------------------------------|---------------------------------|------------------------------------|
| LUMBER TOP CHORD | 2x4 SPF N | lo.2 | | LOAD CASE(S) | Standard | | | | | | | | |
| WEBS | 2x4 SPF N 2x4 SPF N | lo.2 | | | | | | | | | | | |
| | IG | | | | | | | | | | | | |
| TOF CHORD | 3-11-4 oc | purlins, ex | ccept end verticals. | | | | | | | | | | |
| BOT CHORD | Rigid ceilir bracing. | ng directly | applied or 6-0-0 oc | | | | | | | | | | |
| REACTIONS | (size) | 3= Mecha | nical, 4= Mechanica | ıl, | | | | | | | | | |
| | Max Horiz | 6=0-3-8 6=86 (LC) | 8) | | | | | | | | | | |
| | Max Uplift | 3=-67 (LC | 8), 6=-26 (LC 8) | 0.40 | | | | | | | | | |
| | Max Grav | 3=115 (LC (LC 1) | 5 T), 4=70 (LC 3), 6= | =249 | | | | | | | | | |
| FORCES | (Ib) - Maximum Compression/Maximum | | | | | | | | | | | | |
| TOP CHORD | 2-6=-217/6 | 64, 1-2=0/3 | 32, 2-3=-74/40 | | | | | | | | | | |
| BOT CHORD | 5-6=-35/3, | 4-5=0/0 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| Wind: ASC Vasd=91m II; Exp C; E cantilever I | E 7-16; Vult ph; TCDL=6 Enclosed; M' left and right | =115mph 5.0psf; BCI WFRS (en exposed : | (3-second gust) DL=6.0psf; h=25ft; (velope) exterior zon ; end vertical left and | Cat. ie; d | | | | | | | | | |
| right expos | ed; Lumber | DOL=1.60 | 0 plate grip DOL=1.6 | 60 | | | | | | | | A STORE | and the |
| 2) I his truss | has been de load noncon | signed for | a 10.0 pst bottom | 40 | | | | | | | | FE OF M | IISS Q |
| 3) * This truss | s has been c | lesigned fo | or a live load of 20.0 | lpsf | | | | | | | A | AN | Ne |
| on the bott | om chord in | all areas v | where a rectangle | | | | | | | | A | S ANDR | EW / C V |
| chord any other members. | | | | | | | | | | | | | |
| 4) All bearing | All bearings are assumed to be SPF No.2. | | | | | | | | | | | | |
| 5) Refer to gi | rder(s) for the | russ to trus | ss connections. | | | | | | | | 10-0 | NUM | RER A |
| using ANS | I/TPI 1 angle | e to grain f | formula. Building | | | | | | | | 87 | PE-20170 | 18993 |
| designer s | hould verify | capacity o | f bearing surface. | _ | | | | | | | V | The second | 18 B |
| bearing pla | echanical co ate capable (| of withstan | by others) of truss to Iding 26 lb uplift at ic | bint | | | | | | | | SIONIA | EN |
| 6 and 67 lb | 6 and 67 lb uplift at joint 3. | | | | | | | | | | | | |

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J17 | Jack-Open | 1 | 1 | Job Reference (optional) | 164799622 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:06 ID:ea4V_hRVmplpKNRUoA0iO8zX7CD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





-0-10-8

0-10-8

| 4-11-4 | |
|--------|--|
| | |

4-11-4

4-11-4

| Scale = 1:25.1 | | | ļ | | | | | | | | | |
|----------------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | тс | 0.35 | Vert(LL) | -0.02 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.21 | Vert(CT) | -0.05 | 4-5 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.02 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.02 | 4-5 | >999 | 240 | Weight: 13 lb | FT = 10% |

LUMBER

| TOP CHORD | 2x4 SPF No.2 |
|-----------|--|
| BOT CHORD | 2x4 SPF No.2 |
| WEBS | 2x3 SPF No.2 |
| BRACING | |
| TOP CHORD | Structural wood sheathing directly applied or 4-11-4 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc |

| | bracing. | |
|-----------|------------|----------------------------------|
| REACTIONS | (size) | 3= Mechanical, 4= Mechanical, |
| | | 5=0-3-8 |
| | Max Horiz | 5=90 (LC 8) |
| | Max Uplift | 3=-77 (LC 8), 5=-41 (LC 8) |
| | Max Grav | 3=151 (LC 1), 4=91 (LC 3), 5=290 |

(LC 1) FORCES (Ib) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-252/83, 1-2=0/26, 2-3=-79/45 BOT CHORD 4-5=0/0

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) The Fabrication Tolerance at joint 5 = 2%, joint 5 = 2%

 This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SPF No.2 .
- 6) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 5 and 77 lb uplift at joint 3.

LOAD CASE(S) Standard





| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J18 | Jack-Open | 3 | 1 | Job Reference (optional) | 164799623 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:06 ID:iONTsZoFFW3KUEuICYZHIzzX7D2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:31.3

| Loading | | (psf) | Spacing | 2-0-0 | CSI | 0.10 | DEFL | in 0.01 | (loc) | l/defl | L/d | PLATES | GRIP |
|--|--|--|---|------------------------|----------------|------|----------|------------|--------|-------------|------------|---------------|----------|
| | | 25.0 | | 1.15 | | 0.10 | | -0.01 | 0 | >999 | 300 | IVI I 20 | 197/144 |
| | | 10.0 | | 1.15 | BC | 0.19 | | -0.02 | | >999 | 240 | | |
| BCLL | | 10.0 | Code | 1ES IRC2021/TPI2014 | WB Matrix-R | 0.00 | Wind(LL) | 0.01 | 5 6 | n/a ∖qqq | n/a 240 | Weight: 12 lb | FT – 10% |
| BODL | | 10.0 | Obde | | Matrix IV | | Wind(EE) | 0.01 | | 2000 | 240 | Weight. 12 lb | 11 = 10% |
| LUMBER TOP CHORD BOT CHORD WEBS | 2x4 SPF No.2 2x4 SPF No.2 *Except* 7-3:2x3 SPF No.2 2x3 SPF No.2 | | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | | |
| TOP CHORD | Structural 3-11-4 oc | wood shea purlins, ex | athing directly applie cept end verticals. | d or | | | | | | | | | |
| BOT CHORD | Rigid ceilir bracing. | ng directly | applied or 10-0-0 oc | \$ | | | | | | | | | |
| REACTIONS | (size) | 4= Mecha 8=0-3-8 | nical, 5= Mechanica | l, | | | | | | | | | |
| | Max Horiz | 8=87 (LC | 8) | | | | | | | | | | |
| | Max Uplift | 4=-34 (LC | 8), 5=-25 (LC 8), 8= | -27 | | | | | | | | | |
| | Max Grav | (LC 8) Grav 4=87 (LC 1), 5=74 (LC 1), 8=247 (LC 1) | | | | | | | | | | | |
| FORCES | (lb) - Maxi Tension | mum Com | pression/Maximum | | | | | | | | | | |
| TOP CHORD | 2-8=-224/53, 1-2=0/31, 2-3=-129/0, 3-4=-21/35 | | | | | | | | | | | | |
| BOT CHORD | 7-8=-37/66 | 6. 6-7=0/53 | 3. 3-6=-22/45. 5-6=0 | /0 | | | | | | | | | |

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2 .
- 5) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 8, 34 lb uplift at joint 4 and 25 lb uplift at joint 5.

LOAD CASE(S) Standard



April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J19 | Jack-Open | 2 | 1 | Job Reference (optional) | 164799624 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:06 ID:dwwX_6b1Ni6lbovxr4OI7VzX7ML-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

 -0-10-8
 2-2-6

 0-10-8
 2-2-6



2-2-6

| Scale = | 1:23.4 |
|---------|--------|
|---------|--------|

| Loading | | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------------------------|--|----------------------|-----------------------------|-----------------|----------|------|----------|------|-------|--------|-----|--------------|----------|
| TCLL (roof) | | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | 0.00 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | 0.00 | 4-5 | >999 | 240 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 7 lb | FT = 10% |
| | | | | | | | | | | | | | |
| TOP CHORD | 2x4 SPF N | lo.2 | | | | | | | | | | | |
| BOT CHORD | 2x4 SPF N | lo.2 | | | | | | | | | | | |
| WEBS | 2x3 SPF N | lo.2 | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | | |
| TOP CHORD | Structural | wood she | athing directly appli | ed or | | | | | | | | | |
| | 2-2-6 oc p | urlins, exe | cept end verticals. | | | | | | | | | | |
| BOT CHORD | Rigid ceilir | ng directly | applied or 10-0-0 o | C | | | | | | | | | |
| | bracing. | | | | | | | | | | | | |
| REACTIONS | (size) | 3= Mecha | nical, 4= Mechanica | al, | | | | | | | | | |
| | Max Horiz | 5=0-3-0 5=52 (I C | 8) | | | | | | | | | | |
| | Max Linlift | 337 (1 C | 8) 523 (IC 8) | | | | | | | | | | |
| | Max Grav | 3=56 (LC | 1) $4=38 (1 \times 3) = 5=$ | 177 | | | | | | | | | |
| | max orav | (LC 1) | 1), 1–00 (20 0), 0– | | | | | | | | | | |
| FORCES | (lb) - Maxii Tension | mum Com | pression/Maximum | | | | | | | | | | |
| TOP CHORD | 2-5=-155/4 | 4, 1-2=0/3 | 31, 2-3=-42/19 | | | | | | | | | | |
| BOT CHORD | 4-5=0/0 | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Wind: AS | CE 7-16; Vult | t=115mph | (3-second gust) | | | | | | | | | | |
| Vasd=91r | nph; TCDL=6 | 6.0psf; BC | DL=6.0psf; h=25ft; | Cat. | | | | | | | | | |
| II; Exp C; | Enclosed; M | WFRS (en | velope) exterior zoi | ne; | | | | | | | | | |
| cantilever | left and right | exposed | ; end vertical left an | nd | | | | | | | | | m. |
| right expo | sed; Lumber | DOL=1.6 | D plate grip DOL=1. | .60 | | | | | | | | GOEL | A Part |
| I his truss | This truss has been designed tor a 10.0 pst bottom | | | | | | | | | NIS'S | | | |
| 3) * This true | s has been o | lesigned f | n any other live loa | ius. Onsf | | | | | | | A | | N.S. |
| | | | | | | | | | | | | | |

- This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2 .
- 5) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 5 and 37 lb uplift at joint 3.

LOAD CASE(S) Standard



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April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J20 | Jack-Open | 3 | 1 | Job Reference (optional) | 164799625 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:06 ID:deO6QIONNUyA2B6gL0amxvzX7Mc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





2-6-0

| Scale | - ' | 1.23 |
|-------|-----|------|

| Loading | | (psf) | Spacing | 2-0-0 | csi | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|---------------|--------------|---|-----------------|----------|------|----------|------|-------|--------|-----|--------------|----------|
| TCLL (roof) | | 25.0 | Plate Grip DOL | 1.15 | TC | 0.06 | Vert(LL) | 0.00 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 4-5 | >999 | 240 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 7 lb | FT = 10% |
| LUMBER | | | | | | | | | | | | | |
| TOP CHORD | 2x4 SPF I | No.2 | | | | | | | | | | | |
| BOT CHORD | 2x4 SPF I | No.2 | | | | | | | | | | | |
| WEBS | 2x3 SPF I | No.2 | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | | |
| TOP CHORD | Structural | wood she | athing directly applie | ed or | | | | | | | | | |
| | 2-6-0 oc p | ourlins, exc | cept end verticals. | | | | | | | | | | |
| BOT CHORD | Rigid ceili | ng directly | applied or 10-0-0 or | | | | | | | | | | |
| REACTIONS | bracing. | 2 Maaba | niael 4 Machaniae | | | | | | | | | | |
| REACTIONS | (SIZE) | 5=0-3-8 | filcal, 4= Mechanica | и, | | | | | | | | | |
| | Max Horiz | 5=48 (LC | 8) | | | | | | | | | | |
| | Max Uplift | 3=-38 (LC | 8), 5=-31 (LC 4) | | | | | | | | | | |
| | Max Grav | 3=67 (LC | 1), 4=44 (LC 3), 5=1 | 188 | | | | | | | | | |
| | | (LC 1) | | | | | | | | | | | |
| FORCES | (lb) - Max | imum Com | pression/Maximum | | | | | | | | | | |
| | Tension | | | | | | | | | | | | |
| TOP CHORD | 2-5=-165/ | 52, 1-2=0/2 | 26, 2-3=-40/20 | | | | | | | | | | |
| BOT CHORD | 4-5=0/0 | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Wind: AS | CE 7-16; Vu | lt=115mph | (3-second gust) | | | | | | | | | | |
| Vasd=91r | nph; TCDL= | 6.0psf; BC | DL=6.0psf; h=25ft; 0 | Cat. | | | | | | | | | |
| II; Exp C; | Enclosed; N | IWFRS (en | velope) exterior zor | ie; | | | | | | | | | |
| cantilever | left and righ | t exposed | ; end vertical left and | | | | | | | | | | m |
| 2) This trues | bas been d | scienced for | o plate grip DOL=1.t | 00 | | | | | | | | OFA | ALCON |
| chord live | load popco | current wi | a 10.0 psi bollom th any other live load | de | | | | | | | | ACEUT | NOSCILL |
| | | icunent wi | un any ouner live load | | | | | | | | | TN | |

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2 .
- 5) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 5 and 38 lb uplift at joint 3.

LOAD CASE(S) Standard



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April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|---------------------|-----|-----|--------------------------|-----------|
| B240069 | J21 | Diagonal Hip Girder | 1 | 1 | Job Reference (optional) | 164799626 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:06 ID:poYgJl7ICd88NnBjTU4N0NzX7Dv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:31.6

| | | | | - | | | | | | | - | | |
|---------------------|--------------|--|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|--|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| I CLL (roof) | 25.0 | Plate Grip DOL | 1.15 | IC | 0.30 | Vert(LL) | -0.03 | 7 | >999 | 360 | M120 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.53 | Vert(CT) | -0.06 | 7 | >999 | 240 | | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.03 | 5 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.03 | 6 | >999 | 240 | Weight: 18 lb | FT = 10% | |
| LUMBER TOP CHORD | 2x4 SPF No.2 | 7) Hanger(s) or other connection device(s) shall be Provided sufficient to support concentrated load(s) 78 lb | | | | | | | | | | | |

| BOT CHORD | 2x4 SPF I 2x4 SPF I | No.2 *Except* 7-3:2x3 SPF No.2 No 2 *Except* 4-5:2x3 SPF No.2 |
|-----------|--------------------------|--|
| BRACING | 2 | |
| TOP CHORD | Structural 6-0-0 oc p | wood sheathing directly applied or purlins, except end verticals. |
| BOT CHORD | Rigid ceili bracing. | ng directly applied or 10-0-0 oc |
| REACTIONS | (size) | 5= Mechanical, 8=0-4-9 |
| | Max Horiz | 8=94 (LC 5) |
| | Max Uplift | 5=-55 (LC 8), 8=-110 (LC 4) |
| | Max Grav | 5=246 (LC 1), 8=379 (LC 1) |
| FORCES | (lb) - Max Tension | imum Compression/Maximum |
| TOP CHORD | 2-8=-345/ | 138, 1-2=0/32, 2-3=-242/33, |

3-4=-76/20, 4-5=-120/34 BOT CHORD 7-8=-46/167, 6-7=0/81, 3-6=-44/60, 5-6=-24/70

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 * This truss has been designed for a live load of 20.0psf
- This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2 .
- 5) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 8 and 55 lb uplift at joint 5.

r) Transer(s) of other connection device(s) shall be provided sufficient to support concentrated load(s) 78 lb down and 46 lb up at 3-0-14, and 67 lb down and 43 lb up at 3-6-3 on top chord, and 6 lb down at 3-0-14, and 6 lb down at 3-6-3 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

 Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20 Concentrated Loads (lb) Vert: 11=-1 (F), 12=0 (B)



Page: 1



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J22 | Jack-Open | 3 | 1 | Job Reference (optional) | 164799627 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:07 ID:GP3oon7aZjBHQoQR3OBb2GzX7My-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



.





- -

| 4-11-4 | |
|--------|--|
| | |

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-------------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.35 | Vert(LL) | -0.02 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.21 | Vert(CT) | -0.05 | 4-5 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.02 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.02 | 4-5 | >999 | 240 | Weight: 13 lb | FT = 10% |

LUMBER

Scale - 1.25 1

| TOP CHORD | 2x4 SPF No.2 |
|-----------|---|
| BOT CHORD | 2x4 SPF No.2 |
| WEBS | 2x3 SPF No.2 |
| BRACING | |
| TOP CHORD | Structural wood sheathing directly applied or |
| | 4.11.4 oc purling oxcopt and vorticals |

| | 4-11-4 oc | purlins, except end verticals. |
|-----------|-------------------------|--|
| BOT CHORD | Rigid ceili bracing. | ng directly applied or 10-0-0 oc |
| REACTIONS | (size) | 3= Mechanical, 4= Mechanical, 5=0-3-8 |
| | Max Horiz | 5=90 (LC 8) |
| | Max Uplift | 3=-77 (LC 8), 5=-41 (LC 8) |
| | Max Grav | 3=151 (LC 1), 4=91 (LC 3), 5=290 (LC 1) |
| FORCES | (lb) - Max | imum Compression/Maximum |

2-8-14

Tension TOP CHORD 2-5=-252/83, 1-2=0/26, 2-3=-79/45

4-5=0/0

BOT CHORD

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) The Fabrication Tolerance at joint 5 = 2%, joint 5 = 2%
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SPF No.2 .
- 6) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 5 and 77 lb uplift at joint 3.

LOAD CASE(S) Standard



April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------------|-----|-----|--------------------------|-----------|
| B240069 | J23 | Jack-Closed Girder | 1 | 1 | Job Reference (optional) | 164799628 |

4-11-4

Wheeler Lumber, Waverly, KS - 66871,

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:07 ID:OPHG_ITuw1KovU3LJ96jq_zX7EI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



4-11-4

Scale = 1:20.2

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|--|---|--|--|---|--|--------------------|-------|--------|-----|---------------|-----------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | -0.03 | 3-4 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | -0.06 | 3-4 | >998 | 240 | | |
| BCLL | 0.0^ | Rep Stress Incr | | 4 Motrix D | 0.01 | Horz(CT) | 0.00 | 3 | n/a | n/a | Waight: 20 lb | ET - 109/ |
| BCDL | 10.0 | CODE | IRG2021/171201 | 4 IVIAUIX-P | | | - | | | | Weight. 30 lb | F1 = 10% |
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD | 2x10 SP 2400F 2.0E 2x4 SPF No.2 2x4 SPF No.2 *Exce 2-0-0 oc purlins: 1-2 Rigid ceiling directly bracing | pt* 3-1:2x3 SPF No , except end vertica applied or 10-0-0 o | 9) Hange provide design 2 respon 10) In the I c LOAD CAS 1) Dead | r(s) or other connectic ed sufficient to suppor 'selection of such con sibility of others. OAD CASE(S) sectic russ are noted as fror SE(S) Standard + Roof Live (balance | on device(s t concentra inection de on, loads ap nt (F) or ba d): Lumber |) shall be ated load(s) . vice(s) is the oplied to the ck (B). | The face 15, | | | | | |
| REACTIONS | (size) 3= Mecha Max Horiz 4=-47 (LC Max Uplift 3=-115 (L Max Grav 3=941 (LC | nical, 4=0-3-8 4) C 5), 4=-150 (LC 4) C 15), 4=1349 (LC 1 | Plate Unifo Ve 6) Conc | Increase=1.15 rm Loads (lb/ft) rt: 1-2=-70, 3-4=-20 entrated Loads (lb) | , , | | | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | ve | t: 5=-878 (B), 6=-878 | (B) | | | | | | | |
| TOP CHORD | 1-4=-1303/178, 1-2= | -17/13, 2-3=-890/13 | 37 | | | | | | | | | |
| BOT CHORD | 3-4=-41/36 | | | | | | | | | | | |
| WEBS | 1-3=-24/24 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | |
| Wind: ASS Vasd=91n II; Exp C; cantilever right expo Provide at 3) This truss chord live * This trus on the bot 3-06-00 ti eco-00 ti chord and | CE /-16; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (er left and right exposed used; Lumber DOL=1.6i dequate drainage to pri- has been designed for load nonconcurrent wi ss has been designed fit tom chord in all areas all by 2-00-00 wide will | (3-second gust) DL=6.0psf; h=25ft; (welope) exterior zor ; end vertical left an 0 plate grip DOL=1. event water ponding ra 10.0 psf bottom th any other live loa or a live load of 20.0 where a rectangle fit between the bottom | Cat. ne; d 60 j. ds. psf om | | | | | | | | STATE OF J | MISSOUR |

- 5) All bearings are assumed to be SPF No.2 .
- Refer to girder(s) for truss to truss connections. 6)

Provide mechanical connection (by others) of truss to 7) bearing plate capable of withstanding 150 lb uplift at joint 4 and 115 lb uplift at joint 3.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

OHNSON NUMBER PE-PE-2017018993

April 11,2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent colleges with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200 / MiTek-US.com

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J24 | Jack-Open | 1 | 1 | Job Reference (optional) | 164799629 |

-0-10-8

0-10-8

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:07 ID:nKpQclglps3J0MFN1B1SBzzX7Oq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





2-2-6

2-2-6

Scale = 1:26

| Loading | | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|------------------------|---------------------|-------------------------|-----------------|----------|------|----------|------|-------|--------|-----|--------------|----------|
| TCLL (roof) | | 25.0 | Plate Grip DOL | 1.15 | тс | 0.07 | Vert(LL) | 0.00 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | 0.00 | 4-5 | >999 | 240 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 7 lb | FT = 10% |
| | | | | LOAD CASE(S) | Standard | | | | | | | | |
| TOP CHORD | 2x4 SPF | No.2 | | () | etandard | | | | | | | | |
| BOT CHORD | 2x4 SPF | No.2 | | | | | | | | | | | |
| WEBS | 2x4 SPF I | No.2 | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | | |
| TOP CHORD | Structura | l wood shea | athing directly applie | ed or | | | | | | | | | |
| | 2-2-6 oc j | ourlins, exc | cept end verticals. | | | | | | | | | | |
| BOT CHORD | Rigid ceil bracing. | ing directly | applied or 6-0-0 oc | | | | | | | | | | |
| REACTIONS | (size) | 3= Mecha 5=0-3-8 | nical, 4= Mechanica | al, | | | | | | | | | |
| | Max Horiz | 5=50 (LC | 8) | | | | | | | | | | |
| | Max Uplift | 3=-37 (LC | 8), 5=-23 (LC 8) | | | | | | | | | | |
| | Max Grav | 3=54 (LC | 1), 4=36 (LC 3), 5= | 179 | | | | | | | | | |
| | | (LC 1) | | | | | | | | | | | |
| FORCES | (lb) - Max Tension | imum Com | pression/Maximum | | | | | | | | | | |
| TOP CHORD | 2-5=-157/ | 44, 1-2=0/3 | 32, 2-3=-42/18 | | | | | | | | | | |
| BOT CHORD | 4-5=-19/1 | 3 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Wind: AS | CE 7-16; Vu | lt=115mph | (3-second gust) | | | | | | | | | | |
| Vasd=91r | nph; TCDL= | 6.0psf; BC | DL=6.0psf; h=25ft; (| Cat. | | | | | | | | | |
| II; Exp C; | Enclosed; N | IWFRS (en | velope) exterior zor | ne; | | | | | | | | | |
| cantilever | left and rigr | | ; end vertical left an | 0 | | | | | | | | | m |
| 2) This truss | has been d | esigned for | a 10.0 nsf bottom | 60 | | | | | | | | OFA | ALC D |
| chord live | load nonco | ncurrent wit | th any other live loa | ds. | | | | | | | 0 | FE | A SCAL |
| 3) * This trus | s has been | designed for | or a live load of 20.0 | Dpsf | | | | | | | 6 | AN IN | NSY |
| on the bot | tom chord in | n all areas v | where a rectangle | | | | | | | | 8 | S' ANDR | EW VC V |
| 3-06-00 ta | all by 2-00-0 | 0 wide will f | fit between the botto | om | | | | | | | 9 | / THOM | IAS Y |
| chord and | l any other n | nembers. | | | | | | | | | X 🖈 | JOHN | |
| 4) All bearing | gs are assur | ned to be S | SPF No.2 . | | | | | | | - (| | hink | unh |
| Refer to g Boaring a | t ioint(c) 5 or | truss to trus | ss connections. | | | | | | | U | M- | NUM | BER A |
| using ANS | SI/TPI 1 and | le to grain f | formula Building | | | | | | | | 17 | PE-2017 | 18003 |
| designer | should verify | capacity o | f bearing surface. | | | | | | | | N | | E A |
| 7) Provide m | echanical c | onnection (| by others) of truss t | 0 | | | | | | | Y | 020 | G A |
| bearing pl | ate capable | of withstan | nding 23 lb uplift at j | oint | | | | | | | | ONA | LEG |
| 5 and 37 I | b uplift at jo | int 3. | | | | | | | | | | an | and a |

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)



April 11,2024

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J25 | Jack-Open | 1 | 1 | Job Reference (optional) | 164799630 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:07 ID:Y8qtsIz_wXDmWCfB_x_KiEzX7OR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







Scale = 1:25.5

| Loading TCLL (roof) | | (psf) 25.0 | Spacing Plate Grip DOL | 2-0-0 1.15 | CSI TC | 0.07 | DEFL Vert(LL) | in 0.00 | (loc) 4-5 | l/defl >999 | L/d 360 | PLATES MT20 | GRIP 197/144 |
|--|-----------------------------|----------------------|---|-----------------|-----------|------|-------------------------|------------|--------------|----------------|------------|----------------|------------------------|
| TCDL | | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 4-5 | >999 | 240 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 8 lb | FT = 10% |
| LUMBER | | | | LOAD CASE(S) | Standard | | | - | | | | | · |
| TOP CHORD | 2x4 SPF N | lo.2 | | | | | | | | | | | |
| BOT CHORD | 2x4 SPF N | lo.2 | | | | | | | | | | | |
| WEBS | 2x4 SPF N | lo.2 | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | | |
| TOP CHORD | Structural 2-5-2 oc p | wood sheaurlins. exc | athing directly applie cept end verticals. | ed or | | | | | | | | | |
| BOT CHORD | Rigid ceilir bracing. | ng directly | applied or 6-0-0 oc | | | | | | | | | | |
| REACTIONS | (size) | 3= Mecha 5=0-3-8 | nical, 4= Mechanica | al, | | | | | | | | | |
| | Max Horiz | 5=46 (LC | 8) | | | | | | | | | | |
| | Max Uplift | 3=-36 (LC | 8), 5=-32 (LC 4) | | | | | | | | | | |
| | Max Grav | 3=62 (LC | 1), 4=40 (LC 3), 5= | 188 | | | | | | | | | |
| | | (LC 1) | | | | | | | | | | | |
| FORCES | (lb) - Maxii Tension | mum Com | pression/Maximum | | | | | | | | | | |
| TOP CHORD | 2-5=-165/5 | 52, 1-2=0/2 | 27, 2-3=-39/18 | | | | | | | | | | |
| BOT CHORD | 4-5=-19/12 | 2 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Wind: ASC | CE 7-16; Vult | t=115mph | (3-second gust) | | | | | | | | | | |
| Vasd=91n | nph; TCDL=6 | 6.0psf; BC | DL=6.0psf; h=25ft; (| Cat. | | | | | | | | | |
| II; Exp C; | Enclosed; M | WFRS (en | velope) exterior zor | ne; | | | | | | | | | |
| cantilever | left and right | exposed | ; end vertical left an | d | | | | | | | | | Th |
| right expo | sed; Lumber | DOL=1.60 | D plate grip DOL=1. | 60 | | | | | | | | OF N | ALC D |
| Inis truss chord live | has been de | esigned for | th any other live log | de | | | | | | | | AFEULT | ISSO |
| 3) * This trus | ioau noncon s has been o | lesigned f | or a live load of 20 (| us. Insf | | | | | | | A | T. M. | N.S. |
| on the bot | tom chord in | all areas | where a rectangle | ,001 | | | | | | | R | S ANDR | EW CA |
| 3-06-00 ta | all by 2-00-00 | wide will | fit between the botto | om | | | | | | | 4 | THOM | IAS Y |
| chord and | any other m | embers. | | | | | | | | | 7 🖈 | JOHNS | SON X |
| All bearing | gs are assum | ned to be S | SPF No.2 . | | | | | | | - 1 | | and le | Inshah |
| Refer to g | irder(s) for the | russ to tru | ss connections. | | | | | | | | | NUT | |
| Bearing at | t joint(s) 5 co | nsiders pa | arallel to grain value | | | | | | | · · | 27 | | DIROOD AND |
| using ANS | bi/ I PI T angle | e lo grain i | f boaring surface | | | | | | | | N | PE-2017 | A REVESTOR |
| 7) Provide m | echanical co | nnection (| hy others) of trues t | 0 | | | | | | | Y | N Po | IN A |
| bearing pl | ate capable (| of withstar | iding 32 lb uplift at i | oint | | | | | | | 12 | STONIA | TENA |
| 5 and 36 l | b uplift at joir | nt 3. | 0 | | | | | | | | | QUA | - A |
| | | | | | | | | | | | | un | |



April 11,2024

Page: 1

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|---------------------|-----|-----|--------------------------|-----------|
| B240069 | J26 | Diagonal Hip Girder | 1 | 1 | Job Reference (optional) | 164799631 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:07

Wheeler Lumber, Waverly, KS - 66871,



| Scale = | 1:24.7 |
|---------|--------|
|---------|--------|

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-------------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.49 | Vert(LL) | -0.04 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.09 | 4-5 | >746 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.02 | 4-5 | >999 | 240 | Weight: 18 lb | FT = 10% |

6-0-8

| r |
|---|

BOT CHORD 2x4 SPF No.2

2x4 SPF No.2 *Except* 3-4:2x3 SPF No.2 WEBS BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-4-9 Max Horiz 5=112 (LC 5) Max Uplift 4=-54 (LC 8), 5=-112 (LC 4) Max Grav 4=247 (LC 1), 5=380 (LC 1) FORCES (Ib) - Maximum Compression/Maximum

Tension TOP CHORD 2-5=-335/155, 1-2=0/32, 2-3=-135/13, 3-4=-176/79 4-5=-30/51

BOT CHORD

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom 2) chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 .
- Refer to girder(s) for truss to truss connections. 5)
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint 5 and 54 lb uplift at joint 4.

- down and 43 lb up at 3-6-3 on top chord, and 6 lb down at 3-6-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face 8) of the truss are noted as front (F) or back (B).
- LOAD CASE(S) Standard
- Dead + Roof Live (balanced): Lumber Increase=1.15, 1) Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-2=-70, 2-3=-70, 4-5=-20
 - Concentrated Loads (lb)

Vert: 7=0 (F)



April 11,2024

Page: 1



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|---------------------|-----|-----|--------------------------|-----------|
| B240069 | J27 | Diagonal Hip Girder | 2 | 1 | Job Reference (optional) | 164799632 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:07 ID:?iDhfildjVV5vhRnaDge6xzX7Q0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f











Scale = 1:30.1

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 NO IRC202 | 21/TPI2014 | CSI TC BC WB Matrix-R | 0.21 0.24 0.00 | DEFL Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.02 -0.03 0.01 0.02 | (loc) 6 7 5 6 | l/defl >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 14 lb | GRIP 197/144 FT = 10% | |
|--|---|--|---|--|---|--|---|--|---------------------------|---------------------------------------|---------------------------------|--|------------------------------------|--|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SPF No.2 2x4 SPF No.2 *Exce 2x3 SPF No.2 Structural wood shea 4-7-4 oc purlins, exc Rigid ceiling directly bracing. (size) 4= Mecha 8=0-4-9 Max Horiz 8=75 (LC Max Uplift 4=-38 (LC (LC 4) Max Grav 4=110 (LC (LC 1) | ept* 7-3:2x3 SPF No. athing directly applie cept end verticals. applied or 10-0-0 oc unical, 5= Mechanica 4) c 8), 5=-10 (LC 8), 8= C 1), 5=70 (LC 1), 8= | 7 2 2 3 3 3 4 4 5 8 4 1 1 5 3 16 | Hanger(s) or provided suff down and 20 up at 2-0-15 1-6-10, and 3 chord. The c (s) is the resp) In the LOAD of the truss a OAD CASE(S) Dead + Roo Plate Increa Uniform Loa Vert: 1-2= Concentrate Vert: 11= | other connection icient to support c I b up at 1-6-10, a on top chord, and 3 b down and 3 b design/selection of ponsibility of other CASE(S) section, re noted as front (Standard of Live (balanced): ase=1.15 adds (lb/t) =-70, 2-4=-70, 7-8 ed Loads (lb) $\cdot 3$ (B), 12=3 (F) | device(s concentra and 62 lb d 2 lb dov up at 2 f such cc s. loads a (F) or ba : Lumber |) shall be ted load(s) 7 o down and 2 wn and 3 lb u -0-15 on bottunnection dev opplied to the l ck (B). Increase=1. 6=-20 | ¹² Ib 0 Ib pp at om rice face 15, | | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | | | | | | | | | | | | |
| TOP CHORD | 2-8=-286/114, 1-2=0 3-4=-17/30 |)/31, 2-3=-171/7, | | | | | | | | | | | | |
| BOT CHORD | 7-8=-40/100, 6-7=0/5 | 54, 3-6=-17/51, 5-6= | =0/0 | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 This terms has a description of the order of the terms.
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2 .
- 5) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 8, 38 lb uplift at joint 4 and 10 lb uplift at joint 5.

s to at joint S ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Page: 1



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J28 | Jack-Open | 4 | 1 | Job Reference (optional) | 164799633 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:07 ID:L7zkarORYbrDwDjCNefrRqzX7QT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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| Scale = 1.29.3 | | | | | | | | | | | · | | |
|---------------------|--------------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|----------|--|
| Loading | (psf) | Spacing | 2-0-0 | csi | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.14 | Vert(LL) | -0.01 | 6 | >999 | 360 | MT20 | 197/144 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | -0.02 | 7 | >999 | 240 | | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 5 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.01 | 6 | >999 | 240 | Weight: 11 lb | FT = 10% | |
| LUMBER TOP CHORD | 2x4 SPF No.2 | | | | | | | | | | | | |

| BOT CHORD | 2x4 SPF No.2 *Except* 7-3:2x3 SPF No.2 |
|-----------|--|
| WFBS | 2x3 SPE No 2 |

| ** - | | |
|------|-------|--|
| BR | ACING | |

| TOP CHORD | Structural 3-10-0 oc | wood sheathing directly applied or purlins, except end verticals. |
|-----------|-------------------------|--|
| BOT CHORD | Rigid ceili bracing. | ng directly applied or 10-0-0 oc |
| REACTIONS | (size) | 4= Mechanical, 5= Mechanical, 8=0-3-8 |
| | Max Horiz | 8=71 (LC 8) |
| | Max Uplift | 4=-43 (LC 8), 5=-5 (LC 8), 8=-36 (LC 8) |

| | Max Grav | 4=103 (LC 1), 5=59 (LC 3), 8=243 (LC 1) |
|--------|-----------------------|---|
| FORCES | (lb) - Max Tension | imum Compression/Maximum |

TOP CHORD 2-8=-223/54, 1-2=0/26, 2-3=-134/0, 3-4=-25/34

BOT CHORD 7-8=-41/81, 6-7=0/36, 3-6=0/52, 5-6=0/0

- NOTES
- Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom 2) chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf 3) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 . 4۱
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 8, 43 lb uplift at joint 4 and 5 lb uplift at joint 5.

LOAD CASE(S) Standard





| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J29 | Jack-Open | 2 | 1 | Job Reference (optional) | 164799634 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:07 ID:tftwohA8n3ammSLkJsKci1zX7QI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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3x6 II

1-4-0

Scale - 1.24 8

| Ocale = 1.24. | 0 | | | | | | | | | | | | |
|---------------|---------------------------|---------------------------|---|-----------------|----------|------|----------|------|-------|--------|-----|--------------|----------|
| Loading | | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | | 25.0 | Plate Grip DOL | 1.15 | TC | 0.06 | Vert(LL) | 0.00 | 4-5 | >999 | 360 | MT20 | 197/144 |
| TCDL | | 10.0 | Lumber DOL | 1.15 | BC | 0.01 | Vert(CT) | 0.00 | 4-5 | >999 | 240 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.00 | 5 | >999 | 240 | Weight: 5 lb | FT = 10% |
| | | | | | | | | | | | | | |
| TOP CHORE | 2x4 SPF | No.2 | | | | | | | | | | | |
| BOT CHORE | 2x4 SPF | No.2 | | | | | | | | | | | |
| WEBS | 2x3 SPF | No.2 | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | | |
| TOP CHORI | D Structura 1-4-0 oc j | l wood she purlins, ex | athing directly applic cept end verticals. | ed or | | | | | | | | | |
| BOT CHORI | D Rigid ceil bracing. | ing directly | applied or 10-0-0 o | с | | | | | | | | | |
| REACTIONS | 6 (size) | 3= Mecha 5=0-3-8 | anical, 4= Mechanica | al, | | | | | | | | | |
| | Max Horiz | 5=31 (LC | 5) | | | | | | | | | | |
| | Max Uplift | 3=-17 (LC | 28), 5=-36 (LC 4) | | | | | | | | | | |
| | Max Grav | 3=20 (LC (LC 1) | 1), 4=22 (LC 3), 5= | 151 | | | | | | | | | |
| FORCES | (lb) - Max | imum Com | pression/Maximum | | | | | | | | | | |
| | Tension | | - | | | | | | | | | | |
| TOP CHORE | D 2-5=-134 | /46, 1-2=0/ | 26, 2-3=-25/4 | | | | | | | | | | |
| BOT CHORI | 0 4-5=0/0 | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Wind: As | SCE 7-16; Vu | ılt=115mph | (3-second gust) | | | | | | | | | | |
| Vasd=91 | Imph; TCDL= | =6.0psf; BC | DL=6.0psf; h=25ft; (| Cat. | | | | | | | | | |
| II; Exp C | ; Enclosed; N | /WFRS (er | velope) exterior zor | ne; | | | | | | | | | |
| cantileve | er left and rigr | nt exposed | ; end vertical left an | d co | | | | | | | | | an |
| 2) This true | osed; Lumbe | lesigned for | r a 10.0 psf bottom | 60 | | | | | | | | OF | MIG |
| chord liv | e load nonco | ncurrent wi | th any other live loa | ds | | | | | | | 0 | Fre | W Scim |
| 3) * This tru | uss has been | designed f | or a live load of 20.0 | Dosf | | | | | | | 6 | AT | NOY |
| on the b | ottom chord in | n all areas | where a rectangle | - T - | | | | | | | 8 | S AND | REW Y |
| 3-06-00 | tall by 2-00-0 | 0 wide will | fit between the botto | om | | | | | | | A | / THO | MAS Y |

- chord and any other members. 4) All bearings are assumed to be SPF No.2 .
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 5 and 17 lb uplift at joint 3.

LOAD CASE(S) Standard



April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | J30 | Jack-Open | 2 | 1 | Job Reference (optional) | 164799635 |

-0-10-8 0-10-8

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:07 ID:LavtRD_6Y9Z1r?7gNV2s3fzX7R?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-4-11

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PE-2017018993

SIONAL ET

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)



<u>1-3-6</u> 1-3-6

12 6 Г

2

5

3x6 II

1

1-4-13

0-6-0

3

4

Scale = 1:25.3

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-----------------|--------------------------|--|-----------------|----------|------|----------|------|-------|----------|-----|--------------|---------------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | 0.00 | 5 | >999 | 360 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.01 | Vert(CT) | 0.00 | 4-5 | >999 | 240 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-R | | Wind(LL) | 0.00 | 4-5 | >999 | 240 | Weight: 5 lb | FT = 10% |
| LUMBER | | | | | | | | | | | | |
| TOP CHORD | 2x4 SPF No.2 | | | | | | | | | | | |
| BOT CHORD | 2x4 SPF No.2 | | | | | | | | | | | |
| WEBS | 2x3 SPF No.2 | | | | | | | | | | | |
| BRACING | | | | | | | | | | | | |
| TOP CHORD | Structural wood sh | eathing directly applie | ed or | | | | | | | | | |
| | 1-3-6 oc purlins, e | xcept end verticals. | | | | | | | | | | |
| BOT CHORD | Rigid ceiling direct | ly applied or 10-0-0 o | с | | | | | | | | | |
| | bracing. | | | | | | | | | | | |
| REACTIONS | (size) 3= Mech | nanical, 4= Mechanica | al, | | | | | | | | | |
| | 5=0-3-8 | 2 5 | | | | | | | | | | |
| | Max Horiz 5=34 (L | | | | | | | | | | | |
| | Max Oplift $3=-19$ (L | C 8), 5=-23 (LC 8) | 150 | | | | | | | | | |
| | | 5 T), 4=2T (LC 3), 5= | 150 | | | | | | | | | |
| FORCES | (Ib) - Maximum Co | mpression/Maximum | | | | | | | | | | |
| TORGES | Tension | Inpression/maximum | | | | | | | | | | |
| TOP CHORD | 2-5=-134/37. 1-2=0 |)/31. 2-3=-29/4 | | | | | | | | | | |
| BOT CHORD | 4-5=0/0 | , | | | | | | | | | | |
| NOTES | | | | | | | | | | | | |
| 1) Wind: AS | CE 7-16: Vult=115mc | h (3-second aust) | | | | | | | | | | |
| Vasd=91n | nph; TCDL=6.0psf; B | CDL=6.0psf; h=25ft; (| Cat. | | | | | | | | | |
| II; Exp C; | Enclosed; MWFRS (| envelope) exterior zor | ne; | | | | | | | | | |
| cantilever | left and right expose | d ; end vertical left an | d | | | | | | | | | ~ |
| right expo | sed; Lumber DOL=1. | 60 plate grip DOL=1. | 60 | | | | | | | | A | and |
| 2) This truss | has been designed f | or a 10.0 psf bottom | | | | | | | | | B.F. OF I | NISS W |
| chord live | load nonconcurrent | with any other live loa | ds. | | | | | | | 4 | A. A. | NUS |
| 3) " I his trus | s has been designed | for a live load of 20.0 | psr | | | | | | | H | ANDE | EW YPY |
| 3-06-00 ta | all by 2-00-00 wide wi | s where a rectangle Il fit between the bott | m | | | | | | | B | THOM | MAS Y |
| chord and | any other members. | | 200 | | | | | | | | | sch \+ 1 |
| 4) All bearing | gs are assumed to be | SPF No.2 . | | | | | | | / | 1 | | Viana a la la |
| 5) Refer to g | irder(s) for truss to tr | uss connections. | | | | | | | | NN | m | www |
| 6) Provide m | echanical connection | (by others) of truss t | 0 | | | | | | <u> </u> | 3 | S NUM | BER |

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 5 and 19 lb uplift at joint 3.

LOAD CASE(S) Standard

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | LAY1 | Lay-In Gable | 1 | 1 | Job Reference (optional) | 164799636 |

7-0-12

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:07 ID:mOrqb3swGTrgwrffdRuw_zSPfT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

23-11-12 30-8-13 16-11-1 6-9-1

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Scale = 1:55.7

Plate Offsets (X, Y): [5:0-1-10,Edge], [15:0-1-10,Edge]

| Loading TCLL (roof) TCDL BCLL BCDL | 2x4 SPF N 2x4 SPF N 2x4 SPF N | (psf) 25.0 10.0 0.0* 10.0 No.2 No.2 No.2 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC202 ⁻ | 1/TPI2014 DP CHORD | CSI TC BC WB Matrix-S | 0.05 0.03 0.10 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.01 | (loo 1 | c) l/def - n/a - n/a 9 n/a | l L/d 999 999 999 n n/a | PLATES MT20 | GRIP 197/144 | |
|--|-------------------------------------|---|--|---|-----------------------|-----------------------------------|------------------------|--|--------------------------|-----------|-------------------------------------|-------------------------------------|----------------------|--|----|
| TCLL (roof) TCDL BCLL BCDL | 2x4 SPF N 2x4 SPF N 2x4 SPF N | 25.0 10.0 0.0* 10.0 No.2 No.2 No.2 | Plate Grip DOL Lumber DOL Rep Stress Incr Code | 1.15 1.15 YES IRC202 ⁻ TC | 1/TPI2014 DP CHORD | TC BC WB Matrix-S | 0.05 0.03 0.10 | Vert(LL) Vert(TL) Horiz(TL) | n/a n/a 0.01 | 1 | - n/a - n/a 9 n/a | a 999 a 999 a n/a | MT20 | 197/144 | |
| TCDL BCLL BCDL | 2x4 SPF N 2x4 SPF N 2x4 SPF N | 10.0 0.0* 10.0 No.2 No.2 No.2 | Lumber DOL Rep Stress Incr Code | 1.15 YES IRC202 ⁻ TC | 1/TPI2014 DP CHORD | BC WB Matrix-S | 0.03 0.10 | Vert(TL) Horiz(TL) | n/a 0.01 | 1 | - n/a 9 n/a | 1 999 1 n/a | | | |
| | 2x4 SPF N 2x4 SPF N 2x4 SPF N | 0.0* 10.0 No.2 No.2 No.2 | Rep Stress Incr Code | YES IRC202 ⁻ TC | 1/TPI2014 OP CHORD | WB Matrix-S | 0.10 | Horiz(TL) | 0.01 | 1 | 9 n/a | ı n/a | | | |
| BCDL | 2x4 SPF N 2x4 SPF N 2x4 SPF N | 10.0 No.2 No.2 No.2 | Code | IRC202 | 1/TPI2014 OP CHORD | Matrix-S | | | | | | | I | | |
| | 2x4 SPF N 2x4 SPF N 2x4 SPF N | No.2 No.2 No.2 | | тс | OP CHORD | | - | | | | | | Weight: 156 lb | FT = 10% | |
| | 2x4 SPF N 2x4 SPF N 2x4 SPF N | No.2 No.2 No.2 | | тс | OP CHORD | | | | | | | | | | |
| LUWBER | 2x4 SPF N 2x4 SPF N 2x4 SPF N | No.2 No.2 No 2 | | | | 1-2=-220/148, 2-3 | 3=-138/11 | 9, 3-4=-118/9 | 2, | 8) 7 | This truss | has be | en designed for a | a 10.0 psf bottom | |
| TOP CHORD | 2x4 SPF N 2x4 SPF N | No.2 No.2 | | | | 4-5=-91/132, 5-6= | =-36/113, | 6-7=-36/113, | | c | chord live | load no | onconcurrent with | any other live loads. | |
| BOT CHORD | 2x4 SPF N | No 2 | | | | 7-8=-36/113, 8-9= | =-36/113, | 9-10=-36/113 | , | 9) * | This trus | s has b | een designed for | a live load of 20.0psf | t. |
| OTHERS | | | | | | 10-11=-36/113, 1 | 1-12=-36 | /113, | | c | on the bot | tom cho | ord in all areas w | here a rectangle | |
| BRACING | | | | | | 12-13=-36/113, 1 | 3-14=-36 | 113, | | 3 | 8-06-00 ta | ll by 2-0 | 00-00 wide will fit | between the bottom | |
| TOP CHORD | Structural | wood shea | athing directly applie | d or | | 14-15=-36/113, 1 | 5-16=-78 | /120, | | C | chord and | any oth | her members. | | |
| | 6-0-0 oc p | ourlins, exce | ept | | | 16-17=-76/48, 17 | -18=-107 | 58, 18-19=-17 | 79/87 | 10) A | All bearing | gs are a | ssumed to be SF | PF No.2 . | |
| | 2-0-0 oc p | ourlins (6-0- | -0 max.): 5-15. | BC | DT CHORD | 1-35=-61/144, 34 | -35=-61/1 | 44, | | 11) F | Provide m | echanic | cal connection (b | y others) of truss to | |
| BOT CHORD | Rigid ceili | ng directly | applied or 10-0-0 oc | | | 33-34=-61/144, 3 | 2-33=-61 | (144, | | t | pearing pl | ate cap | able of withstand | ing 75 lb uplift at joint | |
| | bracing. | • • | | | | 31-32=-61/144, 3 | 0-31=-61 | (144, | | 1 | , 33 lb up | plift at jo | pint 19, 91 lb uplif | t at joint 35, 112 lb | |
| REACTIONS | (size) | 1=31-0-8. | 19=31-0-8, 20=31-0 | -8. | | 29-30=-61/144, 2 | 8-29=-61 | (144, | | L | iplift at jo | int 34, 9 | 0 lb uplift at joint | 33, 30 lb uplift at joint | t |
| | · · · | 21=31-0-8 | , 22=31-0-8, 23=31- | 0-8, | | 26-28=-61/144, 2 | 5-26=-61 | 144, | | | 32, 46 ID I | ipliπ at | joint 31, 34 ID up | Ift at joint 30, 34 lb | |
| | | 24=31-0-8 | , 25=31-0-8, 26=31- | 0-8, | | 24-25=-01/144, 2 | 3-24=-01 | 144, | | L L | ipliπ at jo | Int 29, 3 | saint 25 40 lb unit | 28, 34 ID UPIIIT at Joint | l. |
| | | 28=31-0-8 | , 29=31-0-8, 30=31- | 0-8, | | 22-23=-01/144, 2 | 0 20- 61 | 144, | | 4 | unlift of io | ipiint at j | 14 lb uplift of ioir | iii al juiiii 24, 04 iu 1 21 and 01 lb unlift a | |
| | | 31=31-0-8 | , 32=31-0-8, 33=31- | 0-8, | EDC | 20-21=-01/144, 1 | 9-20=-01/ 24- 160 | /144 | | L 1 | ipilit at jo | nt 22, 1 | 14 ib upilit at joir | it 21 and 91 ib uplift a | t |
| | | 34=31-0-8 | , 35=31-0-8 | vv | EBS | 2-33=-156/114 6 | -34=-100/ | 54 7-3114 | 7/70 | 12) (| Dini 20. Prophical | nurlin r | oprocontation do | oc not donict the cize | |
| | Max Horiz | 1=-165 (LC | C 4) | | | 8-30140/58 9-1 | -02=-100/ 29=-140/5 | 34, 7-31=-141 8 10-28140 | 1/10, 1/58 | 12) (| or the orie | ntation | of the purlin alon | a the top and/or | |
| | Max Uplift | 1=-75 (LC | 6), 19=-33 (LC 7), | | | 11-26=-140/58 1 | 2-2514 | 0, 10 20= 140 0/57 | 5/50, | F | ottom ch | ord | | g the top ana/or | |
| | | 20=-91 (LC | C 9), 21=-114 (LC 9) | , | | 13-24=-147/64 1 | 4-23=-12 | 9/22 | | 101 | | C) C+c | ndord | | |
| | | 22=-84 (LC | C 9), 24=-40 (LC 5), | | | 16-22=-149/108. | 17-21=-1 | 63/139. | | LUA | D CASE(| 3) 312 | anuaru | | |
| | | 25=-33 (LC | C 4), 26=-34 (LC 5), | | | 18-20=-136/109 | | | | | | | | | |
| | | 28=-34 (LC | C 5), 29=-34 (LC 4), | NC | TES | | | | | | | | | | |
| | | 30=-34 (LC | C 5), 31=-46 (LC 4), | 1) | Linhalancod | roof live loads be | vo boon | considered for | | | | | | | |
| | | 32=-30 (LC | C 5), 33=-90 (LC 8), | 1) | this design | TOOL IIVE IDaus Ha | ive been | | | | | | Good | man | |
| | | 34=-112 (L | LC 8), 35=-91 (LC 8) | 2) | Wind ASCE | 7-16: \/ult=115m | nh (3-cor | cond quet) | | | | | A OF | MISO | |
| | Max Grav | 1=143 (LC | (LC 9), 19=115 (LC 9), | <i>2)</i> | Vasd-91mm | h: TCDI -6 Opsf | BCDI -61 | Inef: h=25ft: (| at | | | | 950 | -00 M | |
| | | 20=174 (L | C 16), 21=203 (LC 1 | 16), | II: Exp C: E | nclosed: MWFRS | (envelope |) exterior zon | рат. 10 ⁻ | | | A | NY INT | New York | |
| | | 22=189 (L | C 16), 23=169 (LC 2 | 22), | cantilever le | ft and right expos | ed · end v | ertical left and | io, 1 | | | 4 | S/ AND | KEW / Y | |
| | | 24=187 (L | C 21), 25=180 (LC 2 | <u>2</u> 2), | right expose | d: Lumber DOL= | 1.60 plate | arip DOL=1.6 | 50 | | | A. | THO. | MAS \ V | |
| | | 20=180 (L | C 21), 28=180 (LC 1 | (1), (3) | Truss desic | ined for wind load | s in the p | ane of the tru | SS | | | | JOHN | ISON X | |
| | | 29=100 (L 21_197 (L | C 22), 30=160 (LC 2 | <u>21),</u> -/ | only. For st | uds exposed to w | ind (norm | al to the face) | | | | | The sale | und | - |
| | | 37-107 (L | C(15), 32 = 173 (LC) 1 | 10), | see Standar | d Industry Gable | End Deta | ils as applicab | je. | | | | NTITA | DED ON | |
| | | 35–174 (L | C 15), 34–201 (LC 1 | i J), | or consult q | ualified building d | esigner a | s per ANSI/TP | ข 1. | | | 27 | | DER A | |
| FORCES | (lb) Max | | oronoion/Movimum | 4) | Provide ade | quate drainage to | prevent | water ponding | | | | N | O PE-201 | 018993 | |
| FURGES | (ID) - IVIAXI | mum com | pression/iviaximum | 5) | All plates ar | e 2x4 MT20 unles | s otherwi | se indicated. | | | | N N | N. BO | 154 | |
| | 1 EUSION | | | 6) | Gable requi | res continuous bo | ttom chor | d bearing. | | | | | W SIG | ENUS | |
| | | | | 7) | Gable studs | spaced at 0-0-0 (| DC. | 5 | | | | | A NA | L P.S | |
| | | | | , | | | | | | | | | and and | and a | |

April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | LAY2 | Lay-In Gable | 1 | 1 | Job Reference (optional) | 164799637 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:08 ID:e94KRRwQKiM6OTyRsHys9qzSPfP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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| Scolo | _ | 1.19 0 |
|-------|---|--------|
| Scale | = | 1:48.9 |

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2 | 021/TPI2014 | CSI TC BC WB Matrix-S | 0.06 0.04 0.14 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 9 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 76 lb | GRIP 197/144 FT = 10% |
|---|--|--|--|--|--|--|--|--|--|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD | 2x4 SPF 2x4 SPF 2x4 SPF Structura 6-0-0 oc Rigid ceil bracing. | No.2 No.2 No.2 Il wood she purlins. ling directly | athing directly applie applied or 10-0-0 oc | d or | Wind: ASCE Vasd=91mpi II; Exp C; Er cantilever lei right expose Truss desig only. For stu see Standar or consult qu All plates are | 7-16; Vult=11: n; TCDL=6.0ps closed; MWFF t and right exp d; Lumber DOI ned for wind lo uds exposed to d Industry Gab alified building e 2x4 MT20 un | 5mph (3-sec sf; BCDL=6. SS (envelope cosed ; end v L=1.60 plate ads in the p v wind (norm le End Deta designer a: less otherwi | cond gust) Dpsf; h=25ft; e) exterior zo vertical left ar grip DOL=1 lane of the tr al to the face ils as applica s per ANSI/T se indicated. | Cat. ne; nd .60 uss ∋), able, PI 1. | | | | | |
| REACTIONS | Max Horiz Max Uplift Max Grav | 1=16-7-1 13=16-7-1 15=16-7-1 1=194 (LC 10=-117 (12=-106 (12=-106 (15=-103 (1=150 (LC 10=220 (L 14=206 (L 14=208 (L 16=221 (L | 1, 9=107-11, 10=10 11, 12=16-7-11, 11, 14=16-7-11, 12, 16=16-7-11 13, 16=16-7-11 14, 16=16-7-11 15, 10, 10, 10 12, 00, 11=-103 (LC 6 14, 10, 11=189 (LC 1 14, 10, 11=189 (LC 1 15, 15=188 (LC 1) 15, 15=188 (| 9), 3), 3), 3), (6), (8), (5), | Gable requir Gable studs This truss ha chord live lox This truss line The struss line < | es continuous spaced at 2-0- is been design ad nonconcurrr has been desig n chord in all a by 2-00-00 wid by other memb are assumed t hanical conner e capable of wi at joint 9, 107 15, 117 lb uplit bublit at joint | bottom chor 0 oc. ed for a 10.1 ent with any ned for a liv treas where e will fit betv ers. o be SPF Ne ction (by oth thstanding 5 Ib uplift at joint 16, t at joint 16, t 11 and 112 | d bearing.) psf bottom other live loa e load of 20. a rectangle veen the bott 0.2. ers) of truss 5 lb uplift at int 14, 103 l 106 lb uplift | ads. Opsf om to joint b at oint | | | | | |
| FORCES | (lb) - Max | kimum Com | pression/Maximum | | 10. | io upint at join | | ib upint at jo | JIIIL | | | | | ~ |
| TOP CHORD | 1-2=-229 4-5=-101 7-8=-109 | /158, 2-3=- /159, 5-6=- /63, 8-9=-1 | 145/115, 3-4=-122/10 81/141, 6-7=-83/69, 93/106 | 04, | LOAD CASE(S) | Standard | | | | | | 4 | TE OF I | MISSO |
| BOT CHORD | 1-16=-77 14-15=-7 12-13=-7 10-11=-7 | /169, 15-16 7/169, 13-1 7/169, 11-1 7/169, 9-10 | 6=-77/169, 4=-77/169, 2=-77/169, 0=-77/169 | | | | | | | | | A * | ANDI THOM | EW PP |
| WEBS | 5-13=-15 3-15=-15 6-12=-16 8-10=-17 | 2/15, 4-14= 1/128, 2-16 6/130, 7-11 0/137 | 167/131,)=-170/137, =-152/128, | | | | | | | | 1 | | NUM PE-2017 | BER 018993 |
| NOTES | | | | | | | | | | | | Y | 1 Sc. | JON H |
| 1) Unbalanc | ed roof live | loads have | been considered for | | | | | | | | | | ONA | LEF |

1) Unbalanced roof live loads have been considered for this design.

April 11,2024

and



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | LAY3 | Lay-In Gable | 1 | 1 | Job Reference (optional) | 164799638 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:08 ID:ounGgtZ5Luhnhs5_TjwBGmzX7Sr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:58

Plate Offsets (X, Y): [6:0-1-10,Edge]

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC202 | 1/TPI2014 | CSI TC BC WB Matrix-S | 0.32 0.14 0.14 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 15 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 150 lb | GRIP 197/144 FT = 10% | |
|--|---|--|--|--|--|---|---|--|--|--|---|--|---|---|--|
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD | 2x4 SPF 2x4 SPF 2x4 SPF 2x4 SPF Structura 6-0-0 oc 2-0-0 oc | No.2 No.2 No.2 No.2 I wood she: purlins, exi purlins, exi purlins (6-0 | athing directly applie cept end verticals, ar 0 max.): 6-14. | T B ed or nd | OP CHORD | I-2=-353/229, 2-3=- I-5=-221/146, 5-6=- I-8=-121/92, 8-9=-1 I0-11=-121/92, 11- I2-13=-121/92, 13- I-27=-122/92, 26-27 I5-26=-122/92, 21-2 20-21=-122/92, 19-2 | ·300/19 ·175/12 21/92, 12=-12 14=-12 7=-122/ 25=-12 23=-12 23=-12 | 4, 3-4=-244/1 2, 6-7=-121/9 9-10=-121/92 1/92, 14-15=- 92, 2/92, 2/92, 2/92, 2/92, | 156, 92, 2, 94/85 | 11) Probea bea 1, 2 upli join lb u join 12) Gra or the | vide med ring plat 0 lb uplit t at joint 24, 99 plift at jo 18, 45 phical p ne orient | chanic e capa ft at joi 26, 1 lb uplif int 20, lb uplif urlin re ation o | al connection (by able of withstand int 15, 104 lb upli 10 lb uplift at join 135 lb uplift at join 14 at joint 17 and apresentation dor of the purlin alon | others) of truss ng 116 lb uplift at ft at joint 27, 100 t 25, 89 lb uplift o uplift at joint 2° nt 19, 37 lb uplif 30 lb uplift at join as not depict the g the top and/or | to at joint 4 lb at 1, 35 ft at nt 16. size |
| BOT CHORD WEBS | Rigid ceil bracing. 1 Row at | ing directly | applied or 10-0-0 oc 14-15, 7-23, 8-21, 9 10-19, 11-18, 12-17 13-16 | c ⊦-20, ₩ ′, | /EBS 2 | 8-19=-122/92, 17- ⁻ 6-17=-122/92, 15- ⁻ 2-27=-151/122, 3-26 I-25=-154/134, 5-2 ⁴ 7-23=-141/123, 8-2 ⁻ | 18=-12: 16=-12: 5=-158/ 1=-163/ 1=-145/ | 2/92, 2/92 (129, (113, (73, 9-20=-14 | 3/60, | bott LOAD (| om chor CASE(S) | d.) Sta | ndard | | |
| REACTIONS | (size) Max Horiz Max Uplift | 1=23-2-9, 17=23-2-9 20=23-2-9 24=23-2-9 27=23-2-9 1=340 (LC 1=-116 (L 16=-50 (L 18=-37 (L 20=-35 (L 23=-99 (L) 25=-110 (27=-104 (| 15=23-2-9, 16=23-2 15=23-2-9, 18=23-2 9, 18=23-2-9, 23=23-2 9, 25=23-2-9, 26=23-2 0, 25 C 6), 15=-20 (LC 5), C 4), 17=-45 (LC 5), C 4), 17=-45 (LC 5), C 4), 19=-35 (LC 5), C 5), 21=-49 (LC 4), C 5), 24=-89 (LC 8), LC 8), 26=-104 (LC 4) | 2-9, -2-9, N -2-9, 1 -2-9, 1 2 8), | OTES Unbalanced this design. Wind: ASCE Vasd=91mpf II; Exp C; En cantilever lef right expose Truss design only. For stu see Standard | 10-19=-143/59, 11- 12-17=-146/60, 13- roof live loads have 7-16; Vult=115mph ; TCDL=6.0psf; BC closed; MWFRS (er t and right exposed d; Lumber DOL=1.6 hed for wind loads in ds exposed to winc d Industry Gable En | 18=-13i 16=-11i been of DL=6.(nvelope ; end v 0 plate n the pl I (norm d Deta | 3/58, 4/114 considered fo cond gust) Dpsf; h=25ft; (e) exterior zor rertical left an grip DDL=1. ane of the tru. al to the face ils as applical | r Cat. ne; d 60 Jss), ble, | | | Å | ATE OF J | MISSOL | h |
| FORCES | Max Grav (Ib) - Max Tension | 1=239 (LC 16=149 (L 18=178 (L 20=184 (L 23=181 (L 25=194 (L 27=194 (L | C 5), 15=33 (LC 1), C 22), 17=188 (LC 2 C 1), 19=184 (LC 2 C 1), 21=185 (LC 2 C 1), 21=185 (LC 2 C 1), 24=203 (LC 1 C 15), 26=197 (LC 2 C 15) pression/Maximum | 1), 4 2), 5 2), 6 5), 7 15), 8 9 | or consult qu Provide adeo All plates are Gable requir Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar | alified building desi juate drainage to pr 2x4 MT20 unless of as continuous botto spaced at 0-0-0 oc. s been designed fo ad nonconcurrent w has been designed fo n chord in all areas by 2-00-00 wile will by other members. are assumed to be | gner as revent v otherwi m chor r a 10.0 ith any for a liv where fit betw | s per ANSI/TF water ponding se indicated. d bearing.) psf bottom other live loa e load of 20.0 a rectangle ween the botto 0.2. | PI 1. g. ds. Dpsf om | | (| | ANDI THOU JOIN NUM PE-2017 | EW AAS SOL BER 018993 | |

April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | LAY4 | Lay-In Gable | 1 | 1 | Job Reference (optional) | 164799639 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:08 ID:hB4efs0wOZUOFi?lihc6pnzX7SF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:48.4

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC202 | 1/TPI2014 | CSI TC BC WB Matrix-S | 0.07 0.03 0.21 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 9 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 69 lb | GRIP 197/144 FT = 10% |
|--|---|---|---|---|--|--|---|---|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SPF No.2 2x4 SPF No.2 2x4 SPF No.2 2x4 SPF No.2 2x4 SPF No.2 Structural wood shea 6-0-0 oc purlins, exc Rigid ceiling directly bracing. (size) 1=13-7-6, 11=13-7-6 14=13-7-6 Max Horiz 1=230 (LC Max Uplift 1=-121 (LI 10=-110 (I 12=-100 (I 14=-103 (I Max Grav 1=189 (LC 10=181 (LI 12=246 (LI 12=246 (LI 12=246 (LI 14=187 (LI | athing directly applied cept end verticals. applied or 10-0-0 oc 9=13-7-6, 10=13-7-6 5, 12=13-7-6, 13=13-7 5, 15=13-7-6 C 5) C 4), 9=-19 (LC 8), LC 9), 11=-104 (LC 9 LC 7), 13=-106 (LC 8 LC 7), 13=-117 (LC 8 C 7), 9=51 (LC 18), C 16), 11=206 (LC 16 C 4), 13=212 (LC 15) C 4), 15=221 (LC 15 | 2) 3) 1 or 4) 5) , -6, 7) 8)),),),),),),),),), 5) | Wind: ASCE Vasd=91mph II; Exp C; En cantilever lef right exposed Truss design only. For stu see Standarc or consult qu All plates are Gable require Gable studs This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and ar All bearing state) Provide mech bearing plate 1, 19 lb upliff | 7-16; Vult=115mp n; TCDL=6.0psf; Bi closed; MWFRS (et and right exposed d; Lumber DOL=1. ted for wind loads ds exposed to wind l Industry Gable Ei alified building des 2x4 MT20 unless es continuous bottt spaced at 2-0-0 oc s been designed fud nonconcurrent v tas been designed n chord in all areas by 2-00-00 wide will y other members. are assumed to be hanical connection to capable of withsta at joint 9, 100 lb u | h (3-sec CDL=6.0 enveloped d; end v 60 plate in the pl d (norm nd Deta signer as otherwi or a 10.0 vith any for a liv s where I fit betw SPF No (by oth anding 1 plift at ju | ond gust) Dpsf; h=25ft; C a) exterior zon rertical left anc grip DOL=1.6 ane of the true al to the face) Ils as applicab as per ANSI/TP be indicated. d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the botto D.2. ers) of truss to 21 lb uplift at j int 12, 106 lb | eat. e; f io ss ss , le, l 1. ls. psf m joint | | | | | |
| | (lb) - Maximum Com Tension | pression/Maximum | 2 | ipint at joint 13, 103 ib upint at joint 14, 117 ib upint at joint 15, 104 lb uplift at joint 11 and 110 lb uplift at joint 10. | | | | | | | | | |
| I OF CHORD | 4-5=-163/209, 5-6=- 7-8=-55/49, 8-9=-53/ | 136/192, 6-7=-101/10 /34 | ² , LC 4, | LOAD CASE(S) Standard | | | | | | | | FE OF M | AISSO |
| BOT CHORD | 1-15=-43/36, 14-15= 12-13=-43/36, 11-12 9-10=-43/36 | -43/36, 13-14=-43/36 =-43/36, 10-11=-43/3 | , 6, | ANDREW THOMAS | | | | | | | | EW | |
| WEBS | 5-12=-223/140, 4-13 3-14=-149/128, 2-15 6-11=-167/129 7-10 | =-171/130, =-170/137, =-134/126 | | JOHNSON * | | | | | | | | | tunta |
| NOTES | 5 . I = 101/120, I 10 | | | | | | | | | C | R's | NUM | BER A |
| 1) Unbalanced roof live loads have been considered for | | | | | | | | | | | N | O PE-2017 | 018993 |

1) Unbalanced roof live loads have been considered for this design.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)

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April 11,2024

SSIONAL ET
| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | LAY5 | Lay-In Gable | 1 | 1 | Job Reference (optional) | 164799640 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:08 ID:y19kkhQhnpWlape99lmw8fzX7Vb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







| Scale = | 1:66.4 |
|---------|--------|
|---------|--------|

Plate Offsets (X, Y): [6:0-1-4,Edge]

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC202 | 21/TPI2014 | CSI TC BC WB Matrix-S | 0.07 0.03 0.18 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a -0.01 | (loc) - - 10 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 92 lb | GRIP 197/144 FT = 10% |
|--|--|---|--|--|---|---|--|--|---|-----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|
| | | | | | /==== | 10 101/101 0 1 | 7 400 | 400 | | | | | ····g···· •_ ·· | |
| LUMBER TOP CHORD BOT CHORD | 2x4 SPF I 2x4 SPF I | No.2 No.2 | | v | /EBS 2 4 8 | 2-18=-184/194, 3-1 1-16=-195/214, 5-14 1-12=-139/61, 9-11 | 7=-182 4=-118 =-149/6 | 193, 54, 7-13=-14 0 | 40/62, | | | | | |
| OTHERS | 2x4 SPF I | No.2 | | N | OTES | | | | | | | | | |
| BRACING TOP CHORD | Structural 6-0-0 oc p 2-0-0 oc p | wood shea ourlins, exc ourlins (6-0- | athing directly applie ept -0 max.): 6-10. | d or 2 | Unbalanced i this design. Wind: ASCE Vasd=91mph | roof live loads have 7-16; Vult=115mpł ı; TCDL=6.0psf; BC | been (3-seo DL=6. | considered fo cond gust) Dpsf; h=25ft; | or Cat. | | | | | |
| BOT CHORD | Rigid ceili bracing. | ng directly | applied or 10-0-0 oc | ; | II; Exp C; End cantilever left | closed; MWFRS (e and right exposed | nvelope ; end י | e) exterior zo rertical left ar | ne; nd | | | | | |
| WEBS | 1 Row at | midpt | 5-14 | | right exposed | l; Lumber DOL=1.6 | 60 plate | grip DOL=1 | .60 | | | | | |
| REACTIONS | (size) Max Horiz Max Uplift Max Grav | 1=15-10-1 11=15-10- 13=15-10- 15=15-10- 17=15-10- 1=432 (LC 11=-36 (LC 13=-38 (LC 13=-38 (LC 15=-50 (LC 17=-168 (I 1=410 (LC 11=195 (L 13=14 (I) | 4, 10=15-10-14, 14, 12=15-10-14, 14, 14=15-10-14, 14, 16=15-10-14, 14, 18=15-10-14, 18, 10=-94 (LC 8), C 4), 12=-37 (LC 5), C 4), 12=-37 (LC 5), C 4), 12=-37 (LC 6), C 15), 16=-188 (LC 6), C 8), 18=-178 (LC 1), C 1), 12=178 (LC 1), C 12), 12=161 (LC 1), C 12), 1 | 3 4 5 6 7 8), 8 8) 1) 9 | Truss design only. For stu see Standarc or consult qui Provide adeq All plates are Gable studs s This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an All bearings a | led for wind loads i ds exposed to wind I Industry Gable Er alified building desis uate drainage to p 2x4 MT20 unless i spaced at 0-0-0 oc. s been designed for d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. are assumed to be | n the p I (norm d Deta gner as revent otherwi r a 10. ith any for a liv where fit betw SPF Ne | ane of the fr al to the face is as applica per ANSI/T water pondin se indicated.) psf bottom other live loa e load of 20. a rectangle veen the bott o.2. | uss able, PI 1. g. ads. Opsf | | | | STOR N | |
| | | 15=116 (L 17=220 (L | C 8), 16=235 (LC 15 C 8), 16=235 (LC 15 C 15), 18=232 (LC 2 | 1), 0 5), 1 15) | 0) Provide mech bearing plate | nanical connection capable of withsta | (by oth nding 1 | ers) of truss 40 lb uplift a | to t joint | | | 6 | ATEOFA | 11SSOL |
| FORCES | (lb) - Max Tension | imum Com | pression/Maximum | | 1, 94 lb uplift uplift at joint | at joint 10, 50 lb up 18, 168 lb uplift at j | olift at j oint 17 | 188 lb uplift | b at | | | A | ANDR | EW YE W |
| TOP CHORD | 1-2=-532/ 4-5=-84/2 7-8=-31/7 | 237, 2-3=-3 9, 5-6=-69/ 3, 8-9=-31/ | 362/164, 3-4=-189/9 63, 6-7=-31/73, 73, 9-10=-31/73 | 4, 1 | joint 16, 54 lb lb uplift at joir 1) Non Standard | o uplift at joint 14, 3 nt 12 and 36 lb upli d bearing condition | 8 lb up ft at joii . Revie | ift at joint 13 ht 11. w required. | , 37 | | (| Æ | EVALOL | the second |
| BOT CHORD | 1-18=-73/ 15-16=-73 13-14=-12 11-12=-12 | '31, 17-18= 3/31, 14-15 29/68, 12-1 29/68, 10-1 | -73/31, 16-17=-73/3 =-130/76, 3=-129/67, 1=-129/60 | 1, 1 L | Graphical put or the orienta bottom chord OAD CASE(S) | rlin representation of tion of the purlin al Standard | does no ong the | ot depict the top and/or | size | | | ANA A | PE-20170 | SER 118993 |



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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | LAY6 | Lay-In Gable | 1 | 1 | Job Reference (optional) | 164799641 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:08 ID:Y3d9WXdoTE_iy1jBS228fXzX7U2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:46.1

Plate Offsets (X, Y): [4:0-1-4,Edge]

| | | | | | | | | | | | | | | | _ |
|--|---|--|--|--|--|--|---|--|--|-------|--------|-----|---------------|-------------|---|
| Loading | | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL (roof) | | 25.0 | Plate Grip DOL | 1.15 | | TC | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 | |
| TCDL | | 10.0 | Lumber DOL | 1.15 | | BC | 0.04 | Vert(TL) | n/a | - | n/a | 999 | | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | | WB | 0.10 | Horiz(IL) | 0.00 | 8 | n/a | n/a | | | |
| BCDL | | 10.0 | Code | IRC2021 | TPI2014 | Matrix-S | | | | | | | Weight: 60 lb | FI = 10% | _ |
| BCLL BCDL LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SPF N 2x4 SPF N 2x4 SPF N Structural 6-0-0 oc p 2-0-0 oc p Rigid ceili bracing. (size) Max Horiz Max Uplift | 0.0* 10.0 No.2 | Rep Stress Incr Code athing directly applied ept -0 max.): 4-8. applied or 10-0-0 oc 4, 8=12-6-14, 9=12-6- 4, 11=12-6-14, 4, 13=12-6-14, 4, 13=12-6-14, 58) 6), 8=-48 (LC 8), 9=: 41 (I C 5), 1118 | YES IRC2021, 2) d or 3) .14, 6) 7) 8) .336 | TPI2014 Wind: ASCE Vasd=91mph II; Exp C; Enc cantilever left right exposed Truss design only. For stu see Standard or consult qu Provide aded All plates are Gable studs a This truss ha chord live loas * This truss ha on the botton 3-06-00 tall b | WB Matrix-S 7-16; Vult=115mph ; TCDL=6.0psf; BC closed; MWFRS (er and right exposed d; Lumber DOL=1.6 ed for wind loads i ds exposed to wind I Industry Gable En alified building desi juate drainage to pr 2x4 MT20 unless of spaced at 2-0-0 oc. s been designed fo d nonconcurrent w as been designed in a chord in all areas y 2-00-00 wide will | 0.10 (3-sec DL=6.0 nvelope ; end v 0 plate n the pi d norm id Deta gner as revent v otherwi r a 10.0 ith any for a liv where fit betw | Horiz(TL) ond gust) 0psf; h=25ft; e) exterior zoi ertical left ar grip DOL=1. ane of the tru al to the face Is as applica is per ANSI/TI vater ponding se indicated. 0 psf bottom other live load a rectangle reen the bott | 0.00 Cat. ne; id 60 uss i), ble, Pl 1. g. uds. 0psf om | 8 | n/a | n/a | Weight: 60 lb | FT = 10% | |
| | Max Grav | (LC 4), 10 15), 12=-3 14=-233 (1=201 (LC (LC 22), 1 8), 12=17 14=295 (L | =-41 (LC 5), 11=-18 88 (LC 4), 13=-56 (LC LC 8) 0 8), 8=86 (LC 1), 9=- 0=172 (LC 1), 11=58 7 (LC 22), 13=144 (L .C 15) | (LC ^{; 8),} 9) 196 ¹⁰⁾ (LC C 1), | chord and an All bearings a Provide med bearing plate 1, 48 lb uplift at joint 9, 41 lb uplift at joint | y other members. are assumed to be nanical connection capable of withsta at joint 8, 18 lb upl lb uplift at joint 10, 13 and 233 lb up | SPF No (by oth nding 3 ift at joi 38 lb up lift at joi | 0.2 . ers) of truss t 9 lb uplift at j nt 11, 36 lb u plift at joint 12 int 14 | to joint ıplift 2, 56 | | | | | | |
| FORCES | (lb) - Maxi | mum Com | pression/Maximum | 11) | Non Standar | d bearing condition | . Revie | w required. | | | | | Contra la | and and | |
| TOP CHORD | 1-2=-275/ 4-5=-20/3 7-8=-20/3 | 137, 2-3=-! 8, 5-6=-20/ 8 | 96/37, 3-4=-69/35, /38, 6-7=-20/38, | 12) | Graphical pu or the orienta bottom chord | rlin representation of the purlin al | does no ong the | ot depict the s top and/or | size | | | Å | STATE OF ANDR | EW FR | |
| BOT CHORD | 1-14=-38/ 11-12=-38 8-9=-71/4 | 20, 13-14= 3/20, 10-11 0 | -38/20, 12-13=-38/20 =-65/45, 9-10=-71/50 |), LO / | AD CASE(S) | Standard | | | | | (| | THOM | AS DND + | |
| WEBS | 7-9=-149/ 3-13=-109 | 60, 6-10=- 9/83, 2-14= | 139/59, 5-12=-141/60 -234/250 |), | | | | | | | C | N I | NUM | BER | |
| NOTES 1) Unbalance this design | ed roof live le n. | oads have | been considered for | | | | | | | | | Q. | PE-2017 | L ENGL | |





April 11,2024

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|--------------|-----|-----|--------------------------|-----------|
| B240069 | LAY7 | Lay-In Gable | 1 | 1 | Job Reference (optional) | 164799642 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:08 ID:aw1XSFiitzIIP5JD?H9P5kzSPgz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.9

Plate Offsets (X, Y): [3:Edge,0-3-2], [4:0-0-0, Edge]

| Loading | (| (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|-------------------|-----------|--|--------|------------------|-----------------------|--------------|-------------------|------|-------|--------|-----|---------------------------|-----------|
| TCLL (roof) | | 25.0 | Plate Grip DOI | 1 15 | | TC | 0.04 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDI | | 10.0 | Lumber DOI | 1 15 | | BC | 0.02 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | | WB | 0.03 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCDI | | 10.0 | Code | IRC202 | 1/TPI2014 | Matrix-P | 0.00 | | 0.00 | 0 | | | Weight [,] 21 lb | FT = 10% |
| | | 10.0 | 0000 | IIII | | Mathx | | - | | | | | Wolgin. 21 lb | |
| LUMBER | | | | 7) | * This truss h | as been designed | for a live | e load of 20.0 |)psf | | | | | |
| TOP CHORD | 2x4 SPF No.2 | 2 | | | on the botton | n chord in all area | s where | a rectangle | | | | | | |
| BOT CHORD | 2x4 SPF No.2 | 2 | | | 3-06-00 tall b | y 2-00-00 wide wi | ill fit betw | een the botto | om | | | | | |
| OTHERS | 2x4 SPF No.2 | 2 | | | chord and an | y other members. | | | | | | | | |
| BRACING | | | | 8) | All bearings a | are assumed to be | SPF No | 0.2 . | | | | | | |
| TOP CHORD | Structural wo | od shea | thing directly applied | or 9) | Provide mecl | nanical connectior | ר (by oth | ers) of truss to | 0 | | | | | |
| | 5-9-1 oc purli | ins. | 0 , 11 | | bearing plate | capable of withst | anding 1 | 0 lb uplift at jo | oint | | | | | |
| BOT CHORD | Rigid ceiling | directly | applied or 10-0-0 oc | | 1, 8 lb uplift a | at joint 5, 136 lb up | olift at joi | nt 7 and 135 I | lb | | | | | |
| | bracing. | | | | uplift at joint | ö. | | | | | | | | |
| REACTIONS | (size) 1= | 5-8-11, | 5=5-8-11, 6=5-8-11, | LC | DAD CASE(S) | Standard | | | | | | | | |
| | 7= | 5-8-11 | | | | | | | | | | | | |
| | Max Horiz 1= | 94 (LC 1 | 7) | | | | | | | | | | | |
| | Max Uplift 1= | -10 (LC | 6), 5=-8 (LC 7), 6=-1 | 35 | | | | | | | | | | |
| | (LC | C 9), 7≕ | -136 (LC 8) | | | | | | | | | | | |
| | Max Grav 1= | :108 (LC | 17), 5=107 (LC 18), | | | | | | | | | | | |
| | 6= | 192 (LC | 16), 7=193 (LC 15) | | | | | | | | | | | |
| FORCES | (lb) - Maximu | ım Com | pression/Maximum | | | | | | | | | | | |
| | Tension | | | | | | | | | | | | | |
| TOP CHORD | 1-2=-144/80, | 2-3=-57 | 7/12, 3-4=-57/12, | | | | | | | | | | | |
| | 4-5=-143/79 | | | | | | | | | | | | | |
| BOT CHORD | 1-7=-52/122, | 6-7=-52 | 2/122, 5-6=-52/122 | | | | | | | | | | | |
| WEBS | 2-7=-155/159 | 9, 4-6=-1 | 54/158 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | m |
| 1) Unbalance | ed roof live load | ls have | been considered for | | | | | | | | | | OFA | ALC D |
| this desigr | n. | | | | | | | | | | | | AFE | 115S |
| 2) Wind: ASC | CE 7-16; Vult=1 | 15mph | (3-second gust) | | | | | | | | | Å | | N.S. |
| Vasd=91n | nph; TCDL=6.0 | psf; BCI | DL=6.0psf; h=25ft; Ca | at. | | | | | | | | A | ANDR | EW YEN |
| II; Exp C; | Enclosed; MVVF | -RS (en | velope) exterior zone | ; | | | | | | | | H | THOM | IAS Y X |
| cantilever | left and right ex | xposed; | end vertical left and | | | | | | | | - 1 | ¥ 🖌 | IOHN | |
| 2) Truce der | sed; Lumber DU | UL=1.60 | the plane of the true | , | | | | | | | | - | Julin | |
| only For | stude expected | to wind | (normal to the face) | 5 | | | | | | | | N/V | | |
| see Stand | lard Industry Ga | able End | (normal to the lace), I Details as applicable | - | | | | | | | v | 83 | NUME | BER A |
| or consult | qualified buildin | | ner as ner ANSI/TPI | , 1 | | | | | | | | 00 | >> PE-20170 | 18993 159 |
| 4) Gable reg | uires continuou | is hotton | n chord bearing | •• | | | | | | | | N | The second | 12A |
| 5) Gable stu | ds spaced at 0-i | 0-0 00 | . c.icia boaring. | | | | | | | | | X | Som | JO'A |
| 6) This truss | has been desig | aned for | a 10.0 psf bottom | | | | | | | | | | ONA | LENZ |
| chord live | load nonconcui | rrent wit | h any other live loads | 5. | | | | | | | | | an | TTT - |
| chord live | load nonconcui | rrent wit | h any other live loads | S. | | | | | | | | | Con | and a |

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)



April 11,2024

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| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|-------------|-----|-----|--------------------------|-----------|
| B240069 | R1 | Flat Girder | 1 | 2 | Job Reference (optional) | 164799643 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:08 ID:abN16ahL?CnnQtSOZcBmr0zX5oo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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6-1-8

| Scale | _ | 1.21 | 1 |
|-------|---|------|---|
| ocale | _ | 1.41 | |

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 NO IRC2021 | /TPI2014 | CSI TC BC WB Matrix-P | 0.80 0.20 0.00 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.03 -0.07 0.00 | (loc) 3-4 3-4 3 | l/defl >999 >999 n/a | L/d 360 240 n/a | PLATES MT20 Weight: 61 lb | GRIP 197/144 FT = 10% |
|--|--|---|--|--|--|---|---|-------------------------------------|--------------------------|-------------------------------|--------------------------|---------------------------------|-------------------------------------|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS | 2x6 SP 2400F 2.0E 2x4 SPF No.2 2x4 SPF No.2 2-0-0 oc purlins: 1-2 Rigid ceiling directly bracing. (size) 3=0-3-8, 4 Max Horiz 4=62 (LC Max Uplift 3=-310 (L Max Grav 3=1830 (L (b) - Maximum Com | , except end verticals applied or 10-0-0 oc =0-3-8 7) C 5), 4=-380 (LC 4) C 1), 4=2217 (LC 1) pression/Maximum | 6) 5. 8) 9) 10) | * This truss h on the bottor 3-06-00 tall b chord and ar All bearings a Provide mec bearing plate 4 and 310 lb Graphical pu or the orienta bottom chorc Hanger(s) or provided suff | has been designed in chord in all area by 2-00-00 wide wi by other members. are assumed to be hanical connection e capable of withst uplift at joint 3. I'lin representation ation of the purlin a d. other connection ficient to support c 198 lb up at 0.90 | d for a liv s where ill fit betw. e SPF No h (by oth anding 3 h does no along the device(s | e load of 20. a rectangle veen the bott c.2. ers) of truss 880 lb uplift a bt depict the e top and/or i) shall be ated load(s) 1 69 lb doa(s) 1 | Opsf om to t joint size | | | | | |
| TOP CHORD BOT CHORD WEBS NOTES 1) 2-ply truss (0.131"x3" Top chord oc, 2x6 - 2 Bottom ch 0-9-0 oc. Web conn | Tension 1-4=-2159/415, 1-2= 3-4=-54/49 1-3=-32/32 to be connected toget) nails as follows: s connected as follows: rows staggered at 0-5 ords connected as follows: ected as follows: 2x4 - | -23/18, 2-3=-1772/33 her with 10d : 2x4 - 1 row at 0-9-0 -0 oc. ows: 2x4 - 1 row at 1 row at 0-9-0 oc. | 36 LO 1) | 191 lb up at 191 lb up at 4-9-0 on top connection d AD CASE(S) Dead + Roc Plate Increa Uniform Lo: Vert: 1-2: Concentrate Vert: 5=- | 2-9-0, and 1169 li chord. The desig levice(s) is the res Standard of Live (balanced): ase=1.15 ads (lb/ft) =-70, 3-4=-20 ed Loads (lb) 1183, 6=-1169, 7= | , and i b down a n/selecti ponsibili : Lumber | and 185 lb up on of such ty of others. | 15, | | | | | |
| All loads a except if n CASE(S) s provided tu unless oth Wind: ASC Vasd=91nr II; Exp C; I | re considered equally oted as front (F) or bac section. Ply to ply conn o distribute only loads erwise indicated. 2E 7-16; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (er | applied to all plies, ck (B) face in the LO/ ections have been noted as (F) or (B), (3-second gust) DL=6.0psf; h=25ft; Ci velope) exterior zone | AD at. ə; | | | | | | | l | | STATE OF ANDR | MISSOUR LEW MAS SON BER |

- cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding. 4)
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com)



E

PE-2017018993

SIONAL

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | V1 | Valley | 1 | 1 | Job Reference (optional) | 164799644 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:09 ID:wQBU4twQr06mPP2dkY48wizX7a6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





7-0-14

| Scale | - 1 | .27 | 8 |
|-------|-----|-----|---|

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2021/TF | 12014 | CSI TC BC WB Matrix-P | 0.19 0.10 0.05 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 4 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 18 lb | GRIP 197/144 FT = 10% |
|--|--|---|--|---|--|---|---------------------------|--|--------------------------|----------------------|-----------------------------|--------------------------|---|--|
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS | 2x4 SPF No 2x4 SPF No 2x3 SPF No 2x3 SPF No | 0.2 0.2 0.2 0.2 | | 8) Pr be 4 ; LOAD | ovide mec aring plate and 98 lb u CASE(S) | hanical connection capable of withe plift at joint 5. Standard | on (by othe standing 2 | ers) of truss 7 lb uplift at | to joint | | | | | |
| BRACING TOP CHORD BOT CHORD | Structural w 6-0-0 oc pu Rigid ceiling bracing. | vood shea rlins, exc g directly | athing directly applic cept end verticals. applied or 10-0-0 o | ed or c | | | | | | | | | | |
| REACTIONS | (size) 1 Max Horiz 1 Max Uplift 4 Max Grav 1 | =7-0-14, =115 (LC =-27 (LC =61 (LC | 4=7-0-14, 5=7-0-14 ; 7) 8), 5=-98 (LC 8) 16), 4=142 (LC 1), 9 | i 5=370 | | | | | | | | | | |
| FORCES TOP CHORD BOT CHORD WEBS | (lb) - Maxim Tension 1-2=-95/49, 1-5=-37/28, 2-5=-288/14 | 2-3=-90/ 4-5=-37/ | pression/Maximum 32, 3-4=-111/46 28 | | | | | | | | | | | |
| NOTES Wind: ASC Vasd=91rr II; Exp C; E cantilever 1 right expos Truss des only. For s see Stands or consult Gable requ Gable requ Gable stuc This truss chord live * This truss on the bott 3-06-00 tal chord and | CE 7-16; Vult= nph; TCDL=6. Enclosed; MW left and right e sed; Lumber L signed for wind studs exposed ard Industry G qualified build uires continuo ds spaced at 4 has been des load nonconc s has been des load nonconc s has been de tom chord in a il by 2-00-00 v any other me | 4115mph Opsf; BCI /FRS (en exposed : DOL=1.60 d loads in d to wind able Enc ding desig us bottor I-0-0 oc. igned for urrent wit ssigned fa all areas with mbers. | (3-second gust) DL=6.0psf; h=25ft; (velope) exterior zor end vertical left an o plate grip DOL=1. the plane of the trr. (normal to the face d Details as applical pner as per ANSI/TF n chord bearing. a 10.0 psf bottom th any other live loa or a live load of 20.0 where a rectangle it between the bottom | Cat. ne; d 60 iss), ble, PI 1. ds. opsf om | | | | | | | l | | STATE OF M ANDE THOM JOHN NUM PE-2017 PE-2017 | MISSOL EEW MAS SOL BER 018993 |

7) All bearings are assumed to be SPF No.2 .

April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | V2 | Valley | 1 | 1 | Job Reference (optional) | 164799645 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:09 ID:sYnpxkl?NPDu55PkLvJdpYzX7aL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f









12 5 Г

2x4 u

• 3

| Seele | 1.00 / |
|---------|--------|
| Scale = | 1:23.4 |

| Loa | ding | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-----|--------------|-------------------------|---|-----------------|----------|------|-----------|------|-------|--------|-----------|---------------|-----------|
| TCL | L (roof) | 25.0 | Plate Grip DOL | 1.15 | тс (| 0.28 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| тс |) L | 10.0 | Lumber DOL | 1.15 | вс о | 0.15 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCL | L | 0.0* | Rep Stress Incr | YES | WB (| 0.00 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCI | DL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | 0.00 | | 0.00 | 0 | | | Weight: 11 lb | FT = 10% |
| | | | | | | | | | | | | 0 | |
| | MBER | | | LOAD CASE(S) | Standard | | | | | | | | |
| | CHORD | 2x4 SPF No.2 | | | | | | | | | | | |
| BO | | 2x4 SPF No.2 | | | | | | | | | | | |
| VE | 85 | 2X3 SPF N0.2 | | | | | | | | | | | |
| BR/ | ACING | | | | | | | | | | | | |
| IOF | CHORD | Structural wood she | eathing directly appli | ed or | | | | | | | | | |
| | | 4-8-11 OC purlins, e | except end verticals. | | | | | | | | | | |
| BO | I CHORD | bracing. | / applied or 10-0-0 o | С | | | | | | | | | |
| RE/ | ACTIONS | (size) 1=4-8-2, | 3=4-8-2 | | | | | | | | | | |
| | | Max Horiz 1=71 (LC | 5) | | | | | | | | | | |
| | | Max Uplift 1=-25 (LC | C 8), 3=-40 (LC 8) | | | | | | | | | | |
| | | Max Grav 1=174 (L | C 1), 3=174 (LC 1) | | | | | | | | | | |
| FOF | RCES | (lb) - Maximum Con | npression/Maximum | | | | | | | | | | |
| TOP | | | 5/00 | | | | | | | | | | |
| | | 1-2=-63/42, 2-3=-13 | 35/63 | | | | | | | | | | |
| 80 | | 1-3=-23/17 | | | | | | | | | | | |
| NO. | TES | | | | | | | | | | | | |
| 1) | Wind: ASC | CE 7-16; Vult=115mpl | n (3-second gust) | • | | | | | | | | | |
| | Vasd=91m | iph; ICDL=6.0psf; BC | DL=6.0pst; h=25ft; | Cat. | | | | | | | | | |
| | II; EXP C; E | Enclosed; IVIVVERS (e | nvelope) exterior zoi | ne; | | | | | | | | | |
| | right expos | en and right exposed | 1, end ventical left an 0 ploto grip DOI -1 | 60 | | | | | | | | | |
| 2) | Truce doe | igned for wind loads i | n the plane of the tr | 00 | | | | | | | | | |
| ∠) | only For | stude exposed to wind | to the plane of the face |) 255 | | | | | | | | 000 | all |
| | see Stands | ard Industry Gable Fr | d Details as applicat |), ble | | | | | | | | 8. OF M | AIG. D |
| | or consult | qualified building desi | igner as per ANSI/TI | PI 1 | | | | | | | - | FIE | NO20 |
| 3) | Gable regu | uires continuous botto | m chord bearing. | | | | | | | | 6 | N | NSY |
| 4) | Gable stud | is spaced at 2-0-0 oc. | | | | | | | | | 8 | S/ ANDR | EW YZY |
| 5) | This truss | has been designed for | or a 10.0 psf bottom | | | | | | | | R | / THOM | IAS \ Y |
| , | chord live I | load nonconcurrent w | ith any other live loa | ds. | | | | | | | X 🖈 | JOHNS | SON X |
| 6) | * This truss | s has been designed | for a live load of 20.0 | Opsf | | | | | | - 1 | P | | Llas hall |
| | on the bott | tom chord in all areas | where a rectangle | | | | | | | U U | \$ | NUM | |
| | 3-06-00 tal | ll by 2-00-00 wide will | fit between the botto | om | | | | | | | 27 | | DER A |
| | chord and | any other members. | | | | | | | | | N. | OX PE-2017 | 018993 |
| 7) | All bearing | is are assumed to be | SPF No.2 . | | | | | | | | V | A. | 154 |
| 8) | Provide me | echanical connection | (by others) of truss t | 10 | | | | | | | | A STON | FNUA |
| | bearing pla | ate capable of withsta | naing 25 ib uplift at j | oint | | | | | | | | WNA | L |
| | 1 and 40 lb | o uplift at joint 3. | | | | | | | | | | atter | |

April 11,2024

Page: 1



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | V3 | Valley | 1 | 1 | Job Reference (optional) | 164799646 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:09 ID:5?InF?f_GyC08toCtDAIVszX7aT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





2x4 ዾ

2-3-5



Scale = 1:17

Plate Offsets (X, Y): [2:Edge,0-1-15]

| Loading | (psf) | Spacing | 2-0-0 | csi | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------------------------|--------------------------|---|-----------------|----------------------|---------|-------------------|----------|-------|----------|---------------|--------------|----------|
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.03 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | | | | | | Weight: 5 lb | FT = 10% |
| | | | 8) Provide mec | hanical connection (| by oth | ers) of truss to | ` | | | | | |
| | 2x4 SPE No 2 | | bearing plate | capable of withstar | ndina 1 | 0 lb uplift at ic | pint | | | | | |
| BOT CHORD | 2x4 SPF No 2 | | 1 and 15 lb u | plift at joint 3. | | | | | | | | |
| WEBS | 2x3 SPF No.2 | | LOAD CASE(S) | Standard | | | | | | | | |
| BRACING | | | () | | | | | | | | | |
| TOP CHORD | Structural wood she | athing directly applie | d or | | | | | | | | | |
| | 2-3-14 oc purlins. ex | xcept end verticals. | | | | | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 10-0-0 oc | | | | | | | | | | |
| | bracing. | | | | | | | | | | | |
| REACTIONS | (size) 1=2-3-5, 3 | 3=2-3-5 | | | | | | | | | | |
| | Max Horiz 1=27 (LC | 7) | | | | | | | | | | |
| | Max Uplift 1=-10 (LC | 3), 3=-15 (LC 8) | | | | | | | | | | |
| | Max Grav 1=66 (LC | 1), 3=66 (LC 1) | | | | | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | | | | | | | | | | |
| | Tension | 10.1 | | | | | | | | | | |
| TOP CHORD | 1-2=-24/16, 2-3=-51/ | /24 | | | | | | | | | | |
| BOT CHORD | 1-3=-9/7 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | |
| 1) Wind: ASC | CE 7-16; Vult=115mph | (3-second gust) | | | | | | | | | | |
| Vasd=91n | nph; TCDL=6.0psf; BC | DL=6.0psf; h=25ft; C | at. | | | | | | | | | |
| II; Exp C; | Enclosed; MWFRS (en | velope) exterior zon | e; | | | | | | | | | |
| right expo | sed: Lumber DOI =1.6 | , end ventical left and 0 plate grip DOI =1.6 | 1 1 | | | | | | | | | ~ |
| 2) Truss des | sed, Lumber DOL-1.00 | the plane of the true | | | | | | | | | an | 1000 |
| only. For | studs exposed to wind | (normal to the face). | | | | | | | | | B. OF M | AIS C |
| see Stand | ard Industry Gable End | d Details as applicab | le, | | | | | | | E | 7.21 | N'SON |
| or consult | qualified building desig | gner as per ANSI/TP | 11. | | | | | | | B | ANDR | FW P.V |
| 3) Gable req | uires continuous bottor | m chord bearing. | | | | | | | | R | | THE VY |
| 4) Gable stud | ds spaced at 2-0-0 oc. | | | | | | | | | 12 + | | |
| 5) This truss | has been designed for | r a 10.0 psf bottom | | | | | | | / | N . | JUNIN | |
| chord live | load nonconcurrent wi | th any other live load | IS. | | | | | | <u> </u> | \mathcal{M} | \sim | ever a |
| 6) * This trus | s has been designed for | or a live load of 20.0 | pst | | | | | | Ŭ | 83 | NUMI | BER SER |
| 3-06-00 ta | IUm choru in all areas | where a rectangle | m | | | | | | | N | ON PE-2017 | 018993 |
| chord and | any other members | in between the DOLLO | | | | | | | | N | 12 | 188 |
| All bearing | are assumed to be S | SPF No.2 . | | | | | | | | | 1380 | ENO'S |
| , | , | | | | | | | | | | UNA NA | LEY |
| | | | | | | | | | | | lan | 555 |
| | | | | | | | | | | | A | 44 0004 |

April 11,2024



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | V4 | Valley | 1 | 1 | Job Reference (optional) | 164799647 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:09 ID:ofN8ncZbvoK0oolszFY6iOzX7aa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



| Scale | - 1. | 25.8 | |
|-------|------|------|--|

| | | | | | 7-0-13 | | | | | | | |
|----------------|--------------|-----------------|-----------------|----------------|---------------|-----------------|-----------|-------|--------|-----|---------------|----------|
| Scale = 1:25.8 | | | I | | | | | | | | | |
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.19 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.05 | Horiz(TL) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | | | | | | Weight: 18 lb | FT = 10% |
| | 2v4 SPE No 2 | | 8) Provide me | chanical conne | ction (by oth | ers) of truss t | 0 oint | | | | | |

| | 274 01 1 1 | 10.2 |
|-----------|------------|------------------------------------|
| BOT CHORD | 2x4 SPF I | No.2 |
| WEBS | 2x3 SPF I | No.2 |
| OTHERS | 2x3 SPF I | No.2 |
| BRACING | | |
| TOP CHORD | Structura | wood sheathing directly applied or |
| | 6-0-0 oc p | ourlins, except end verticals. |
| BOT CHORD | Rigid ceil | ing directly applied or 10-0-0 oc |
| | bracing. | |
| REACTIONS | (size) | 1=7-0-13, 4=7-0-13, 5=7-0-13 |
| | Max Horiz | 1=114 (LC 5) |
| | Max Uplift | 4=-27 (LC 8), 5=-98 (LC 8) |
| | Max Grav | 1=61 (LC 16), 4=142 (LC 1), 5=370 |
| | | (LC 1) |
| FORCES | (lb) - Max | imum Compression/Maximum |
| | Tension | |
| TOP CHORD | 1-2=-95/4 | 9, 2-3=-90/32, 3-4=-111/46 |
| BOT CHORD | 1-5=-37/2 | 8, 4-5=-37/28 |
| WEBS | 2-5=-287/ | (148 |

WFBS

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. Gable requires continuous bottom chord bearing.
- 3) Gable studs spaced at 4-0-0 oc. 4)

- This truss has been designed for a 10.0 psf bottom 5) chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf 6) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) All bearings are assumed to be SPF No.2 .





 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not beigh valid for use only with with with with the contractions. This design is based only door plantaters shown, and is for an individual dualing component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)



314.434.1200 / MiTek-US.com

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | V5 | Valley | 1 | 1 | Job Reference (optional) | 164799648 |

4-8-14

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:09 ID:GaP5Q8NZhuJHtKXn1uGM30zX7aq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

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2x4 ዾ

2x4 u

2x4 🛛

| | | | 4-8-14 | | | | | | | | | |
|--------------|-------|-----------------|-----------------|----------|------|-----------|------|-------|--------|-----|---------------|----------|
| Scale = 1:21 | | | | | | | | | | | | |
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 25.0 | Plate Grip DOL | 1.15 | TC | 0.29 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.16 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | | | | | | Weight: 12 lb | FT = 10% |

| LUMBER | LOAD CASE(S) | Standard |
|---|--------------|------------------|
| TOP CHORD 2x4 SPF No.2 | | |
| BOT CHORD 2x4 SPF No.2 | | |
| WEBS 2x3 SPF No.2 | | |
| BRACING | | |
| 4-9-8 oc purlins except end verticals | | |
| BOT CHORD Rigid ceiling directly applied or 10-0-0 oc | | |
| bracing. | | |
| REACTIONS (size) 1=4-8-14, 3=4-8-14 | | |
| Max Horiz 1=72 (LC 7) | | |
| Max Uplift 1=-26 (LC 8), 3=-40 (LC 8) | | |
| Max Grav I=177 (LC I), 3=177 (LC I) | | |
| Tension | | |
| TOP CHORD 1-2=-64/43, 2-3=-138/64 | | |
| BOT CHORD 1-3=-23/18 | | |
| NOTES | | |
| 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) | | |
| Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. | | |
| cantilever left and right exposed ; end vertical left and | | |
| right exposed; Lumber DOL=1.60 plate grip DOL=1.60 | | |
| 2) Truss designed for wind loads in the plane of the truss | | |
| only. For studs exposed to wind (normal to the face), | | OF MICH |
| see Standard Industry Gable End Details as applicable, | | SE OT MISS |
| Gable requires continuous bottom chord bearing. | | ALT C |
| 4) Gable studs spaced at 2-0-0 oc. | | ANDREW V |
| 5) This truss has been designed for a 10.0 psf bottom | | H THOMAS |
| chord live load nonconcurrent with any other live loads. | | JOHNSON |
| on the bottom chord in all areas where a rectangle | | (Funderson) |
| 3-06-00 tall by 2-00-00 wide will fit between the bottom | | NUMBER |
| chord and any other members. | | VO PE-2017018993 |
| 7) All bearings are assumed to be SPF No.2. | | |
| 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint | | Some EN |
| 1 and 40 lb uplift at joint 3. | | WAL |
| · · · · · · · · · · · · · · · · · · · | | April 11 2024 |
| | | April 11,2024 |

tpinst.org) to the second seco

| MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. | |
|---|---------|
| Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not | |
| a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall | |
| building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing | |
| is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the | |
| fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, and DSB-22 available from Truss Plate Institute (www | .tpinst |
| and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcscomponents.com) | |

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | V6 | Valley | 1 | 1 | Job Reference (optional) | 164799649 |

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Tue Apr 09 15:45:09 ID:V1w3IPHYZRIQw6wEZD6UkKzX7ay-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1









| | | | | | | I | | | | | |
|-------|---------------------------------------|---|--|--|---|--|---|---|---|---|---|
| (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| 25.0 | Plate Grip DOL | 1.15 | TC | 0.04 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(TL) | n/a | - | n/a | 999 | | |
| 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| 10.0 | Code | IRC2021/TPI2014 | Matrix-P | | | | | | | Weight: 5 lb | FT = 10% |
| | (psf) 25.0 10.0 0.0* 10.0 | (psf)Spacing25.0Plate Grip DOL10.0Lumber DOL0.0*Rep Stress Incr10.0Code | (psf) Spacing 2-0-0 25.0 Plate Grip DOL 1.15 10.0 Lumber DOL 1.15 0.0* Rep Stress Incr YES 10.0 Code IRC2021/TPI2014 | (psf) Spacing 2-0-0 CSI 25.0 Plate Grip DOL 1.15 TC 10.0 Lumber DOL 1.15 BC 0.0* Rep Stress Incr YES WB 10.0 Code IRC2021/TPI2014 Matrix-P | (psf) Spacing 2-0-0 CSI 25.0 Plate Grip DOL 1.15 TC 0.04 10.0 Lumber DOL 1.15 BC 0.02 0.0* Rep Stress Incr YES WB 0.00 10.0 Code IRC2021/TPI2014 Matrix-P | (psf) Spacing 2-0-0 CSI DEFL 25.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) 10.0 Lumber DOL 1.15 BC 0.02 Vert(TL) 0.0* Rep Stress Incr YES WB 0.00 Horiz(TL) 10.0 Code IRC2021/TPI2014 Matrix-P Horiz(TL) | (psf) Spacing 2-0-0 CSI DEFL in 25.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) n/a 10.0 Lumber DOL 1.15 BC 0.02 Vert(TL) n/a 0.0* Rep Stress Incr YES WB 0.00 Horiz(TL) 0.00 10.0 Code IRC2021/TPI2014 Matrix-P Matrix-P Matrix-P Matrix-P | (psf) Spacing 2-0-0 CSI DEFL in (loc) 25.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) n/a - 10.0 Lumber DOL 1.15 BC 0.02 Vert(TL) n/a - 0.0* Rep Stress Incr YES WB 0.00 Horiz(TL) 0.00 3 10.0 Code IRC2021/TPI2014 Matrix-P Horiz(TL) 0.00 3 | (psf) Spacing 2-0-0 CSI DEFL in (loc) l/defl 25.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) n/a - n/a 10.0 Lumber DOL 1.15 BC 0.02 Vert(TL) n/a - n/a 0.0* Rep Stress Incr YES WB 0.00 Horiz(TL) 0.00 3 n/a 10.0 Code IRC2021/TPI2014 Matrix-P - <td>(psf) Spacing 2-0-0 CSI DEFL in (loc) l/defl L/d 25.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) n/a - n/a 999 10.0 Lumber DOL 1.15 BC 0.02 Vert(TL) n/a - n/a 999 0.0* Rep Stress Incr YES WB 0.00 Horiz(TL) 0.00 3 n/a n/a 10.0 Code IRC2021/TPI2014 Matrix-P Matrix-P Horiz(TL) 0.00 3 n/a n/a</td> <td>(psf) Spacing 2-0-0 CSI DEFL in (loc) l/defl L/d PLATES 25.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) n/a - n/a 999 MT20 10.0 Lumber DOL 1.15 BC 0.02 Vert(TL) n/a - n/a 999 10.0 Code IRC2021/TPI2014 WB 0.00 Horiz(TL) 0.00 3 n/a n/a</td> | (psf) Spacing 2-0-0 CSI DEFL in (loc) l/defl L/d 25.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) n/a - n/a 999 10.0 Lumber DOL 1.15 BC 0.02 Vert(TL) n/a - n/a 999 0.0* Rep Stress Incr YES WB 0.00 Horiz(TL) 0.00 3 n/a n/a 10.0 Code IRC2021/TPI2014 Matrix-P Matrix-P Horiz(TL) 0.00 3 n/a n/a | (psf) Spacing 2-0-0 CSI DEFL in (loc) l/defl L/d PLATES 25.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) n/a - n/a 999 MT20 10.0 Lumber DOL 1.15 BC 0.02 Vert(TL) n/a - n/a 999 10.0 Code IRC2021/TPI2014 WB 0.00 Horiz(TL) 0.00 3 n/a n/a |

| LUMBER | | LOAD CASE(S) | Standard | |
|-----------------------------|--|--------------|----------|--------------------------|
| TOP CHORD | 2x4 SPF No.2 | | | |
| BOT CHORD | 2x4 SPF No.2 | | | |
| WEBS | 2x3 SPF No.2 | | | |
| BRACING | | | | |
| TOP CHORD | Structural wood sheathing directly applied or | | | |
| | 2-4-11 oc purlins. except end verticals. | | | |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc | | | |
| | bracing. | | | |
| REACTIONS | (size) 1=2-4-2. 3=2-4-2 | | | |
| | Max Horiz 1=28 (LC 7) | | | |
| | Max Uplift 1=-10 (LC 8), 3=-16 (LC 8) | | | |
| | Max Grav 1=69 (LC 1), 3=69 (LC 1) | | | |
| FORCES | (lb) - Maximum Compression/Maximum | | | |
| 1011020 | Tension | | | |
| TOP CHORD | 1-2=-25/17, 2-3=-54/25 | | | |
| BOT CHORD | 1-3=-9/7 | | | |
| NOTES | | | | |
| 1) Wind AS | CF 7-16: Vult=115mph (3-second gust) | | | |
| Vasd=91n | nph: TCDL=6.0psf: BCDL=6.0psf: h=25ft: Cat. | | | |
| II: Exp C: | Enclosed: MWFRS (envelope) exterior zone: | | | |
| cantilever | left and right exposed ; end vertical left and | | | |
| right expo | sed; Lumber DOL=1.60 plate grip DOL=1.60 | | | |
| 2) Truss des | signed for wind loads in the plane of the truss | | | |
| only. For | studs exposed to wind (normal to the face), | | | Samo |
| see Stand | lard Industry Gable End Details as applicable, | | | OF MISS |
| or consult | qualified building designer as per ANSI/TPI 1. | | | B IN SOLA |
| Gable req | uires continuous bottom chord bearing. | | | ANDREW P.V |
| Gable stu | ds spaced at 2-0-0 oc. | | | ANDREW VY |
| 5) This truss | has been designed for a 10.0 psf bottom | | | THOMAS IN I |
| chord live | load nonconcurrent with any other live loads. | | | |
| 6) ^ I his trus | ss has been designed for a live load of 20.0psf | | | 1 million and the second |
| | llom chord in all areas where a rectangle | | | NUMBER A |
| chord and | an by 2-00-00 wide will in between the bottom | | | PE-2017018993 |
| 7) All bearing | ns are assumed to be SPF No 2 | | | |
| 8) Provide m | pechanical connection (by others) of truss to | | | A CON |
| bearing pl | late capable of withstanding 10 lb uplift at joint | | | IN ONAL ET |
| 1 and 16 l | b uplift at joint 3. | | | A THAT A |
| | | | | April 11 2024 |
| | | | | April 11,2024 |



| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | V7 | Valley | 1 | 1 | Job Reference (optional) | 164799650 |

1-11-8

2-3-3

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:09 ID:JwmvRe8e92w_5Qa7QPQvo?zX7b7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

8-11-13

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8-11-13

0-6-15

3

2x4 👟



| Scale = 1:25.9 | | | | | | | | | | | | | |
|---|--|---|----------------------|---|---|--|---|----------------------------|--------|---------------|------------|----------------|------------------------|
| Loading TCLL (roof) | (psf) 25.0 | Spacing Plate Grip DOL | 2-0-0 1.15 | | CSI TC | 0.28 | DEFL Vert(LL) | in n/a | (loc) | l/defl n/a | L/d 999 | PLATES MT20 | GRIP 197/144 |
| TCDL BCLL | 10.0 0.0* | Lumber DOL Rep Stress Incr | 1.15 YES | | BC WB | 0.13 0.05 | Vert(TL) Horiz(TL) | n/a 0.00 | - 3 | n/a n/a | 999 n/a | | |
| BCDL | 10.0 | Code | IRC20 | 021/TPI2014 | Matrix-P | | | | | | | Weight: 22 lb | FI = 10% |
| LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD | 2x4 SPF No.2 2x4 SPF No.2 2x3 SPF No.2 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. | athing directly applie applied or 10-0-0 or | ed or | This truss h on the bottor 3-06-00 tall b chord and ar All bearings i Provide mec bearing plate 1, 48 lb uplift LOAD CASE(S) | has been desig in chord in all a by 2-00-00 wide by other member are assumed to hanical connect capable of witt t at joint 3 and 4 Standard | ned for a liv reas where e will fit betv ers. b be SPF No ction (by oth thstanding 4 4 lb uplift at | e load of 20. a rectangle veen the bott b.2. ers) of truss i2 lb uplift at joint 4. | Opsf tom to joint | | | | | |
| REACTIONS | (size) 1=8-11-13 Max Horiz 1=35 (LC Max Uplift 1=-42 (LC (LC 8) Max Grav 1=183 (LC | 8, 3=8-11-13, 4=8-1 8) 8), 3=-48 (LC 9), 4 C 1), 3=183 (LC 1), 4 | 1-13 =-4 4=336 | | | | | | | | | | |

(LC 1) FORCES (Ib) - Maximum Compression/Maximum Tension

| | 10101011 |
|-----------|------------------------|
| TOP CHORD | 1-2=-88/49, 2-3=-88/35 |
| BOT CHORD | 1-4=-1/39, 3-4=-1/39 |
| WEBS | 2-4=-238/63 |

WEBS

NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6)
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

OF MISSOL A ANDREW THOMAS **JOHNSON** NUMBER PE-2017018993 C SSIONAL E

April 11,2024

16023 Swingley Ridge Rd. Chesterfield MO 63017 314.434.1200 / MiTek-US.com

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to dury with with where outputs into design is based only door parameters shown, and is for an individual building design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TPH1 Quality Criteria**, and **DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

| Job | Truss | Truss Type | Qty | Ply | Lot 183 HT | |
|---------|-------|------------|-----|-----|--------------------------|-----------|
| B240069 | V8 | Valley | 1 | 1 | Job Reference (optional) | 164799651 |

Run: 8,73 S Mar 21 2024 Print: 8,730 S Mar 21 2024 MiTek Industries. Inc. Tue Apr 09 15:45:09 ID:8_0TQROII?6nfurCoNJMHwzX7c5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



5-7-13







5-7-13

Scale = 1:22.5

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 25.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC20 | 921/TPI2014 | CSI TC BC WB Matrix-P | 0.08 0.04 0.02 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 3 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 13 lb | GRIP 197/144 FT = 10% | |
|--|---|--|---------------------------------------|--|---|--|---|--------------------------|----------------------|-----------------------------|--------------------------|--|------------------------------------|--|
| LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SPF No.2 2x4 SPF No.2 2x3 SPF No.2 Structural wood shea 5-8-13 oc purlins. Rigid ceiling directly bracing. (size) 1=5-7-13, Max Horiz 1=-20 (LC | athing directly applie applied or 10-0-0 or 3=5-7-13, 4=5-7-13 | ed or | 7) * This truss h on the bottor 3-06-00 tall h chord and ar All bearings Provide mec bearing plate 1, 28 lb uplift | has been desig n chord in all a by 2-00-00 wide by other membrare assumed to hanical connec e capable of wit at joint 3 and 2 Standard | ned for a liv reas where e will fit betv ers. o be SPF No ction (by oth chstanding 2 2 lb uplift at | e load of 20.0 a rectangle veen the botto c.2. ers) of truss t 24 lb uplift at j joint 4. | Dpsf om o oint | | | | | | |
| FORCES | Max Uplift 1=-24 (LC (LC 8) Max Grav 1=105 (LC (LC 1) (lb) - Maximum Com Tension 1-2=-51/28, 2-3=-51/ | : 8), 3=-28 (LC 9), 4= C 1), 3=105 (LC 1), 4 pression/Maximum /20 | =-2 4=192 | | | | | | | | | | | |

BOT CHORD 1-4=-1/22, 3-4=-1/22 WEBS 2-4=-136/36

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- 1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor1 bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- 5. Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.