



MiTek USA, Inc. 16023 Swingley Ridge Rd Chesterfield, MO 63017 314-434-1200

Re: 3008841 C&H/159 COBEY CREEK/MO

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Valley Center).

Pages or sheets covered by this seal: I49431985 thru I49432010

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: Engineering 001193

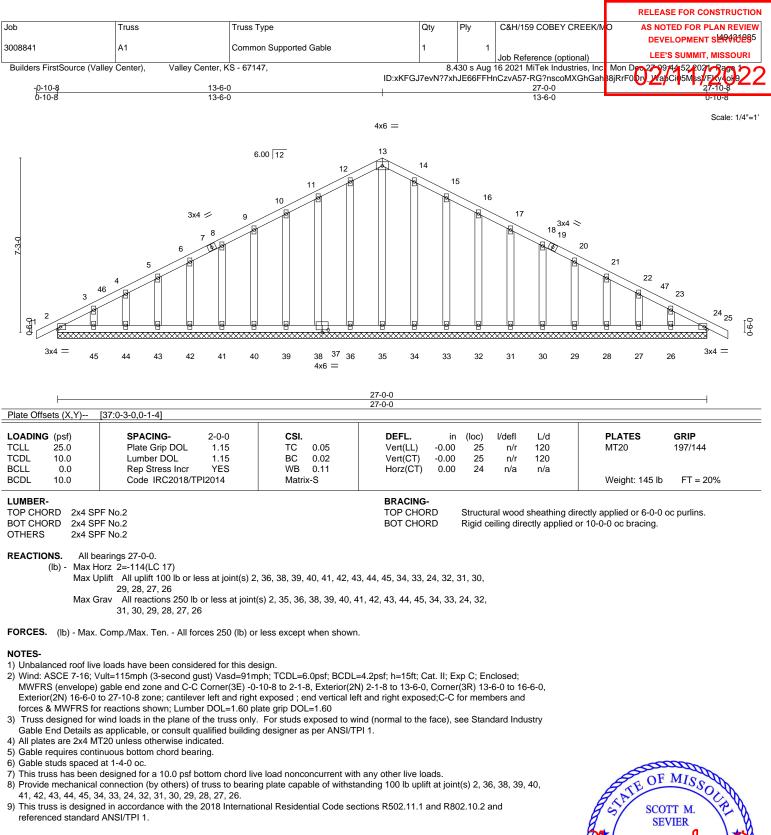


Sevier, Scott

December 28,2021

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.

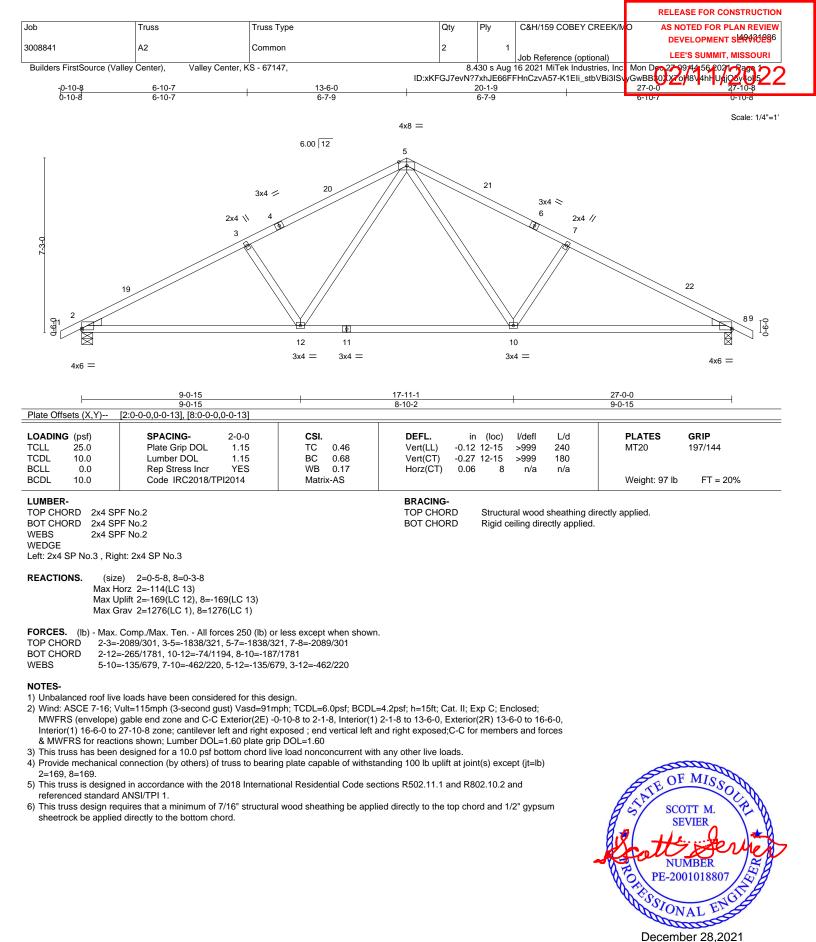
,Engineer



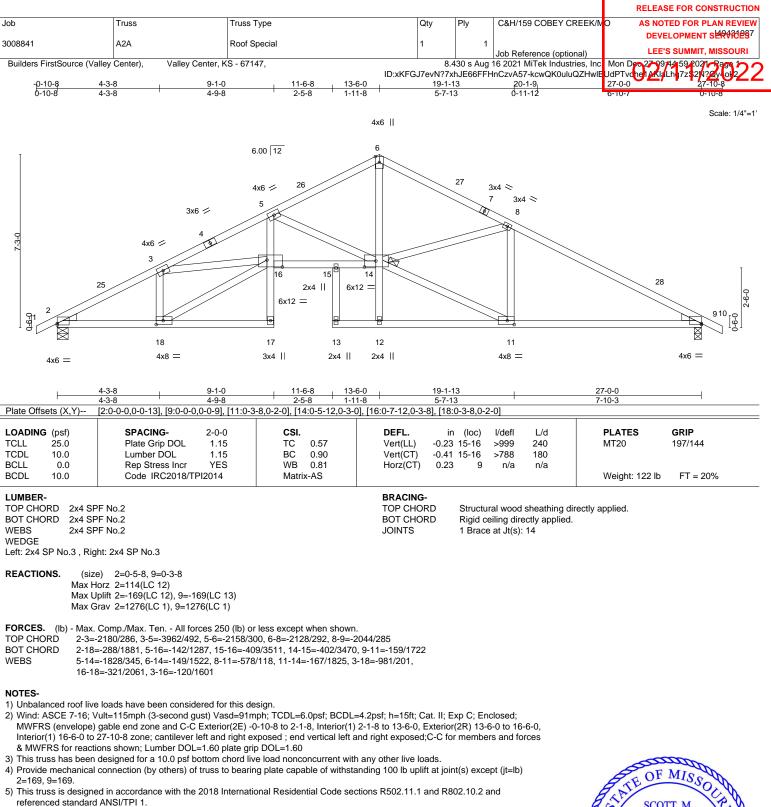


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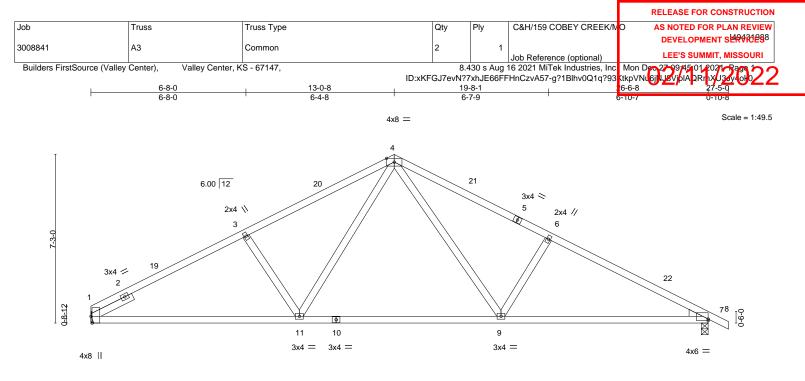




6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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| Plate Offsets (X,Y) | 8-11-9 8-11-9 [1:0-3-8,Edge], [7:0-0-0,0-0-13] | | 17-7-10 8-8-1 | | 26-6-8 3-10-14 |
|--|---|--|--|---|---|
| LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014 | CSI. TC 0.46 BC 0.66 WB 0.18 Matrix-AS | DEFL. in (loc) Vert(LL) -0.11 9-18 Vert(CT) -0.25 9-11 Horz(CT) 0.06 7 | l/defl L/d >999 240 >999 180 n/a n/a | PLATES GRIP MT20 197/144 Weight: 96 lb FT = 20% |
| LUMBER- | PF No.2 | Matrix-AS | BRACING- TOP CHORD Struct | ural wood sheathing dire | |

BOT CHORD

Rigid ceiling directly applied.

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 WEDGE
 Right: 2x4 SP No.3

 SLIDER
 Left 2x4 SPF No.2 2-0-0

REACTIONS. (size) 1=Mechanical, 7=0-3-8

Max Horz 1=-125(LC 13) Max Uplift 1=-147(LC 12), 7=-168(LC 13) Max Grav 1=1193(LC 1), 7=1257(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD 1-3=-1901/296, 3-4=-1704/315, 4-6=-1814/325, 6-7=-2050/300

BOT CHORD 1-11=-241/1633, 9-11=-69/1156, 7-9=-188/1746

WEBS 3-11=-403/206, 4-11=-120/590, 4-9=-143/693, 6-9=-458/220

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 13-0-8, Exterior(2R) 13-0-8 to 16-0-8, Interior(1) 16-0-8 to 27-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=147, 7=168.

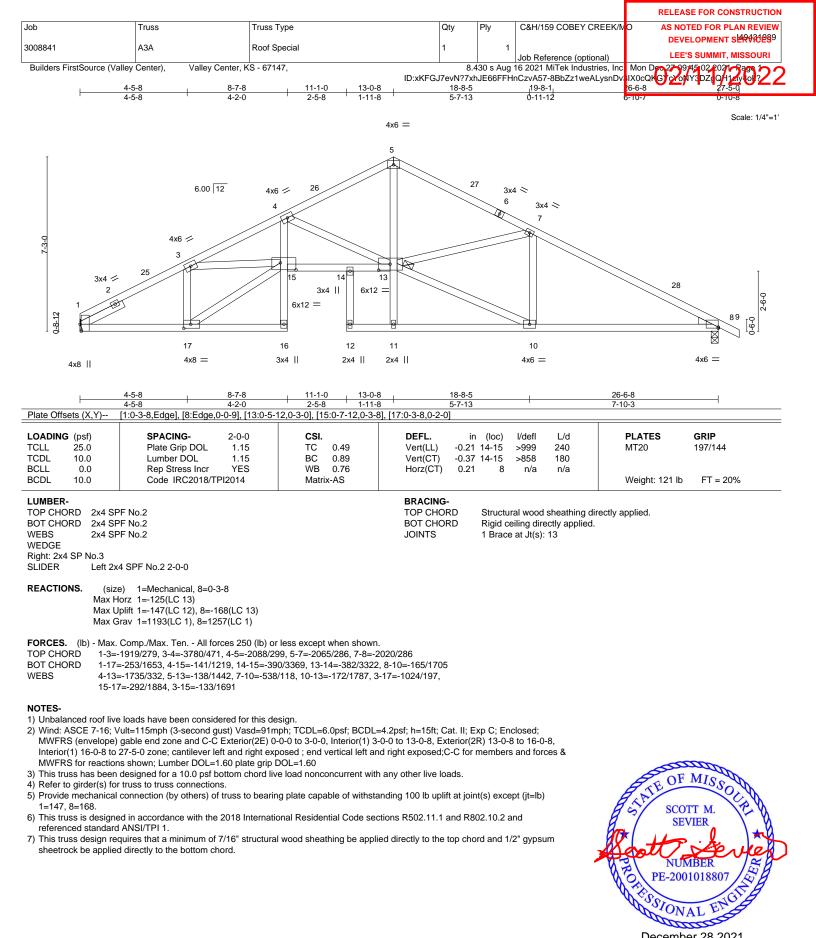
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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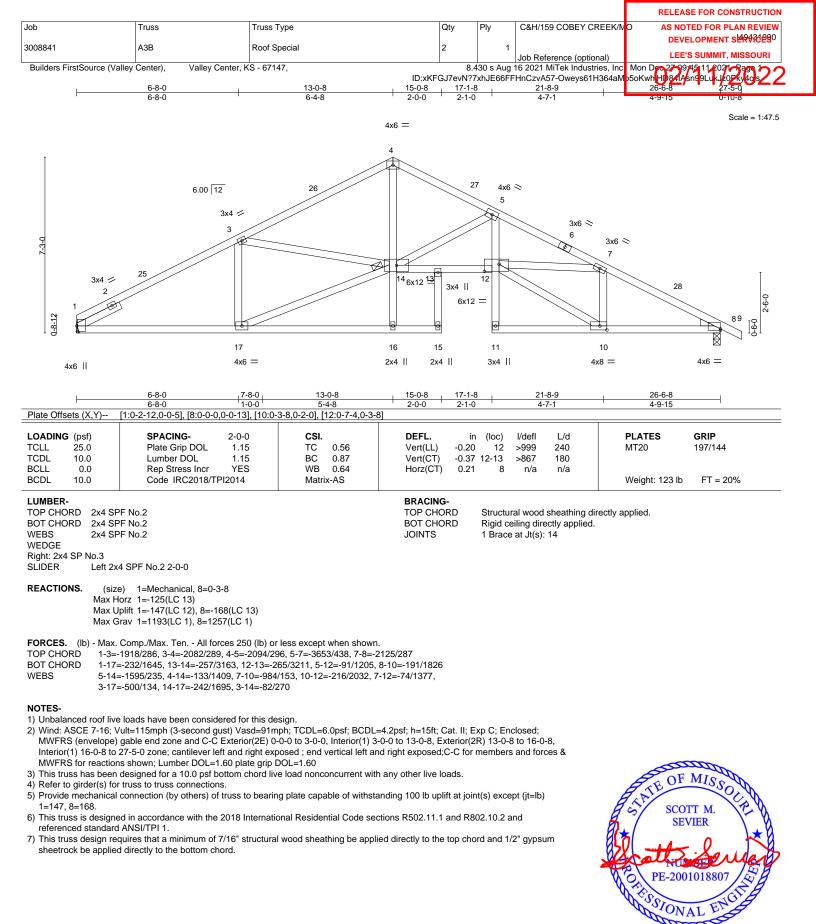




WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

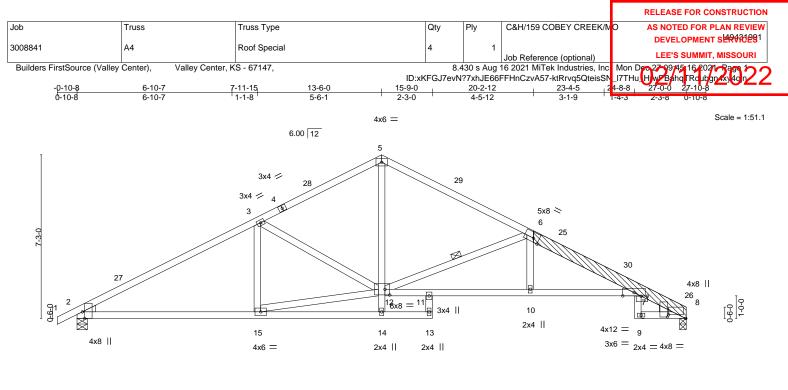


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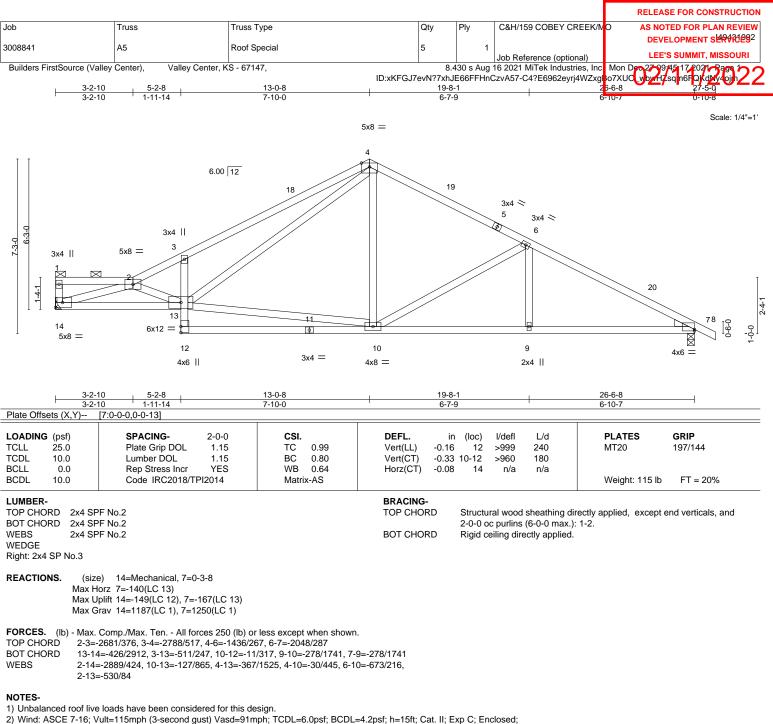
| — | 7-11-15 | <u>13-6-0</u> 5-6-1 | 15-9-0 | <u>20-2-12</u> 4-5-12 | 24-8-8 | 27-0-0 | |
|---|--|---|---|--|--|----------------------------------|------------------------------------|
| Plate Offsets (X,Y) | [2:0-3-8,Edge], [6:0-3-0,Edge], [7:0-3-7 | | | | 4-5-12 | 2-3-0 | |
| LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014 | CSI. TC 0.53 BC 0.89 WB 0.40 Matrix-AS | DEFL. Vert(LL) Vert(CT) Horz(CT) | in (loc) l/defl -0.19 10-21 >999 -0.36 10-11 >907 0.20 8 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 135 lb | GRIP 197/144 FT = 20% |
| 6-8: 2x BOT CHORD 2x4 SF WEBS 2x4 SF OTHERS 2x6 SF LBR SCAB 6-8 2x6 WEDGE Left: 2x4 SPF No.2 , R REACTIONS. (siz Max H Max U | PF No.2 *Except* 6 SP 2400F 2.0E PF No.2 P 2400F 2.0E 6 SP 2400F 2.0E 6 SP 2400F 2.0E one side ight: 2x4 SPF No.2 e) 2=0-5-8, 8=0-3-8 lorz 2=120(LC 16) Uplift 2=-169(LC 12), 8=-152(LC 13) Grav 2=1276(LC 1), 8=1212(LC 1) | | BRACING- TOP CHOF BOT CHOF WEBS | D Structural wood | sheathing directly ectly applied. 6-12 | y applied. | |
| TOP CHORD 2-3= BOT CHORD 2-15= | Comp./Max. Ten All forces 250 (lb) o -2025/287, 3-5=-1634/277, 5-6=-1687/2 =-234/1719, 11-12=-229/2467, 10-11=-2 =-110/1018, 12-15=-199/1615, 3-12=-48 | 77, 6-7=-2714/374, 7-8=-4 272/2551, 7-10=-274/2540 | 485/91) | | | | |
| 0-0-8 from end at joi 2) Unbalanced roof live 3) Wind: ASCE 7-16; W MWFRS (envelope) Interior(1) 16-6-0 to & MWFRS for reacti 4) This truss has been 5) Bearing at joint(s) 8 capacity of bearing at 6) Provide mechanical 2=169, 8=152. | b 6 to 8, front face(s) 2x6 SP 2400F 2.0E int 6, nail 2 row(s) at 7" o.c. for 2-0-0; sta e loads have been considered for this de /ult=115mph (3-second gust) Vasd=91m gable end zone and C-C Exterior(2E) - (26-11-11 zone; cantilever left and right is considered for a 10.0 psf bottom chord live considers parallel to grain value using A surface. connection (by others) of truss to bearing ed in accordance with the 2018 International constant is constant in the constant in the constant in the constant is constant in the constant is constant in the constant is constant in the con | arting at 3-2-3 from end a ssign. pp; TCDL=6.0psf; BCDL= 0-10-8 to 2-1-8, Interior(1) exposed ; end vertical left p DOL=1.60 re load nonconcurrent with NNSI/TPI 1 angle to grain ng plate capable of withsta | t joint 6, nail 2 row =4.2psf; h=15ft; Ca) 2-1-8 to 13-6-0, E and right exposed h any other live loa formula. Building anding 100 lb uplif | (s) at 4" o.c. for 4-4-5. at. II; Exp C; Enclosed; ixterior(2R) 13-6-0 to 16 ;C-C for members and ads. designer should verify t at joint(s) except (jt=lb) | -6-0, forces | * SEV | MISSOLA TT M. VIER |

2.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



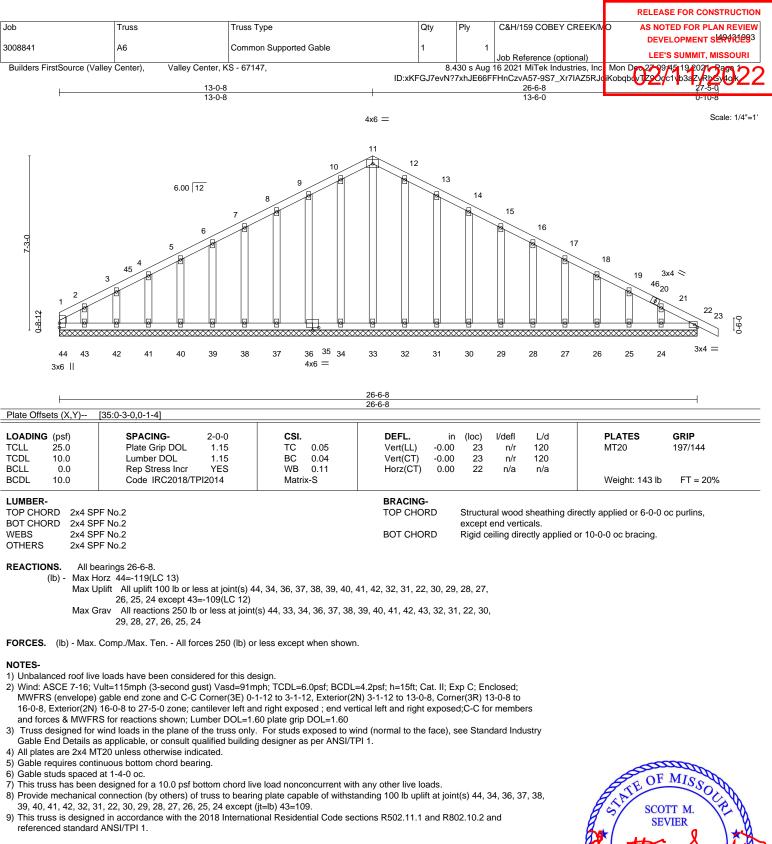
MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017



- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-2-10, Interior(1) 3-2-10 to 13-0-8, Exterior(2R) 13-0-8 to 16-0-8 , Interior(1) 16-0-8 to 27-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=149, 7=167.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





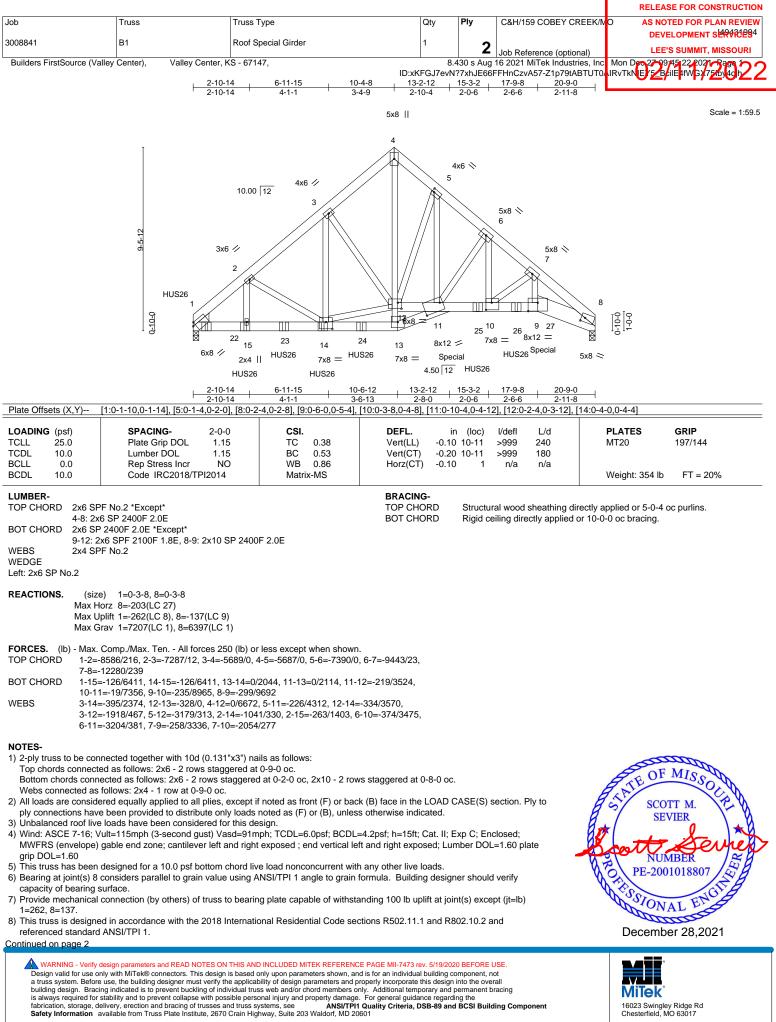




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| | | | | | 1 | RELEASE FOR CONSTRUCTION |
|--|--|--|---------------------------|-------------|---|--|
| Job | Truss | Truss Type | Qty | Ply | C&H/159 COBEY CREEK/N | O AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES |
| 3008841 | B1 | Roof Special Girder | 1 | 2 | lah Dafamaa (antianal) | LEE'S SUMMIT, MISSOURI |
| Builders FirstSourc | e (Valley Center), Valle | ey Center, KS - 67147, | 8 | .430 s Aua | Job Reference (optional) 16 2021 MiTek Industries, Inc | Mon Dep 27-99/45/22/2021 Rags 2 |
| NOTES- | | | ID:xKFGJ7evN | I?7xhJE66 | FFHnCzvA57-Z1p79tABTUT0 | |
| 9) Load case(s) 1, | | 1, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, | | 29, 30, 31, | 32, 33, 34, 35, 36, 37, 38, 3 | 9, 40 has/have been |
| | | bads to verify that they are correct for the in d Girder, 4-10d Truss) or equivalent spaced | | a at 0-8-4 | from the left end to 8-8-4 to | connect truss(es) to |
| front face of bo | ottom chord. | | | • | | |
| 11) Use Simpson front face of bo | 0 | d Girder, 4-10d Truss) or equivalent spaced | at 2-0-0 oc max. starting | g at 14-8-4 | from the left end to 16-8-4 | to connect truss(es) to |
| 12) Fill all nail hole | es where hanger is in conta | | | | | |
| | | shall be provided sufficient to support conc ign/selection of such connection device(s) is | | | 169 lb up at 12-7-0, and 1 | 167 lb down and 169 lb |
| LOAD CASE(S) | Standard | | | | | |
| • • • | | rease=1.15, Plate Increase=1.15 | | | | |
| Uniform Loads | u , | 0, 11-13=-20, 9-11=-20, 9-19=-20 | | | | |
| Concentrated L | oads (lb) | | | | | |
| | | 1=-1167(F) 15=-1173(F) 22=-1176(F) 23=- er Increase=1.15, Plate Increase=1.15 | 1173(F) 24=-1173(F) 25 | =-1167(F) | 26=-1167(F) 27=-1167(F) | |
| Uniform Loads | (plf) | | | | | |
| Vert: 1- Concentrated L | | 0, 11-13=-20, 9-11=-20, 9-19=-20 | | | | |
| Vert: 12 | 2=-1200(F) 14=-1008(F) 1 | 1=-1002(F) 15=-1008(F) 22=-1011(F) 23=- | | =-1002(F) | 26=-1002(F) 27=-1002(F) | |
| Dead + Uninhat Uniform Loads (| | ge: Lumber Increase=1.25, Plate Increase= | 1.25 | | | |
| Vert: 1- | -4=-20, 4-8=-20, 13-16=-4 | 0, 11-13=-40, 9-11=-40, 9-19=-40 | | | | |
| Concentrated L Vert: 12 | . , | =-752(F) 15=-756(F) 22=-762(F) 23=-756(F) | F) 24=-756(F) 25=-752(F |) 26=-752 | (F) 27=-752(F) | |
| , | () | Left: Lumber Increase=1.60, Plate Increase | e=1.60 | | | |
| Uniform Loads Vert: 1- | | 1-13=-8, 9-11=-8, 9-19=-8 | | | | |
| Horz: 1 Concentrated L | I-4=3, 4-8=21 | | | | | |
| Vert: 12 | 2=-1200(F) 14=155(F) 11= | =157(F) 15=155(F) 22=154(F) 23=155(F) 24 | | 157(F) 27 | =157(F) | |
| Dead + 0.6 MW Uniform Loads | | Right: Lumber Increase=1.60, Plate Increas | se=1.60 | | | |
| Vert: 1- | -4=9, 4-8=-15, 13-16=-8, 1 | 1-13=-8, 9-11=-8, 9-19=-8 | | | | |
| Horz: 1 Concentrated L | I-4=-21, 4-8=-3 .oads (lb) | | | | | |
| Vert: 12 | 2=-1200(F) 14=155(F) 11= | =157(F) 15=155(F) 22=154(F) 23=155(F) 24 | () () | 157(F) 27 | =157(F) | |
| bead + 0.6 MW Uniform Loads (| , | Left: Lumber Increase=1.60, Plate Increase | 9=1.60 | | | |
| | | 0, 11-13=-20, 9-11=-20, 9-19=-20 | | | | |
| Concentrated L | I-4=13, 4-8=10 oads (lb) | | | | | |
| | | =169(F) 15=167(F) 22=164(F) 23=167(F) 24 Right: Lumber Increase=1.60, Plate Increase | | 169(F) 27 | =169(F) | |
| Uniform Loads | (plf) | | 30-1.00 | | | |
| | -4=-10, 4-8=-33, 13-16=-20 I-4=-10, 4-8=-13 | 0, 11-13=-20, 9-11=-20, 9-19=-20 | | | | |
| Concentrated L | oads (lb) | | | | | |
| | | =169(F) 15=167(F) 22=164(F) 23=167(F) 24 1st Parallel: Lumber Increase=1.60, Plate I | | 169(F) 27: | =169(F) | |
| Uniform Loads | u / | | | | | |
| | -4=25, 4-8=9, 13-16=-8, 1´ I-4=-37, 4-8=21 | 1-13=-8, 9-11=-8, 9-19=-8 | | | | |
| Concentrated L | | =157(F) 15=155(F) 22=154(F) 23=155(F) 24 | 4–155(F) 25–157(F) 26– | 157(E) 27 | –157(F) | |
| 9) Dead + 0.6 MW | FRS Wind (Pos. Internal) | 2nd Parallel: Lumber Increase=1.60, Plate | | 107(1)27 | =107(1) | |
| Uniform Loads | (plf) -4=9, 4-8=25, 13-16=-8, 1′ | 1-13=-8, 9-11=-8, 9-19=-8 | | | | |
| Horz: 1 | -4=-21, 4-8=37 | ,, | | | | |
| Concentrated Lo Vert: 12 | | =157(F) 15=155(F) 22=154(F) 23=155(F) 24 | 4=155(F) 25=157(F) 26= | 157(F) 27 | =157(F) | |
| 10) Dead + 0.6 M | WFRS Wind (Pos. Internal |) 3rd Parallel: Lumber Increase=1.60, Plate | | | | |
| Uniform Loads Vert: | u , | 11-13=-8, 9-11=-8, 9-19=-8 | | | | |
| | 1-4=-26, 4-8=16 | | | | | |
| | 12=-1200(F) 14=155(F) 11 | 1=157(F) 15=155(F) 22=154(F) 23=155(F) 2 | | =157(F) 2 | 7=157(F) | |
| 11) Dead + 0.6 MV Uniform Loads | |) 4th Parallel: Lumber Increase=1.60, Plate | Increase=1.60 | | | |
| Vert: | 1-4=4, 4-8=14, 13-16=-8, | 11-13=-8, 9-11=-8, 9-19=-8 | | | | |
| Horz: Concentrated | 1-4=-16, 4-8=26 | | | | | |
| | 12=-1200(F) 14=155(F) 11 | 1=157(F) 15=155(F) 22=154(F) 23=155(F) 2 | 24-155(E) 25-157(E) 26 | -157(F) 2 | 7–157(F) | |
| | WFRS Wind (Neg. Internal | | | -137(1)2 | 1=101(1) | |

Continued on page 3



| | | | | | | RELEASE FOR CONSTRUCTION |
|--|---|---|-----------------|-------------|------------------------------|---|
| Job | Truss | Truss Type | Qty | Ply | C&H/159 COBEY CREEK/N | O AS NOTED FOR PLAN REVIEW DEVELOPMENT SLAR HP2024 |
| 3008841 | B1 | Roof Special Girder | 1 | 2 | Job Reference (optional) | LEE'S SUMMIT, MISSOURI |
| Builders FirstSource (Valley | Center), Valley Center, H | | 8. | 430 s Aug 1 | 6 2021 MiTek Industries, Inc | |
| | | | ID.XKFGJ7evi | | гппс2vA37-21р79IAB1010. | |
| LOAD CASE(S) Standard Uniform Loads (plf) | d | | | | | |
| u , | -8=-10, 13-16=-20, 11-13=-2 | 0, 9-11=-20, 9-19=-20 | | | | |
| Concentrated Loads (I | b) | | | | | |
| | | 5=167(F) 22=164(F) 23=167(F) 24=167(F) Ilel: Lumber Increase=1.60, Plate Increase= | () | =169(F) 27 | =169(F) | |
| Uniform Loads (plf) | , 4-8=6, 13-16=-20, 11-13=-2 | 0 9-1120 9-1920 | | | | |
| Horz: 1-4=-10 | , 4-8=26 | 0, 5 11- 20, 5 15- 20 | | | | |
| Concentrated Loads (I Vert: 12=-120 | | 5=167(F) 22=164(F) 23=167(F) 24=167(F) | 25=169(F) 26 | =169(F) 27 | ² =169(F) | |
| 14) Dead: Lumber Increas Uniform Loads (plf) | e=0.90, Plate Increase=0.90 | Plt. metal=0.90 | | | | |
| Vert: 1-4=-20, | , 4-8=-20, 13-16=-20, 11-13= | -20, 9-11=-20, 9-19=-20 | | | | |
| Concentrated Loads (I Vert: 12=-120 | / | 15=-511(F) 22=-514(F) 23=-511(F) 24=-51 | 1(F) 25=-508(| F) 26=-508 | (F) 27=-508(F) | |
| 15) Dead + 0.75 Roof Live Uniform Loads (plf) | e (bal.) + 0.75(0.6 MWFRS W | (ind (Neg. Int) Left): Lumber Increase=1.60, | , Plate Increas | e=1.60 | | |
| Vert: 1-4=-67, | , 4-8=-50, 13-16=-20, 11-13= | -20, 9-11=-20, 9-19=-20 | | | | |
| Horz: 1-4=10, Concentrated Loads (I | | | | | | |
| | | 63(F) 22=59(F) 23=63(F) 24=63(F) 25=64(/ind (Neg. Int) Right): Lumber Increase=1.6 | | | | |
| Uniform Loads (plf) | | | | 130-1.00 | | |
| Vert: 1-4=-50, Horz: 1-4=-8, | , 4-8=-67, 13-16=-20, 11-13= 4-8=-10 | -20, 9-11=-20, 9-19=-20 | | | | |
| Concentrated Loads (I Vert: 12=-120 | | 63(F) 22=59(F) 23=63(F) 24=63(F) 25=64(| F) 26=64(F) 2 | 7=64(F) | | |
| 17) Dead + 0.75 Roof Live | | ind (Neg. Int) 1st Parallel): Lumber Increas | | | 1.60 | |
| | , 4-8=-50, 13-16=-20, 11-13= | -20, 9-11=-20, 9-19=-20 | | | | |
| Horz: 1-4=-20 Concentrated Loads (I | | | | | | |
| Vert: 12=-120 | 0(F) 14=63(F) 11=64(F) 15= | 63(F) 22=59(F) 23=63(F) 24=63(F) 25=64(/ind (Neg. Int) 2nd Parallel): Lumber Increa | | | 1 60 | |
| Uniform Loads (plf) | | | se=1.00, Flate | increase= | 1.00 | |
| Vert: 1-4=-50, Horz: 1-4=-8, | , 4-8=-38, 13-16=-20, 11-13= 4-8=20 | -20, 9-11=-20, 9-19=-20 | | | | |
| Concentrated Loads (I | | 63(F) 22=59(F) 23=63(F) 24=63(F) 25=64(| E) 26-64(E) 2 | 7-64(F) | | |
| 19) Dead + 0.6 MWFRS V | | se=1.60, Plate Increase=1.60 | 1)20-01(1)2 | -01(1) | | |
| Uniform Loads (plf) Vert: 1-4=-17, | , 4-8=-12, 13-16=-8, 11-13=- | 8, 9-11=-8, 9-19=-8 | | | | |
| Horz: 1-4=5 Concentrated Loads (I | b) | | | | | |
| Vert: 12=-120 | 0(F) 14=85(F) 11=88(F) 15= | 85(F) 22=84(F) 23=85(F) 24=85(F) 25=88(F) | F) 26=88(F) 2 | 7=88(F) | | |
| Uniform Loads (plf) | Ū | ease=1.60, Plate Increase=1.60 | | | | |
| Vert: 1-4=-12, Horz: 4-8=-5 | , 4-8=-17, 13-16=-8, 11-13=- | 3, 9-11=-8, 9-19=-8 | | | | |
| Concentrated Loads (I | | 85(F) 22=84(F) 23=85(F) 24=85(F) 25=88(I | F) 26-88(F) 2 | 7-88(F) | | |
| 21) 1st Dead + Roof Live | | se=1.15, Plate Increase=1.15 | 1)20-00(1)2 | -00(1) | | |
| Uniform Loads (plf) Vert: 1-4=-70, | , 4-8=-20, 13-16=-20, 11-13= | -20, 9-11=-20, 9-19=-20 | | | | |
| Concentrated Loads (I Vert: 12=-120 | | F) 15=-1173(F) 22=-1176(F) 23=-1173(F) 2 | 24=-1173(F) 2 | 5=-1167(F) | 26=-1167(F) | |
| 27=-1167(F) | ., ., ., | , | | | 20 | |
| Uniform Loads (plf) | · · · · | ase=1.15, Plate Increase=1.15 | | | | |
| Vert: 1-4=-20, Concentrated Loads (I | , 4-8=-70, 13-16=-20, 11-13= b) | -20, 9-11=-20, 9-19=-20 | | | | |
| | | F) 15=-1173(F) 22=-1176(F) 23=-1173(F) 2 | 24=-1173(F) 2 | 5=-1167(F) | 26=-1167(F) | |
| 23) 3rd Dead + 0.75 Roof | Live (unbalanced): Lumber I | ncrease=1.15, Plate Increase=1.15 | | | | |
| Uniform Loads (plf) Vert: 1-4=-58, | , 4-8=-20, 13-16=-20, 11-13= | -20, 9-11=-20, 9-19=-20 | | | | |
| Concentrated Loads (I Vert: 12=-120 | | F) 15=-1008(F) 22=-1011(F) 23=-1008(F) 2 | 24=-1008(F) 2 | 5=-1002(F) | 26=-1002(F) | |
| 27=-1002(F) 24) 4th Dead + 0.75 Roof | Live (unbalanced): Lumber li | ncrease=1.15, Plate Increase=1.15 | | | | |
| Uniform Loads (plf) Vert: 1-4=-20. | , 4-8=-58, 13-16=-20, 11-13= | -20. 9-11=-20. 9-19=-20 | | | | |
| vont. 1 4=-20, | , | | | | | |

Continued on page 4



| | | | | | | RELEASE FOR CONSTRUCTION |
|---|---|--|-------------------|-------------|--|--|
| Job | Truss | Truss Type | Qty | Ply | C&H/159 COBEY CREEK/M | |
| 3008841 | B1 | Roof Special Girder | 1 | 2 | | DEVELOPMENT S≝R∜R21294 LEE'S SUMMIT, MISSOURI |
| Builders FirstSource (Valley | Center), Valley Center, H | KS - 67147, | 8.4 | 130 s Aug 1 | Job Reference (optional) 6 2021 MiTek Industries, Inc | Mon Den 27-99:45:22.2021 Ram 40 |
| | | | ID:xKFGJ7evN | ?7xhJE66F | FHnCzvA57-Z1p79tABTUT0/ | |
| LOAD CASE(S) Standard | | | | | | |
| Concentrated Loads (I Vert: 12=-120 | | F) 15=-1008(F) 22=-1011(F) 23=-1008(F) |) 24=-1008(F) 25 | =-1002(F) | 26=-1002(F) 27=-1002(F) | |
| 25) Reversal: Dead + 0.6 Uniform Loads (plf) | MWFRS Wind (Pos. Internal) | Left: Lumber Increase=1.60, Plate Increa | ase=1.60 | | | |
| Vert: 1-4=-15 | , 4-8=9, 13-16=-8, 11-13=-8, | 9-11=-8, 9-19=-8 | | | | |
| Horz: 1-4=3, 4 Concentrated Loads (I | | | | | | |
| Vert: 12=-120 | 00(F) 14=-499(F) 11=-460(F) | 15=-499(F) 22=-500(F) 23=-499(F) 24=-4 | | -) 26=-460 | (F) 27=-460(F) | |
| 26) Reversal: Dead + 0.6 Uniform Loads (plf) | MWFRS Wind (Pos. Internal) | Right: Lumber Increase=1.60, Plate Incr | ease=1.60 | | | |
| Vert: 1-4=9, 4 Horz: 1-4=-21 | -8=-15, 13-16=-8, 11-13=-8, | 9-11=-8, 9-19=-8 | | | | |
| Concentrated Loads (I | lb) | | | | | |
| | | 15=-499(F) 22=-500(F) 23=-499(F) 24=-4 Left: Lumber Increase=1.60, Plate Incre | | -) 26=-460 | (F) 27=-460(F) | |
| Uniform Loads (plf) | | | | | | |
| Vert: 1-4=-33 Horz: 1-4=13, | , 4-8=-10, 13-16=-20, 11-13= , 4-8=10 | -20, 9-11=-20, 9-19=-20 | | | | |
| Concentrated Loads (I | | 1E 407/E) 22 401/E) 22 407/E) 24 / | 197/E) 26 - 440/E | -) 26- 440 | (E) 27 440(E) | |
| | () () | 15=-487(F) 22=-491(F) 23=-487(F) 24=-4 Right: Lumber Increase=1.60, Plate Incr | () | -) 26=-448 | (F) 27=-449(F) | |
| Uniform Loads (plf) | , 4-8=-33, 13-16=-20, 11-13= | -20 9-1120 9-1920 | | | | |
| Horz: 1-4=-10 |), 4-8=-13 | -20, 3-1120, 3-1320 | | | | |
| Concentrated Loads (I Vert: 12=-120 | , | 15=-487(F) 22=-491(F) 23=-487(F) 24=-4 | 187(F) 25=-449(F | -) 26=-449 | (F) 27=-449(F) | |
| 29) Reversal: Dead + 0.6 | | 1st Parallel: Lumber Increase=1.60, Plat | | | | |
| Uniform Loads (plf) Vert: 1-4=25, | 4-8=9, 13-16=-8, 11-13=-8, 9 | 9-11=-8, 9-19=-8 | | | | |
| Horz: 1-4=-37 Concentrated Loads (I | , | | | | | |
| Vert: 12=-120 | 00(F) 14=-499(F) 11=-460(F) | 15=-499(F) 22=-500(F) 23=-499(F) 24=-4 | | | (F) 27=-460(F) | |
| 30) Reversal: Dead + 0.6 Uniform Loads (plf) | MWFRS Wind (Pos. Internal) | 2nd Parallel: Lumber Increase=1.60, Pla | te Increase=1.60 | C | | |
| Vert: 1-4=9, 4 | -8=25, 13-16=-8, 11-13=-8, 9 | 9-11=-8, 9-19=-8 | | | | |
| Horz: 1-4=-21 Concentrated Loads (I | | | | | | |
| | | 15=-499(F) 22=-500(F) 23=-499(F) 24=-4 3rd Parallel: Lumber Increase=1.60, Plat | | | (F) 27=-460(F) | |
| Uniform Loads (plf) | | | | , | | |
| Vert: 1-4=14, Horz: 1-4=-26 | 4-8=4, 13-16=-8, 11-13=-8, § 6, 4-8=16 | 9-11=-8, 9-19=-8 | | | | |
| Concentrated Loads (I | | 15=-499(F) 22=-500(F) 23=-499(F) 24=-4 | 100/E) 25- 460/E | -) 26- 460 | (E) 27- 460(E) | |
| | | 4th Parallel: Lumber Increase=1.60, Plat | | | (F) 27=-400(F) | |
| Uniform Loads (plf) Vert: 1-4=4 4 | -8=14, 13-16=-8, 11-13=-8, 9 | 9-11=-8 9-19=-8 | | | | |
| Horz: 1-4=-16 | 6, 4-8=26 | | | | | |
| Concentrated Loads (I Vert: 12=-120 | | 15=-499(F) 22=-500(F) 23=-499(F) 24=-4 | 199(F) 25=-460(F | -) 26=-460 | (F) | |
| 27=-460(F) | MWERS Wind (Neg. Internal | 1st Parallel: Lumber Increase=1.60, Pla | to Increase-1.60 | | | |
| Uniform Loads (plf) | | | | , | | |
| Vert: 1-4=6, 4 Horz: 1-4=-26 | ŀ-8=-10, 13-16=-20, 11-13=-2 δ. 4-8=10 | 0, 9-11=-20, 9-19=-20 | | | | |
| Concentrated Loads (I | lb) | 45 407/5) 22 404/5) 22 407/5) 24 / | | -) 00 440 | | |
| 27=-449(F) | DU(F) 14=-487(F) 11=-449(F) | 15=-487(F) 22=-491(F) 23=-487(F) 24=-4 | 187(F) 25=-449(f | -) 26=-448 | (F) | |
| 34) Reversal: Dead + 0.6 Uniform Loads (plf) | MWFRS Wind (Neg. Internal | 2nd Parallel: Lumber Increase=1.60, Pla | ate Increase=1.6 | 0 | | |
| Vert: 1-4=-10 | , 4-8=6, 13-16=-20, 11-13=-2 | 0, 9-11=-20, 9-19=-20 | | | | |
| Horz: 1-4=-10 Concentrated Loads (I | | | | | | |
| Vert: 12=-120 27=-449(F) | 00(F) 14=-487(F) 11=-449(F) | 15=-487(F) 22=-491(F) 23=-487(F) 24=-4 | 487(F) 25=-449(F | -) 26=-449 | (F) | |
| . , | 5 Roof Live (bal.) + 0.75(0.6 | /WFRS Wind (Neg. Int) Left): Lumber Inc | rease=1.60, Pla | te Increas | e=1.60 | |
| Uniform Loads (plf) Vert: 1-4=-67 | , 4-8=-50, 13-16=-20, 11-13= | -20, 9-11=-20, 9-19=-20 | | | | |
| Horz: 1-4=10, | 4-8=8 | 20, 0 11-20, 0 10-20 | | | | |
| Concentrated Loads (I Vert: 12=-120 | | 15=-866(F) 22=-869(F) 23=-866(F) 24=-8 | 366(F) 25=-834(F | -) 26=-834 | ·(F) | |
| 27=-834(F) | ., ., ., | | ., . | | . , | |
| 50) Reversal: Dead + 0.75 | 1 0.0) LIVE (DBI.) + 0.75(0.6 | /IWFRS Wind (Neg. Int) Right): Lumber Ir | icrease=1.60, Pl | ate increa | 50=1.00 | |

Continued on page 5



| | | | | | | RELEASE FOR CONSTRUCTION |
|------------------------------|---------------------------|---------------------|--------------|------------|--------------------------|-----------------------------------|
| Job | Truss | Truss Type | Qty | Ply | C&H/159 COBEY CREEK/M | O AS NOTED FOR PLAN REVIEW |
| 3008841 | B1 | Roof Special Girder | 1 | | | DEVELOPMENT SERVICES |
| | | | | 2 | Job Reference (optional) | LEE'S SUMMIT, MISSOURI |
| Builders FirstSource (Valley | Center), Valley Center, M | (S - 67147, | | | | Mon Dec 27-99:45 22,2021 - Page 5 |
| | | | ID:xKFGJ7evN | I?7xhJE66F | FHnCzvA57-Z1p79tABTUT0 | IRvTkNIEY5_BcilE4fWGX754by4ch |

OR PLAN REVIEW MIT. MISSOURI 2021 Bags 5 /GX75/by40h2 ୰∠℉

LOAD CASE(S) Standard Uniform Loads (plf)

Vert: 1-4=-50, 4-8=-67, 13-16=-20, 11-13=-20, 9-11=-20, 9-19=-20

Horz: 1-4=-8, 4-8=-10

Concentrated Loads (lb)

Vert: 12=-1200(F) 14=-866(F) 11=-834(F) 15=-866(F) 22=-869(F) 23=-866(F) 24=-866(F) 25=-834(F) 26=-834(F) 27=-834(F) 26=-834(F) 26=-37) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-4=-38, 4-8=-50, 13-16=-20, 11-13=-20, 9-11=-20, 9-19=-20

Horz: 1-4=-20, 4-8=8

Concentrated Loads (lb)

Vert: 12=-1200(F) 14=-866(F) 11=-834(F) 15=-866(F) 22=-869(F) 23=-866(F) 24=-866(F) 25=-834(F) 26=-834(F) 27=-834(F) 38) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-4=-50, 4-8=-38, 13-16=-20, 11-13=-20, 9-11=-20, 9-19=-20

Horz: 1-4=-8, 4-8=20

Concentrated Loads (lb)

Vert: 12=-1200(F) 14=-866(F) 11=-834(F) 15=-866(F) 22=-869(F) 23=-866(F) 24=-866(F) 25=-834(F) 26=-834(F) 27=-834(F) 25=-834(F) 25=-39) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=-17, 4-8=-12, 13-16=-8, 11-13=-8, 9-11=-8, 9-19=-8

Horz: 1-4=5

Concentrated Loads (lb)

Vert: 12=-1200(F) 14=-429(F) 11=-390(F) 15=-429(F) 22=-430(F) 23=-429(F) 24=-429(F) 25=-390(F) 26=-390(F) 27=-390(F) 40) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60

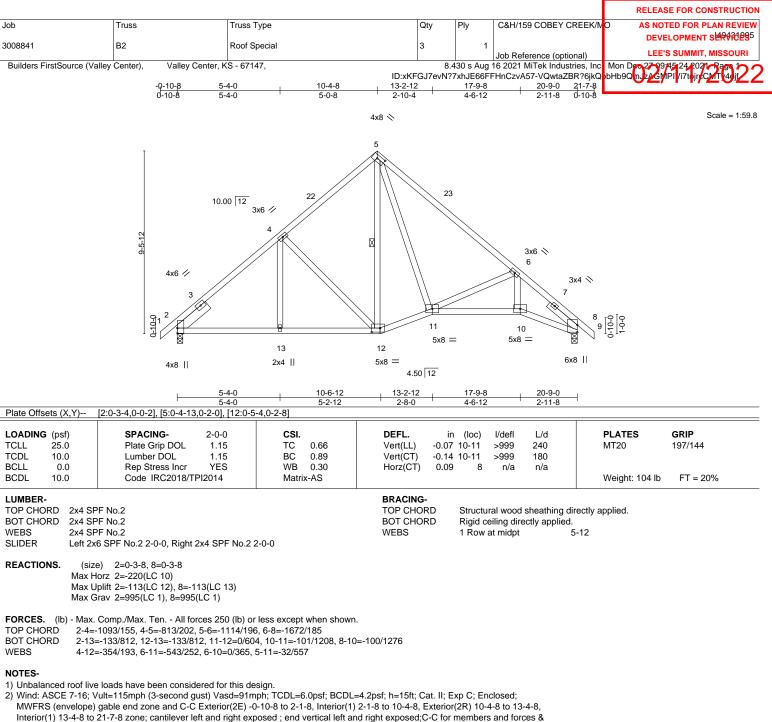
Uniform Loads (plf)

Vert: 1-4=-12, 4-8=-17, 13-16=-8, 11-13=-8, 9-11=-8, 9-19=-8

Horz: 4-8=-5 Concentrated Loads (lb)

Vert: 12=-1200(F) 14=-429(F) 11=-390(F) 15=-429(F) 22=-430(F) 23=-429(F) 24=-429(F) 25=-390(F) 26=-390(F) 27=-390(F)





MWFRS for reactions shown; 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.

 Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

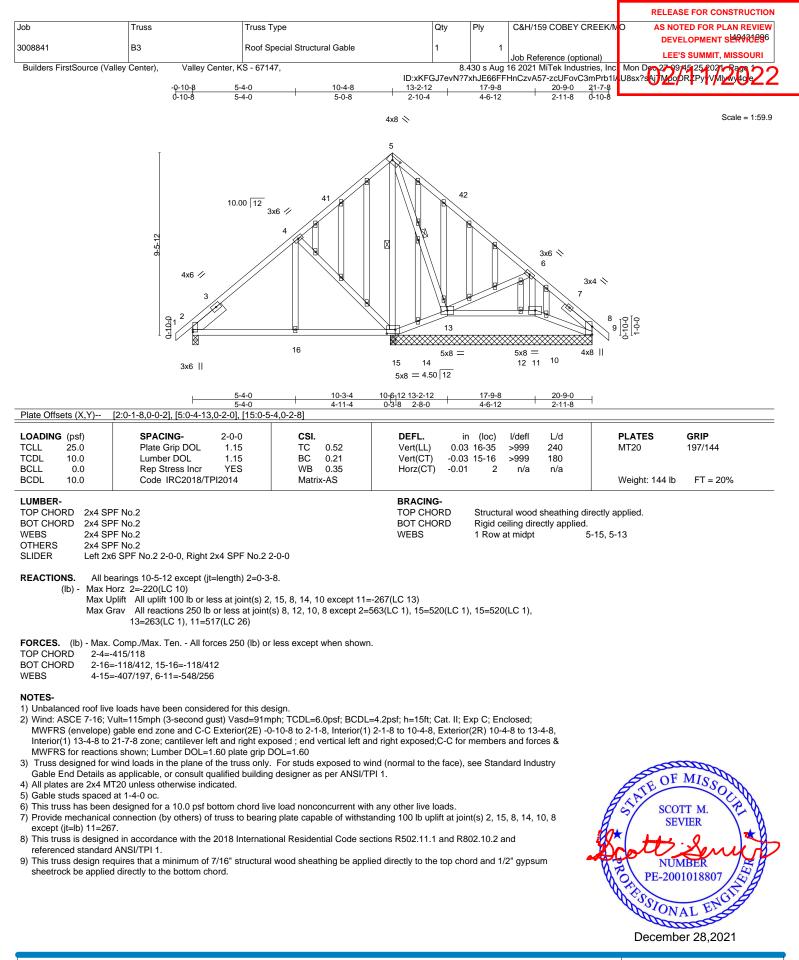
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=113, 8=113.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

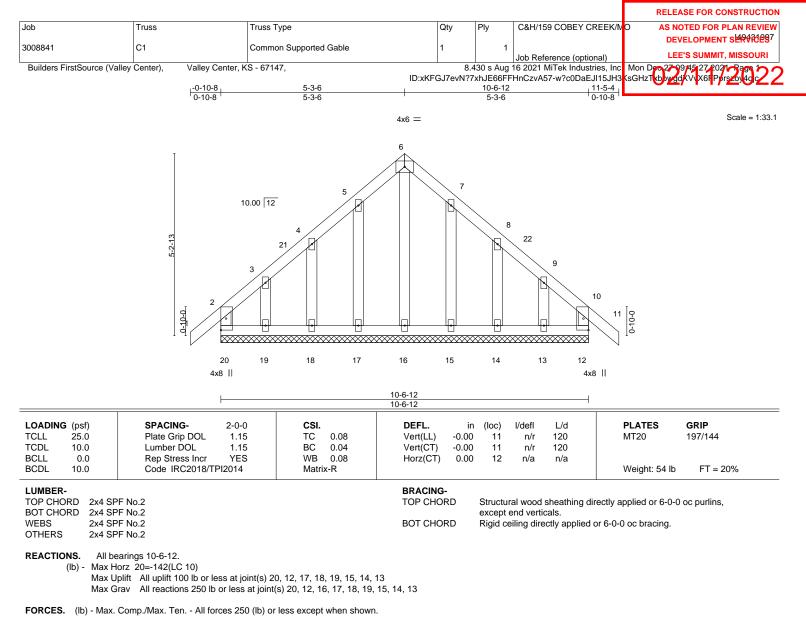
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







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NOTES-

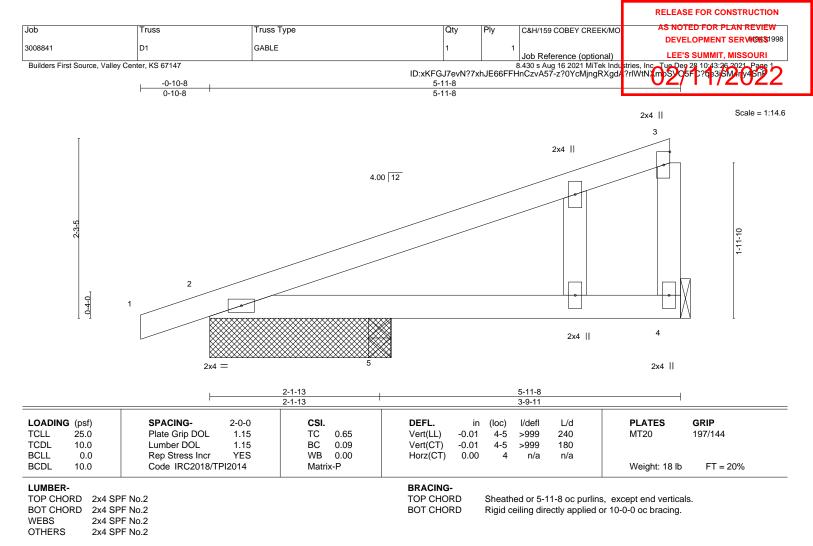
1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-3-6, Corner(3R) 5-3-6 to 8-3-6, Exterior(2N) 8-3-6 to 11-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 18, 19, 15, 14, 13.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







REACTIONS. (size) 4=Mechanical, 2=2-3-8, 5=0-3-8

Max Horz 2=83(LC 9)

Max Uplift 4=-64(LC 12), 2=-97(LC 8) Max Grav 4=226(LC 1), 2=279(LC 1), 5=154(LC 3)

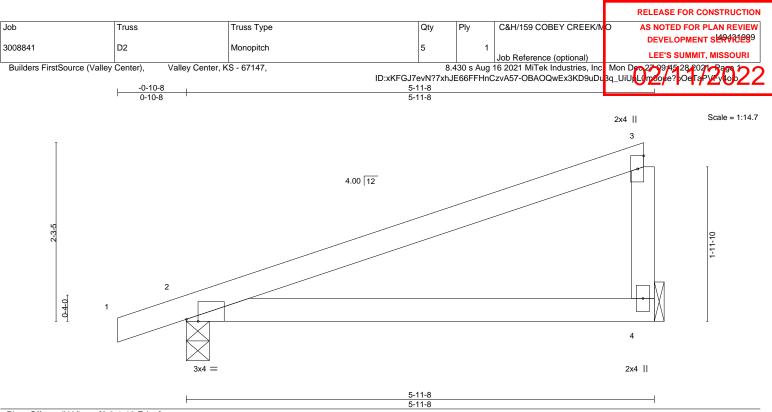
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-196/256

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-9-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.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.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 studs spaced at 1-4-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 4 and 97 lb uplift at joint 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



16023 Swingley Ridge Rd Chesterfield, MO 63017



| Plate Offsets (X,Y) | [2:0-1-13,Edge] | | |
|---------------------|-----------------------|-----------|--|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl L/d PLATES GRIP |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.44 | Vert(LL) -0.06 4-7 >999 240 MT20 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.35 | Vert(CT) -0.12 4-7 >569 180 |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.00 2 n/a n/a |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-AS | Weight: 17 lb FT = 20% |
| | | | |

LUMBER-

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2

TOP CHORD BOT CHORD

Structural wood sheathing directly applied, except end verticals. Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 2=0-3-8

Max Horz 2=84(LC 11) Max Uplift 4=-52(LC 12), 2=-76(LC 8)

Max Grav 4=257(LC 1), 2=327(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-9-12 zone; cantilever left and right

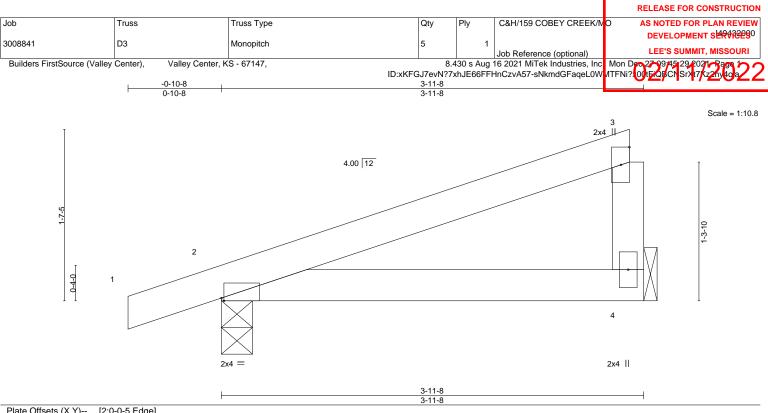
exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60). This true has been designed for a 10.0 per bettern short live lead someoperurset with any other live leads

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

- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.







| Plate Offsets (X,Y) | [2:0-0-5,Edge] | | | | | | |
|---------------------|-----------------------|-----------|----------------------------|---------------|---------------------|--------------------------|---------------|
| OADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. i | n (loc) l/de | əfl L/d | PLATES | GRIP |
| TCLL 25.0 | Plate Grip DOL 1.15 | TC 0.17 | Vert(LL) -0.0 ⁻ | 1 4-7 >99 | 99 240 | MT20 | 197/144 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.15 | Vert(CT) -0.02 | 2 4-7 >99 | 99 180 | | |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.00 |) 2 n | /a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-MP | | | | Weight: 11 lb | FT = 20% |
| UMBER- | | | BRACING- | | | · | |
| OP CHORD 2x4 | SPF No.2 | | TOP CHORD | Structural w | ood sheathing dir | rectly applied or 3-11-8 | 8 oc purlins, |
| BOT CHORD 2x4 | SPF No.2 | | | except end | verticals. | | |
| VEBS 2x4 | SPF No.2 | | BOT CHORD | Rigid ceiling | directly applied of | or 10-0-0 oc bracing. | |

REACTIONS. (size) 4=Mechanical, 2=0-3-8

Max Horz 2=57(LC 11) Max Uplift 4=-33(LC 12), 2=-63(LC 8) Max Grav 4=165(LC 1), 2=240(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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.

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

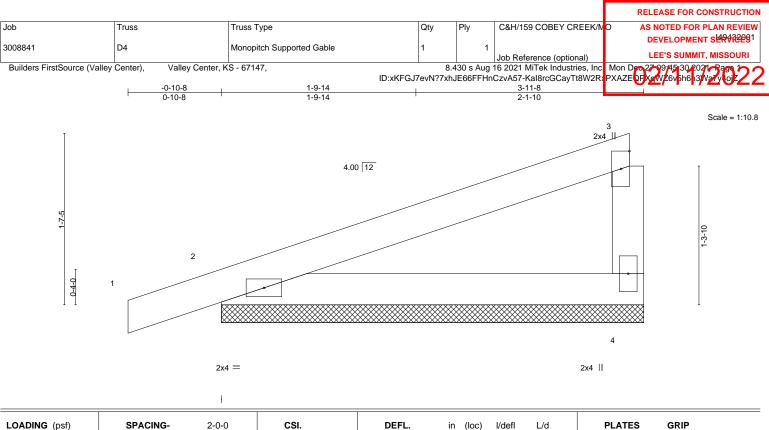
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.

5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1.







| | _ | | | BRACING- | | | | |
|--------|---------|----------------------|----------|----------------|-------|--------|-----|---------------|
| BCDL | 10.0 | Code IRC2018/TPI2014 | Matrix-P | | | | | Weight: 11 lb |
| BCLL | 0.0 | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.00 | 4 | n/a | n/a | |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.15 | Vert(CT) 0.00 | 1 | n/r | 120 | |
| TCLL | 25.0 | Plate Grip DOL 1.15 | TC 0.23 | Vert(LL) -0.00 | 1 | n/r | 120 | MT20 |
| LOADIN | G (psf) | SPACING- 2-0-0 | CSI. | DEFL. in | (loc) | l/defl | L/d | PLATES |

L

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

TOP CHORD

Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 4=3-11-8, 2=3-11-8 (size) Max Horz 2=57(LC 9) Max Uplift 4=-33(LC 12), 2=-64(LC 8) Max Grav 4=162(LC 1), 2=240(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

NOTES-

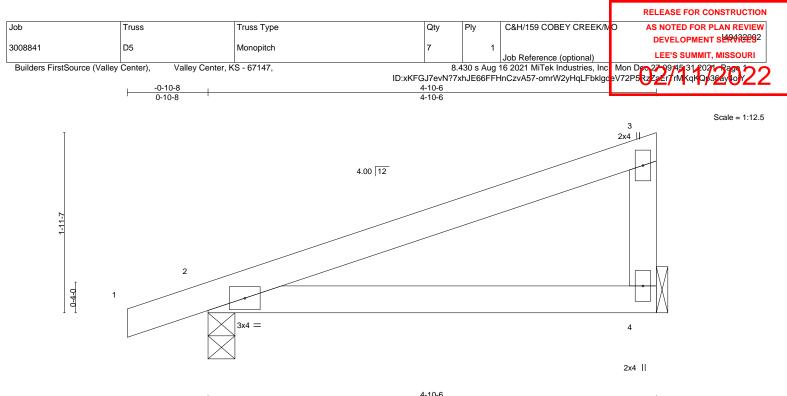
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 3-9-5 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



197/144

FT = 20%





| | | | 1 | | 4-10 |)-6 | | | | 1 | |
|---------------|-----------------|--------|--------|------|----------|-------|-------|--------|-----|---------------|----------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 25.0 | Plate Grip DOL | 1.15 | TC | 0.28 | Vert(LL) | -0.03 | 4-7 | >999 | 240 | MT20 | 197/144 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC | 0.23 | Vert(CT) | -0.05 | 4-7 | >999 | 180 | | |
| BCLL 0.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TI | PI2014 | Matrix | <-AS | | | | | | Weight: 14 lb | FT = 20% |

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2

REACTIONS. 4=Mechanical, 2=0-3-8 (size) Max Horz 2=69(LC 11) Max Uplift 4=-42(LC 12), 2=-69(LC 8) Max Grav 4=207(LC 1), 2=279(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

NOTES-

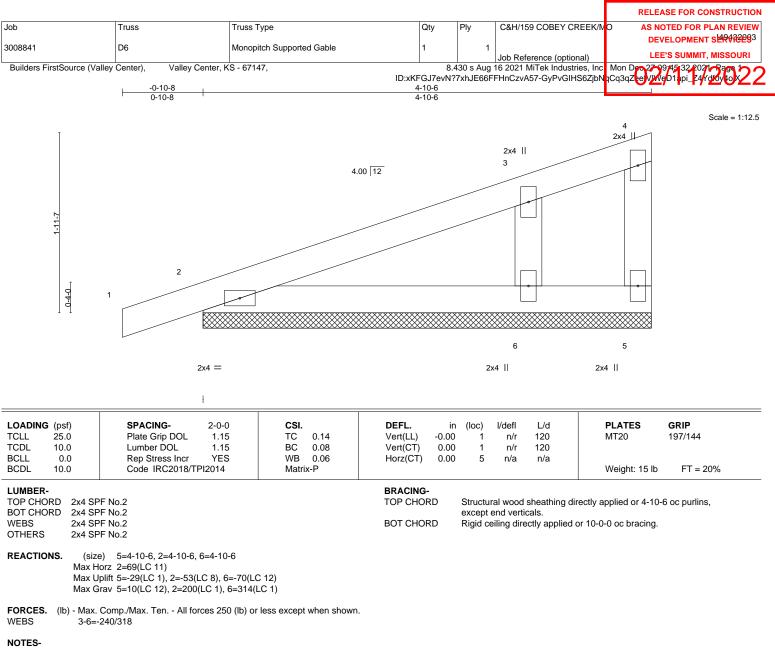
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-8-10 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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.
- 3) Gable studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.





 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 4-8-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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.

3) Gable requires continuous bottom chord bearing.

4) Gable studs spaced at 1-4-0 oc.

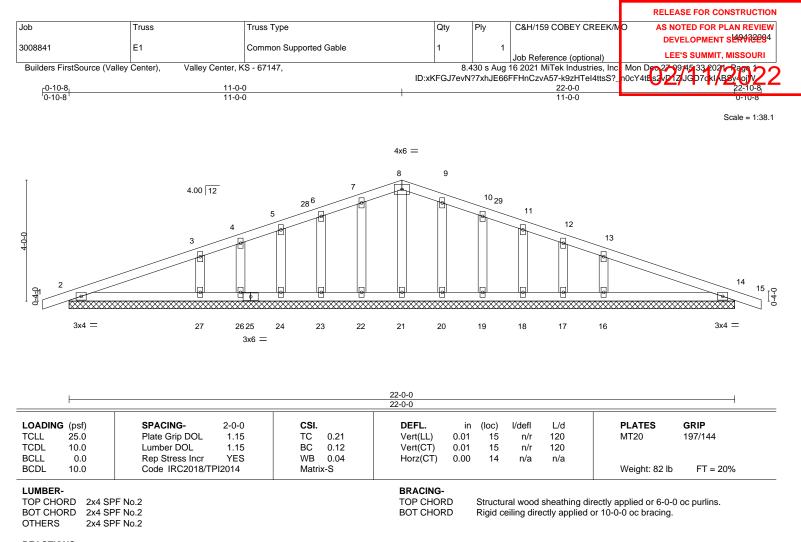
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







REACTIONS. All bearings 22-0-0.

(lb) - Max Horz 2=63(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 26, 27, 20, 19, 18, 17, 16, 14

Max Grav All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 26, 20, 19, 18, 17, 14 except 27=417(LC 25), 16=417(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS 3-27=-303/147, 13-16=-303/147

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 11-0-0, Corner(3R) 11-0-0 to 14-0-0, Exterior(2N) 14-0-0 to 22-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.

5) Gable requires continuous bottom

6) Gable studs spaced at 1-4-0 oc.

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

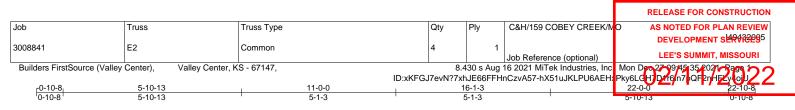
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 23, 24, 26, 27, 20, 19, 18, 17, 16, 14.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

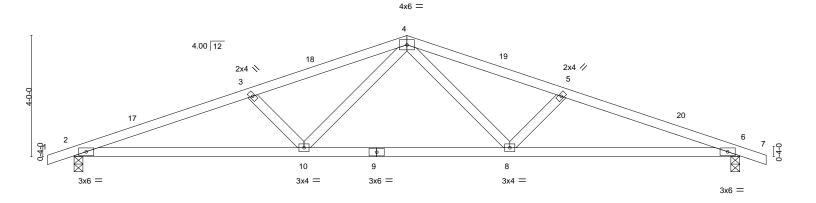


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Scale = 1:38.1



| | 7-7-3 7-7-3 | | <u>14-4-13</u> 6-9-10 | | | | 22-0-0 7-7-3 | |
|--|--|--|--|---|-------------------------------|--------------------------------|---------------------------------|------------------------------------|
| LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014 | CSI. TC 0.38 BC 0.69 WB 0.16 Matrix-AS | DEFL. Vert(LL) Vert(CT) Horz(CT) | in (loc) -0.12 10 -0.25 10-13 0.06 6 | l/defl >999 >999 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 70 lb | GRIP 197/144 FT = 20% |
| BOT CHORD 2x | 4 SPF No.2 4 SPF No.2 4 SPF No.2 | | BRACING- TOP CHOF BOT CHOF | RD Struct | | sheathing di ectly applied. | rectly applied. | |
| M | (size) 2=0-3-8, 6=0-3-8 ax Horz 2=63(LC 12) ax Uplift 2=-176(LC 8), 6=-176(LC 9) ax Grav 2=1051(LC 1), 6=1051(LC 1) | | | | | | | |
| FORCES. (Ib) - I TOP CHORD 2 | ax. Comp./Max. Ten All forces 250 (lb) o -3=-2359/458, 3-4=-2082/411, 4-5=-2082/4 -10=-380/2208, 8-10=-213/1483, 6-8=-381/ | 11, 5-6=-2359/458 | | | | | | |

WEBS 4-8=-96/659, 5-8=-448/170, 4-10=-95/659, 3-10=-448/169

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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 22-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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.

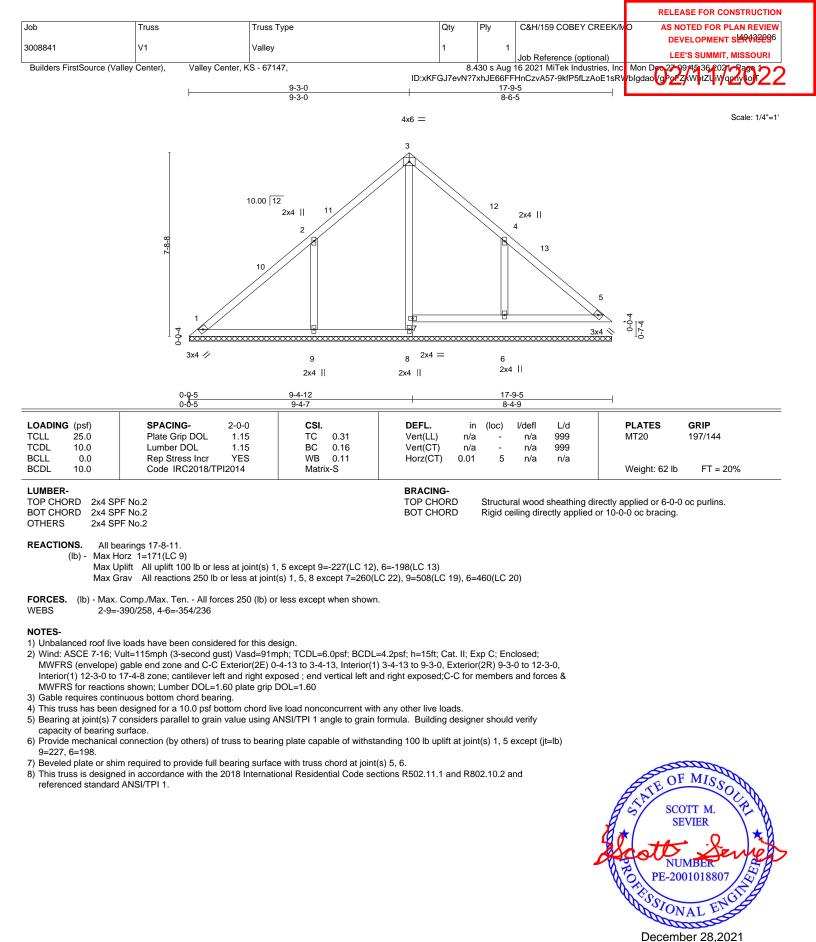
 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=176, 6=176.

5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

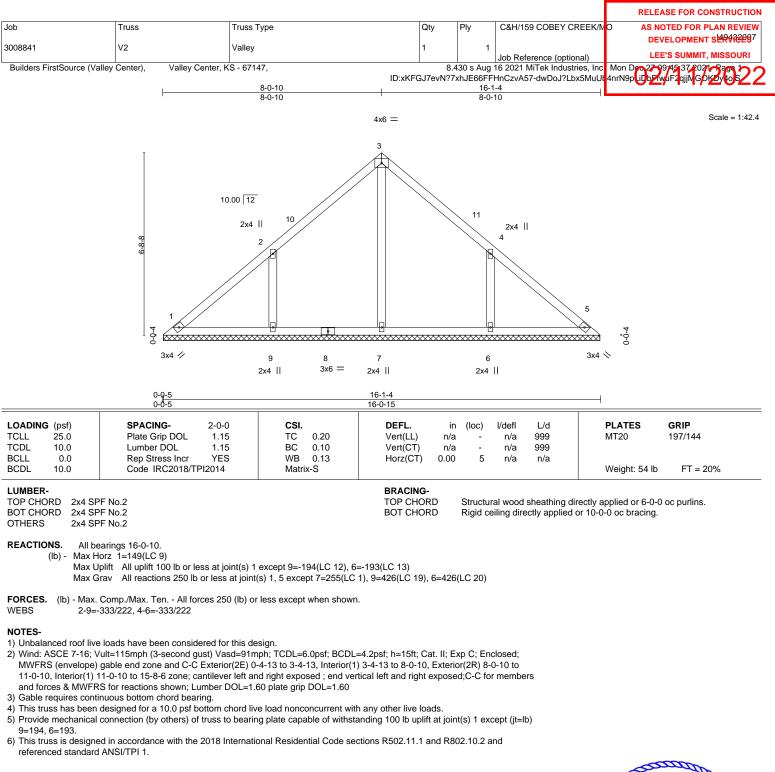
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.









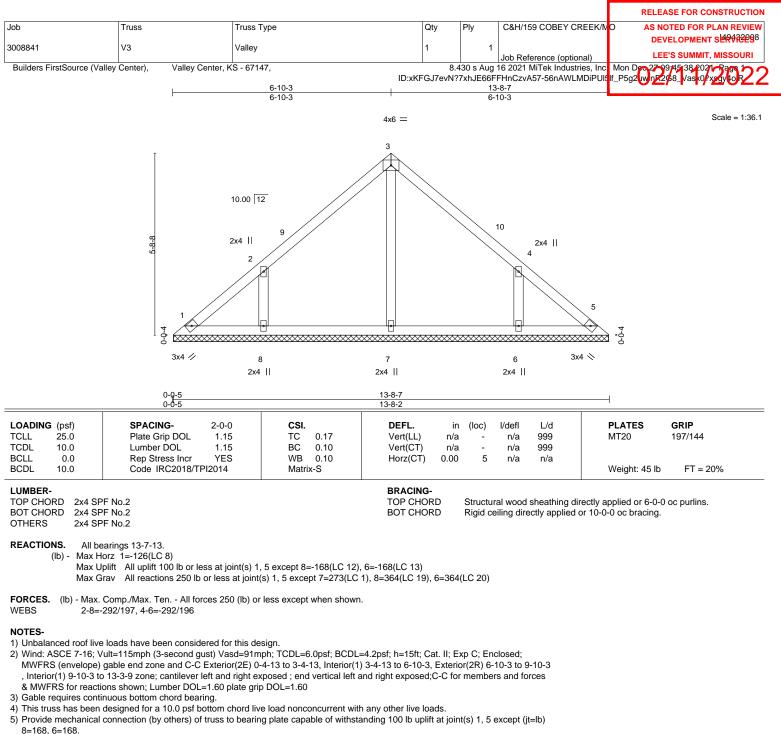




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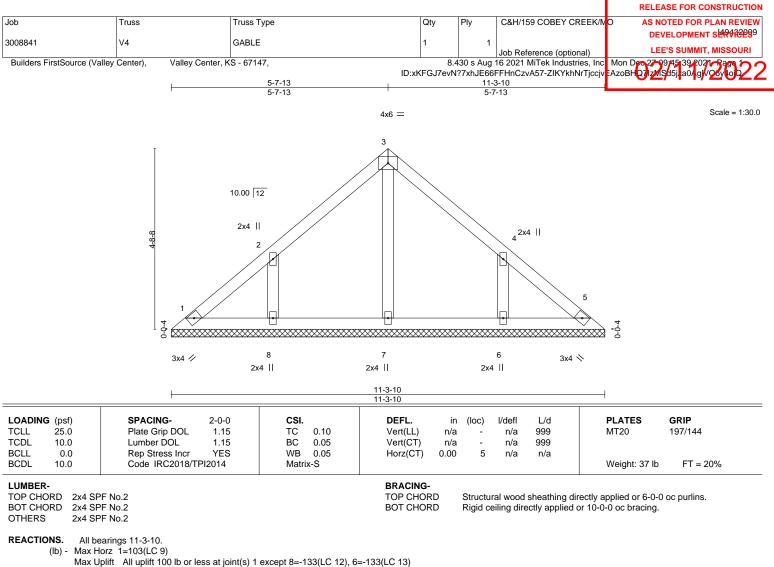




6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=292(LC 19), 6=291(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

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

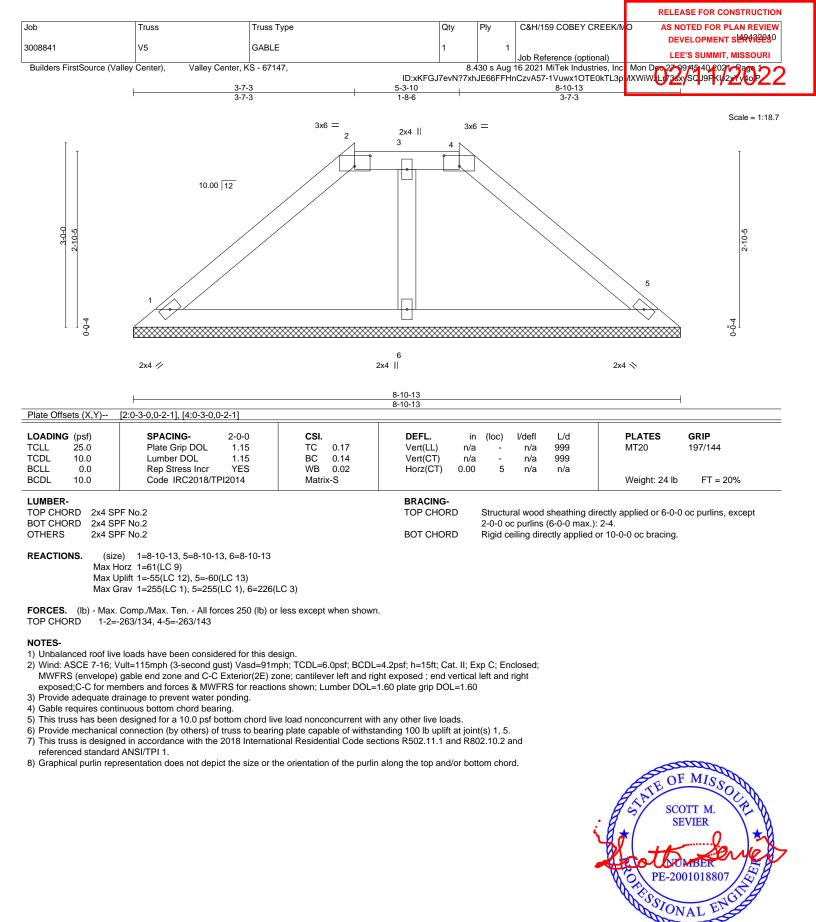
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 5-7-13, Exterior(2R) 5-7-13 to 8-7-13, Interior(1) 8-7-13 to 10-10-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=133, 6=133.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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