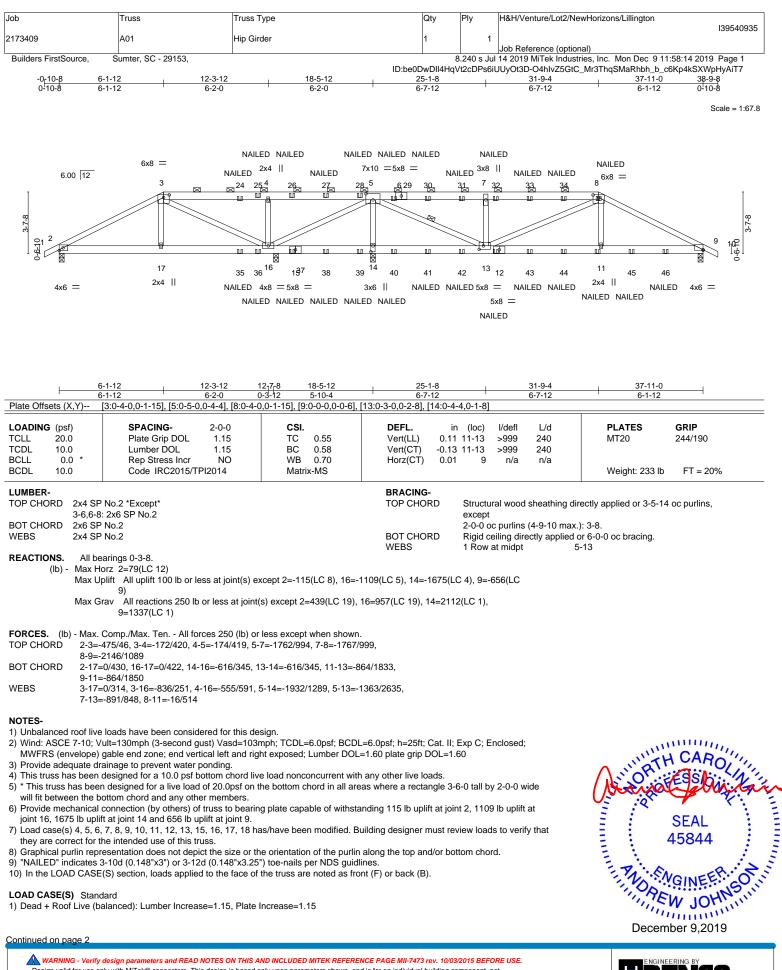


| RE: 2173409 - H&H/Venture/Lot2/NewHorizons/Lilli Site Information: Project Customer: A AND G RESIDENTIAL Project I Lot/Block: Subdivision Model: Address: City: State: NC General Truss Engineering Criteria & Design Loads Drawings Show Special Loading Conditions): Design Code: IRC2015/TPI2014 Wind Code: ASCE 7-10 Wind Speed: 130 mph Roof Load: 40.0 psf Mean Roof Height (feet): 25 | Name: 2173409 n: |
|---|--|
| No.Seal#Truss NameDateNo.Seal#1 139540935 A01 $12/9/19$ 35 139540936 2 139540935 A02 $12/9/19$ 35 139540937 3 139540937 A03 $12/9/19$ 4 139540938 A04 $12/9/19$ 5 139540940 A06 $12/9/19$ 6 139540942 A08 $12/9/19$ 7 139540942 A08 $12/9/19$ 8 139540942 A08 $12/9/19$ 9 139540944 A10 $12/9/19$ 10 139540945 A11 $12/9/19$ 11 139540946 A12 $12/9/19$ 12 139540947 A13 $12/9/19$ 13 139540946 A12 $12/9/19$ 14 139540950 A16 $12/9/19$ 15 129640951 A17 $12/9/19$ 16 139540955 H02 $12/9/19$ 17 139540954 H01 $12/9/19$ 20 139540955 H02 $12/9/19$ 21 139540957 J01 $12/9/19$ 22 139540956 H03 $12/9/19$ 23 139540956 J02 $12/9/19$ 24 139540961 J03 $12/9/19$ 25 139540961 J03 $12/9/19$ 26 139540961 J03 $12/9/19$ 27 139540965 J04 $12/9/19$ 28 139540965 J05 $12/9/19$ 30 139540966 J04 $12/9/19$ </td <td>Truss Name Date</td> | Truss Name Date |
| The truss drawing(s) referenced above have been prepared to Truss Engineering Co. under my direct supervision based of provided by Builders FirstSource-Sumter,SC. Truss Design Engineer's Name: Johnson, Andrew My license renewal date for the state of North Carolina is D IMPORTANT NOTE: The seal on these truss component designs that the engineer named is licensed in the jurisdiction(s) identified and th designs comply with ANSI/TPI 1. These designs are based upon parameters on the Mitter of Mitter of Mitter of Mitter of Mitter of TRENCO's customers file reference purpose only, and was not taken inthe preparation of these designs. MiTek or TRENCO has not independently applicability of the design parameters or the designs for any particular but the building designer should verify applicability of design parameters and the building designer to the parameters of the design parameters of the design parameters and the building designer should verify applicability of design parameters and the building designer of the parameters of the design parameters of the design parameters of the state of the design parameters of t | ecember 31, 2019 is a certification at the eters ich were for MiTek's or o account in the verified the ilding. Before use, properly |

IRENCO'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

December 9,2019



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 we band/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent oclapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of truss systems, see **ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

818 Soundside Road Edenton, NC 27932

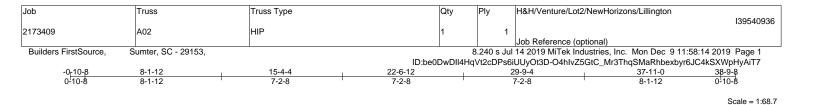
| Job | Truss | Truss Type | Qty | Ply | H&H/Venture/Lot2/NewHorizons/Lillington |
|---|--|---|---------------------------|--------------|--|
| 2173409 | A01 | Hip Girder | 1 | 1 | 139540935 |
| Builders FirstSource, | Sumter, SC - 29153, | | | 8.240 s Ju | Job Reference (optional) Il 14 2019 MiTek Industries, Inc. Mon Dec 9 11:58:14 2019 Page 2 |
| , | | | | | UUyOt3D-O4hlvZ5GtC_Mr3ThqSMaRhbh_b_c6Kp4kSXWpHyAiT7 |
| Concentrated Loads (I Vert: 8=-124(I | 3-8=-60, 8-10=-60, 18-21=-20 b) F) 15=24(F) 11=-37(F) 12=-37 | | | | F) 30=-124(F) 31=-124(F) 32=-124(F) 33=-124(F) -161(F) 46=-103(F) |
| 4) Dead + 0.6 MWFRS W Uniform Loads (plf) Vert: 1-2=21, | /ind (Pos. Internal) Left: Lumb 2-3=3, 3-8=40, 8-9=20, 9-10= , 2-3=-15, 8-9=32, 9-10=24 | er Increase=1.60, Plate Increase=1.60 12, 18-37=-12, 14-37=96(F=108), 14-21 | , , , | | |
| Concentrated Loads (I Vert: 8=163(F 34=150(F) 35 | b)) 15=55(F) 11=-18(F) 12=-18(=127(F) 36=12(F) 38=55(F) 3 | F) 24=108(F) 25=106(F) 26=106(F) 27= 9=55(F) 40=-18(F) 41=-18(F) 42=-18(F) ber Increase=1.60, Plate Increase=1.60 | 43=-18(F) 44=-1 | | (F) 30=150(F) 31=150(F) 32=150(F) 33=150(F) 9(F) 46=52(F) |
| Uniform Loads (plf) Vert: 1-2=12, Horz: 1-2=-24 Drag: 3-4=1, 5 | 2-3=20, 3-8=40, 8-9=3, 9-10= , 2-3=-32, 8-9=15, 9-10=33 7-8=-1 | 21, 18-37=-12, 14-37=96(F=108), 14-21 | | | |
| 34=150(F) 35 |) 15=55(F) 11=-18(F) 12=-18(=127(F) 36=12(F) 38=55(F) 3 | F) 24=108(F) 25=106(F) 26=106(F) 27= 9=55(F) 40=-18(F) 41=-18(F) 42=-18(F) er Increase=1.60, Plate Increase=1.60 | | | (F) 30=150(F) 31=150(F) 32=150(F) 33=150(F) 9(F) 46=52(F) |
| Vert: 1-2=-12, | 2-3=-0, 8-9=17, 9-10=24 7-8=-0 | 0=4, 18-37=-20, 14-37=88(F=108), 14-2 | 1=-20 | | |
| Vert: 8=191(F 34=178(F) 35 7) Dead + 0.6 MWFRS W Uniform Loads (plf) |) 15=63(F) 11=-10(F) 12=-10(=135(F) 36=20(F) 38=63(F) 3 /ind (Neg. Internal) Right: Lun | 9=63(F) 40=-10(F) 41=-10(F) 42=-10(F) ber Increase=1.60, Plate Increase=1.60 | 43=-10(F) 44=-1 | | (F) 30=178(F) 31=178(F) 32=178(F) 33=178(F) 7(F) 46=60(F) |
| Horz: 1-2=-24 Drag: 3-4=0, 7 Concentrated Loads (I | ., 2-3=-17, 8-9=0, 9-10=8 7-8=-0 b) | -12, 18-37=-20, 14-37=88(F=108), 14-2 | | | |
| 34=178(F) 35 8) Dead + 0.6 MWFRS W Uniform Loads (plf) | =135(F) 36=20(F) 38=63(F) 3 /ind (Pos. Internal) 1st Paralle | F) 24=136(F) 25=134(F) 26=134(F) 27= =-63(F) 40=-10(F) 41=-10(F) 42=-10(F) I: Lumber Increase=1.60, Plate Increase =10, 18-37=-12, 14-37=96(F=108), 14-2 | 43=-10(F) 44=-1 =1.60 | | (F) 30=178(F) 31=178(F) 32=178(F) 33=178(F) 7(F) 46=60(F) |
| Horz: 1-2=-45 Drag: 3-4=0, 7 Concentrated Loads (I | , 2-3=-52, 8-9=30, 9-10=22 7-8=-0 b) | | |) 29=180(| (F) 30=180(F) 31=180(F) 32=180(F) 33=180(F) |
| 34=180(F) 35 9) Dead + 0.6 MWFRS W Uniform Loads (plf) | =127(F) 36=12(F) 38=55(F) 3 /ind (Pos. Internal) 2nd Paralle | 9=55(F) 40=-18(F) 41=-18(F) 42=-18(F) el: Lumber Increase=1.60, Plate Increas =33, 18-37=-12, 14-37=96(F=108), 14-2 | 43=-18(F) 44=-1 e=1.60 | | |
| Horz: 1-2=-22 Drag: 3-4=0, 7 Concentrated Loads (I | , 2-3=-30, 8-9=52, 9-10=45 7-8=-0 b) | F) 24=138(F) 25=136(F) 26=136(F) 27= | | ·) 29=180(| (F) 30=180(F) |
| 43=-18(F) 44= | =-18(F) 45=89(F) 46=52(F) | 35=127(F) 36=12(F) 38=55(F) 39=55(F) lel: Lumber Increase=1.60, Plate Increas | , , , | 18(F) 42= | 18(F) |
| Vert: 1-2=33 Horz: 1-2=-4 Drag: 3-4=0, Concentrated Loads | 5, 2-3=-52, 8-9=30, 9-10=22 , 7-8=-0 (lb) | 0=10, 18-37=-12, 14-37=96(F=108), 14- 3(F) 24=138(F) 25=136(F) 26=136(F) 27 | | (F) 29=180 | 0(F) 30=180(F) |
| 43=-18(F) 44 | 4=-18(F) 45=89(F) 46=52(F) | F) 35=127(F) 36=12(F) 38=55(F) 39=55(F) El: Lumber Increase=1.60, Plate Increase | () () | -18(F) 42 | 2≕-18(F) |
| Horz: 1-2=-2 Drag: 3-4=0, Concentrated Loads | 2, 2-3=-30, 8-9=52, 9-10=45 , 7-8=-0 (lb) | 0=33, 18-37=-12, 14-37=96(F=108), 14- | | | |
| 31=180(F) 3 43=-18(F) 44 | 2=180(F) 33=180(F) 34=180(4=-18(F) 45=89(F) 46=52(F) | 3(F) 24=138(F) 25=136(F) 26=136(F) 27 F) 35=127(F) 36=12(F) 38=55(F) 39=55 | (F) 40=-18(F) 41= | | |
| 12) Deau + 0.0 MWFRS | wind (neg. internal) 1st Paral | lel: Lumber Increase=1.60, Plate Increas | 55=1.0U | | |

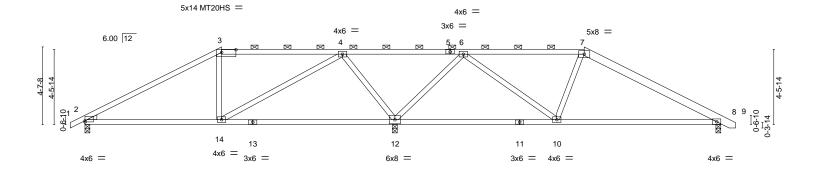
Continued on page 3



| Job | Truss | Truss Type | Qty | Ply | H&H/Venture/Lot2/NewHorizons/Lillington | |
|------------------------|---|---|------------------------|--------------|--|---------------|
| | | | | | | 139540935 |
| 2173409 | A01 | Hip Girder | 1 | 1 | | |
| Builders FirstSource, | Sumter, SC - 29153, | | | 8 240 e lui | Job Reference (optional) 14 2019 MiTek Industries, Inc. Mon Dec 9 11:58:1 | 4 2010 Page 3 |
| Builders Firstoburce, | Sumer, SC - 29155, | | ID:be0DwDII4H | | JUyOt3D-O4hlvZ5GtC_Mr3ThqSMaRhbh_b_c6Kp4 | |
| | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| LOAD CASE(S) Stand | | | | | | |
| Uniform Loads (plf) | | | | | | |
| | | =-5, 9-10=2, 18-37=-20, 14-37=88(F=108 | , 14-21=-20 | | | |
| | -45, 2-3=-37, 8-9=15, 9 | -10=22 | | | | |
| Drag: 3-4= | | | | | | |
| Concentrated Load | | | A(E) 07 404(E) 00 40 | 4/5) 00 000 | VEN 00, 000/E) 01, 000/E) 00, 000/E) 00, 000/E) | |
| | | -) 12=-10(F) 24=166(F) 25=164(F) 26=16 8=63(F) 39=63(F) 40=-10(F) 41=-10(F) 42 | | | (F) 30=208(F) 31=208(F) 32=208(F) 33=208(F) | |
| | | 2nd Parallel: Lumber Increase=1.60, Plate | | =-10(F) 45=s | 97(F) 40=00(F) | |
| Uniform Loads (plf) | | 210 Farallel. Lumber Increase=1.00, Flate | increase=1.00 | | | |
| | | 7, 9-10=25, 18-37=-20, 14-37=88(F=108 | 14-2120 | | | |
| | -22, 2-3=-3, 3-0=-3, 8-9=37, 9 | | , 14-21=-20 | | | |
| Drag: 3-4= | , , , | 10-10 | | | | |
| Concentrated Load | | | | | | |
| | | F) 12=-10(F) 24=166(F) 25=164(F) 26=16 | 4(F) 27=164(F) 28=16 | 4(F) 29=208 | (F) 30=208(F) 31=208(F) 32=208(F) 33=208(F) | |
| 34=208(F) | 35=135(F) 36=20(F) 3 | 8=63(F) 39=63(F) 40=-10(F) 41=-10(F) 42 | 2=-10(F) 43=-10(F) 44 | =-10(F) 45=9 | 97(F) 46=60(F) | |
| 15) Dead + 0.75 Roof L | _ive (bal.) + 0.75(0.6 M | WFRS Wind (Neg. Int) Left): Lumber Incre | ase=1.60, Plate Increa | ase=1.60 | | |
| Uniform Loads (plf) |) | | | | | |
| | | 8-9=-37, 9-10=-32, 18-37=-20, 14-37=61(F | =81), 14-21=-20 | | | |
| | -6, 2-3=-0, 8-9=13, 9-1 | 0=18 | | | | |
| Drag: 3-4= | | | | | | |
| Concentrated Load | | | | | | |
| | () () (| , , , , , , | | () | =128(F) 31=128(F) 32=128(F) 33=128(F) 34=12 | 28(F) |
| | | =85(F) 40=-10(F) 41=-10(F) 42=-10(F) 43 | | | 3(F) | |
| , | () | WFRS Wind (Neg. Int) Right): Lumber Inc | rease=1.60, Plate Incr | ease=1.60 | | |
| Uniform Loads (plf) | | | - 91) 14 21 - 20 | | | |
| | -32, 2-3=-37, 3-8=-22, 8 -18, 2-3=-13, 8-9=0, 9- | 8-9=-50, 9-10=-44, 18-37=-20, 14-37=61(F | -=81), 14-21=-20 | | | |
| Drag: 3-4= | | 10=0 | | | | |
| Concentrated Load | | | | | | |
| | | E) 12=-10(E) 24=91(E) 25=99(E) 26=99(E) | 27=99(F) 28=99(F) 2 | 9=128(F) 30 | =128(F) 31=128(F) 32=128(F) 33=128(F) 34=12 | 28(F) |
| | | =85(F) 40=-10(F) 41=-10(F) 42=-10(F) 43 | | | | |
| | | WFRS Wind (Neg. Int) 1st Parallel): Lumb | | | | |
| Uniform Loads (plf) | | | | | | |
| Vert: 1-2=- | -17, 2-3=-22, 3-8=-39, 8 | 8-9=-39, 9-10=-33, 18-37=-20, 14-37=61(F | =81), 14-21=-20 | | | |
| | -33, 2-3=-28, 8-9=11, 9 | | | | | |
| Drag: 3-4= | 0, 7-8=-0 | | | | | |
| Concentrated Load | ls (lb) | | | | | |
| | | | | | (F) 30=150(F) 31=150(F) 32=150(F) 33=150(F) | |
| | | 8=85(F) 39=85(F) 40=-10(F) 41=-10(F) 42 | | | | |
| / | () | WFRS Wind (Neg. Int) 2nd Parallel): Lum | per Increase=1.60, Pla | te Increase= | =1.60 | |
| Uniform Loads (plf) | | | | | | |
| | , , , | 3-9=-22, 9-10=-17, 18-37=-20, 14-37=61(F | -=81), 14-21=-20 | | | |
| | -17, 2-3=-11, 8-9=28, 9 | -10=33 | | | | |
| Drag: 3-4= | | | | | | |
| Concentrated Load | | E) 12 10(E) 24 114(E) 25 122(E) 20 12 | 2/E) 27 122/E) 20 12 | 2/E) 20 450 | VEN 20 150(E) 21 150(E) 22 150(E) 22 450(F) | |
| | | 8=85(F) 39=85(F) 40=-10(F) 41=-10(F) 42 | | | (F) 30=150(F) 31=150(F) 32=150(F) 33=150(F) | |
| 34=150(F) | 33=117(F) 30=34(F) 3 | 0=00(F) $0=00(F)$ $40=10(F)$ $41=10(F)$ 42 | L=-10(F) 43=-10(F) 44 | =-10(F) 45=0 | 55(F) 40=50(F) | |



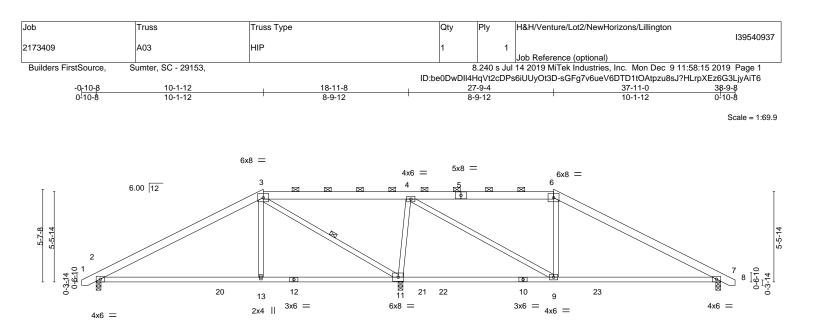




| | 8-1-12 8-1-12 | <u>18-5-12</u> 10-4-0 | 28-1-10 | | <u>37-11-0</u> 9-9-6 | |
|---|---|--|--|--|---|---|
| Plate Offsets (X,Y) | [2:0-0-0,0-0-14], [3:0-10-4,0-2-0] | 10-4-0 | 3-7-14 | | 3-3-0 | |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014 | CSI. TC 0.74 BC 0.76 WB 0.74 Matrix-AS | DEFL. in (loc) //def Vert(LL) -0.20 12-14 >999 Vert(CT) -0.38 12-14 >577 Horz(CT) -0.02 2 n/a Wind(LL) 0.13 14-17 >995 | 9 360 240 a n/a | PLATES MT20 MT20HS Weight: 179 lb | GRIP 244/190 187/143 FT = 20% |
| LUMBER- TOP CHORD 2x4 SP 7-9: 2xi BOT CHORD 2x4 SP WEBS 2x4 SP WEDGE Left: 2x4 SP No.3 | 6 SP No.2 No.2 | | 2-0-0 oc purli | od sheathing dire ns (6-0-0 max.): 3 directly applied. | ctly applied, except -7. | |
| Max H Max U | e) 2=683/0-3-8, 12=1728/0-3-8, 8=7 orz 2=101(LC 16) plift 2=-233(LC 12), 12=-491(LC 9), 8= rav 2=686(LC 23), 12=1728(LC 1), 8= | -233(LC 13) | | | | |
| TOP CHORD 2-3=- BOT CHORD 2-14= | Comp./Max. Ten All forces 250 (lb) 870/393, 3-4=-692/451, 4-6=-124/521, -185/687, 10-12=-110/266, 8-10=-227 -161/662, 4-12=-964/468, 6-12=-1063 | 6-7=-685/426, 7-8=-880/43 /731 | 3 | | | |
| 2) Wind: ASCE 7-10; V MWFRS (envelope) MWFRS for reaction 3) Provide adequate dr 4) All plates are MT20 5) This truss has been 6) * This truss has been 6) * This truss has been 7) Provide mechanical joint 12 and 233 lb u 8) This truss design red sheetrock be applied | loads have been considered for this c ult=130mph (3-second gust) Vasd=10 gable end zone and C-C Exterior(2) zr s shown; Lumber DOL=1.60 plate gring plates unless otherwise indicated. designed for a 10.0 psf bottom chord I n designed for a live load of 20.0psf or ottom chord and any other members. connection (by others) of truss to bear plift at joint 8. uires that a minimum of 7/16" structur I directly to the bottom chord. esentation does not depict the size or | 3mph; TCDL=6.0psf; BCDL one; end vertical left and rigi DOL=1.60 ve load nonconcurrent with the bottom chord in all area ing plate capable of withstar al wood sheathing be applie | nt exposed;C-C for members and force any other live loads. as where a rectangle 3-6-0 tall by 2-0-0 nding 233 lb uplift at joint 2, 491 lb upli ad directly to the top chord and 1/2" gy | es &) wide ft at | THE REAL | SEAL 45844 W JOHNSON |

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 safe truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

818 Soundside Road Edenton, NC 27932



| | 10-1-12 10-1-12 | 18-5-12 8-4-0 | <u>27-9-4</u> 9-3-8 | 37-11-0 10-1-12 | |
|---------------|----------------------|------------------|------------------------------|-----------------------------|---|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl | L/d PLATES GRIP | |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.57 | Vert(LL) -0.15 13-16 >999 | 360 MT20 244/190 | |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.81 | Vert(CT) -0.35 13-16 >629 | 240 | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.54 | Horz(CT) 0.02 7 n/a | n/a | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-AS | Wind(LL) 0.16 13-16 >999 | 240 Weight: 206 lb FT = 20% | 6 |

| LUMBER- |
|---------|
|---------|

TOP CHORD2x6 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3

BRACING-TOP CHORD

BOT CHORD

WEBS

Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 3-6. Rigid ceiling directly applied. 1 Row at midpt 3-11

REACTIONS. (Ib/size) 2=745/0-3-8, 11=1583/0-3-8, 7=787/0-3-8 Max Horz 2=120(LC 12) Max Uplift 2=-251(LC 12), 11=-410(LC 9), 7=-280(LC 13)

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

TOP CHORD 2-3=-861/447, 3-4=-60/273, 4-6=-790/550, 6-7=-956/471

BOT CHORD 2-13=-212/700, 11-13=-214/694, 7-9=-236/784

WEBS 3-13=0/372, 3-11=-888/299, 4-11=-992/483, 4-9=-270/859

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

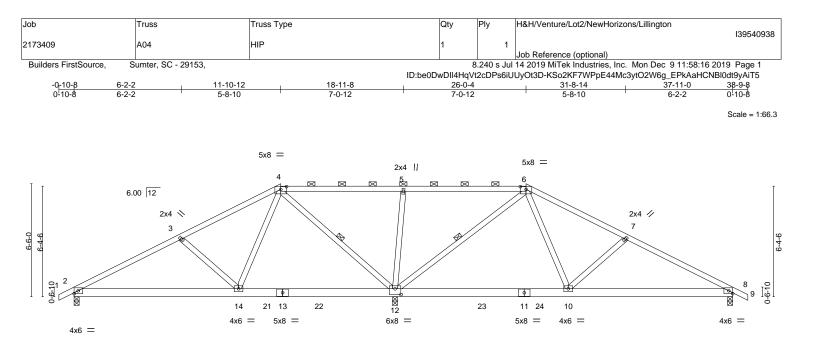
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 251 lb uplift at joint 2, 410 lb uplift at joint 11 and 280 lb uplift at joint 7.

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.

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







| | 9-5-10 9-5-10 | 18-5-12 9-0-2 | | 28-5-6 -11-10 | 37-11-0 9-5-10 | |
|---|---|---------------------------------------|--|--|-------------------------|------------------|
| late Offsets (X,Y) | [4:0-4-0,0-1-15], [6:0-4-0,0-1-15], [12:0 | -4-0,0-4-0] | | | | |
| OADING (psf) CLL 20.0 CDL 10.0 CLL 0.0 * | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES | CSI. TC 0.75 BC 0.38 WB 0.45 | Vert(LL) -0.06 | n (loc) l/defl L/d 6 10-12 >999 360 2 14-17 >999 240 1 8 n/a n/a | PLATES GRI MT20 244, | P /190 |
| CDL 10.0 | Code IRC2015/TPI2014 | Matrix-AS | Wind(LL) 0.04 | 4 14-17 >999 240 | Weight: 219 lb FT | Γ = 20% |
| UMBER- OP CHORD 2x4 SP OT CHORD 2x6 SP /EBS 2x4 SP | No.2 No.3 | | BRACING- TOP CHORD BOT CHORD WEBS | Structural wood sheathi 2-0-0 oc purlins (10-0-0 Rigid ceiling directly ap 1 Row at midpt | | |
| Max H Max U | 2=630/0-3-8, 12=1829/0-3-8, 8=6° porz 2=-142(LC 13) plift 2=-203(LC 12), 12=-381(LC 9), 8= rav 2=661(LC 23), 12=1829(LC 1), 8= | -229(LC 13) | | | | |

TOP CHORD 2-3=-861/349, 3-4=-588/259, 4-5=-76/440, 5-6=-49/400, 6-7=-694/295, 7-8=-966/384

BOT CHORD 2-14=-273/712, 12-14=-29/315, 10-12=0/371, 8-10=-218/805

WEBS 3-14=-357/343, 4-14=-143/519, 4-12=-897/424, 5-12=-474/322, 6-12=-913/417, 6-10=-132/547, 7-10=-347/343

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 203 lb uplift at joint 2, 381 lb uplift at joint 12 and 229 lb uplift at joint 8.

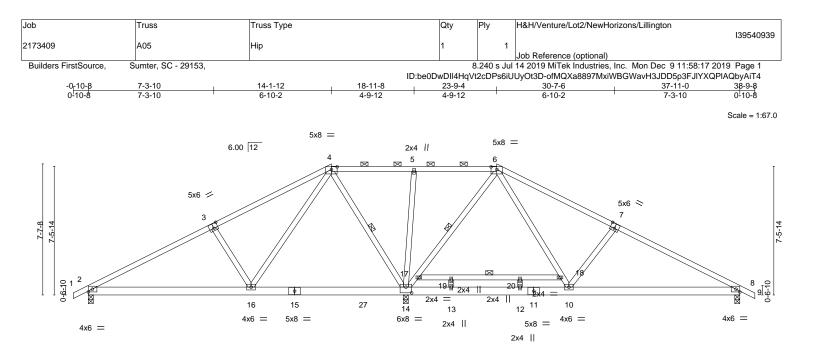
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

8) 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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| F | 9-5-10 9-5-10 | <u>18-5-12</u> 9-0-2 | <u>21-1-8</u> 2-7-12 | 25-1-8 4-0-0 | 27-11-10 | <u>37-11-0</u> 9-11-6 | |
|--|---|---|--|--|--|----------------------------------|------------------------------------|
| Plate Offsets (X,Y) | [3:0-3-0,0-3-4], [4:0-4-0,0-1-15], [6:0 | 0-4-0,0-1-15], [7:0-3-0,0-3-4], | [14:0-4-0,0-4-0] | | | | |
| LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014 | CSI. TC 0.49 BC 0.39 WB 0.44 Matrix-AS | Vert(CT) -0 Horz(CT) 0 | in (loc) 0.07 14-16 0.15 10-26 0.01 2 0.06 10-26 | l/defl L/d >999 360 >999 240 n/a n/a >999 240 | PLATES MT20 Weight: 238 lb | GRIP 244/190 FT = 20% |
| BOT CHORD 2x6 | SP No.2 SP No.2 SP No.3 | | BRACING- TOP CHORD BOT CHORD WEBS | 2-0-0 o Rigid c | ral wood sheathing dii c purlins (10-0-0 max. eiling directly applied. at midpt 4 | | |
| Ma: Ma: | size) 2=589/0-3-8, 14=1909/0-3-8, 8= (Horz 2=-168(LC 13) (Uplift 2=-203(LC 12), 14=-344(LC 12) (Grav 2=635(LC 23), 14=1909(LC 1), |), 8=-237(LC 13) | | | | ,, | |

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

TOP CHORD 2-3=-773/299, 3-4=-561/306, 4-5=-53/502, 5-6=-41/482, 6-7=-616/314, 7-8=-865/342

BOT CHORD 2-16=-258/620, 14-16=-113/284, 8-10=-162/703

WEBS 3-16=-411/400, 4-16=-301/685, 4-14=-875/442, 14-17=-922/443, 6-17=-885/432,

6-18=-263/657, 10-18=-257/635, 7-10=-415/403, 5-14=-297/210

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 203 lb uplift at joint 2, 344 lb uplift at joint 14 and 237 lb uplift at joint 8.

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.

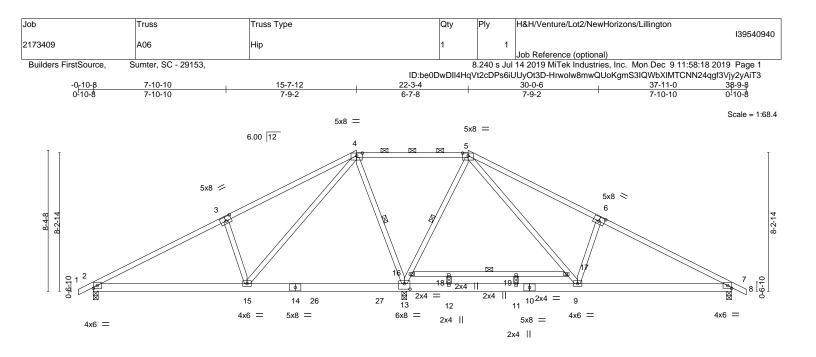
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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| | 9-1-10 | <u>18-5-12</u> 9-4-2 | <u>21-1-8</u> <u>25-1-8</u> <u>28-9-6</u> <u>37-11-0</u> <u>2-7-12</u> <u>4-0-0</u> <u>3-7-14</u> <u>9-1-10</u> |
|---|--|---|---|
| Plate Offsets (X,Y) | [3:0-4-0,0-3-0], [4:0-4-0,0-1-15], [5:0-4-0 | | |
| OADING (psf) "CLL 20.0 "CDL 10.0 3CLL 0.0 * 3CDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014 | CSI. TC 0.58 BC 0.46 WB 0.95 Matrix-AS | DEFL. in (loc) l/defl L/d Vert(LL) -0.09 13-15 >999 360 MT20 244/190 Vert(CT) -0.19 11-12 >999 240 MT20 244/190 Horz(CT) 0.01 7 n/a n/a Weight: 235 lb FT = 20% |
| OT CHORD 2x6 S VEBS 2x4 S REACTIONS. (Ib/si Max Max | SP No.2 SP No.2 SP No.3 ze) 2=558/0-3-8, 13=2124/0-3-8, 7=656 Horz 2=184(LC 12) Uplift 2=-225(LC 12), 13=-182(LC 12), 7= Grav 2=611(LC 23), 13=2124(LC 1), 7=7 | -218(LC 13) | BRACING- TOP CHORDStructural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 4-5.BOT CHORDRigid ceiling directly applied.WEBS1 Row at midpt4-13, 5-13, 16-17 |
| TOP CHORD 2-3 BOT CHORD 2-1 7-9 VEBS 3-1 | x. Comp./Max. Ten All forces 250 (lb) or =-702/350, 3-4=-571/457, 4-5=0/525, 5-6= 5=-306/551, 13-15=-254/288, 12-13=-117 =-78/765 5=-454/447, 4-15=-465/816, 4-13=-946/45 7=-303/977, 9-17=-317/933, 6-9=-443/454 | -812/358, 6-7=-945/250 273, 11-12=-117/273, 9- 5, 13-16=-1041/409, 5-16 | 1=-117/273, |
|) Wind: ASCE 7-10; | ve loads have been considered for this de Vult=130mph (3-second gust) Vasd=103i | nph; TCDL=6.0psf; BCDL | |

MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) 200.0lb AC unit load placed on the bottom chord, 23-1-8 from left end, supported at two points, 4-0-0 apart.

4) Provide adequate drainage to prevent water ponding.

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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 2, 182 lb uplift at joint 13 and 218 lb uplift at joint 7.

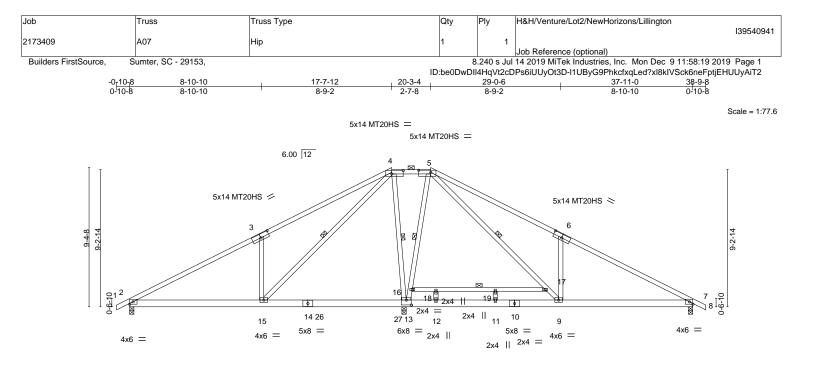
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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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| | 8-10-10 | 18-5-12 | 20-7-8 24-7-8 | 8 29-0-6 | 37-11-0 | 1 |
|--|---|--|---|---|-----------|---|
| | 8-10-10 | 9-7-2 | 2-1-12 4-0-0 |) 4-4-14 | 8-10-10 | I |
| Plate Offsets (X,Y) | [3:0-7-0,0-3-0], [4:0-9-4,0-2-12], [5:0-9 | 9-12,0-1-12], [6:0-7-0,0-3-0], [| 13:0-4-0,0-4-0] | | | |
| LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014 | CSI. TC 0.75 BC 0.43 WB 0.49 Matrix-AS | Vert(LL) -0.10 Vert(CT) -0.17 Horz(CT) 0.02 | n (loc) l/defl L/d) 13-15 >999 360 7 11-12 >999 240 2 7 n/a n/a 9 15-22 >999 240 | MT20 | GRIP 244/190 187/143 FT = 20% |
| | | | BRACING- TOP CHORD BOT CHORD WEBS | Structural wood sheathing d 2-0-0 oc purlins (10-0-0 may Rigid ceiling directly applied 1 Row at midpt | <.): 4-5. | 17 |

REACTIONS. (lb/size) 2=532/0-3-8, 13=2209/0-3-8, 7=597/0-3-8 Max Horz 2=207(LC 12) Max Uplift 2=-221(LC 12), 13=-227(LC 12), 7=-216(LC 13) Max Grav 2=595(LC 23), 13=2209(LC 1), 7=656(LC 24)

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

TOP CHORD 2-3=-650/307, 3-4=-664/588, 4-5=0/518, 5-6=-824/489, 6-7=-813/218

- BOT CHORD 2-15=-288/495, 13-15=-410/410, 12-13=-336/392, 11-12=-336/392, 9-11=-336/392, 7-9=-46/638
- WEBS 3-15=-568/556, 4-15=-696/1094, 4-13=-925/488, 13-16=-983/419, 5-16=-963/428, 5-17=-554/1240, 9-17=-564/1200, 6-9=-561/562

NOTES-

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

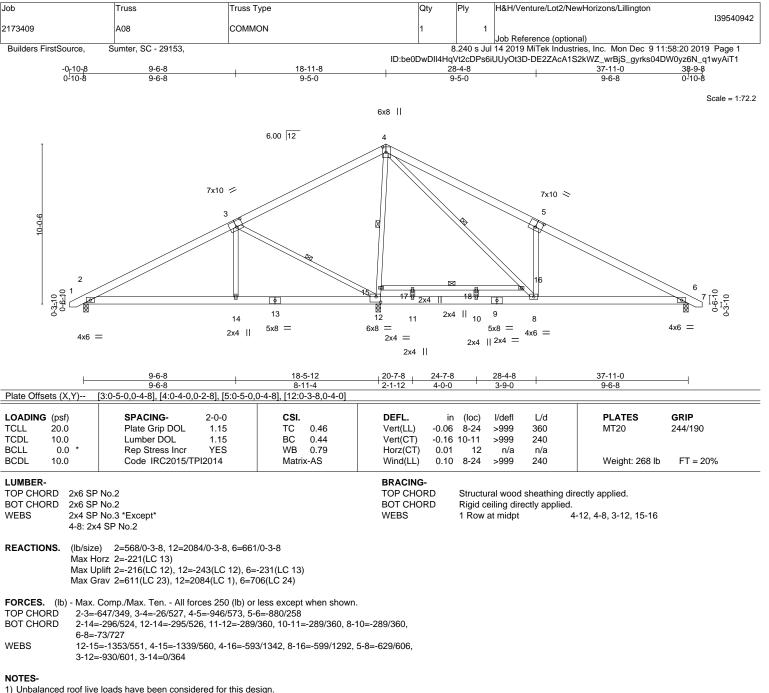
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 200.0lb AC unit load placed on the bottom chord, 22-7-8 from left end, supported at two points, 4-0-0 apart.

- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 221 lb uplift at joint 2, 227 lb uplift at joint 13 and 216 lb uplift at joint 7.
- 9) 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.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) 200.0lb AC unit load placed on the bottom chord, 22-7-8 from left end, supported at two points, 4-0-0 apart.

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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 216 lb uplift at joint 2, 243 lb uplift at joint 12 and 231 lb uplift at joint 6.

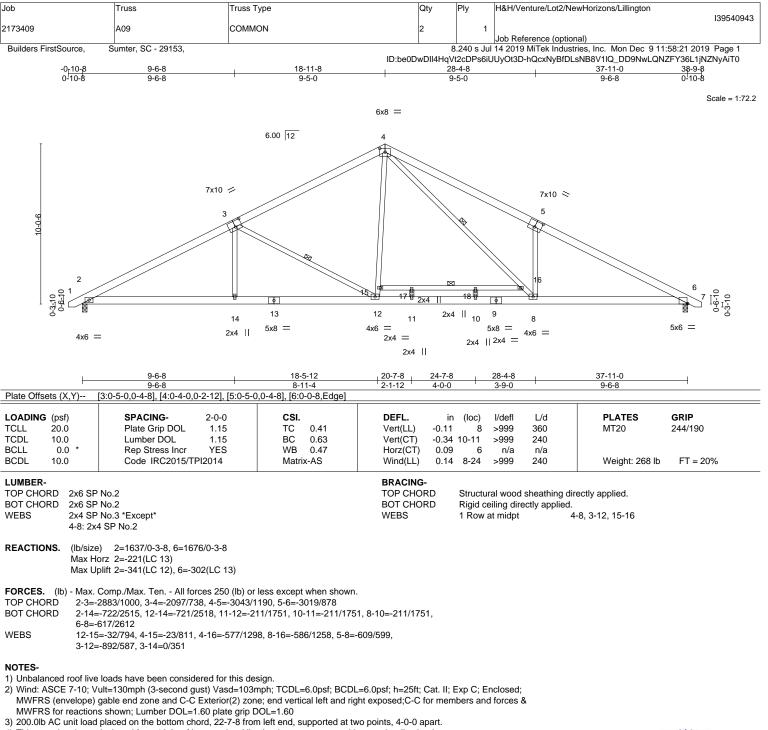
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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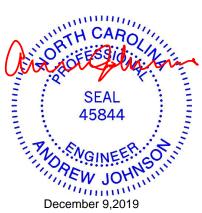


4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 341 lb uplift at joint 2 and 302 lb uplift at joint 6.

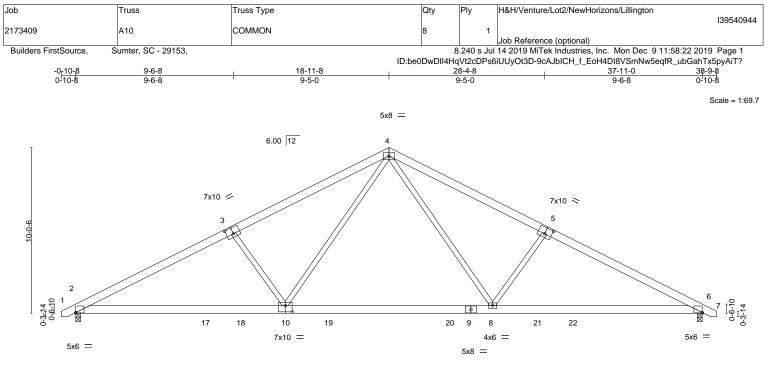
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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| L | 12-8-3 | 1 | 25-2-13 | 1 | 37-11-0 | |
|--|---|--|--|---|--|---|
| | 12-8-3 | | 12-6-10 | 1 | 12-8-3 | |
| Plate Offsets (X,Y) | [2:Edge,0-0-4], [3:0-5-0,0-4-8], [5:0-5-0, | 0-4-8], [6:0-0-0,0-0-4], [10 |):0-5-0,0-4-8] | | | |
| LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014 | CSI. TC 0.44 BC 0.84 WB 0.90 Matrix-AS | DEFL. in (loc) Vert(LL) -0.29 8-10 Vert(CT) -0.45 8-10 Horz(CT) 0.08 6 Wind(LL) 0.15 10-13 | | PLATES GRIP MT20 244/190 Weight: 242 lb FT = 209 | % |

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

TOP CHORD 2x6 SP No.2 BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3

REACTIONS. (lb/size) 2=1558/0-3-8, 6=1558/0-3-8 Max Horz 2=-221(LC 13) Max Uplift 2=-422(LC 12), 6=-422(LC 13)

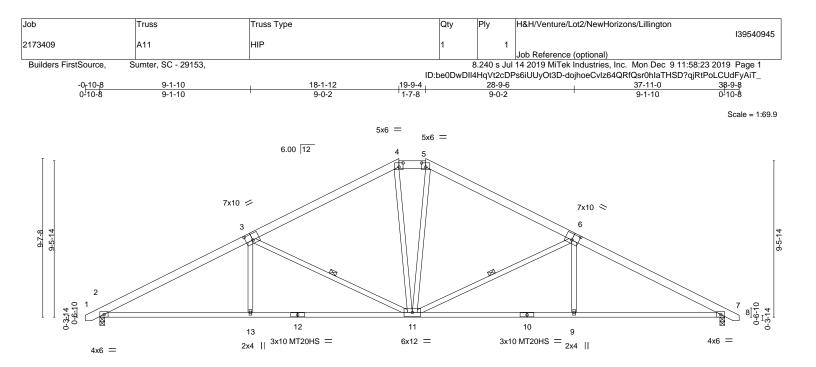
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- 2-3=-2708/1183, 3-4=-2473/1164, 4-5=-2473/1164, 5-6=-2708/1183 TOP CHORD
- BOT CHORD 2-10=-885/2375, 8-10=-387/1565, 6-8=-887/2374
- WEBS 4-8=-364/1013, 5-8=-587/535, 4-10=-364/1013, 3-10=-587/535

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
- will fit between the bottom chord and any other members, with BCDL = 10.0psf. 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 422 lb uplift at joint 2 and 422 lb uplift at joint 6.
- 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.







| | | 001 | | 1/-1-41 | 1.74 | | |
|---------------|----------------------|-----------|----------------------|---------|------|----------------|----------|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) | l/defl | L/d | PLATES | GRIP |
| FCLL 20.0 | Plate Grip DOL 1.15 | TC 0.37 | Vert(LL) -0.17 11-13 | | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.89 | Vert(CT) -0.40 11-13 | >999 | 240 | MT20HS | 187/143 |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.52 | Horz(CT) 0.13 7 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-AS | Wind(LL) 0.13 13-16 | >999 | 240 | Weight: 230 lb | FT = 20% |

 TOP CHORD
 2x6 SP No.2
 TOP CHORD
 Structural wood sheathing directly applied, exce

 BOT CHORD
 2x4 SP No.2 *Except*
 2-0-0 oc purlins (5-5-0 max.): 4-5.

 10-12: 2x4 SP No.1
 BOT CHORD
 Rigid ceiling directly applied.

 WEBS
 2x4 SP No.3
 WEBS
 1 Row at midpt
 3-11, 6-11

- REACTIONS. (lb/size) 2=1558/0-3-8, 7=1558/0-3-8 Max Horz 2=211(LC 12) Max Uplift 2=-415(LC 12), 7=-415(LC 13)
- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-3=-2717/1143, 3-4=-1877/908, 4-5=-1612/925, 5-6=-1877/908, 6-7=-2717/1143

BOT CHORD 2-13=-857/2339, 11-13=-858/2337, 9-11=-860/2337, 7-9=-859/2339

WEBS 3-13=0/372, 3-11=-871/539, 4-11=-182/538, 5-11=-181/538, 6-11=-871/539, 6-9=0/372

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) 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.

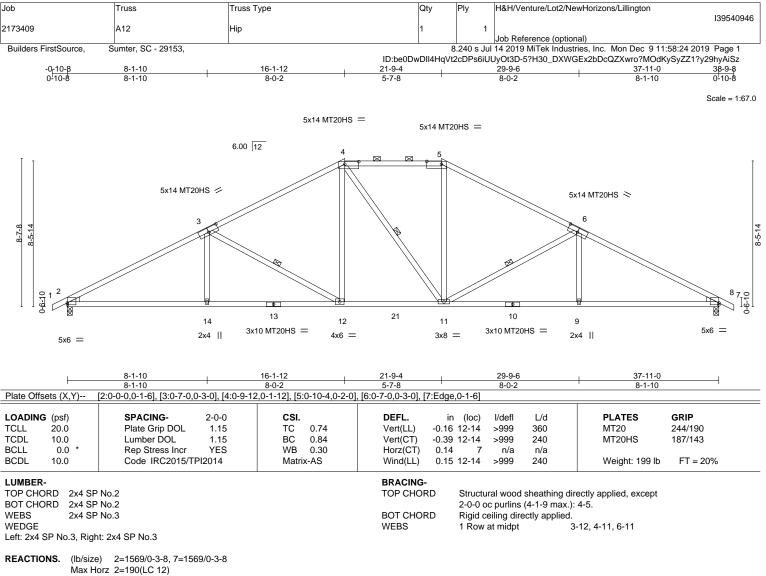
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 415 lb uplift at joint 2 and 415 lb uplift at joint 7.
- 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.







Max Uplift 2=-401(LC 12), 7=-401(LC 13)

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

TOP CHORD 2-3=-2715/1125, 3-4=-2052/957, 4-5=-1733/940, 5-6=-2053/957, 6-7=-2715/1124

- BOT CHORD 2-14=-846/2329, 12-14=-847/2328, 11-12=-457/1733, 9-11=-850/2328, 7-9=-849/2328
- WEBS 3-14=0/315, 3-12=-685/446, 4-12=-136/510, 5-11=-136/510, 6-11=-685/445, 6-9=0/315

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) 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 3-6-0 tall by 2-0-0 wide

will fit between the bottom chord and any other members, with BCDL = 10.0psf.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 401 lb uplift at joint 2 and 401 lb uplift at joint 7.

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.

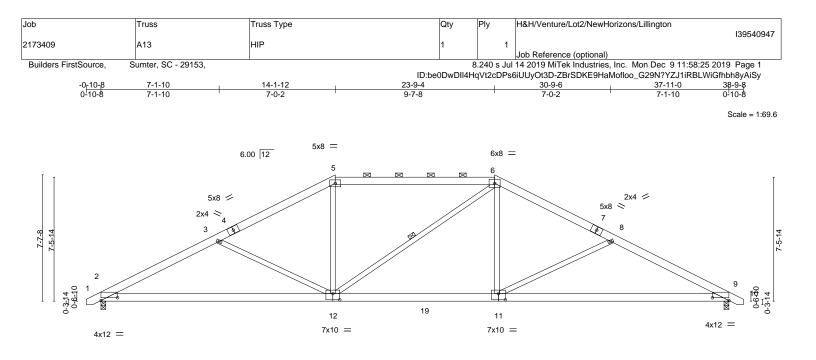
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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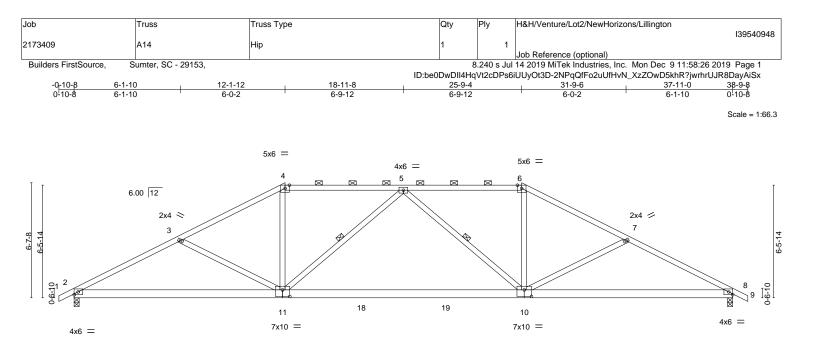


| H | 14-1-12 | + | 23-9-4 9-7-8 | | | <u>37-11-0</u> 14-1-12 | |
|--|---|--|---|--|---|----------------------------------|------------------------------------|
| Plate Offsets (X,Y) | [2:1-0-0,0-2-0], [9:1-0-0,0-2-0], [11:0-5-0 |),0-4-8], [12:0-5-0,0-4-8] | 3-1-0 | | | 17-1-12 | |
| LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014 | CSI. TC 0.60 BC 0.76 WB 0.57 Matrix-AS | DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in (loc) -0.21 12-15 -0.47 12-15 0.08 9 0.11 12-15 | l/defl L/d >999 360 >965 240 n/a n/a >999 240 | PLATES MT20 Weight: 250 lb | GRIP 244/190 FT = 20% |
| BOT CHORD 2x6 S WEBS 2x4 S REACTIONS. (Ib/siz Max I | P No.2 P No.2 P No.3 e) 2=1558/0-3-8, 9=1558/0-3-8 Horz 2=-165(LC 13) Jplift 2=-373(LC 12), 9=-373(LC 13) | | BRACING- TOP CHOR BOT CHOR WEBS | 2-0-0 oc D Rigid ce | ral wood sheathing c purlins (4-0-14 ma eiling directly applied at midpt | | |
| TOP CHORD 2-3= BOT CHORD 2-12 | . Comp./Max. Ten All forces 250 (lb) or 2747/1214, 3-5=-2305/989, 5-6=-1977/5 =-942/2426, 11-12=-556/1974, 9-11=-94 =-495/433, 5-12=-56/584, 6-11=-58/583, | 975, 6-8=-2308/992, 8-9=-27 4/2426 | 748/1214 | | | | |
| NOTES- | e loads have been considered for this de | sian | | | | | |

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 373 lb uplift at joint 2 and 373 lb uplift at joint 9.
- 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







| | <u>12-1-12</u> 12-1-12 | | <u>25-9-4</u> 13-7-8 | | | <u>37-11-0</u> 12-1-12 | | | | |
|--|---|--|---|---|---------------------------------|----------------------------------|------------------------------------|--|--|--|
| Plate Offsets (X,Y) | [10:0-5-0,0-4-8], [11:0-5-0,0-4-8] | | | | | | | | | |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014 | CSI. TC 0.63 BC 0.95 WB 0.32 Matrix-AS | Vert(LL) -0.38 Vert(CT) -0.67 Horz(CT) 0.09 | n (loc) l/defl 3 10-11 >999 7 10-11 >680 9 8 n/a 6 10-11 >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 216 lb | GRIP 244/190 FT = 20% | | | |
| LUMBER- BRACING- TOP CHORD 2x4 SP No.2 TOP CHORD 2x6 SP No.2 BOT CHORD 2x6 SP No.2 2-0-0 oc purlins (3-4-13 max.): 4-6. WEBS 2x4 SP No.3 BOT CHORD Rigid ceiling directly applied. REACTIONS. (lb/size) 2=1569/0-3-8, 8=1569/0-3-8 Max Horz 2=145(LC 12) Max Uplift 2=-354(LC 12), 8=-354(LC 13) | | | | | | | | | | |
| FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2784/1183, 3-4=-2422/992, 4-5=-2089/956, 5-6=-2089/956, 6-7=-2422/992, 7-8=-2784/1183 BOT CHORD 2-11=-926/2425, 10-11=-765/2355, 8-10=-929/2425 WEBS 3-11=-369/379, 4-11=-164/689, 5-11=-483/300, 5-10=-483/300, 6-10=-164/689, 7-10=-369/379 | | | | | | | | | | |
| 2) Wind: ASCE 7-10; | e loads have been considered for this de Vult=130mph (3-second gust) Vasd=103r) gable end zone and C-C Exterior(2) zor | mph; TCDL=6.0psf; BCDL= | | | | | | | | |

MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for memi 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 354 lb uplift at joint 2 and 354 lb uplift at joint 8.

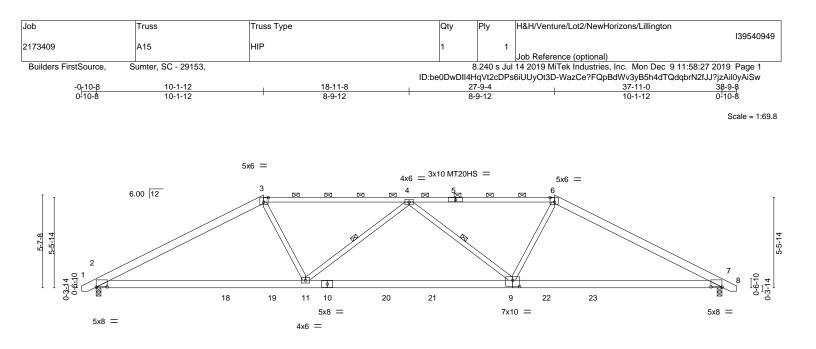
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

8) 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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| ⊢ — | <u>12-8-3</u> 12-8-3 | | <u>25-2-13</u> 12-6-10 | | | <u>37-11-0</u> 12-8-3 | | | |
|--|--|--|---|---|---------------------------------|--|---|--|--|
| Plate Offsets (X,Y) | [2:0-8-0,0-0-4], [3:0-3-4,0-3-4], [6:0-3-4, | 0-3-4], [7:0-8-0,0-0-4], [9:0 | | | | 12-0-3 | | | |
| LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014 | CSI. TC 0.87 BC 0.81 WB 0.30 Matrix-AS | Vert(LL) -0.17 Vert(CT) -0.39 Horz(CT) 0.09 | i (loc) l/defl 11-14 >999 11-14 >999 7 n/a 11-14 >999 | L/d 360 240 n/a 240 | PLATES MT20 MT20HS Weight: 212 lb | GRIP 244/190 187/143 FT = 20% | | |
| LUMBER- BRACING- TOP CHORD 2x6 SP No.2 *Except* 3-5,5-6: 2x4 SP No.1 TOP CHORD BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3 REACTIONS. (lb/size) 2=1558/0-3-8, 7=1558/0-3-8 Max Horz 2=-121(LC 13) Max Uplift 2=-319(LC 12), 7=-319(LC 13) | | | | | | | | | |
| TOP CHORD2-3=BOT CHORD2-11 | . Comp./Max. Ten All forces 250 (lb) or 2607/1036, 3-4=-2534/1068, 4-6=-2534 =-731/2260, 9-11=-988/2870, 7-9=-732/2 =-73/718, 4-11=-545/360, 4-9=-545/360, | /1068, 6-7=-2607/1036 2260 | | | | | | | |
| 2) Wind: ASCE 7-10; MWFRS (envelope | re loads have been considered for this de Vult=130mph (3-second gust) Vasd=103r) gable end zone and C-C Exterior(2) zor ns shown; Lumber DOL=1.60 plate grip D | nph; TCDL=6.0psf; BCDL: le; end vertical left and right | | | | | | | |

Provide adequate drainage to prevent water ponding.

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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 319 lb uplift at joint 2 and 319 lb uplift at joint 7.

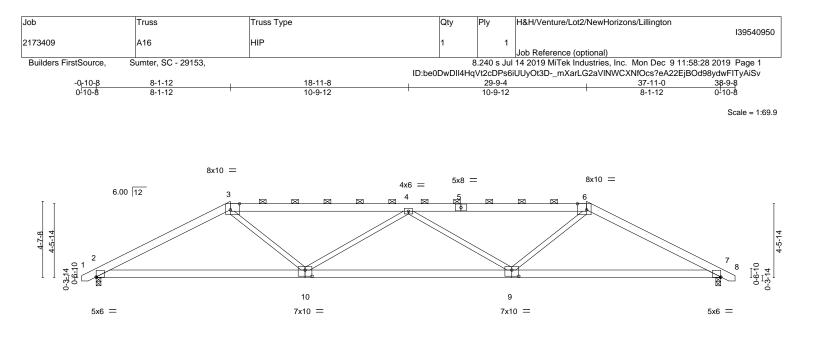
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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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| Plate Offsets (X,Y) | 12-8-3 12-8-3 [2:0-0-0,0-0-4], [3:0-6-10.Edge], [6:0-6- | 0.Edae]. [7:0-0-0.0-0-4]. [9 | 25-2-13 12-6-10 1:0-5-0.0-4-8]. [10 |):0-5-0 | .0-4-81 | - | | <u>37-11-0</u> 12-8-3 | |
|---|---|--|---|--------------------------------------|---------------|---------------------------------------|---------------------------------|----------------------------------|------------------------------------|
| LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014 | CSI. TC 0.70 BC 0.82 WB 0.83 Matrix-AS | DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.16 -0.40 0.11 0.21 | (loc) 9-10 | l/defl >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 226 lb | GRIP 244/190 FT = 20% |
| LUMBER- TOP CHORD 2x6 SF BOT CHORD 2x6 SF WEBS 2x4 SF | BRACING- TOP CHOR | BRACING- TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-2-12 max.): 3-6. BOT CHORD Rigid ceiling directly applied. | | | | | | | |
| REACTIONS. (lb/size) 2=1558/0-3-8, 7=1558/0-3-8 Max Horz 2=-98(LC 13) Max Uplift 2=-359(LC 9), 7=-359(LC 8) | | | | | | | | | |
| FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-2754/1117, 3-4=-3126/1209, 4-6=-3126/1209, 6-7=-2756/1118 BOT CHORD 2-10=-846/2427, 9-10=-1346/3692, 7-9=-848/2430 WEBS 3-10=-166/983, 4-10=-759/503, 4-9=-758/503, 6-9=-166/981 | | | | | | | | | |

NOTES-

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 359 lb uplift at joint 2 and 359 lb uplift at joint 7.

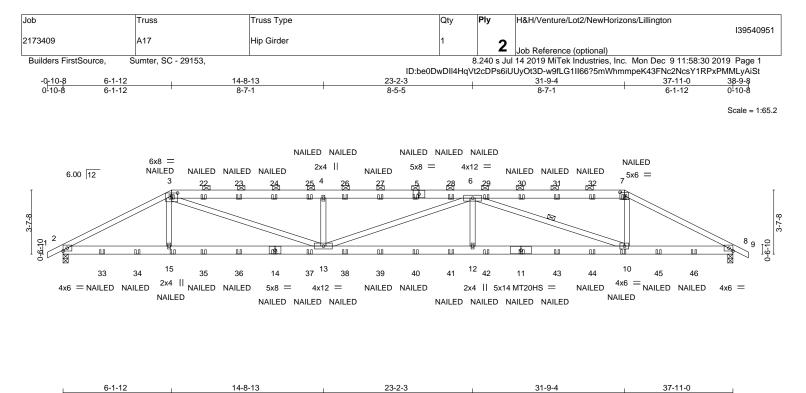
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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





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



| 01 | 12 14010 | | 2020 | 01 | | 0111 | 0 |
|--|--|------------------------------|---------------------------------------|-----------------------|-----------------|----------------------|--------------------|
| 6-1- | | | 8-5-5 | 8- | 7-1 | 6-1-1 | 2 |
| Plate Offsets (X,Y) | [3:0-4-0,0-1-15], [7:0-3-0,0-2-7] | | | | | | |
| | | | | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | | in (loc) l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.76 | Vert(LL) 0.5 | 54 12-13 >844 | 240 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.95 | Vert(CT) -0.6 | 3 12-13 >719 | 240 | MT20HS | 187/143 |
| BCLL 0.0 * | Rep Stress Incr NO | WB 0.81 | Horz(CT) 0.1 | 3 8 n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-MS | | | | Weight: 456 lb | FT = 20% |
| | | | | | | | |
| LUMBER- | | | BRACING- | | | | |
| TOP CHORD 2x4 SP | No.2 *Except* | | TOP CHORD | Structural wood | sheathing direc | tly applied or 5-0-5 | oc purlins, except |
| | 6 SP No.1, 5-7: 2x6 SP No.2 | | | 2-0-0 oc purlins | | | -, |
| BOT CHORD 2x6 SP | | | BOT CHORD | | ``` | 7-1-13 oc bracing. | |
| WEBS 2x4 SP | | | WEBS | 1 Row at midpt | 6-1 | | |
| | 110.2 | | WEBO | i itow at iniupt | 01 | 0 | |
| REACTIONS. (Ib/size | e) 2=2959/0-3-8, 8=2961/0-3-8 | | | | | | |
| · · · · · · · · · · · · · · · · · · · | | | | | | | |
| | orz 2=79(LC 12) | | | | | | |
| Max U | plift 2=-1523(LC 8), 8=-1525(LC 9) | | | | | | |
| | | | | | | | |
| () | Comp./Max. Ten All forces 250 (lb) o | | | | | | |
| | 5583/2974, 3-4=-8876/5050, 4-6=-8872 | , , | | | | | |
| | -2632/4922, 13-15=-2637/4906, 12-13 | =-4973/8869, 10-12=-4973 | 3/8869, | | | | |
| | -2591/4930 | | | | | | |
| | =0/527, 3-13=-2579/4311, 4-13=-1173/1 | 086, 6-12=0/583, 6-10=-4 | 352/2610, | | | | |
| 7-10= | -758/1801 | | | | | | |
| | | | | | | | |
| NOTES- | | | | | | | |
| 1) 2-ply truss to be con | nected together with 10d (0.131"x3") na | ails as follows: | | | | | |
| Top chords connected | ed as follows: 2x4 - 1 row at 0-9-0 oc, 2 | x6 - 2 rows staggered at 0 | -9-0 oc. | | | | |
| Bottom chords conne | ected as follows: 2x6 - 2 rows staggere | d at 0-9-0 oc. | | | | | |
| Webs connected as | follows: 2x4 - 1 row at 0-9-0 oc. | | | | | | |
| 2) All loads are conside | ered equally applied to all plies, except | f noted as front (F) or back | (B) face in the LOAD | CASE(S) section. F | Plv to | | |
| | e been provided to distribute only loads | | | () | , | | CAP |
| | loads have been considered for this de | | | | | un. | CAD |
| | ult=130mph (3-second gust) Vasd=103 | | =6 Onsf: h=25ft: Cat 1 | · Exp C: Enclosed | | | A UARO |
| | gable end zone; end vertical left and rig | | | | | A A | Contractory |
| | ainage to prevent water ponding. | | | 1.00 | | A OP | ETODAL |
| / | plates unless otherwise indicated. | | | | | | hanne |
| / ! | designed for a 10.0 psf bottom chord liv | a load popoopourropt with | ony other live leads | | | 10. | V X : : : |
| | n designed for a live load of 20.0psf on | | | | ido | | 0541 |
| | | the bottom chord in all are | as where a rectangle a | 5-6-0 tall by 2-0-0 w | lue | | SEAL : = |
| | ottom chord and any other members. | | | | | - E - E | 15911 = |
| , | connection (by others) of truss to bearing | ng plate capable of withsta | inding 1523 ib uplift at | joint 2 and 1525 lb | μημα | | 43044 2 |
| at joint 8. | | de a siendation af de la l | a class that takes a structure of the | hattan ahaad | | | 1 |
| | presentation does not depict the size or | | | bottom chord. | | - 7 · A | A: > > |
| 11) "NAILED" indicates | 3-10d (0.148"x3") or 3-12d (0.148"x3.2 | 25") toe-nails per NDS guid | dlines. | | | 1. 1. SA | ICINEE OS |
| | | | | | | 1. On' | SEAL 45844 |
| LOAD CASE(S) Stand | | | | | | 1, ME | W IOHN I' |
| Dead + Roof Live (based) | alanced): Lumber Increase=1.15, Plate | Increase=1.15 | | | | CAANGE STATE | |
| | | | | | | | unnus. |
| | | | | | | Docom | bor 0 2010 |

Continued on page 2

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December 9,2019

| Job | Truss | Truss Type | Qty | Ply | H&H/Venture/Lot2/NewHorizons/Lillington |
|-------------------------|--------------------|------------|-----|------------|---|
| | | | | | 139540951 |
| 2173409 | A17 | Hip Girder | 1 | 2 | |
| | | | | 2 | Job Reference (optional) |
| Builders FirstSource, S | umter, SC - 29153, | | 8 | .240 s Jul | 14 2019 MiTek Industries, Inc. Mon Dec 9 11:58:30 2019 Page 2 |

ID:be0DwDII4HqVt2cDPs6iUUy0t3D-w9fLG1II66?5mWhmmpeK43FNc2NcsY1RPxPMMLyAiSt

LOAD CASE(S) Standard

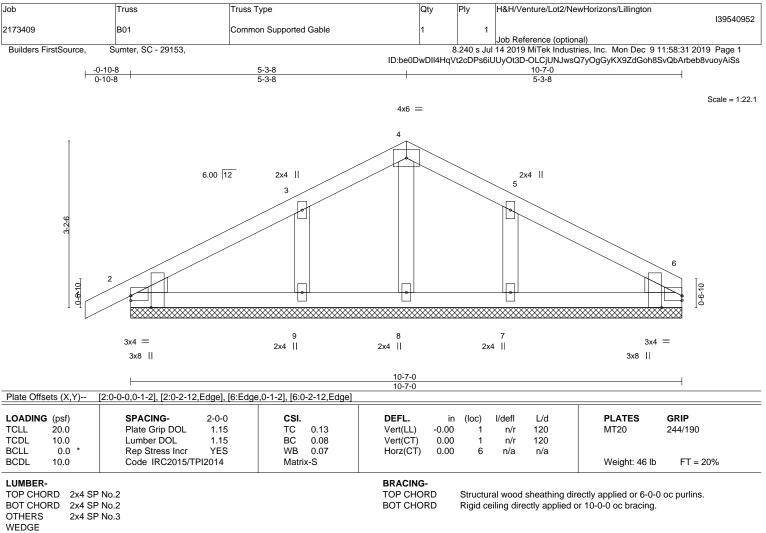
Uniform Loads (plf)

Vert: 1-3=-60, 3-7=-60, 7-9=-60, 16-19=-20

Concentrated Loads (lb)

Vert: 3=-124(B) 5=-124(B) 7=-124(B) 14=-37(B) 15=-37(B) 10=-37(B) 11=-37(B) 22=-124(B) 23=-124(B) 24=-124(B) 25=-124(B) 26=-124(B) 27=-124(B) 28=-124(B) 29=-124(B) 30=-124(B) 30=-124(B) 32=-124(B) 32=-37(B) 32=-37(B) 32=-37(B) 32=-37(B) 32=-37(B) 42=-37(B) 42=-37(B)





Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. All bearings 10-7-0.

(lb) - Max Horz 2=74(LC 12) Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 9=-144(LC 12), 7=-149(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 8, 6 except 9=264(LC 1), 7=277(LC 24)

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

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) Gable requires continuous bottom chord bearing.

5) Gable studs spaced at 2-0-0 oc.

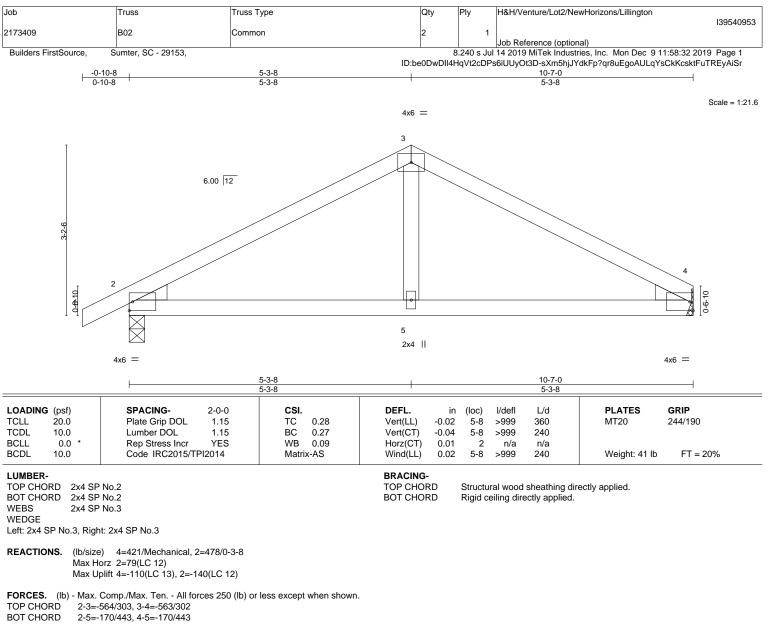
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (it=lb
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 9=144, 7=149.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Edenton, NC 27932



- NOTES-
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.

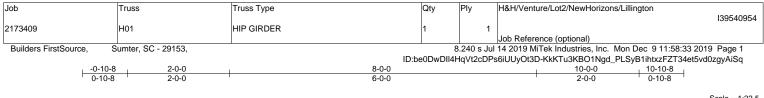
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=110, 2=140.
- 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.



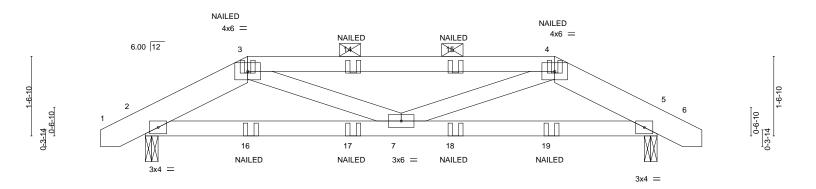
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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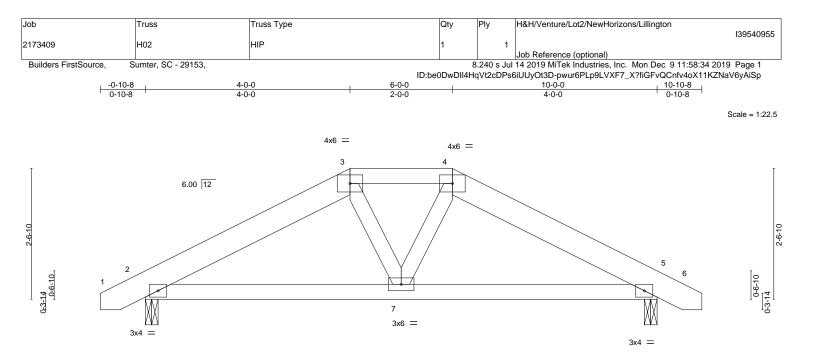
Scale = 1:22.5



| | <u> </u> | | 10-0-0 5-0-0 |
|--|---|---|---|
| LOADING (psf) TCLL 20.0 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 NO Code IRC2015/TPI2014 | CSI. TC 0.56 BC 0.24 WB 0.05 Matrix-MS | DEFL. in (loc) I/defl L/d PLATES GRIP Vert(LL) 0.03 7-10 >999 240 MT20 244/190 Vert(CT) -0.03 7-10 >999 240 MT20 244/190 Horz(CT) 0.01 5 n/a n/a Weight: 49 lb FT = 20% |
| | | | BRACING- TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (5-10-15 max.): 3-4. BOT CHORD Rigid ceiling directly applied or 9-7-8 oc bracing. |
| Max He | e) 2=445/0-3-0, 5=445/0-3-0 orz 2=33(LC 8) plift 2=-254(LC 5), 5=-254(LC 4) | | |
| TOP CHORD 2-3=- | Comp./Max. Ten All forces 250 (lb) or 650/433, 3-4=-677/467, 4-5=-650/433 376/575, 5-7=-364/575 | less except when shown. | |
| Wind: ASCE 7-10; V MWFRS (envelope) DOL=1.60 Provide adequate dr. This truss has been this truss has been * This truss has been * This truss has been Provide mechanical 2=254, 5=254. Graphical purlin repr "NAILED" indicates 3 In the LOAD CASE(S) Stand Dead + Roof Live (bi Uniform Loads (plf) Vert: 1-3=-6 Concentrated Loads | gable end zone; end vertical left and rigl ainage to prevent water ponding. designed for a 10.0 psf bottom chord live n designed for a live load of 20.0psf on to ottom chord and any other members. connection (by others) of truss to bearin resentation does not depict the size or th 3-10d (0.148"x3") or 3-12d (0.148"x3.25" S) section, loads applied to the face of th dard alanced): Lumber Increase=1.15, Plate I io, 3-4=-60, 4-6=-60, 8-11=-20 | ph; TCDL=6.0psf; BCDL= at exposed; porch left and be load nonconcurrent with the bottom chord in all area g plate capable of withstar e orientation of the purlin a) toe-nails per NDS guidlir e truss are noted as front | s where a rectangle 3-6-0 tall by 2-0-0 wide ding 100 lb uplift at joint(s) except (jt=lb) long the top and/or bottom chord. es. |

December 2 December 9,2019



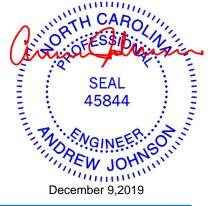


| | 5-0-5-0-5-0- | | | 10-0-0 5-0-0 | | |
|--|---|--|--|--|---------------------------------|------------------------------------|
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0 | SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2015/TPI2014 | CSI. TC 0.17 BC 0.21 WB 0.04 Matrix-AS | Vert(LL) 0.03 7- | loc) I/defl L/d -13 >999 240 -10 >999 240 5 n/a n/a | PLATES MT20 Weight: 51 lb | GRIP 244/190 FT = 20% |
| BOT CHORD 3-4: 2x4 2x4 SP WEBS 2x4 SP REACTIONS. (Ib/size Max Ho | | - | 2-0 | ructural wood sheathing dir 0-0 oc purlins (6-0-0 max.): gid ceiling directly applied. | | |
| TOP CHORD 2-3=-5 | Comp./Max. Ten All forces 250 (lb) or 521/696, 3-4=-453/745, 4-5=-521/695 518/430, 5-7=-519/430 | less except when shown | | | | |
| Wind: ASCE 7-10; Vu MWFRS (envelope) of for members and ford Provide adequate dra This truss has been of | loads have been considered for this de ult=130mph (3-second gust) Vasd=103 gable end zone and C-C Exterior(2) zon zes & MWFRS for reactions shown; Lur ainage to prevent water ponding. Jesigned for a 10.0 psf bottom chord liv designed for a live load of 20.0psf on | mph; TCDL=6.0psf; BCDL ne; end vertical left and rig nber DOL=1.60 plate grip e load nonconcurrent with | nt exposed; porch left and ri DOL=1.60 any other live loads. | ight exposed;C-C | | |

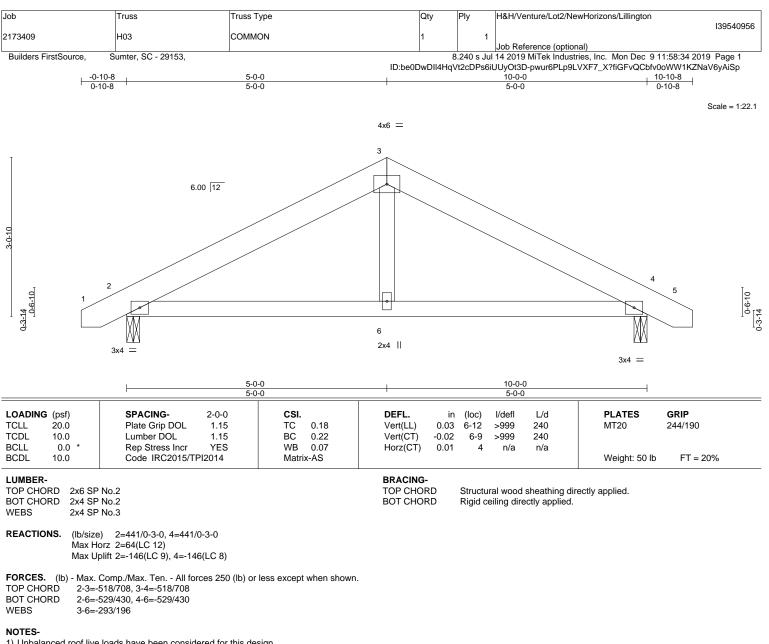
will fit between the bottom chord and any other members.
Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

2=175, 5=175.7) 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.

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







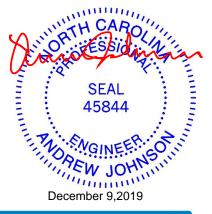
1) Unbalanced roof live loads have been considered for this design.

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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.

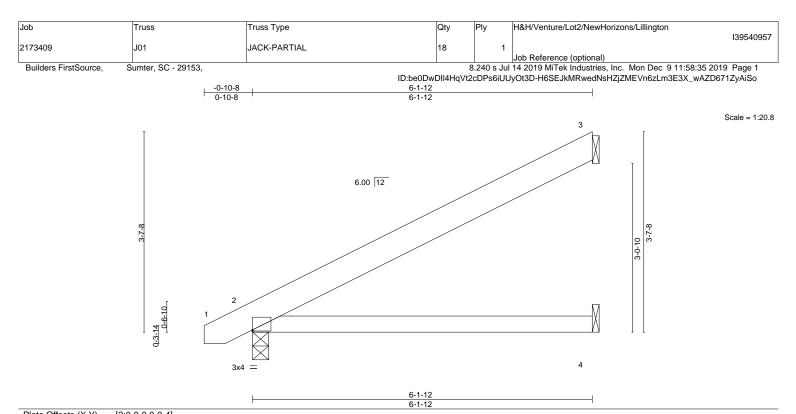
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=146, 4=146.

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.







| LOADING (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|------------------|-------|-------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC | 0.28 | Vert(LL) | -0.04 | 4-7 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC | 0.29 | Vert(CT) | -0.08 | 4-7 | >874 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 3 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI | 2014 | Matri | x-AS | Wind(LL) | 0.04 | 4-7 | >999 | 240 | Weight: 28 lb | FT = 20% |

LUMBER-

TOP CHORD2x6 SP No.2BOT CHORD2x4 SP No.2

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (lb/size) 3=184/Mechanical, 2=287/0-3-8, 4=57/Mechanical Max Horz 2=174(LC 12) Max Uplift 3=-145(LC 12), 2=-66(LC 12) Max Grav 3=184(LC 1), 2=287(LC 1), 4=96(LC 3)

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

NOTES-

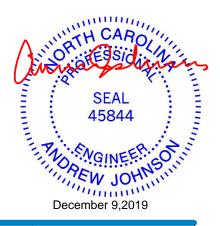
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

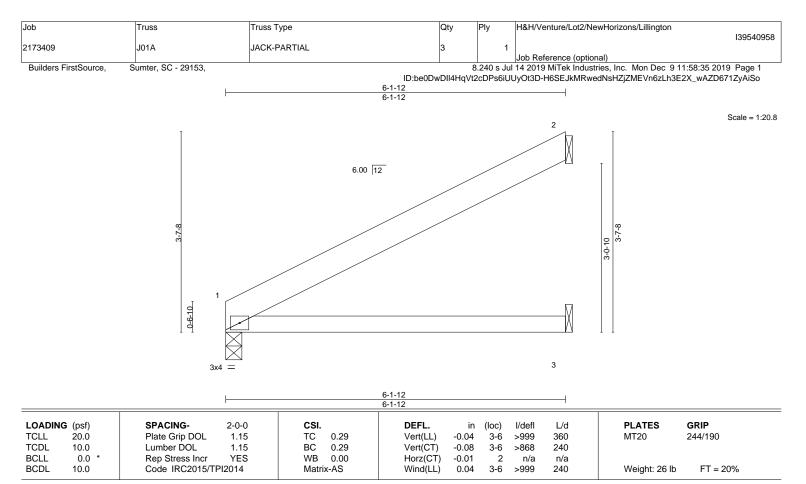
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 2 except (jt=lb) 3=145.
- 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.







BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

| | JMBE | :D_ |
|-------|------|----------|
| - L V | | <u>n</u> |

TOP CHORD2x6 SP No.2BOT CHORD2x4 SP No.2

REACTIONS. (lb/size) 1=243/0-3-8, 2=186/Mechanical, 3=57/Mechanical Max Horz 1=159(LC 12) Max Uplift 1=-42(LC 12), 2=-146(LC 12)

Max Grav 1=243(LC 1), 2=186(LC 1), 3=96(LC 3)

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

NOTES-

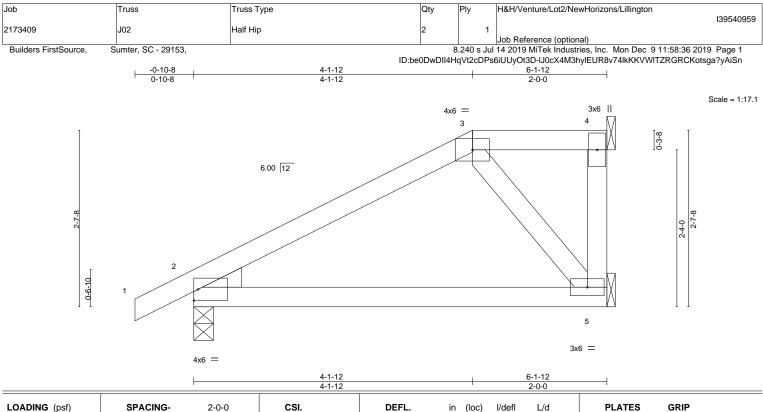
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 1 except (jt=lb) 2=146.
- 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.







| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in | (loc) | l/defl L/d | PLATES GRIP |
|---------------|-----------------------|-----------|----------------|-------|------------|------------------------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.27 | Vert(LL) -0.05 | 5-8 | >999 360 | MT20 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.35 | Vert(CT) -0.10 | 5-8 | >701 240 | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.06 | Horz(CT) 0.01 | 2 | n/a n/a | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-AS | Wind(LL) 0.03 | 5-8 | >999 240 | Weight: 29 lb FT = 20% |

BRACING-

TOP CHORD

BOT CHORD

2-0-0 oc purlins: 3-4.

Rigid ceiling directly applied.

LUMBER-

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP No.2

 WEBS
 2x4 SP No.3

 WEDGE
 Left: 2x4 SP No.3

REACTIONS. (lb/size) 2=296/0-3-8, 5=181/Mechanical, 4=56/Mechanical Max Horz 2=131(LC 11) Max Uplift 2=-97(LC 12), 5=-43(LC 12), 4=-37(LC 8)

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

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5, 4.

 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.

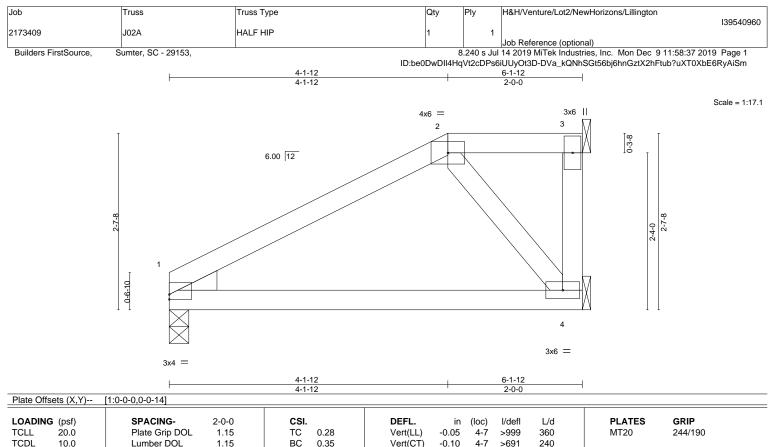
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



Structural wood sheathing directly applied, except end verticals, and





| BCLL BCDL | 0.0 * 10.0 | Rep Stress Incr YES Code IRC2015/TPI2014 | WB 0.06 Matrix-AS | Horz(CT) | 0.01 0.03 | 1 4-7 > | n/a n/a 999 240 | Weight: 27 lb | FT = 20% |
|--------------|--------------------------|---|----------------------|-----------------------|--------------|--------------|--------------------|----------------------------|--------------------|
| BOT CH | ORD 2x4 SP ORD 2x4 SP | No.2 | | BRACING- TOP CHORD | 2 | 2-0-0 oc p | urlins: 2-3. | lirectly applied, except e | end verticals, and |
| WEBS | 2x4 SP | No.3 | | BOT CHORD | F | Rigid ceilir | g directly applied | | |

WEDGE Left: 2x4 SP No.3

REACTIONS. (lb/size) 1=240/0-3-8, 4=184/Mechanical, 3=56/Mechanical Max Horz 1=109(LC 12)

Max Uplift 1=-55(LC 12), 4=-56(LC 12), 3=-37(LC 8)

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

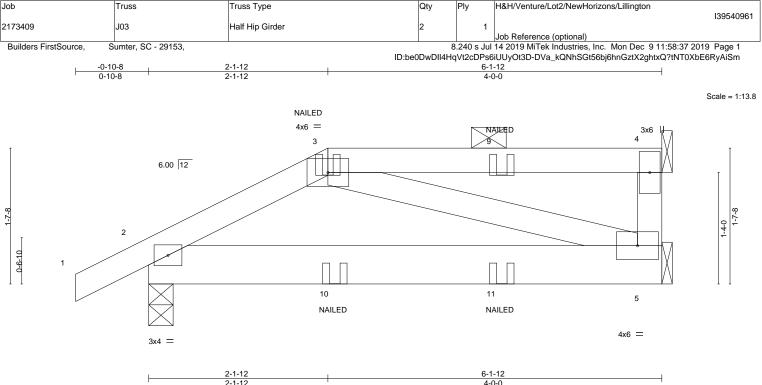
NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 3.
- 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.
 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



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A MITEK Affiliate 818 Soundside Road Edenton, NC 27932



| | | 2-1-12 | | | | 4-0-0 | | | | - | | |
|--------|---------|-----------------|--------|--------|------|----------|-------|-------|--------|-----|---------------|----------|
| LOADIN | G (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.32 | Vert(LL) | -0.01 | 5-8 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | -0.03 | 5-8 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.07 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TI | PI2014 | Matrix | -MP | Wind(LL) | 0.01 | 5-8 | >999 | 240 | Weight: 33 lb | FT = 20% |

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x6 SP No.2WEBS2x4 SP No.2

BRACING-TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=299/0-3-8, 5=123/Mechanical, 4=116/Mechanical Max Horz 2=76(LC 8) Max Uplift 2=-117(LC 8), 5=-24(LC 5), 4=-81(LC 4) Max Grav 2=299(LC 1), 5=142(LC 3), 4=116(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-251/140

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60

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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4 except (jt=lb) 2=117.

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

9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines

11) 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 (plf) Vert: 1-3=-60, 3-4=-60, 5-6=-20

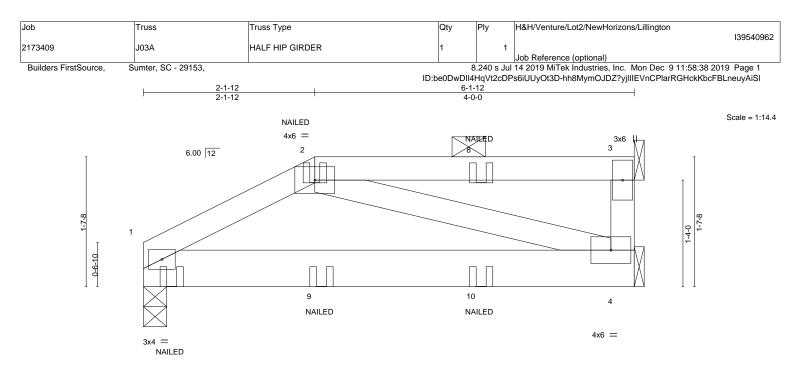
Concentrated Loads (lb)

Vert: 10=-2(F) 11=-2(F)



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Edenton, NC 27932



| | <u>2-1-12</u> 2-1-12 | | <u>6-1-12</u> 4-0-0 | | | | |
|---------------|-------------------------|-----------|------------------------|-------------|-----|---------------|----------|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (l | loc) l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.32 | Vert(LL) -0.01 | 4-7 >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.17 | Vert(CT) -0.03 | 4-7 >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr NO | WB 0.07 | Horz(CT) 0.00 | 3 n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-MP | Wind(LL) 0.01 | 4-7 >999 | 240 | Weight: 31 lb | FT = 20% |

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x6 SP No.2WEBS2x4 SP No.2

BRACING-TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (Ib/size) 1=250/0-3-8, 4=128/Mechanical, 3=116/Mechanical Max Horz 1=64(LC 7) Max Uplift 1=-98(LC 8), 4=-28(LC 5), 3=-81(LC 4) Max Grav 1=250(LC 1), 4=144(LC 3), 3=116(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-256/147

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) gable end zone; 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 3.

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

9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

11) 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

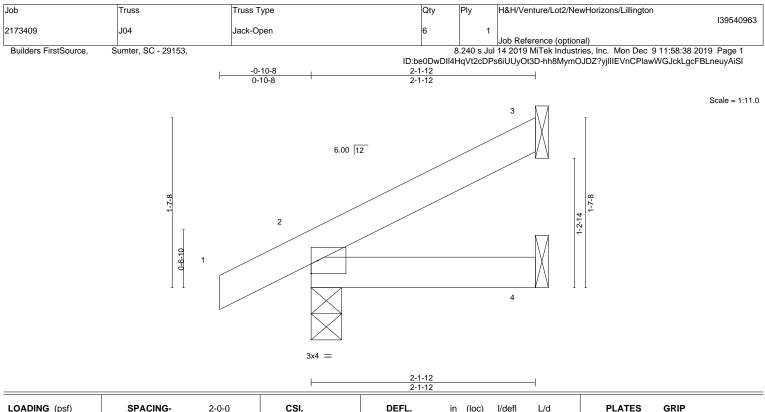
Uniform Loads (plf) Vert: 1-2=-60, 2-3=-60, 4-5=-20

Concentrated Loads (lb)

Vert: 7=-8(F) 9=-2(F) 10=-2(F)







| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. ir | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|-----------------------|-----------|----------------|-------|--------|-----|--------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.06 | Vert(LL) -0.00 | 7 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.04 | Vert(CT) -0.00 | 4-7 | >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 IRC2015/TPI2014 | Matrix-MP | Wind(LL) 0.00 | 7 | >999 | 240 | Weight: 8 lb | FT = 20% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2

REACTIONS. (lb/size) 3=51/Mechanical, 2=147/0-3-8, 4=22/Mechanical Max Horz 2=74(LC 12) Max Uplift 3=-46(LC 12), 2=-44(LC 12) Max Grav 3=51(LC 1), 2=147(LC 1), 4=37(LC 3)

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

NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

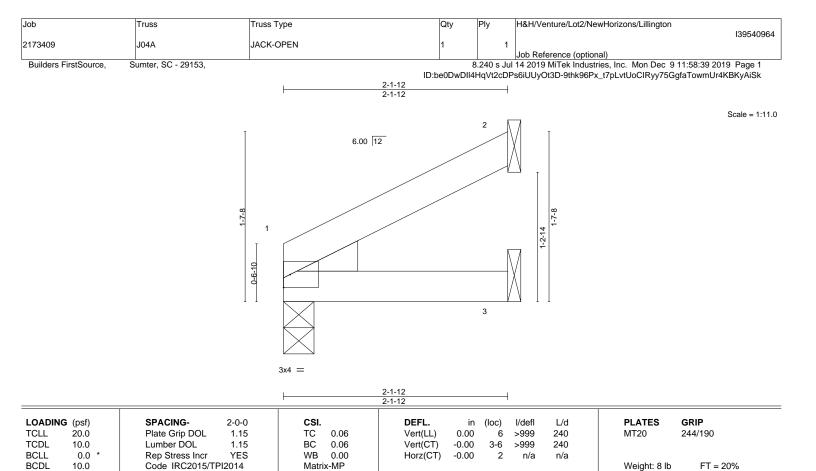
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



Structural wood sheathing directly applied or 2-1-12 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.





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TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEDGE BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-1-12 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

Left: 2x4 SP No.3

REACTIONS. (lb/size) 1=83/0-3-8, 2=56/Mechanical, 3=27/Mechanical Max Horz 1=54(LC 12) Max Uplift 1=-9(LC 12), 2=-49(LC 12), 3=-1(LC 12) Max Grav 1=83(LC 1), 2=56(LC 1), 3=39(LC 3)

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

NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.

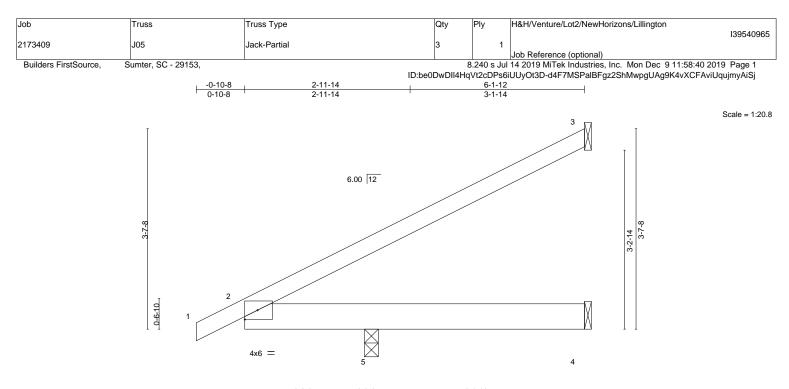
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 1, 2, 3.







| | | <u>2-2-0</u> 2-3-8 2-2-0 0-1-8 | | ——— |
|--|---|--|--|--------------|
| LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014 | CSI. TC 0.49 BC 0.40 WB 0.00 Matrix-AS | DEFL. in (loc) l/defl L/d Vert(LL) 0.01 4-5 >999 360 Vert(CT) 0.02 4-5 >999 240 Horz(CT) -0.04 3 n/a n/a Wind(LL) -0.01 4-5 >999 240 | MT20 244/190 |

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2

REACTIONS. (lb/size) 3=119/Mechanical, 4=-61/Mechanical, 5=481/0-3-0 Max Horz 5=178(LC 12) Max Uplift 3=-117(LC 12), 4=-69(LC 20), 5=-116(LC 12) Max Grav 3=119(LC 1), 4=33(LC 12), 5=481(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. BOT CHORD 2-5=-92/272

NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed; porch left 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.

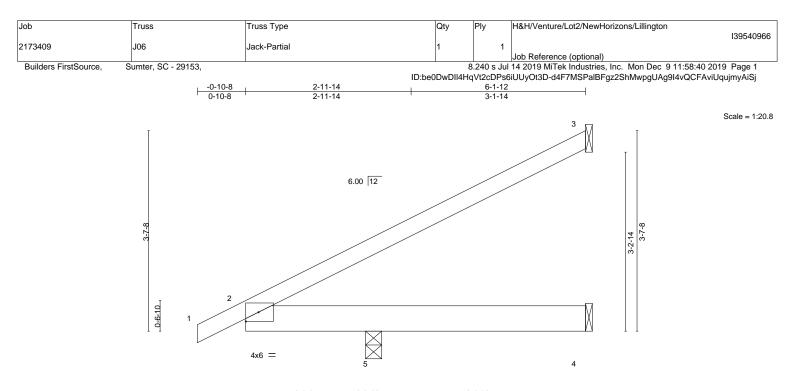
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 4 except (jt=lb) 3=117. 5=116.

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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| | | <u>2-2-0</u> 2-3-1 2-2-0 0-1-1 | | 1 |
|--|---|--|--|---|
| LOADING (psf) TCLL 20.0 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 IRC2015/TPI2014 | CSI. TC 0.49 BC 0.41 WB 0.00 Matrix-AS | DEFL. in (loc) l/defl L/d Vert(LL) 0.01 4-5 >999 360 Vert(CT) 0.02 4-5 >999 240 Horz(CT) -0.05 3 n/a n/a Wind(LL) -0.01 4-5 >999 240 | PLATES GRIP MT20 244/190 Weight: 26 lb FT = 20% |

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2

REACTIONS. (lb/size) 3=119/Mechanical, 4=-63/Mechanical, 5=483/0-3-8 Max Horz 5=178(LC 12) Max Uplift 3=-117(LC 12), 4=-63(LC 1), 5=-117(LC 12) Max Grav 3=119(LC 1), 4=34(LC 12), 5=483(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. BOT CHORD 2-5=-92/272

NOTES-

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

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.



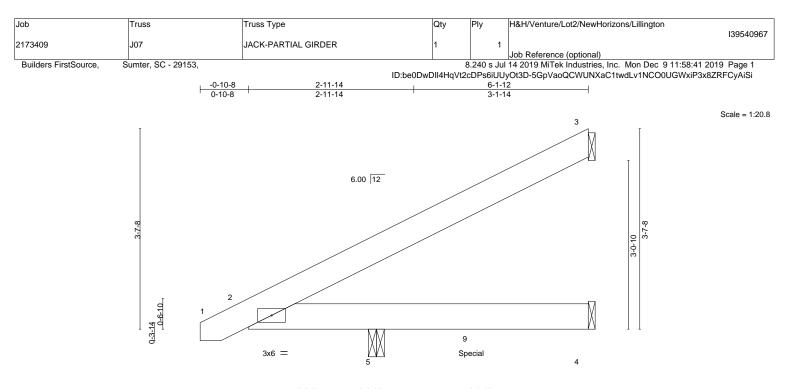
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

⁵⁾ Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 3=117, 5=117.



| | | 2-2-0 2-3 2-2-0 0-1 | - | | 1 |
|--|--|--|---------------|---|---|
| LOADING (psf) TCLL 20.0 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 NO Code IRC2015/TPI2014 | CSI. TC 0.24 BC 0.35 WB 0.00 Matrix-MP | Vert(LL) 0.02 | oc) I/defl L/d 4-5 >999 240 4-5 >999 240 3 n/a n/a | PLATES GRIP MT20 244/190 Weight: 33 lb FT = 20% |

BRACING-TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD2x6 SP No.2BOT CHORD2x6 SP No.2

REACTIONS. (Ib/size) 3=115/Mechanical, 4=136/Mechanical, 5=678/0-3-8 Max Horz 5=174(LC 8) Max Uplift 3=-121(LC 8), 4=-104(LC 7), 5=-217(LC 8) Max Grav 3=115(LC 1), 4=150(LC 3), 5=678(LC 1)

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

NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left exposed ; end vertical left exposed; porch left 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.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 3=121, 4=104, 5=217.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 401 lb down and 208 lb up at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) 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

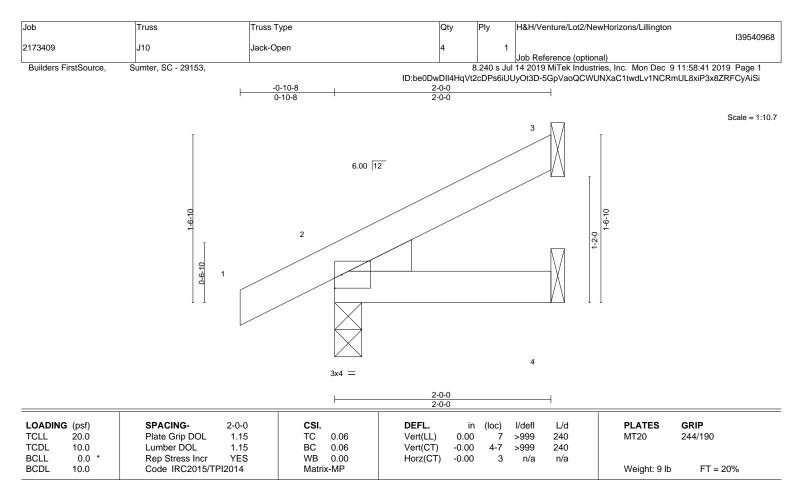
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
- Vert: 1-3=-60, 4-6=-20
- Concentrated Loads (lb)
 - Vert: 9=-401(B)



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.





LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEDGE Left: 2x4 SP No.3 BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=48/Mechanical, 2=144/0-3-0, 4=20/Mechanical Max Horz 2=71(LC 12) Max Uplift 3=-44(LC 12), 2=-43(LC 12), 4=-16(LC 9) Max Grav 3=48(LC 1), 2=144(LC 1), 4=36(LC 3)

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

NOTES-

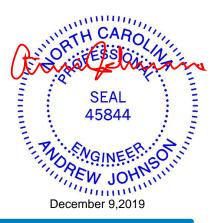
 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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) 3, 2, 4.



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