

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 19-011183T

ON TOP BLDRS/TYLER ELEVATION B

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Stock Building Supply.

Pages or sheets covered by this seal: T16143188 thru T16143203

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844



January 29,2019

Albani, Thomas

IMPORTANT NOTE: Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

ON TOP BLDRS/TYLER ELEVATION B Job Qty Truss Truss Type T16143188 19-011183T A01 GABLE Job Reference (optional) BMC (Middlesex, NC), Middlesex, NC - 27557, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 29 14:35:51 2019 Page 1 ID:?BblnpL7FFeHSf05l4zWgwz9hnW-43epCx4vvxN332ooeJkn0QsBTes3icX3txBY9XzqTFM 21-2-15 34-8-0 35-6-8 0-10-8

HNH18

3-10-15

3-10-15

Scale = 1:78.0

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

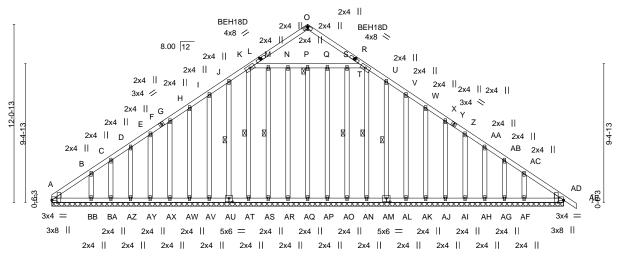
M-AS, K-AT, J-AU, S-AO, T-AN, U-AM

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

1 Row at midpt

1 Brace at Jt(s): P

13-5-1



34-8-0 [A:0-1-15,Edge], [A:0-0-0,0-0-8], [L:0-0-11,0-1-2], [O:0-1-3,0-1-12], [R:0-0-11,0-1-2], [AD:Edge,0-0-8], [AD:0-1-15,Edge], [AM:0-3-0,0-3-0], [AU:0-3-0,0-3-0], [AU:0-3-0,0-3-0 Plate Offsets (X,Y)--.0-3-01

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.00	TC 0.16	Vert(LL)	0.00 AD	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.04	Vert(CT)	0.00 AE	n/r	120	MII18	195/188
BCLL	0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT)	0.00 AD	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	-0.00 AD	n/r	90	Weight: 336 lb	FT = 20%

BRACING-

WEBS

JOINTS

TOP CHORD

BOT CHORD

34-8-0

LUMBER-

2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS TOP CHORD BOT CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

OTHERS 2x4 SP No.2

WEDGE

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

REACTIONS. All bearings 34-8-0.

(lb) - Max Horz A=-186(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) A, AV, AW, AX, AY, AZ, BA, BB, AL,

13-5-1

AK AJ AI AH AG AF

Max Grav All reactions 250 lb or less at joint(s) A, AD, AQ, AR, AS, AT, AU, AV, AW,

AX, AY, AZ, BA, BB, AP, AO, AN, AM, AL, AK, AJ, AI, AH, AG, AF

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

TOP CHORD K-O=-272/59, O-T=-272/59

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate arip DOL=1.33
- 3) Truss designed for wind loads in the plane of the truss only. For study 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) Attach MiTek HNH18 (Half and Half Plate) on each face of truss with USP NA11 nails (0.131" x 1.5") in pre-punched holes provided. All nail holes must be filled (5 Nails per side 10 nails total).
- 7) See HINGE PLATE DETAILS for plate placement.
- 8) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 1-4-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * 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
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A, AV, AW, AX, AY, AZ, BA, BB, AL, AK, AJ, AI, AH, AG, AF.
- 14) 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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ON TOP BLDRS/TYLER ELEVATION B Job Qty Truss Truss Type T16143189 19-011183T A02 COMMON Job Reference (optional) BMC (Middlesex, NC). Middlesex, NC - 27557, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 29 14:35:54 2019 Page 1 ID:?BblnpL7FFeHSf05l4zWgwz9hnW-UeJyqz7nCsmdwVWNJRIUd3Ud5rnUvvuVavQCmszqTFJ -0₋10-8 0-10-8 17-4-0 21-2-15 27-10-13 34-8-0 35-6-8 0-10-8

3-10-15

3-10-15

Scale = 1:72.3 3x4 =

6-9-3

6-7-14

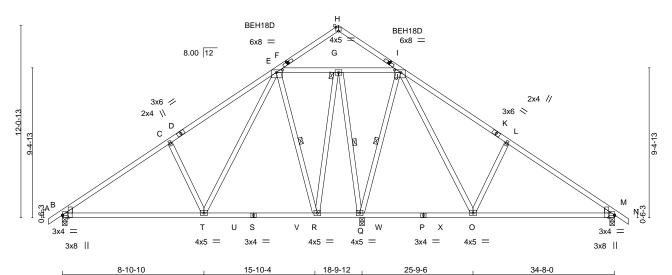


Plate Off	sets (X,Y)	[B:0-1-15,Edge], [B:0-0-0),0-0-8], [E:0-4	-11,0-2-0], [F	:0-0-11,0-1-	2], [H:0-2-0,Edge],	[I:0-0-1	1,0-1-2	, [J:0-4-1	1,0-2-0], [M	:0-0-0,0-0-8], [M:0-1-15	,Edge]
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.45	Vert(LL)	-0.14	B-Ť	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.31	B-T	>728	180	MII18	195/188
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.01	M	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S	, ,					Weight: 228 lb	FT = 20%

2-11-8

6-11-10

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS BOT CHORD

WFBS 2x4 SP No.2

WEDGE

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

BRACING-TOP CHORD

BOT CHORD WFBS

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

8-10-10

1 Row at midpt G-Q, J-Q, E-R

JOINTS 1 Brace at Jt(s): G

6-11-10

REACTIONS. (lb/size) B=690/0-3-8, M=553/0-3-8, Q=1629/0-3-8

6-9-3

6-7-14

Max Horz B=-188(LC 8)

Max Grav B=717(LC 21), M=582(LC 22), Q=1680(LC 17)

8-10-10

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

B-C=-806/97, C-E=-662/172, E-H=-276/67, G-J=0/439, H-J=-276/67, J-L=-431/160, TOP CHORD

L-M=-574/85

BOT CHORD B-T=-51/668, M-O=0/412 **WEBS**

C-T=-370/179, E-T=-65/653, G-Q=-784/21, J-Q=-875/115, L-O=-376/180, J-O=-65/653,

E-R=-739/108, G-R=-52/868

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate arip DOL=1.33
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) See HINGE PLATE DETAILS for plate placement.
- 6) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * 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.
- 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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MARNING - 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 permanent. 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.



ON TOP BLDRS/TYLER ELEVATION B Job Qty Truss Truss Type T16143190 19-011183T A03 ROOF SPECIAL Job Reference (optional) Middlesex, NC - 27557, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 29 14:35:55 2019 Page 1 BMC (Middlesex, NC), ID:?BblnpL7FFeHSf05l4zWgwz9hnW-yqtK2J7PzAuUYf5at8pjAG1k_F1leJWeoZ9llJzqTFl -0₋10-8 17-4-0 21-4-0 27-10-13 34-8-0 35-6-8 0-10-8

4-0-0

4-0-0

Scale = 1:74.9 HNH18

6-9-3

6-6-13

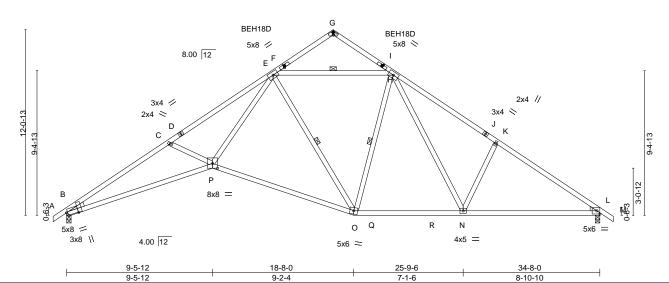


Plate Offsets (X,Y)	Plate Offsets (X,Y) [B:0-2-11,0-9-0], [B:0-0-14,Edge], [F:0-0-11,0-1-2], [G:0-1-3,0-1-12], [I:0-0-11,0-1-2], [L:0-5-13,0-1-9], [L:0-1-3,0-0-12], [P:0-4-0,0-3-11]											
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in	(loc)	l/defl L/d	PLATES GRIP						
TCLL 20.0	Plate Grip DOL 1.00	TC 0.76	Vert(LL) -0.33	O-P	>999 240	MT20 244/190						
TCDL 10.0	Lumber DOL 1.15	BC 0.89	Vert(CT) -0.74	O-P	>554 180	MII18 195/188						
BCLL 0.0 *	Rep Stress Incr YES	WB 0.53	Horz(CT) 0.28	L	n/a n/a							
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	, ,			Weight: 199 lb FT = 20%						

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

6-8-14

6-7-2

BOT CHORD WFBS 2x4 SP No.2

WEDGE

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

BRACING-

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins.

Except:

1 Row at midpt

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

WEBS 1 Row at midpt E-O, H-O

REACTIONS. (lb/size) B=1436/0-3-8, L=1436/0-3-8

Max Horz B=-188(LC 8)

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

B-C=-3698/216, C-E=-3357/170, E-G=-268/59, E-H=-1089/191, G-H=-268/59,

H-K=-1896/237, K-L=-2046/162

BOT CHORD B-P=-102/3191, O-P=0/1625, N-O=0/1223, L-N=-34/1612

WEBS C-P=-318/200, E-P=0/2197, E-O=-545/63, K-N=-344/181, H-N=-71/617

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) Attach MiTek HNH18 (Half and Half Plate) on each face of truss with USP NA11 nails (0.131" x 1.5") in pre-punched holes provided. All nail holes must be filled (5 Nails per side 10 nails total).
- 6) See HINGE PLATE DETAILS for plate placement.
- 7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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.
- 10) Bearing at joint(s) B considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





January 29,2019



MARNING - 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 permanent. 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.



ON TOP BLDRS/TYLER ELEVATION B Job Qty Truss Truss Type T16143191 19-011183T A04 ROOF SPECIAL Job Reference (optional) BMC (Middlesex, NC), Middlesex, NC - 27557, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 29 14:35:56 2019 Page 1 ID:?BblnpL7FFeHSf05l4zWgwz9hnW-R1RiFf82kT0LApgmRsKyjUZvlfN_Nmmo1DvJrlzqTFH -0₋10-8 17-4-0 21-4-0 27-10-13 34-7-8

4-0-0

4-0-0

Scale = 1:73.8 HNH18

6-8-11

6-6-13

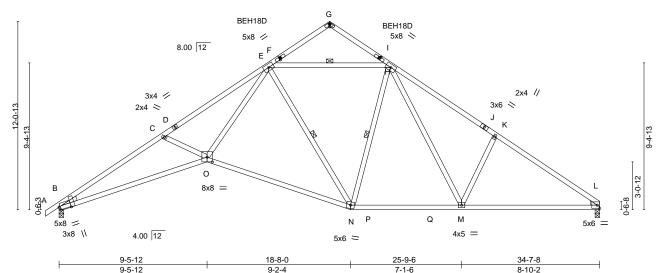


Plate Off	Plate Offsets (X,Y) [B:0-2-11,0-9-0], [B:0-0-14,Edge], [F:0-0-11,0-1-2], [G:0-1-3,0-1-12], [I:0-0-11,0-1-2], [L:0-5-5,0-1-3], [L:0-0-15,0-0-10], [O:0-4-0,0-3-11]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.Ó	Plate Grip DOL	1.00	TC	0.76	Vert(LL)	-0.33	N-Ó	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.74	N-O	>554	180	MII18	195/188
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.28	L	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S	, ,					Weight: 197 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS BOT CHORD

6-8-14

6-7-2

WFBS 2x4 SP No.2

WEDGE

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-4-8 oc purlins.

Except:

1 Row at midpt F-H

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

WEBS 1 Row at midpt E-N, H-N

REACTIONS. (lb/size) B=1435/0-3-8, L=1372/0-3-8

Max Horz B=186(LC 7)

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

B-C=-3696/236, C-E=-3355/189, E-G=-268/59, E-H=-1088/192, G-H=-268/59,

H-K=-1893/241, K-L=-2043/164

B-O=-136/3183, N-O=0/1619, M-N=0/1221, L-M=-56/1608 BOT CHORD

WEBS C-O=-318/199, E-O=0/2191, E-N=-546/64, K-M=-342/186, H-M=-74/615

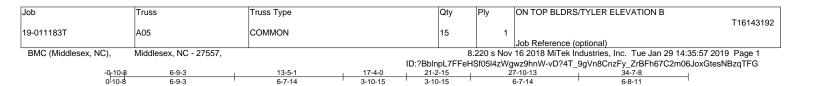
NOTES-

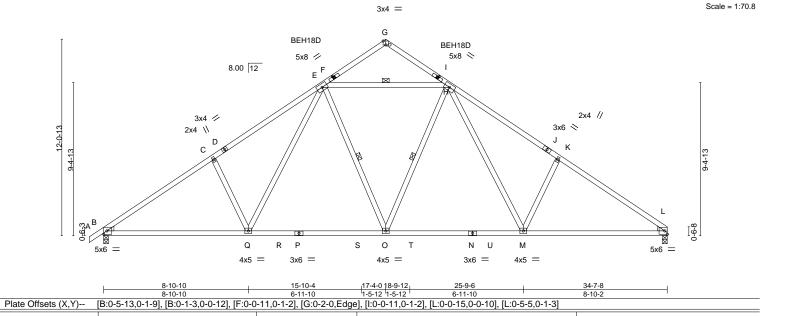
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) Attach MiTek HNH18 (Half and Half Plate) on each face of truss with USP NA11 nails (0.131" x 1.5") in pre-punched holes provided. All nail holes must be filled (5 Nails per side 10 nails total).
- 6) See HINGE PLATE DETAILS for plate placement.
- 7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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.
- 10) Bearing at joint(s) B considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 29,2019







LUMBER-

LOADING (psf)

TCLL

TCDL

BCLL

BCDL

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

BOT CHORD WFBS 2x4 SP No.2

20.0

10.0

10.0

0.0

WEDGE

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

BRACING-

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

TOP CHORD Structural wood sheathing directly applied or 3-7-4 oc purlins.

F-H

L/d

240

180

n/a

PLATES

Weight: 201 lb

MT20

MII18

GRIP

244/190

195/188

FT = 20%

Except:

M-Ó

L-M

L

-0.19

-0.34

0.08

1 Row at midpt

I/defl

>999

>999

n/a

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

WEBS 1 Row at midpt H-O, E-O

REACTIONS. (lb/size) B=1435/0-3-8, L=1372/0-3-8

Max Horz B=186(LC 7)

Max Grav B=1451(LC 17), L=1394(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. B-C=-2117/161, C-E=-1982/236, E-G=-275/65, E-H=-1206/183, G-H=-276/65, TOP CHORD

H-K=-1980/239, K-L=-2096/163

BOT CHORD B-Q=-51/1786, O-Q=0/1360, M-O=0/1308, L-M=-54/1647

WEBS C-Q=-343/182, E-Q=-63/628, H-O=-70/301, K-M=-342/186, H-M=-67/626, E-O=-72/299

2-0-0

1.00

1.15

YES

CSI.

TC

ВС

WB

Matrix-S

0.52

0.64

0.16

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) See HINGE PLATE DETAILS for plate placement.
- 6) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * 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. 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 29,2019

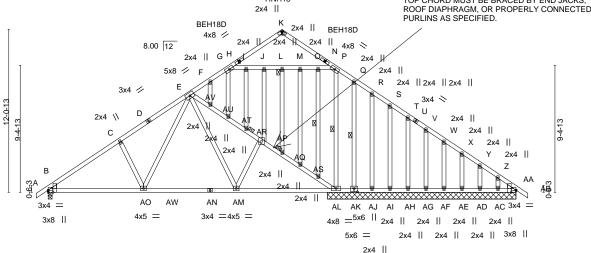


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid for use only with release controlled in the controlle



ON TOP BLDRS/TYLER ELEVATION B Job Qty Truss Truss Type T16143193 19-011183T A06 FINK Job Reference (optional) BMC (Middlesex, NC), Middlesex, NC - 27557 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 29 14:35:59 2019 Page 1 ID:?BblnpL7FFeHSf05l4zWgwz9hnW-rc7rugAw0OOw1HPL6_tfK6BX5sWmaAqEjB7zR4zqTFE 21-4-0 34-8-0 10-6-0 13-4-0 15-7-13 17-4-0 0-10-8 1-8-3 5-4-3 5-1-13 2-10-0 2-3-13 4-0-0 13-4-0 HNH18 TOP CHORD MUST BE BRACED BY END JACKS.



7-0-12 6-10-7 20-8-12 Plate Offsets (X,Y)--[B:0-1-15,Edge], [B:0-0-0,0-0-8], [H:0-0-11,0-1-2], [K:0-1-3,0-1-12], [N:11-8-1,19-5-8], [AA:0-1-15,Edge], [AA:0-0-0,0-0-8], [AK:0-3-0,0-3-0] LOADING (psf) SPACING-CSI. DEFL. **PLATES GRIP** in (loc) I/defl L/d TCLL Plate Grip DOL TC -0.09AM-AO 244/190 20.0 1.00 0.24 Vert(LL) >999 240 MT20 TCDL ВС 0.37 -0.14AM-AO 180 MII18 195/188 10.0 Lumber DOL 1.15 Vert(CT) >999 **BCLL** 0.0 Rep Stress Incr YES WB 0.38 Horz(CT) 0.03 AA n/a n/a **BCDL** 10.0 Code IRC2015/TPI2014 Weight: 310 lb FT = 20% Matrix-S

BRACING-

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS BOT CHORD

WFBS 2x4 SP No.2 WEDGE

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

TOP CHORD

Structural wood sheathing directly applied or 5-1-14 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WFBS 1 Row at midpt O-AS, P-AL, Q-AK

JOINTS 1 Brace at Jt(s): L, AP, AT

REACTIONS. All bearings 13-11-8 except (jt=length) B=0-3-8.

(lb) -Max Horz B=188(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) Al, AH, AG, AF, AE, AD, AC, AA except AK=-137(LC 3) Max Grav All reactions 250 lb or less at joint(s) AJ, AI, AH, AG, AF, AE, AD, AC except B=978(LC 1), AL =826(LC 1) AA=260(LC 1)

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

TOP CHORD B-C=-1322/106, C-E=-1178/161, E-F=-293/135, G-K=-272/59, K-P=-272/59, X-Y=-250/48,

Y-Z=-255/49, Z-AA=-282/61

BOT CHORD B-AO=-5/1121, AM-AO=-4/827, AL-AM=0/999

WEBS E-AV=-871/40, AU-AV=-870/36, AT-AU=-923/40, AR-AT=-941/43, AP-AR=-941/45, AP-AQ=-956/45, AQ-AS=-948/44, AL-AS=-952/47, E-AO=-38/459, E-AM=0/334

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) Attach MiTek HNH18 (Half and Half Plate) on each face of truss with USP NA11 nails (0.131" x 1.5") in pre-punched holes provided. All nail holes must be filled (5 Nails per side 10 nails total).
- 6) See HINGE PLATE DETAILS for plate placement.
- 7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) AI, AH, AG, AF, AE, AD, AC, AA except (jt=lb) AK=137.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

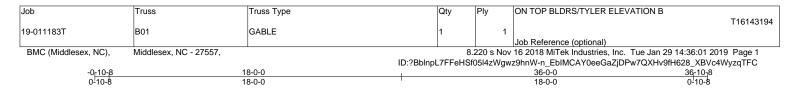


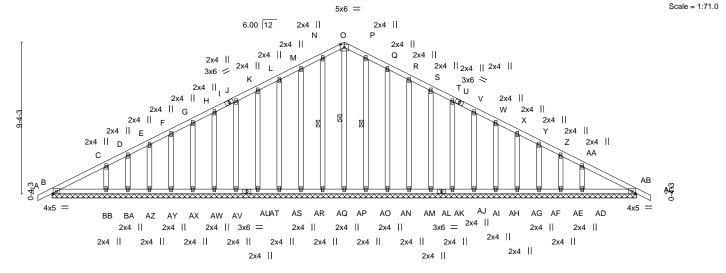


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LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.08 BC 0.06 WB 0.08 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL)	in 0.00 0.00 0.00 -0.00	(loc) AC AC AB AB	l/defl n/r n/r n/a n/r	L/d 120 120 n/a 90	PLATES MT20 Weight: 287 lb	GRIP 244/190 FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS BOT CHORD

2x4 SP No.2 OTHERS

REACTIONS. All bearings 36-0-0.

Max Horz B=79(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) AR, AS, AT, AV, AW, AX, AY, AZ, BA, BB, AN, AM, AL, AJ, AI, AH,

AG, AF, AE, AD

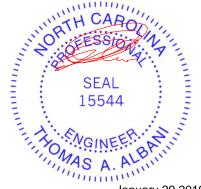
Max Grav All reactions 250 lb or less at joint(s) AP, AQ, AR, AS, AT, AV, AW, AX, AY, AZ, BA, AB, AO, AN, AM,

AL, AJ, AI, AH, AG, AF, AE, B except BB=261(LC 21), AD=261(LC 22)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 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 1-4-0 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) AR, AS, AT, AV, AW, AX, AY, AZ, BA, BB, AN, AM, AL, AJ, AI, AH, AG, AF, AE, AD.



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

O-AP, N-AQ, P-AO

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

1 Row at midpt

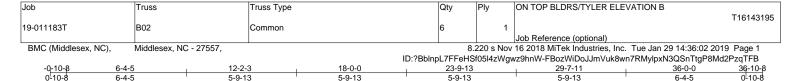
January 29,2019



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5x6 = 6.00 12 Е 5x6 / 5x6 <> D 2x4 \\ 2x4 // G С Q 4x5 = 2x4 || Κ S L 4x5 = 5x8 = 5x8 4x5 2x4 ||

Dista Off	(V V)	7-6-5	5-5-13	0.001 [M.O.	4-11-14	4-6	6-14	- !	5-	10-13	7-6-5	1
Plate Oil	sets (X,Y)	[D:0-3-0,0-3-0], [F:0-3-0,	0-3-0], [K:0-4-0	,0-3-0], [IVI:0-	4-0,0-3-0]							
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.69	Vert(LL)	-0.29	Ĺ	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.71	L	>606	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.62	Horz(CT)	0.12	Н	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matrix	-S						Weight: 209 lb	FT = 20%

BRACING-

WFBS

TOP CHORD

BOT CHORD

22-6-14

18-0-0

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS **BOT CHORD**

WFBS 2x4 SP No.2

(lb/size) B=1669/0-3-8, H=1665/0-3-8

Max Horz B=79(LC 9)

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

TOP CHORD B-C=-3054/385, C-D=-2933/433, D-E=-2537/456, E-F=-2483/443, F-G=-2925/431,

G-H=-3063/383

BOT CHORD B-N=-253/2661 M-N=-144/2265 I -M=-29/1661 K-I =-29/1661 J-K=-145/2253

H-J=-252/2654

WEBS E-P=-148/1039, K-P=-151/932, F-K=-570/207, F-J=-84/494, G-J=-307/158, M-O=-165/964,

E-O=-163/1072, D-M=-578/213, D-N=-88/486, C-N=-307/158

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 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) 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=1.00 Uniform Loads (plf)

Vert: A-E=-60, E-I=-60, B-H=-20, O-P=-40(F)



Structural wood sheathing directly applied or 2-10-5 oc purlins.

O-P

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

1 Row at midpt

January 29,2019

Scale = 1:61.1

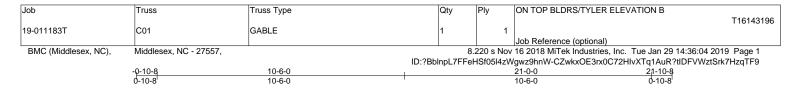


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





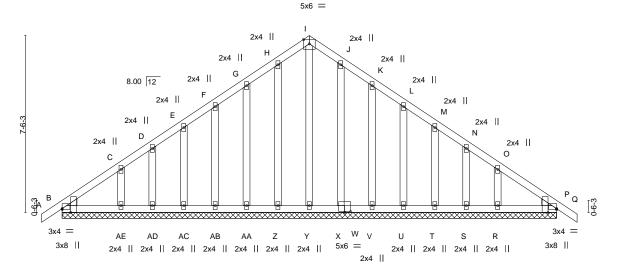


Plate Off	Plate Offsets (X,Y) [B:0-0-0,0-0-8], [B:0-1-15,Edge], [P:0-1-15,Edge], [P:Edge,0-0-8], [W:0-3-0,0-0-8], [W:0-0-0,0-1-12], [X:0-1-12,0-0-0]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.Ó	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	0.00	ÌΡ́	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	ВС	0.03	Vert(CT)	0.00	Р	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	Р	n/a	n/a		
BCDL	10.0	Code IRC2015/Ti	PI2014	Matri	x-S	Wind(LL)	0.00	Р	n/r	90	Weight: 153 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

21-0-0

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS BOT CHORD

OTHERS 2x4 SP No.2

WEDGE

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

REACTIONS. All bearings 21-0-0.

(lb) -Max Horz B=-117(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) B, Z, AA, AB, AC, AD, AE, V, U, T, S, R

Max Grav All reactions 250 lb or less at joint(s) B, Y, Z, AA, AB, AC, AD, AE, X, P, V, U, T, S, R

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 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 1-4-0 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) B, Z, AA, AB, AC, AD, AE, V, U, T, S, R.



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

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

January 29,2019

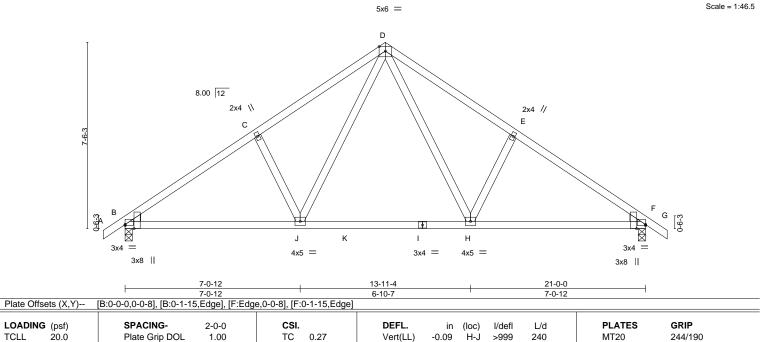




WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE FAGE MITERS 1804. INVAICED BEFORE SECTION OF THE PROPERTY OF THE PROPER fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



ON TOP BLDRS/TYLER ELEVATION B Job Qty Truss Truss Type T16143197 19-011183T C02 Common Job Reference (optional) BMC (Middlesex, NC), Middlesex, NC - 27557, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Jan 29 14:36:05 2019 Page 1 ID:?BblnpL7FFeHSf05l4zWgwz9hnW-glU68kFhcE83lCsVSF_3aNRYCHZG_yb766aHfjzqTF8 21-10-8 0-10-8 -0-10-8 0-10-8 10-6-0 15-7-13 21-0-0 5-4-3 5-1-13 5-1-13 5-4-3



Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

-0.13

0.03

F-H

>999

n/a

180

n/a

Structural wood sheathing directly applied or 5-6-5 oc purlins.

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

Weight: 108 lb

FT = 20%

LUMBER-

TCLL

TCDL

BCLL

BCDL

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS BOT CHORD

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

WFBS 2x4 SP No.2

10.0

10.0

0.0

WEDGE

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

REACTIONS. (lb/size) B=890/0-3-8, F=890/0-3-8

Max Horz B=117(LC 9)

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

B-C=-1174/98, C-D=-1034/155, D-E=-1034/155, E-F=-1174/98 TOP CHORD

BOT CHORD B-J=0/944, H-J=0/622, F-H=0/890

D-H=-43/485, E-H=-269/138, D-J=-43/486, C-J=-269/138 **WEBS**

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

ВС

WB

Matrix-S

0.36

0.11

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

1.15

YES

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.



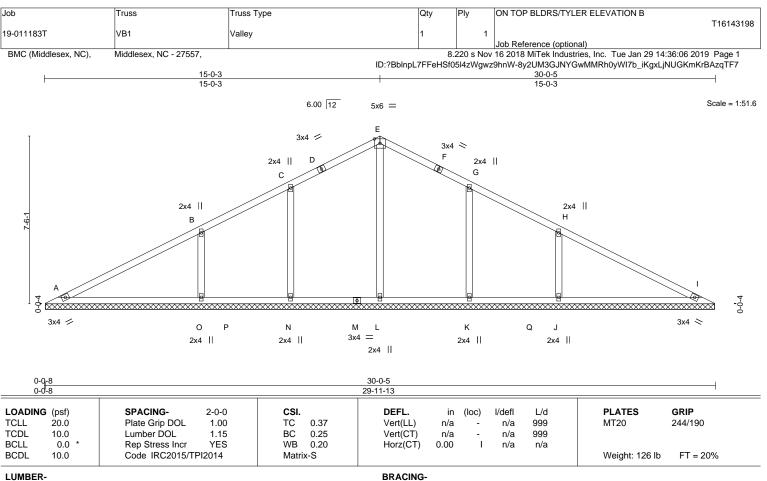


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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

BOT CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

2x4 SP No.2 **OTHERS**

REACTIONS. All bearings 29-11-5.

Max Horz A=-61(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) N, O, K, J

Max Grav All reactions 250 lb or less at joint(s) A, I except L=398(LC 17), N=354(LC 17), O=521(LC 1), K=354(LC

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

WFBS B-O=-376/180 H-J=-376/180

NOTES-

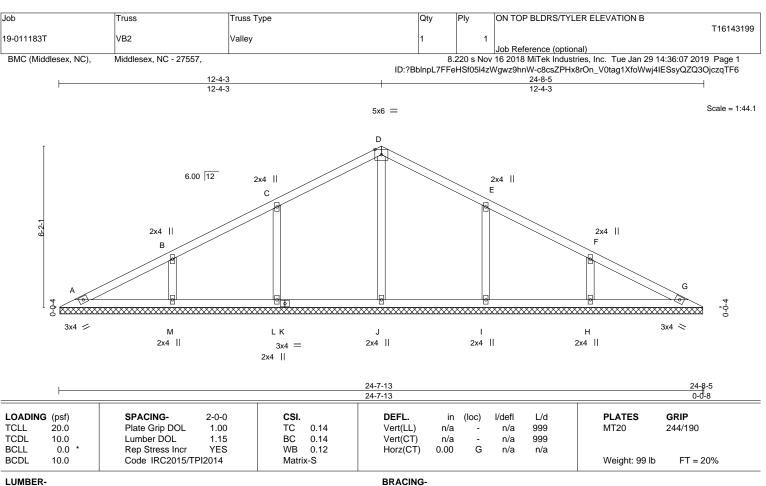
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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 100 lb uplift at joint(s) N, O, K, J.



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

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





TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

BOT CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

2x4 SP No.2 **OTHERS**

REACTIONS. All bearings 24-7-5.

Max Horz A=49(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) L, M, I, H

Max Grav All reactions 250 lb or less at joint(s) A, G except J=387(LC 17), L=353(LC 17), M=343(LC 1), I=353(LC

18), H=343(LC 1)

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

C-L=-257/124, B-M=-251/122, E-I=-257/124, F-H=-251/122 WFBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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 100 lb uplift at joint(s) L, M, I, H.

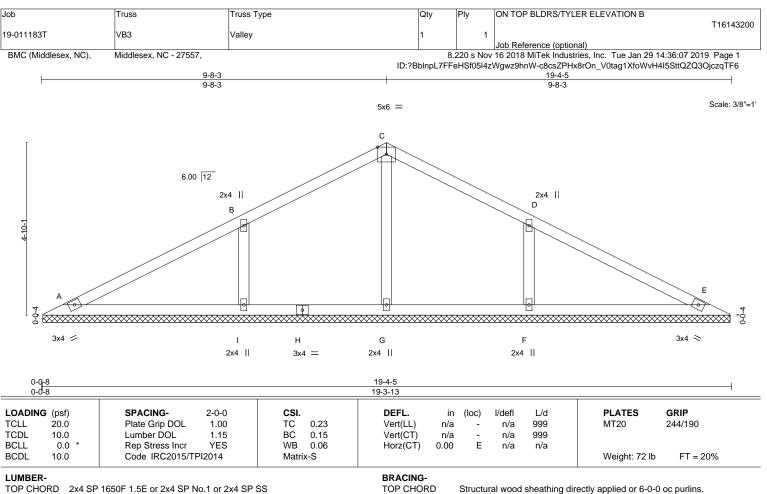


Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

January 29,2019





BOT CHORD

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

2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

BOT CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

2x4 SP No.2 **OTHERS**

REACTIONS. All bearings 19-3-5.

Max Horz A=38(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) I, F

Max Grav All reactions 250 lb or less at joint(s) A, E, G except I=447(LC 21), F=447(LC 22)

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

B-I=-328/156, D-F=-328/156 **WEBS**

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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 100 lb uplift at joint(s) I, F.

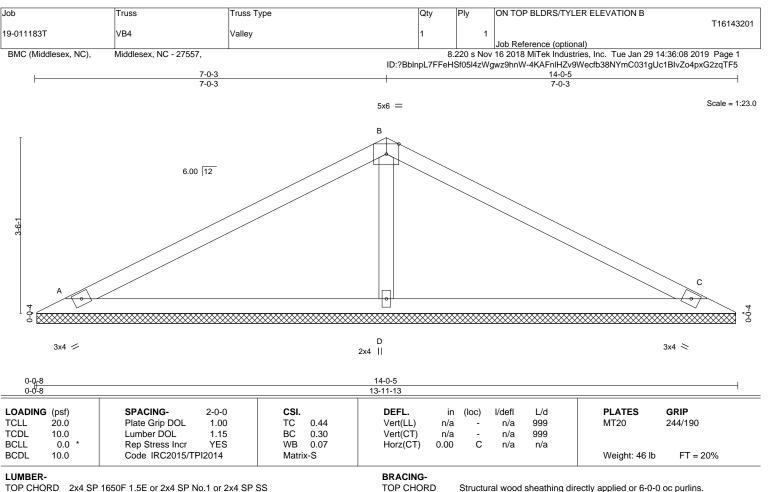




Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 in-jury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





BOT CHORD

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

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS **BOT CHORD**

2x4 SP No.2 **OTHERS**

REACTIONS. (lb/size) A=233/13-11-5, C=233/13-11-5, D=556/13-11-5

Max Horz A=-27(LC 8) Max Uplift C=-1(LC 11)

Max Grav A=235(LC 21), C=235(LC 22), D=556(LC 1)

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

B-D=-369/122 **WEBS**

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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 100 lb uplift at joint(s) C.



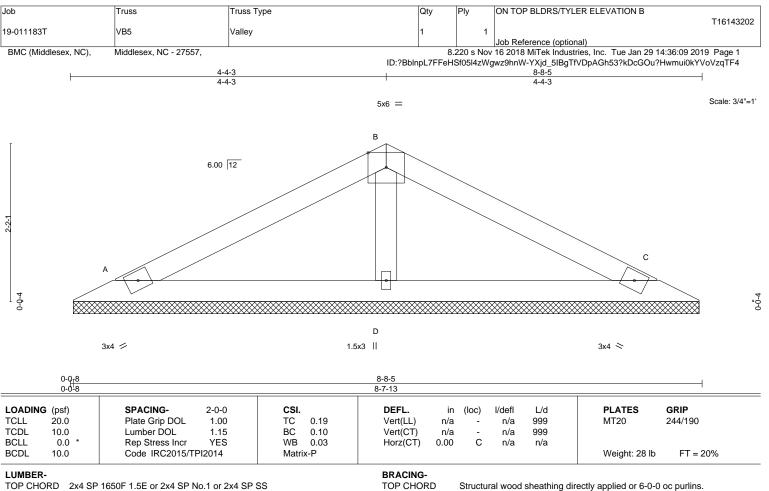


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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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.





BOT CHORD

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

2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

BOT CHORD 2x4 SP No.2 **OTHERS**

REACTIONS. (lb/size) A=151/8-7-5, C=151/8-7-5, D=293/8-7-5

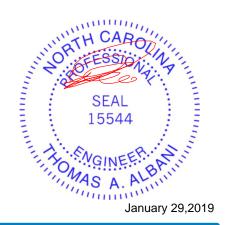
Max Horz A=-16(LC 8)

Max Uplift A=-1(LC 10), C=-4(LC 11)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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 100 lb uplift at joint(s) A, C.



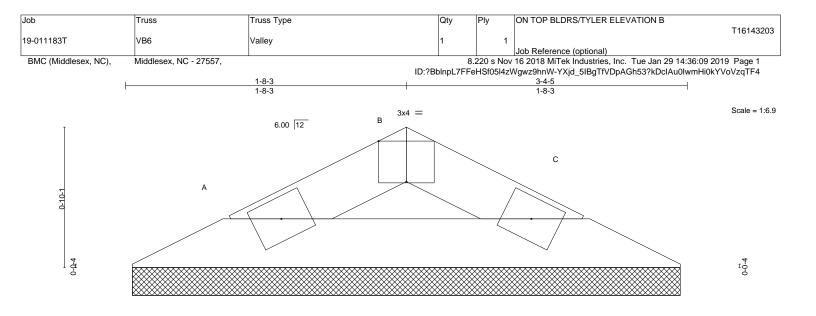


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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 permanent. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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3x4 / 3x4 <

		3-3-13	
Plate Offsets (X,Y)	[B:0-2-0,Edge]		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014		/a 999 MT20 244/190 /a 999

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

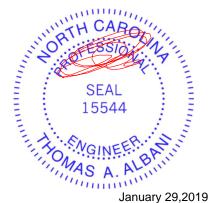
TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS BOT CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS

(lb/size) A=84/3-3-5, C=84/3-3-5

Max Horz A=-4(LC 6)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * 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.



Structural wood sheathing directly applied or 3-4-5 oc purlins.

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



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

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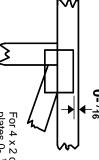


Symbols

PLATE LOCATION AND ORIENTATION



offsets are indicated. Center plate on joint unless x, y and fully embed teeth Apply plates to both sides of truss Dimensions are in ft-in-sixteenths.



plates 0- 1/16" from outside For 4 x 2 orientation, locate edge of truss.

connector plates. required direction of slots in This symbol indicates the

* Plate location details available in MiTek 20/20 software or upon request

PLATE SIZE

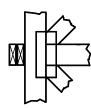
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



by text in the bracing section of the output. Use T or I bracing if indicated. Indicated by symbol shown and/or

BEARING



Min size shown is for crushing only number where bearings occur. reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

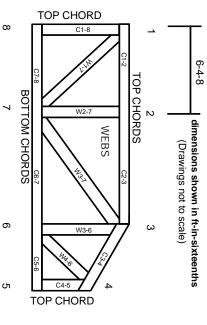
Industry Standards:

National Design Specification for Metal

DSB-89: ANSI/TPI1:

Guide to Good Practice for Handling **Building Component Safety Information** Design Standard for Bracing. Connected Wood Trusses. Installing & Bracing of Metal Plate Plate Connected Wood Truss Construction.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

truss unless otherwise shown. Trusses are designed for wind loads in the plane of the

established by others. section 6.3 These truss designs rely on lumber values Lumber design values are in accordance with ANSI/TPI 1

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building
- Cut members to bear tightly against each other

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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- 7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 10. Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design
- 14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- 15. Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.