

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 20-011219T

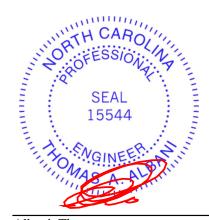
ON TOP BUILDERS/THE AMHERST

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: T19333701 thru T19333719

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



February 5,2020

Albani, Thomas

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



BMC (Middlesex, NC), Middlesex, NC - 27557,

ID:NMFL59h203ksXTJIFZtlfWyUXix-E95OruCUq2syBWYwbZNt0SCV_YZ7Vk4L7bTSAjzo9SY

Structural wood sheathing directly applied or 3-7-2 oc purlins, except

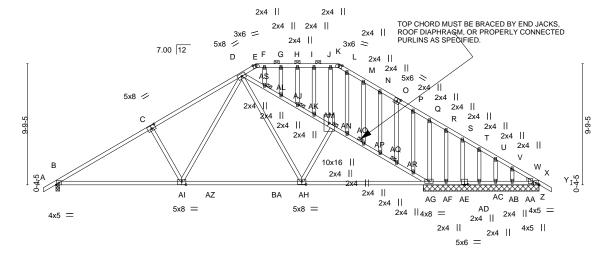
2-0-0 oc purlins (6-0-0 max.): E-K.

1 Brace at Jt(s): AJ, AM, AO, AQ, AS

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

22-10-4 16-1-12 19-6-0 1-1-12 3-4-4 1-0-0 1-0-0 7-8-13 15-0-0 38-11-15 2-9-4 0-7-0

Scale = 1:93.0



	10-1-14	19-10-2	30-11-13	
	10-1-14	9-8-4	19-1-13	
[C:0-4-0,0-3	3-0], [O:0-3-0,0-3-0], [W:0-1-0,0-	-1-12], [Z:0-1-0,0-6-4], [Z:0-0-0	,0-1-12], [AD:0-0-0,0-1-12], [AE:0-1-12,0-0-0], [AE:0-3-0,0-0	-8], [AH:0-4-0
0-3-01 [AI:	0-4-0 0-3-41			

	,	,0-3-0j, [Al.0-4-0,0-3-4j										
LOADING ((psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 2	20.0	Plate Grip DOL	1.00	TC	0.57	Vert(LL)	-0.41 AH-AI	>880	240	MT20	244/190	
TCDL 1	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.54 AH-AI	>662	180			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.07 X	n/a	n/a			
BCDL 1	10.0	Code IRC2015/TF	PI2014	Matri	x-MS	` '				Weight: 285 lb	FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

JOINTS

I UMRER-

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

WEBS 2x4 SP No.2

REACTIONS. All bearings 9-4-0 except (jt=length) B=0-3-8. Max Horz B=-194(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) B, AG, AE, AC, AB, AA, Z except AF=-394(LC 3)

Max Grav All reactions 250 lb or less at joint(s) AE, AC, AB, AA, Z except B=1304(LC 1), AG=1402(LC 1), X=345(LC 22), X=322(LC 1)

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

TOP CHORD B-C=-1977/139, C-D=-1791/187, D-E=-392/127, K-L=-337/91, L-M=-389/89, M-N=-401/71,

N-O=-415/55, O-P=-445/43, P-Q=-506/39, Q-R=-334/36, R-S=-439/0, S-T=-426/7, T-U=-426/9, U-V=-427/11, V-W=-425/13, W-X=-417/13, E-F=-343/107, F-G=-343/107,

G-H=-343/107, H-I=-343/107, I-J=-343/107, J-K=-343/107

BOT CHORD B-AI=-68/1726, AH-AI=-14/1131, AG-AH=0/1422, AF-AG=-5/376, AE-AF=-5/376, AC-AE=-5/376, AB-AC=-5/376, AA-AB=-5/376, Z-AA=-5/376, X-Z=-5/376

D-AS=-1246/87, AL-AS=-1212/64, AJ-AL=-1247/82, AJ-AK=-1251/84, AK-AM=-1274/95,

AM-AN=-1281/112, AN-AO=-1282/110, AO-AP=-1296/120, AP-AQ=-1319/132, AQ-AR=-1322/137, AG-AR=-1305/129, D-AH=0/491, D-AI=-62/801, Q-AG=-492/215,

C-AI=-440/191

NOTES-

WEBS

Plate Offsets (X,Y)--

- 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) gable end zone 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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) B, AG, AE, AC, AB, AA, Z except (jt=lb) AF=394
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 5,2020



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

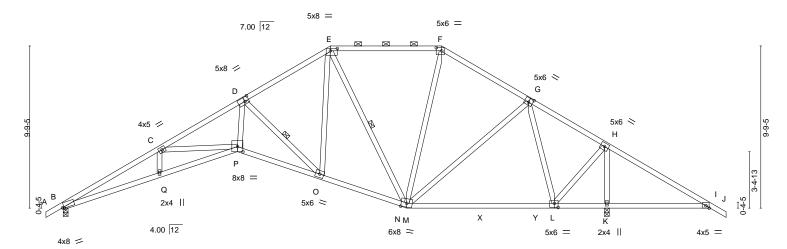


Job Truss Truss Type ON TOP BUILDERS/THE AMHERST T19333702 20-011219T A02 Piggyback Base Job Reference (optional) 8.240 s Dec 6 2019 MiTek Industries, Inc. Wed Feb 5 14:45:17 2020 Page 1 BMC (Middlesex, NC), Middlesex, NC - 27557,

6-8-9

ID:NMFL59h203ksXTJIFZtlfWyUXix-AYC8FaEIMf7gQqhJj_PL5tHrZLDbzZDeavyYEczo9SW 38-11-15 39-11-15 1-0-0 28-1-0 33-3-11 5-2-11 5-2-11 5-8-4

Scale = 1:69.4



	0-q <u>-</u> 0	3-1-1	10-0-1		13-1-11	20-0	-10		23-1-11		JZ-11	1-1 30-11-13	
	0-0-8	5-6-15	4-11-0	ı	5-1-4	5-1	-4		8-10-12		3-3-1	13 6-0-8	
Plate Off	sets (X,Y)-	- [B:0-1-2,Ed	ge], [D:0-3-0,0	-3-0], [E:0-	·5-0,0-1-12], [F:	0-4-0,0-2-4],	[G:0-3-0,0-3-0]	[L:0-2-12	0-3-0],	[N:0-1-3,	0-0-3], [P:0-4-	0,0-3-11]	
LOADING	G (psf)	SPA	CING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate	Grip DOL	1.00	TC	0.57	Vert(LL)	-0.29	P-Q	>999	240	MT20	244/190
TCDL	10.0	Lumb	er DOL	1.15	BC	0.80	Vert(CT	-0.60	P-Q	>659	180		
BCLL	0.0 *	Rep	Stress Incr	YES	WB	0.66	Horz(C7	0.38	K	n/a	n/a		
BCDL	10.0	Code	IRC2015/TP	12014	Matri	x-MS	`					Weight: 227 lb	FT = 20%
												•	

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

WEBS 2x4 SP No.2 **BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-8-0 oc purlins, except

D-O, E-N

2-0-0 oc purlins (5-3-4 max.): E-F.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: K-L,I-K.

WEBS 1 Row at midpt

(lb/size) K=1925/0-3-8, B=1314/0-3-8 REACTIONS.

Max Horz B=194(LC 9)

5-10-3

5-10-3

5-1-12

5-1-12

Max Uplift K=-39(LC 11), B=-47(LC 10)

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

B-C=-4329/198, C-D=-3720/126, D-E=-1618/134, E-F=-919/143, F-G=-1104/142, TOP CHORD

G-H=-536/45, H-I=-225/620

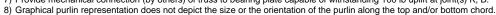
B-Q=-240/3855, P-Q=-238/3872, O-P=-73/3043, N-O=0/1341, M-N=0/745, L-M=0/579, **BOT CHORD**

K-L=-448/258, I-K=-448/258

WEBS C-P=-512/153, D-P=-39/2306, D-O=-2192/174, E-O=-23/1136, E-N=-801/57, F-M=-6/269,

G-M=-50/406, G-L=-861/189, H-L=-76/1264, H-K=-1795/242

- 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) gable end zone 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) 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) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, B.





February 5,2020



🛝 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 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.



Job Truss Truss Type Qty ON TOP BUILDERS/THE AMHERST T19333703 20-011219T A04 Piggyback Base Job Reference (optional) 8.240 s Dec 6 2019 MiTek Industries, Inc. Wed Feb 5 14:45:19 2020 Page 1 BMC (Middlesex, NC), Middlesex, NC - 27557, ID:NMFL59h203ksXTJIFZtlfWyUXix-6wKugGF?uHNOg7rhqPRpAINAZ9wbRYux2DRfJUzo9SU

22-10-4

6-8-9

28-1-0

5-2-11

29-0-3

33-3-11

5-2-11

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

D-M, E-K

2-0-0 oc purlins (5-11-5 max.): D-E.

1 Row at midpt

Rigid ceiling directly applied or 6-0-0 oc bracing.

16-1-11

5-2-11

5-2-11

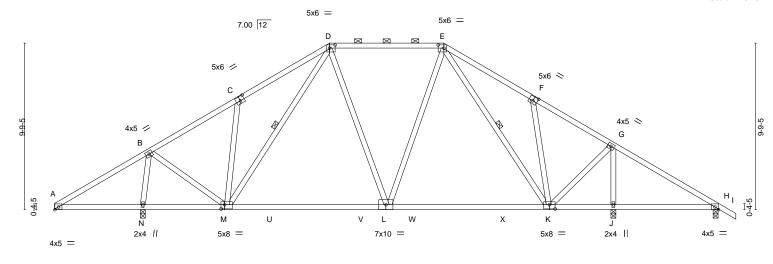
1-0-0 Scale = 1:67.6

39₋11-1₅

38-11-15

38-11-15

5-8-4



		5-0-8 4-	11-5 0-11-3	8-7-0		9-6-3			3-11-4	6-0-0 0-0-8
Plate Off	sets (X,Y)	- [C:0-3-0,0-3-0], [D:0	0-4-0,0-2-4], [E:0-4	-0,0-2-4], [F:0-3-0,0-3-0], [K:0-4-0,0-3-0], [M:0	0-2-8,0-3-0]				
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip D	OL 1.00	TC 0.54	Vert(LL)	-0.21 K-L	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	. 1.15	BC 0.77	Vert(CT)	-0.37 K-L	>907	180		
BCLL	0.0 *	Rep Stress I	ncr YES	WB 0.33	Horz(CT)	0.02 J	n/a	n/a		
BCDL	10.0	Code IRC20)15/TPI2014	Matrix-MS					Weight: 231	lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

19-6-0

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

WEBS 2x4 SP No.2

REACTIONS. (lb/size) N=1539/0-3-8, H=228/0-3-8, J=1413/0-3-8

Max Horz N=-190(LC 6)

5-8-4

Max Uplift N=-34(LC 10), H=-16(LC 11), J=-35(LC 11) Max Grav N=1539(LC 1), H=237(LC 22), J=1430(LC 18)

9-11-12

10-11-0

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

TOP CHORD A-B=-137/428, B-C=-846/53, C-D=-930/185, D-E=-813/147, E-F=-808/210, F-G=-739/88

BOT CHORD A-N=-290/151, L-M=-23/793, K-L=0/753

B-M=-27/951, C-M=-363/178, D-L=-11/251, E-L=-4/301, E-K=-276/107, F-K=-327/163, WFBS

G-K=0/930, B-N=-1419/199, G-J=-1339/120

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) gable end zone 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) 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, H, J.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 5,2020

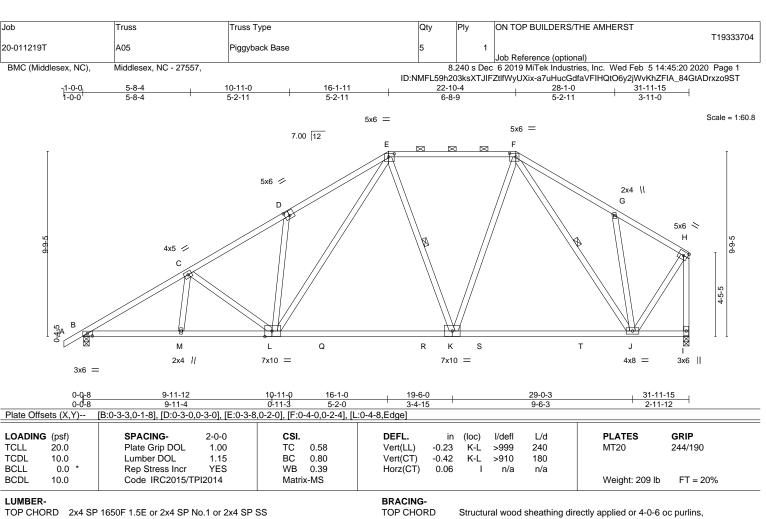


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MTI-sky 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 Truse Plate petitive 218 N. Lea Street, Site 312, Alexandria, VA. 22314. 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

WEBS

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**

WEBS 2x4 SP No.2 *Except* H-I: 2x4 SP No.3

(lb/size) B=1335/0-3-8, I=1273/0-3-8 REACTIONS.

Max Horz B=233(LC 9) Max Uplift B=-44(LC 10)

Max Grav B=1335(LC 1), I=1312(LC 2)

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

TOP CHORD B-C=-2184/155, C-D=-1858/173, D-E=-1947/302, E-F=-1095/184, F-G=-881/232,

G-H=-756/110. H-I=-1363/79

BOT CHORD B-M=-119/1938, L-M=-123/1931, K-L=-26/1153, J-K=0/922

WEBS C-L=-391/112, D-L=-371/178, E-L=-176/979, E-K=-252/117, F-K=0/574, F-J=-522/102,

G-J=-350/172, H-J=-5/1117

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) gable end zone 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) 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) B.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



except end verticals, and 2-0-0 oc purlins (5-0-0 max.): E-F.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

E-K, F-J

6-0-0 oc bracing: I-J.

1 Row at midpt

February 5,2020

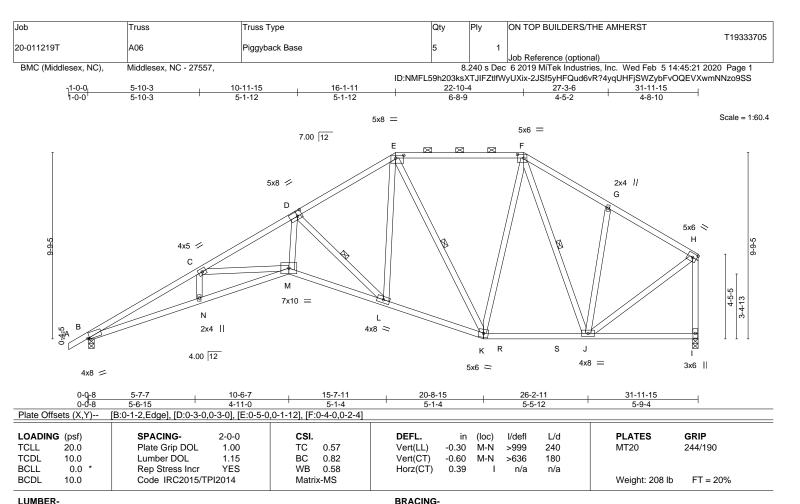


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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





BOT CHORD

WEBS

LUMBER-

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

WEBS

H-I: 2x4 SP No.3

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

(lb/size) I=1273/0-3-8, B=1335/0-3-8 REACTIONS.

Max Horz B=233(LC 9) Max Uplift B=-43(LC 10)

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

B-C=-4412/258, C-D=-3810/215, D-E=-1667/196, E-F=-955/192, F-G=-990/210, TOP CHORD

G-H=-1030/141, H-I=-1223/113

BOT CHORD B-N=-266/3930, M-N=-264/3947, L-M=-99/3119, K-L=-36/1382, J-K=0/875

WEBS C-M=-506/151, D-M=-58/2357, D-L=-2234/189, E-L=-20/1146, E-K=-797/70, F-K=-8/422,

F-J=-309/107, G-J=-282/141, H-J=-26/1027

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) gable end zone 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) 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) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 2-7-7 oc purlins,

D-L, E-K, F-J

except end verticals, and 2-0-0 oc purlins (5-1-8 max.): E-F.

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

1 Row at midpt

February 5,2020

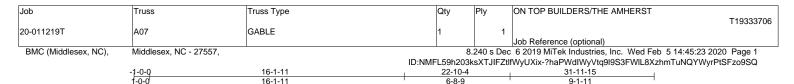


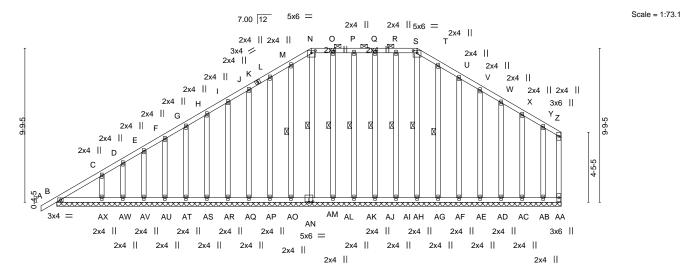
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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.







31-11-15

Plate Offs	sets (X,Y)	[N:0-3-0,0-1-12], [S:0-3-0	,0-1-12], [AM:	0-1-12,0-0-0	, [AN:0-3-0,	0-0-8], [AN:0-0-0,0	-1-12]					
LOADING	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	0.08	Vert(LL)	-0.00	Α	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	Α	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	AA	n/a	n/a		
BCDL	10.0	Code IRC2015/TP	PI2014	Matri	x-S	Wind(LL)	0.00	Α	n/r	90	Weight: 323 lb	FT = 20%

LUMBER-**BRACING-**

TOP CHORD 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SP 1650F 1.5E or 2x4 SP No.1 or 2x4 SP SS except end verticals, and 2-0-0 oc purlins (6-0-0 max.): N-S.

WEBS 2x4 SP No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.2 **WEBS** S-AH, R-AI, Q-AJ, P-AK, O-AL, N-AM, 1 Row at midpt M-AO, T-AG

REACTIONS. All bearings 31-11-15.

Max Horz B=233(LC 7) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) AA, B, AH, AI, AJ, AK, AL, AM, AO, AP, AQ, AR, AS, AT, AU, AV,

AW, AX, AG, AF, AE, AD, AC, AB

Max Grav All reactions 250 lb or less at joint(s) AA, B, AH, AI, AJ, AK, AL, AM, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AG, AF, AE, AD, AC, AB

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) gable end zone 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) 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) Provide adequate drainage to prevent water ponding.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) AA, B, AH, AI, AJ, AK, AL, AM, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AG, AF, AE, AD, AC, AB.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



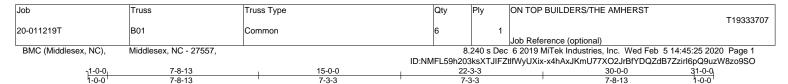
February 5,2020



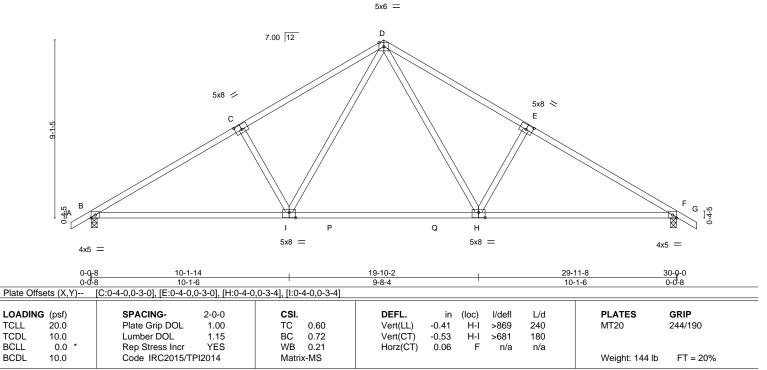
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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





Scale = 1:58.9



BRACING-TOP CHORD

BOT CHORD

LUMBER-

TCLL

TCDL

BCLL

BCDL

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

WEBS 2x4 SP No.2

REACTIONS. (lb/size) B=1260/0-3-8, F=1260/0-3-8

Max Horz B=-181(LC 8)

Max Uplift B=-42(LC 10), F=-42(LC 11)

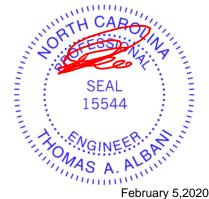
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. B-C=-1890/156, C-D=-1721/205, D-E=-1721/205, E-F=-1890/156 TOP CHORD

B-I=-81/1688, H-I=0/1082, F-H=-25/1578 **BOT CHORD**

WEBS D-H=-68/806, E-H=-454/198, D-I=-68/806, C-I=-454/198

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) gable end zone 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, F.



Structural wood sheathing directly applied or 3-8-11 oc purlins.

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

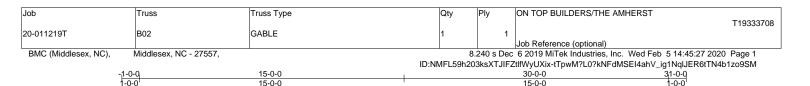


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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.





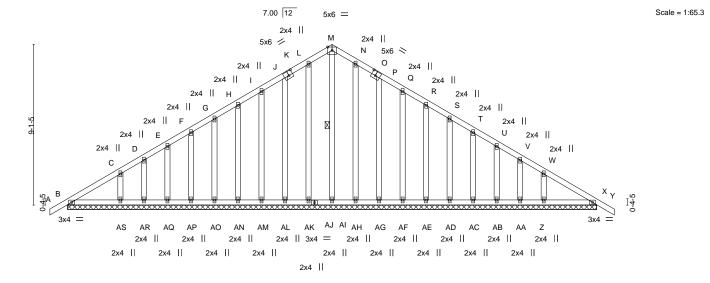


Plate Offsets (X,Y)	Plate Offsets (X,Y) [J:0-2-0,0-0-0], [K:0-2-12,0-3-0], [K:0-0-0,0-1-12], [O:0-2-12,0-3-0], [O:0-0-0,0-1-12], [P:0-2-0,0-0-0]											
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP			
TCLL 20.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL)	0.00	X	n/r	120	MT20	244/190			
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT)	0.00	Υ	n/r	120					
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT)	0.01	X	n/a	n/a					
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.00	X	n/r	90	Weight: 238 lb	FT = 20%			

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 **OTHERS** 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS

1 Row at midpt M-AI

REACTIONS. All bearings 30-0-0.

(lb) -Max Horz B=-181(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) B, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AH, AG, AF, AE, AD, AC,

AB. AA. Z

Max Grav All reactions 250 lb or less at joint(s) B, AI, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AH, AG, X, AF, AE,

AD, AC, AB, AA, Z

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) gable end zone 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- 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.
- * 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, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AH, AG, AF, AE, AD, AC, AB, AA, Z.



February 5,2020



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 MTI-sky 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 Truse Plate petitive 218 N. Lea Street, Site 312, Alexandria, VA. 22314. 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.



Job Truss Truss Type Qty ON TOP BUILDERS/THE AMHERST T19333709 20-011219T C01 Common 11 Job Reference (optional) 8.240 s Dec 6 2019 MiTek Industries, Inc. Wed Feb 5 14:45:28 2020 Page 1 BMC (Middlesex, NC), Middlesex, NC - 27557, ID:NMFL59h203ksXTJIFZtlfWyUXix-LfNIZLMem2V6FW1Qso6w1CFnHn4c2fAF676e7Tzo9SL 16-5-8 22-0-0 5-5-9 5-5-9 5-6-7

5x6 =

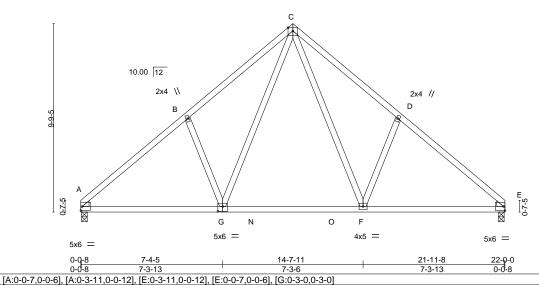


Plate Offsets (X,Y)--GRIP LOADING (psf) SPACING-CSI. (loc) I/defI L/d **PLATES TCLL** 20.0 Plate Grip DOL 1.00 TC 0.28 Vert(LL) -0.14 F-G >999 240 MT20 244/190 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.39 Vert(CT) -0.19 F-G >999 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.19 Horz(CT) 0.02 n/a n/a Code IRC2015/TPI2014 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Matrix-MS

LUMBER-

BCDL

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

WEBS 2x4 SP No.2

10.0

WEDGE

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

REACTIONS. (lb/size) A=880/0-3-8, E=880/0-3-8

Max Horz A=177(LC 7)

Max Uplift A=-6(LC 10), E=-6(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. A-B=-1099/108, B-C=-1003/206, C-D=-1003/206, D-E=-1099/108 TOP CHORD

BOT CHORD A-G=-68/880, F-G=0/576, E-F=-3/782

WEBS C-F=-107/543, D-F=-301/193, C-G=-107/543, B-G=-301/193

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) gable end zone 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.
- * 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 100 lb uplift at joint(s) A, E.



Weight: 121 lb

Structural wood sheathing directly applied or 5-9-6 oc purlins.

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

February 5,2020

Scale = 1:59.7



Job Truss Truss Type Qty ON TOP BUILDERS/THE AMHERST T19333710 20-011219T C02 GABLE Job Reference (optional) 8.240 s Dec 6 2019 MiTek Industries, Inc. Wed Feb 5 14:45:29 2020 Page 1 BMC (Middlesex, NC), Middlesex, NC - 27557,

ID:NMFL59h203ksXTJIFZtlfWyUXix-prxgnhNGXLdztgccQVd9aPn0fBWFn86PLnsBfvzo9SK

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

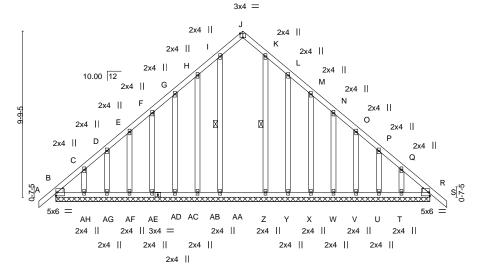
I-AA, K-Z

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

1 Row at midpt

22-0-0 -1-0-0 1-0-0 11-0-0 11-0-0

Scale = 1:67.8



22-0-0

Plate Offsets (X,Y)	[B:0-3-11,0-0-12], [B:0-0-7,0-0-6], [J:0-	2-0,Edge], [R:0-0-7,0-0-6],	, [R:0-3-11,0-0-12]	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL 20.0	Plate Grip DOL 1.00	TC 0.05	Vert(LL) -0.00 S n/r 120 MT20 244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00 S n/r 120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.01 R n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.00 S n/r 90 Weight: 180 lb 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**

OTHERS 2x4 SP No.2

WEDGE

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

REACTIONS. All bearings 22-0-0.

Max Horz B=194(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) B, AB, AC, AE, AF, AG, AH, R, Y, X, W, V, U, T

Max Grav All reactions 250 lb or less at joint(s) B, AA, AB, AC, AE, AF, AG, AH, R, Z, Y, X, W, V, U, T

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

TOP CHORD B-C=-291/190, Q-R=-274/190

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) gable end zone 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) 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.
- 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.
- * 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 100 lb uplift at joint(s) B, AB, AC, AE, AF, AG, AH, R, Y, X, W, V, U, T.



February 5,2020

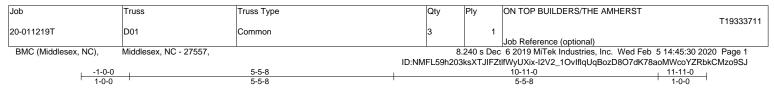


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

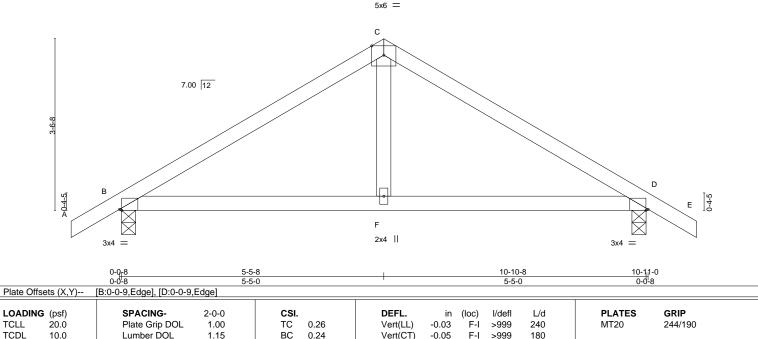
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.









Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.01

D

n/a

n/a

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

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

LUMBER-

TCLL

TCDL

BCLL

BCDL

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

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

WEBS 2x4 SP No.2

0.0

10.0

REACTIONS. (lb/size) B=497/0-3-8, D=497/0-3-8

Max Horz B=-73(LC 8)

Max Uplift B=-25(LC 10), D=-25(LC 11)

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

TOP CHORD B-C=-560/58, C-D=-560/58 **BOT CHORD** B-F=0/422, D-F=0/422

WEBS C-F=0/257

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) gable end zone 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.

YES

WB

Matrix-MS

0.06

- 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) B, D.



FT = 20%

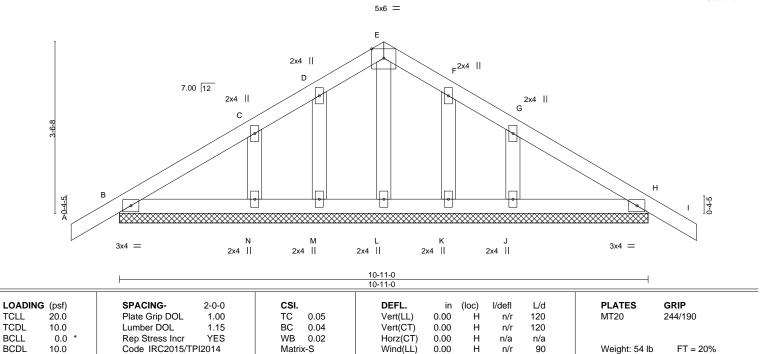
Weight: 43 lb

February 5,2020



Job Truss Truss Type Qty ON TOP BUILDERS/THE AMHERST T19333712 20-011219T D02 GABLE Job Reference (optional) 8.240 s Dec 6 2019 MiTek Industries, Inc. Wed Feb 5 14:45:31 2020 Page 1 BMC (Middlesex, NC), Middlesex, NC - 27557, ID:NMFL59h203ksXTJIFZtlfWyUXix-mE3RCMOX3zth6zm?XwfdfqsM9_BnF3gio5Llkozo9SI 10-11-0 11-11-0 1-0-0 5-5-8 5-5-8 1-0-0

Scale: 1/2"=1



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 **OTHERS**

REACTIONS. All bearings 10-11-0.

(lb) - Max Horz B=73(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) B, H, M, N, K, J Max Grav All reactions 250 lb or less at joint(s) B, H, L, M, N, K, J

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) gable end zone 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) 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.
- * 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, H, M, N, K, J.



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

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

February 5,2020

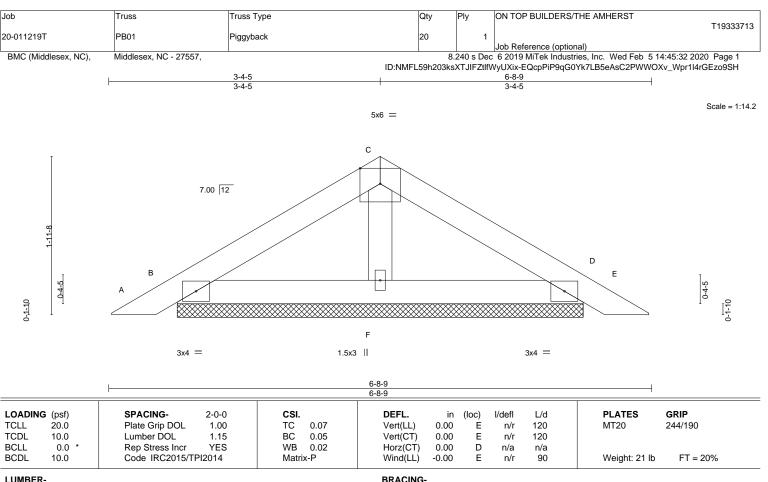


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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.





BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.3

REACTIONS. B=141/5-0-4, D=141/5-0-4, F=184/5-0-4 (lb/size)

Max Horz B=-34(LC 8)

Max Uplift B=-22(LC 10), D=-26(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) gable end zone 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) B, D.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

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

February 5,2020

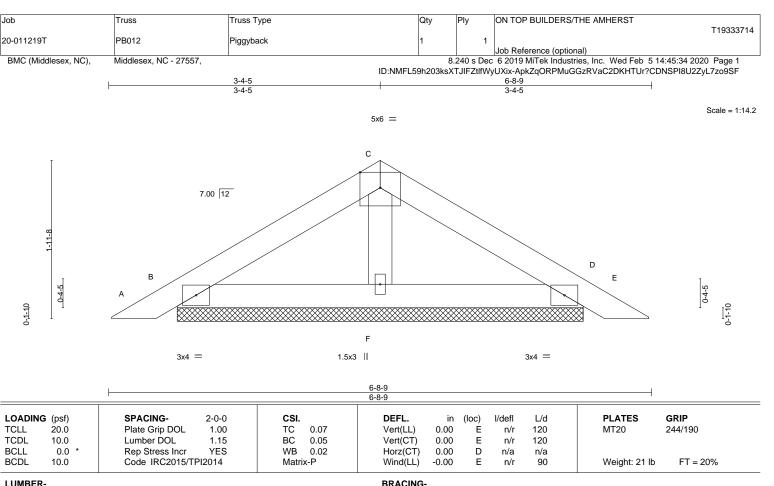


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BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.3

REACTIONS. B=141/5-0-4, D=141/5-0-4, F=184/5-0-4 (lb/size)

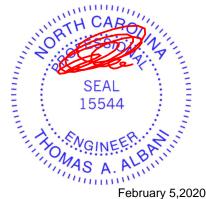
Max Horz B=-34(LC 8)

Max Uplift B=-22(LC 10), D=-26(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) gable end zone 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) B, D.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

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

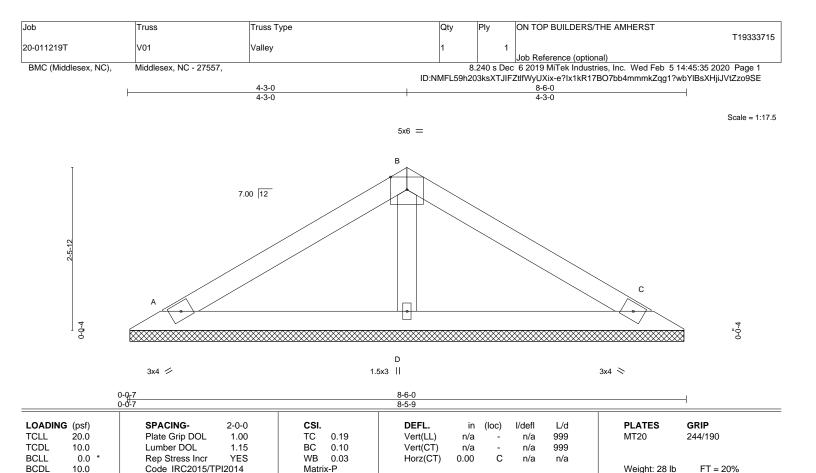


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BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.2

REACTIONS. (lb/size) A=155/8-5-2, C=155/8-5-2, D=283/8-5-2

Max Horz A=-42(LC 6)

Max Uplift A=-18(LC 10), C=-24(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) gable end zone 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.



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

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

February 5,2020

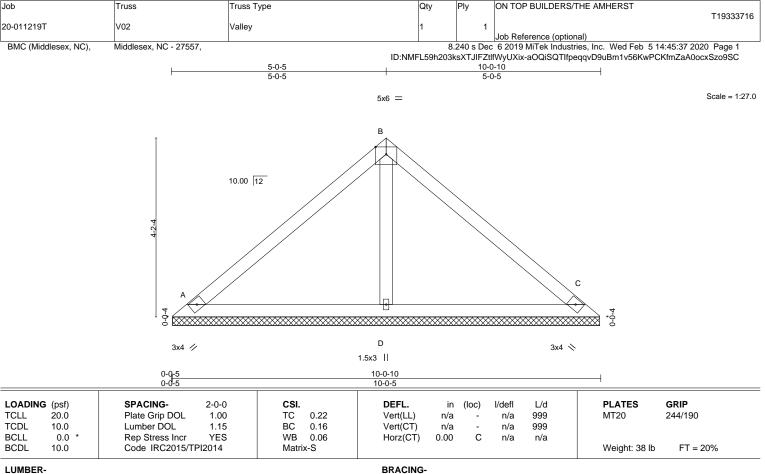


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BOT CHORD

ON TOP BUILDERS/THE AMHERST

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

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

LUMBER-

Job

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

OTHERS 2x4 SP No.2

REACTIONS. (lb/size) A=196/10-0-1, C=196/10-0-1, D=348/10-0-1

Max Horz A=-75(LC 6)

Max Uplift A=-13(LC 11), C=-23(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) gable end zone 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.



February 5,2020

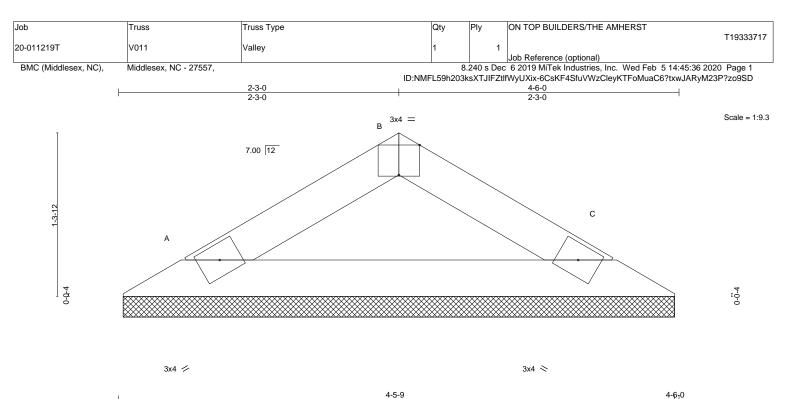


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		4-5-9									0-0-7		
Plate Off	fsets (X,Y)	[B:0-2-0,Edge]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	С	n/a	n/a			
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-P						Weight: 13 lb	FT = 20%	

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=137/4-5-2, C=137/4-5-2 Max Horz A=19(LC 7)

Max Uplift A=-3(LC 10), C=-3(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) gable end zone 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.



Structural wood sheathing directly applied or 4-6-0 oc purlins.

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

February 5,2020



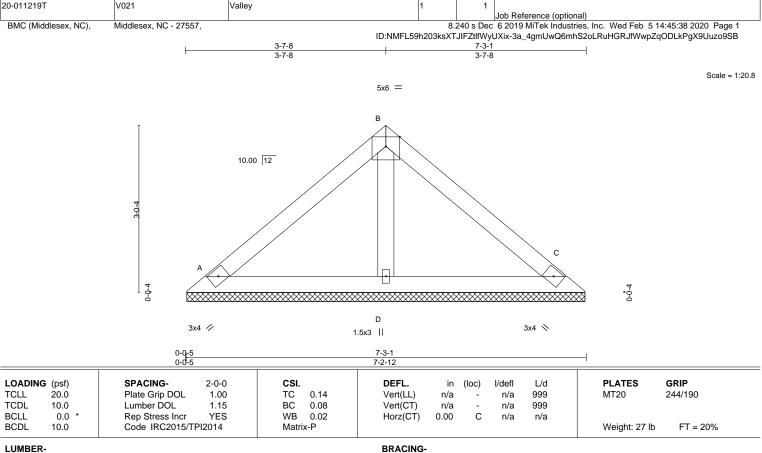
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available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





BOT CHORD

Qty

ON TOP BUILDERS/THE AMHERST

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

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

T19333718

LUMBER-

Job

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

OTHERS 2x4 SP No.2

REACTIONS. (lb/size) A=148/7-2-7, C=148/7-2-7, D=220/7-2-7

Max Horz A=-52(LC 6)

Truss

Truss Type

Max Uplift A=-16(LC 11), C=-22(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) gable end zone 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.



February 5,2020

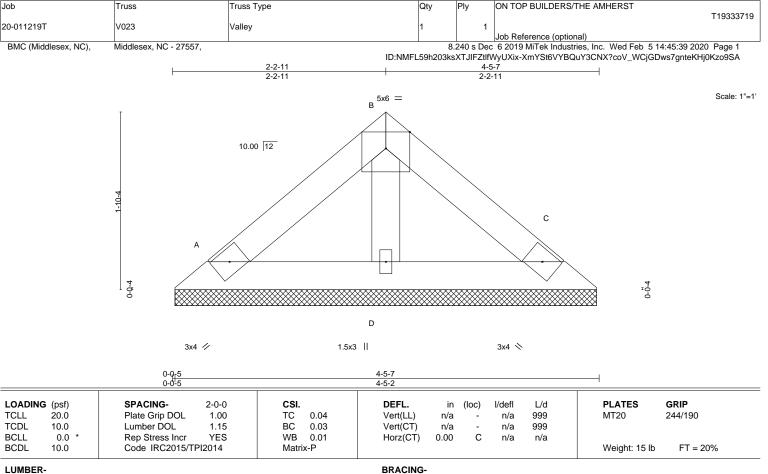


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BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.2

REACTIONS. A=84/4-4-13, C=84/4-4-13, D=124/4-4-13 (lb/size)

Max Horz A=-29(LC 6)

Max Uplift A=-9(LC 11), C=-13(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) gable end zone 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.



Structural wood sheathing directly applied or 4-5-7 oc purlins.

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

February 5,2020





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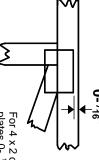


Symbols

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

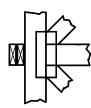
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

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

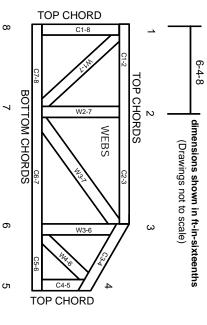
Industry Standards:

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.