

Mark Morris, P.E.

#126, 1317-M, Summerville, SC 29483
843 209-5784, Fax (866)-213-4614

The truss drawing(s) listed below have been prepared by **Atlantic Building Components** under my direct supervision based on the parameters provided by the truss designers.

AST #: 53757
JOB: 24-0270-R01
JOB NAME: LOT 90 PROVIDENCE CREEK
Wind Code: ASCE7-16
Wind Speed: Vult= 120mph
Exposure Category: B
Mean Roof Height (feet): 35
These truss designs comply with IRC 2018 as well as IRC 2021.
30 Truss Design(s)

Trusses:

PB01, PB02, PB03, R01, R02, R04, R05, R06, R07, R08, R09, R10, R11, R12, R13, SP01, SP02, SPJ01, SPJ02, SPJ03, VS01, VS02, VS03, VT01, VT02, VT03, VT04, VT05, VT06, VT07

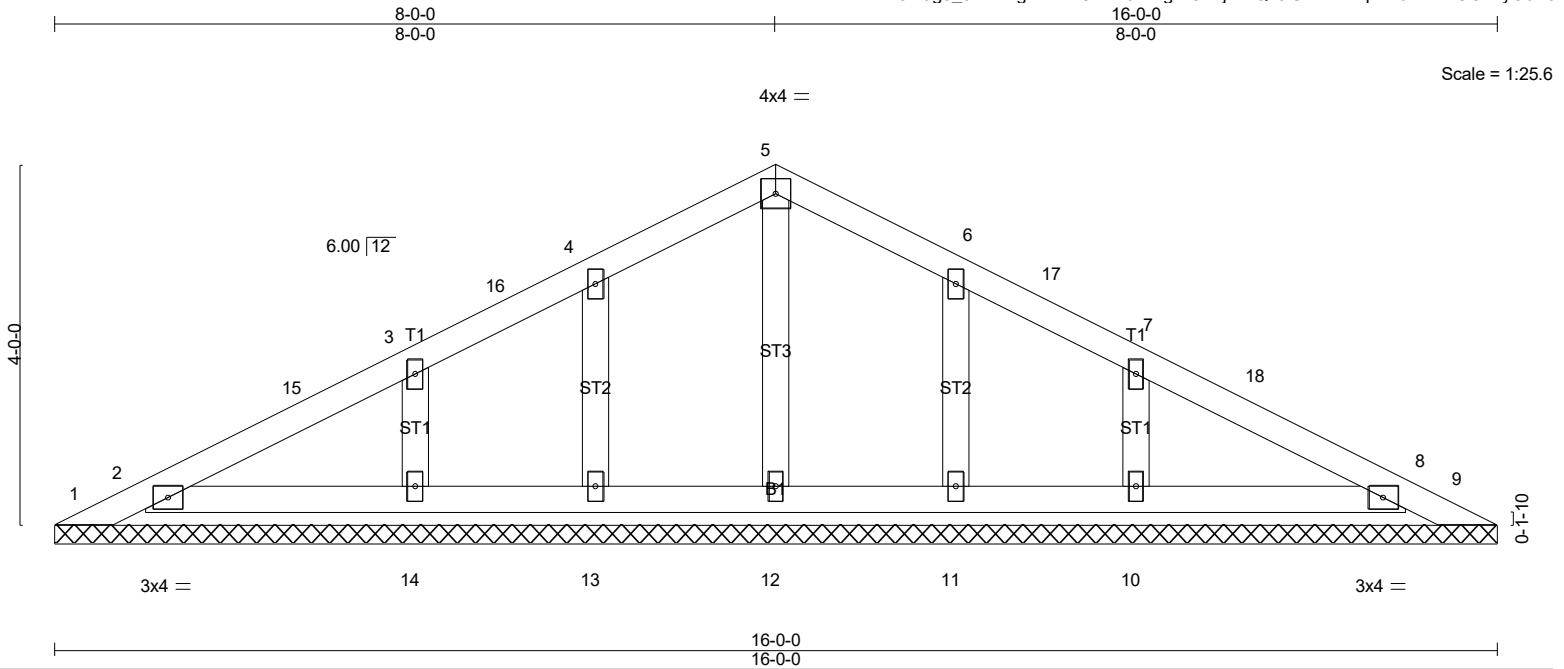


10/30/2024

Mark Morris

Warning !—Verify design parameters and read notes before use.

This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.



Scale = 1:25.6

LOADING (psf)		SPACING-		CSI.	DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0 1.15	TC	in (loc)	l/defl	L/d	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	n/a	-	n/a	999
TCDL	10.0	Rep Stress Incr	YES	WB	n/a	-	n/a	999
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH	Horz(CT)	0.00	8	n/a
BCDL	10.0							
							Weight: 63 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 6'-0-0 oc purlins.
 Rigid ceiling directly applied or 10'-0-0 oc bracing.

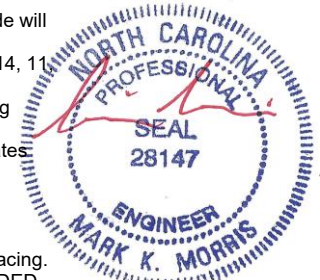
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 16-0-0.
 (lb) - Max Horz 1=-57(LC 15)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 2, 8, 13, 14, 11, 10
 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 2, 8, 12, 13, 11 except 14=282(LC 21), 10=282(LC 22)

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

NOTES- (13-16)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 5-1-8, Exterior(2R) 5-1-8 to 10-10-8, Exterior(2E) 10-10-8 to 15-8-1 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2'-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 1'-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 2, 8, 13, 14, 11, 10.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING



10/30/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	PB01	GABLE	2	1	Job Reference (optional) # 53757

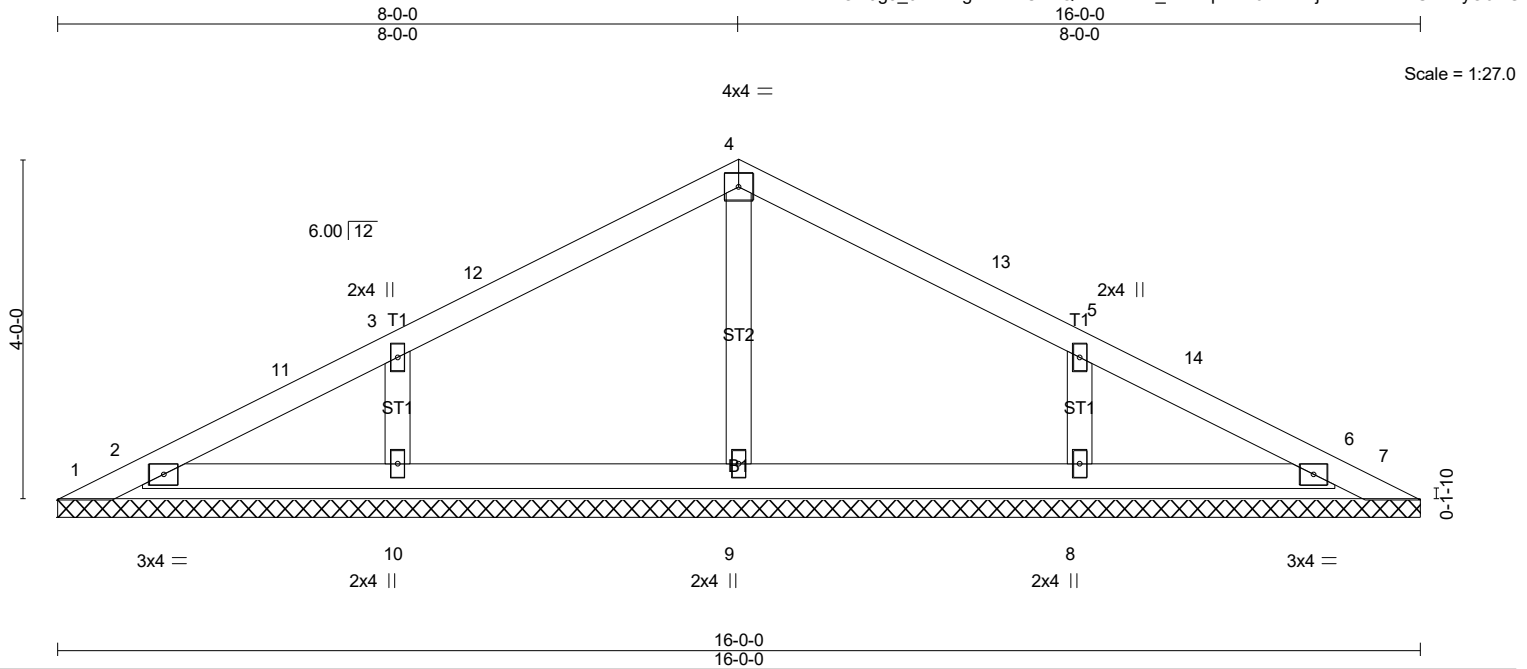
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LOAD CASE(S) Standard



10/30/2024

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LOADING (psf)	TCLL (roof) 20.0 Snow (Pf) 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2021/TPI2014	CSI.	TC 0.27 BC 0.20 WB 0.07 Matrix-SH	DEFL.	in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 7 n/a n/a	PLATES	GRIP
								MT20	244/190
								Weight: 56 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

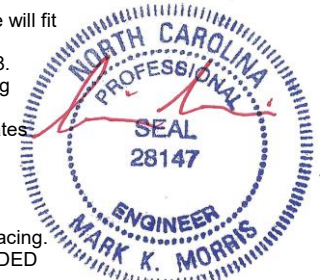
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 16-0-0.
 (lb) - Max Horz 1=-57(LC 15)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 10, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6 except 9=293(LC 21), 10=436(LC 21), 8=436(LC 22)

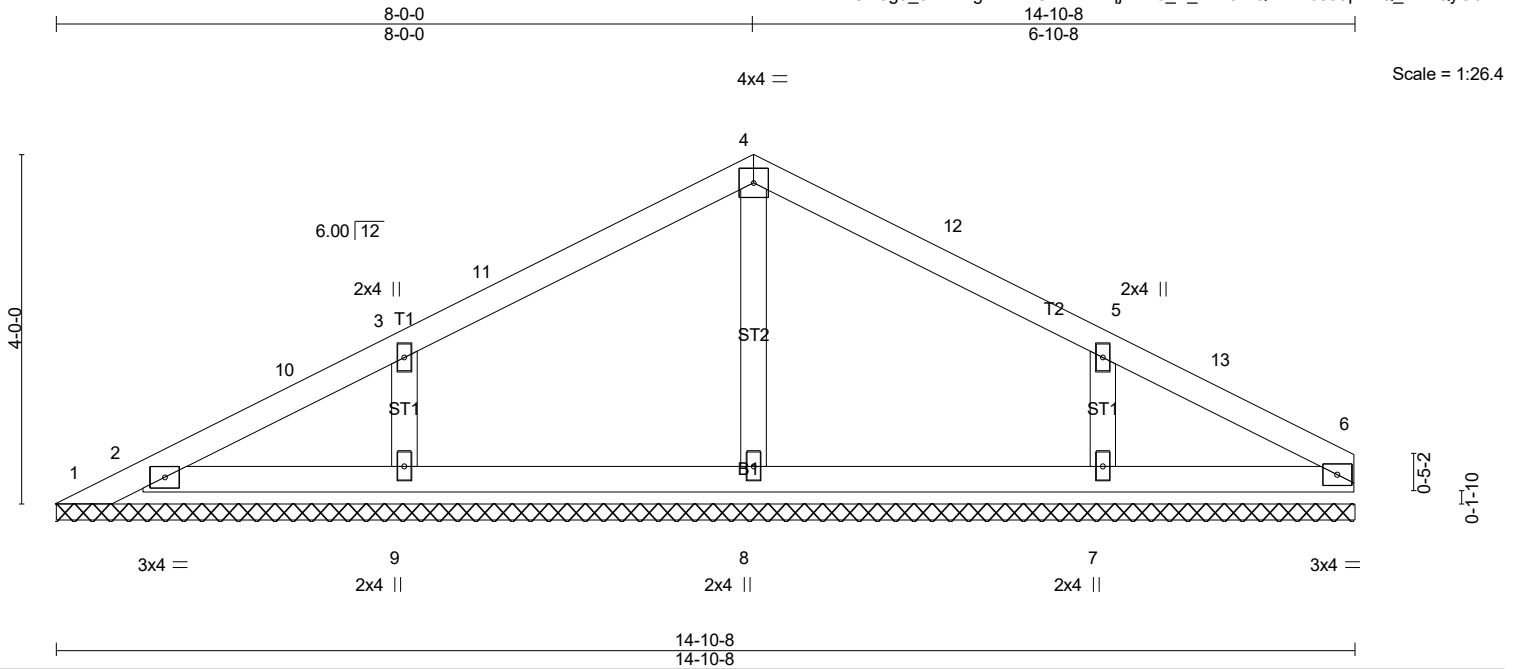
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-10=-363/165, 5-8=-363/165

- NOTES-** (12-15)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 5-1-8, Exterior(2R) 5-1-8 to 10-10-8, Exterior(2E) 10-10-8 to 15-8-1 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 5) Unbalanced snow loads have been considered for this design.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) Gable studs spaced at 4'-0-0 oc.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6, 10, 8.
 - 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



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LOADING (psf)		SPACING-		CSI.	DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	in (loc) l/defl L/d	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(LL) n/a - n/a 999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Vert(CT) n/a - n/a 999		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH		Horz(CT) 0.00 6 n/a n/a		
BCDL	10.0						Weight: 54 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3

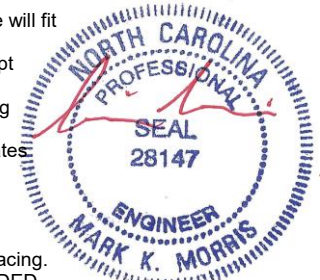
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 14-10-8.
(lb) - Max Horz 1=63(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 2, 9 except 7=-101(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 2 except 8=292(LC 21), 9=437(LC 21), 7=441(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-9=-363/167, 5-7=-364/157

- NOTES-** (12-15)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCCL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 5-1-8, Exterior(2R) 5-1-8 to 10-0-14, Exterior(2E) 10-0-14 to 14-10-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 5) Unbalanced snow loads have been considered for this design.
 - 6) Gable requires continuous bottom chord bearing.
 - 7) Gable studs spaced at 4-0-0 oc.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 2, 9 except (jt=lb) 7=101.
 - 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	PB03	GABLE	5	1	Job Reference (optional) # 53757

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LOAD CASE(S) Standard



10/30/2024

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Job 24-0270-R01	Truss R01	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC Job Reference (optional) # 53757
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-0'-10-8 21'-6-0 37'-6-0 59'-0-0 59'-10-8
0'-10-8 21'-6-0 16'-0-0 21'-6-0 0'-10-8

Scale = 1:102.4

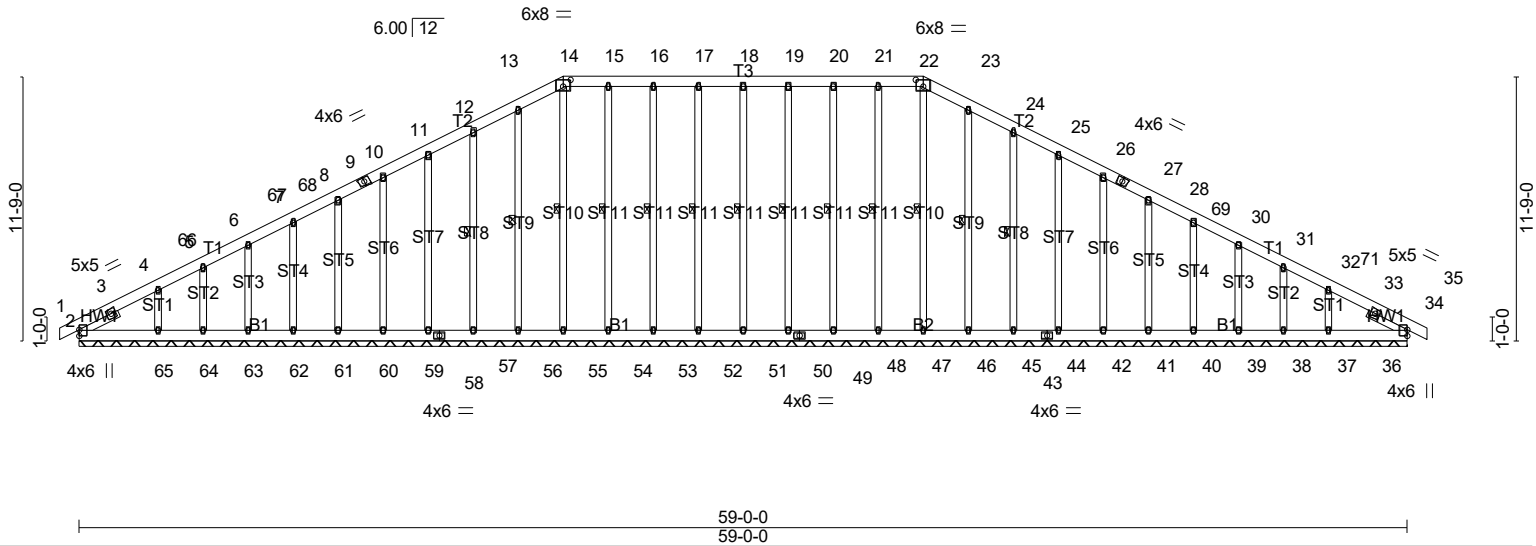


Plate Offsets (X,Y)-- [14:0-4-0,0-3-8], [22:0-4-0,0-3-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.06	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) 0.00 34 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.26	Vert(CT) 0.00 35 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 34 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 600 lb	FT = 20%

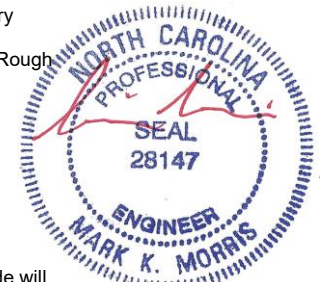
LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0

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 18-51, 17-52, 16-53, 15-54, 14-55, 13-56, 12-57, 19-50, 20-48, 21-47, 22-46, 23-45, 24-44

REACTIONS. All bearings 59-0-0.
(lb) - Max Horz 2=167(LC 18)
Max Uplift All uplift 100 lb or less at joint(s) 2, 51, 52, 53, 54, 56, 57, 59, 60, 61, 62, 63, 64, 50, 48, 47, 45, 44, 42, 41, 40, 39, 38, 37 except 65=-127(LC 14), 36=-110(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 2, 63, 64, 46, 38, 37, 34 except 51=292(LC 44), 52=292(LC 44), 53=295(LC 44), 54=294(LC 44), 55=258(LC 52), 56=297(LC 47), 57=295(LC 45), 59=292(LC 45), 60=292(LC 45), 61=293(LC 45), 62=283(LC 45), 65=259(LC 54), 50=292(LC 44), 48=295(LC 44), 47=294(LC 44), 45=294(LC 49), 44=295(LC 45), 42=292(LC 45), 41=292(LC 45), 40=293(LC 45), 39=283(LC 45), 36=259(LC 55)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 12-13=-124/284, 13-14=-140/319, 14-15=-131/306, 15-16=-131/306, 16-17=-131/306, 17-18=-131/306, 18-19=-131/306, 19-20=-131/306, 20-21=-131/306, 21-22=-131/306, 22-23=-140/319, 23-24=-124/284

- NOTES-** (14-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 16-8-6, Corner(3R) 16-8-6 to 26-3-10, Exterior(2N) 26-3-10 to 32-8-6, Corner(3R) 32-8-6 to 42-3-10, Exterior(2N) 42-3-10 to 55-0-14, Corner(3E) 55-0-14 to 59-10-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 51, 52, 53, 54, 56,



10/30/2024

Warning: This design is for informational purposes only and is not to be used for construction. This design is based on the parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R01	Piggyback Base Supported Gable	1	1	Job Reference (optional) # 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:14:28 2024 Page 2
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- 14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

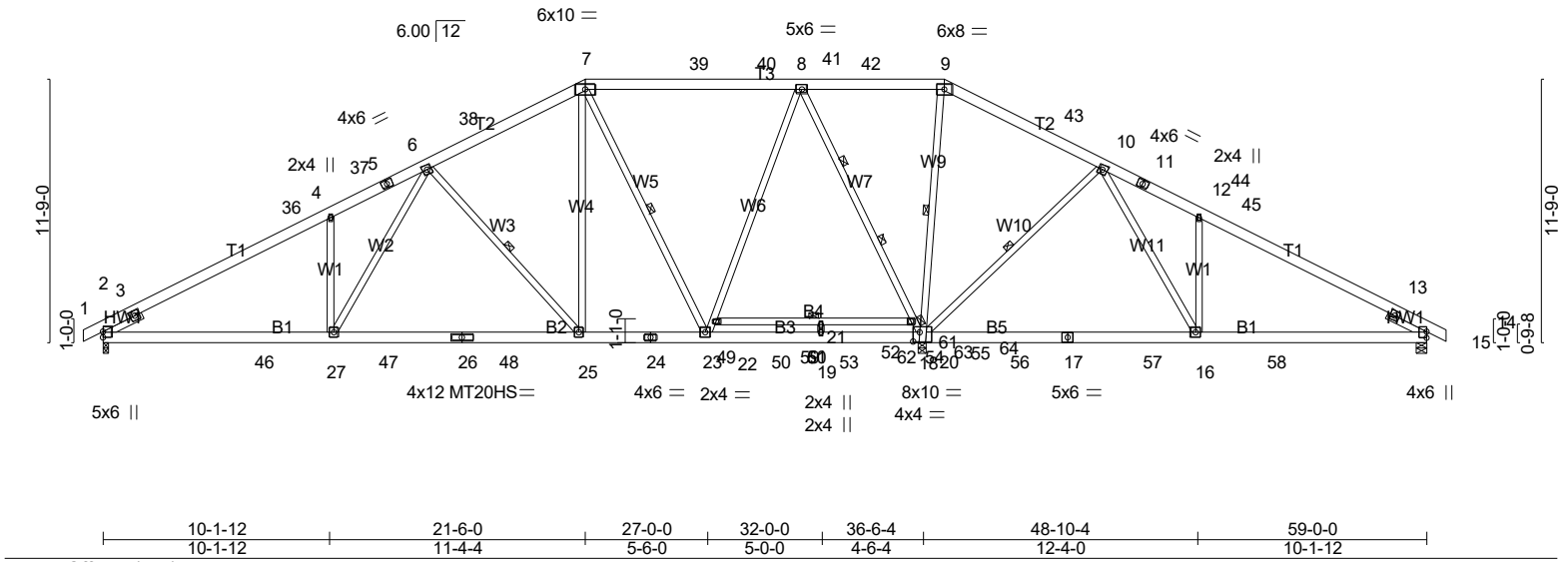


10/30/2024

Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.



Scale = 1:102.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	2.0-0	TC	0.71	Vert(LL)	-0.28 25-27 >999 240	MT20	244/190		
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.44 25-27 >998 180	MT20HS	187/143		
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.05 18 n/a n/a				
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							
BCDL	10.0										Weight: 469 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x6 SP No.2 *Except* B4: 2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied. Except: 6-0-0 oc bracing: 20-22
WEBS	2x4 SP No.3 *Except* W5,W7: 2x4 SP SS	WEBS	1 Row at midpt 6-25, 7-23, 10-18, 9-18 2 Rows at 1/3 pts 8-20
SLIDER	Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0		

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1339/0-3-8 (min. 0-1-13), 18=3037/0-3-8 (min. 0-2-14), 14=628/0-5-8 (min. 0-1-8)
 Max Horz 2=167(LC 14)
 Max Uplift 2=-205(LC 14), 18=-7(LC 14), 14=-207(LC 15)
 Max Grav 2=1551(LC 43), 18=4183(LC 43), 14=773(LC 41)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-835/0, 3-36=-2505/273, 4-36=-2339/293, 4-37=-2447/404, 5-37=-2432/406, 5-6=-2308/423, 6-38=-1268/291, 7-38=-1142/312, 7-39=-754/267, 39-40=-754/267, 40-41=-754/267, 8-41=-754/267, 8-42=0/1101, 9-42=0/1101, 9-43=0/1245, 10-43=0/1070, 10-11=-689/425, 11-44=-835/408, 12-44=-846/406, 12-45=-651/292, 13-45=-861/271, 13-14=-311/0
BOT CHORD 2-46=-302/2136, 27-46=-302/2136, 27-47=-214/1674, 26-47=-214/1674, 26-48=-214/1674, 25-48=-214/1674, 24-25=-63/1058, 24-49=-63/1058, 23-49=-63/1058, 23-50=-162/402, 50-51=-162/402, 51-52=-162/402, 19-52=-162/402, 19-53=-162/402, 53-54=-162/402, 54-55=-162/402, 18-55=-162/402, 18-56=-365/263, 17-56=-365/263, 17-57=-365/263, 16-57=-365/263, 16-58=-138/678, 14-58=-138/678
WEBS 6-25=-1053/259, 7-25=-109/1129, 7-23=-1169/162, 22-23=-56/1619, 8-22=-30/1740, 8-20=-2306/217, 18-20=-2402/195, 10-18=-1148/266, 19-21=-301/0, 9-18=-864/120, 6-27=-182/968, 10-16=-176/1177, 4-27=-476/255, 12-16=-587/254

- NOTES-** (18-21)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 55-0-14, Exterior(2E) 55-0-14 to 59-10-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT 20 unless otherwise indicated.



Continued on page 2
 Vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI I-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R02	Piggyback Base	9	1	
					# 53757

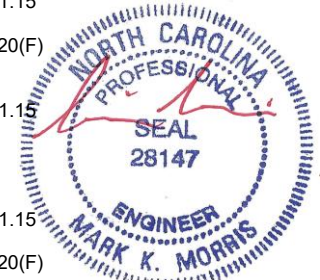
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NOTES- (18-21)

- 8) All plates are 5x5 MT20 unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 2=205, 14=207.
- 13) Load case(s) 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 14) MULTIPLE LOADCASES – This design is the composite result of multiple load cases.
- 15) User moving load cases exist: Review the load cases for details.
- 16) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 17) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 18) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 19) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 20) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 21) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard Except:

- 109) Reversal: 1st User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 110) Reversal: 2nd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 51=-150 52=-150
- 111) Reversal: 3rd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 52=-150 53=-150
- 112) Reversal: 4th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 53=-150 55=-150
- 113) Reversal: 5th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 18=-150 54=-150
- 114) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 115) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 116) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 117) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 118) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 119) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150



10/30/2024

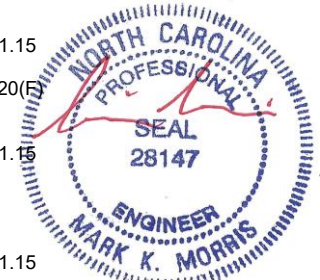
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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R02	Piggyback Base	9	1	# 53757

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LOAD CASE(S)

- 120) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 121) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 122) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 123) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 124) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 125) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 126) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 127) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 128) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 129) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 130) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 131) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 132) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 133) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 134) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 135) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)



10/30/2024

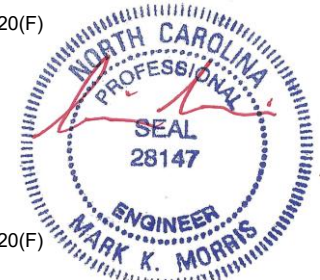
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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R02	Piggyback Base	9	1	# 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:14:35 2024 Page 4
ID:kHdPkON9g3_0lfrDBlgKRzexCS-u6ecPHtyLUl8F_9hdOVT1AxqfMQWZU_PQVtfk9yO6w2

LOAD CASE(S)

- Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 136) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 137) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 138) 1st User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 139) 2nd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 51=-150 52=-150
- 140) 3rd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 52=-150 53=-150
- 141) 4th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 53=-150 55=-150
- 142) 5th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 18=-150 54=-150
- 143) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 144) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 145) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 146) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 147) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 148) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 149) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150
- 150) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
Vert: 23=-150 51=-150



10/30/2024

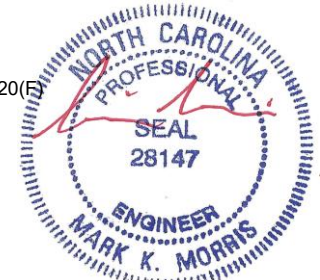
Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 Guide to *Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R02	Piggyback Base	9	1	
					# 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:14:35 2024 Page 5
 ID:kHdPkcoN9g3_0lfrDBlgKRzexCS-u6ecPHYtLUI8F_9hdOVT1AxqfMQWZU_PQVtfk9yO6w2

LOAD CASE(S)

- 151) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 152) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 153) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 154) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 155) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 156) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 157) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 158) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 159) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 160) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 161) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
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 Uniform Loads (plf)
 Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 163) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 164) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 165) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
 Vert: 23=-150 51=-150
- 166) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)



10/30/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R02	Piggyback Base	9	1	Job Reference (optional) # 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:14:35 2024 Page 6
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LOAD CASE(S)

Concentrated Loads (lb)

Vert: 23=-150 51=-150



10/30/2024

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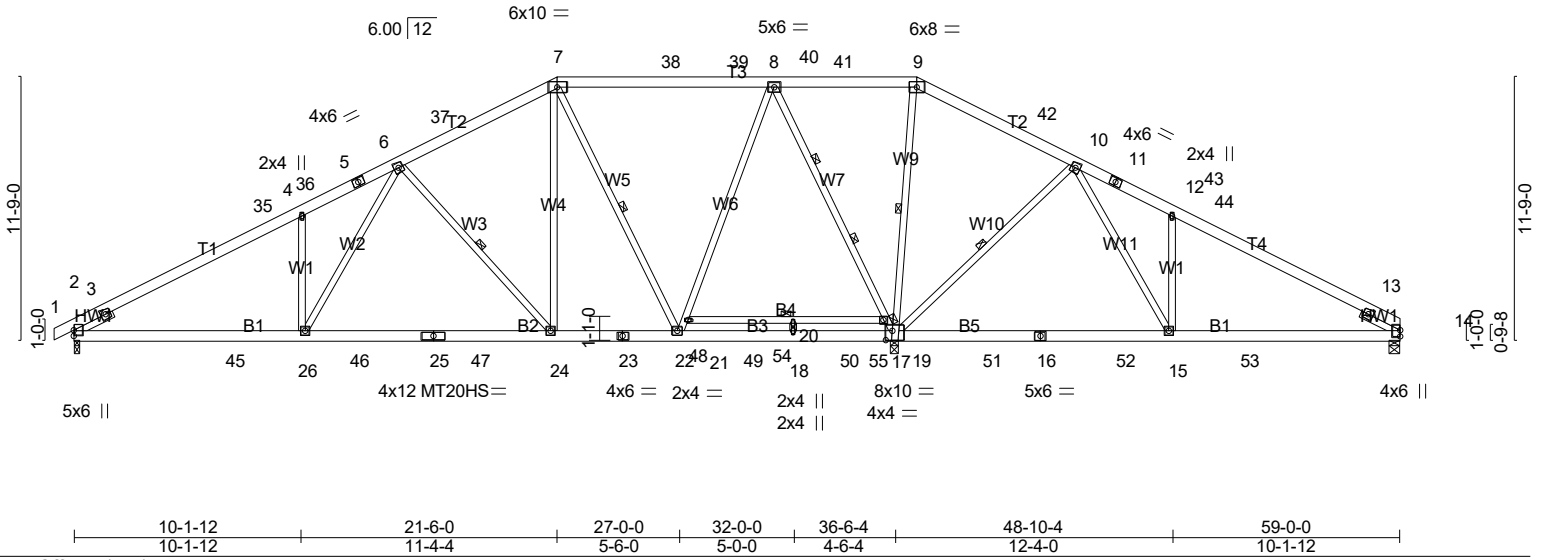


Plate Offsets (X,Y)-- [17:0-3-8,0-5-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.71	Vert(LL) -0.28 24-26	>999	240		MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.88	Vert(CT) -0.44 24-26	>998	180		MT20HS	187/143
TCDL 10.0	Rep Stress Incr YES		WB 0.91	Horz(CT) 0.05 17	n/a	n/a			
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-AS						
BCDL 10.0									Weight: 467 lb FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2 *Except*
 B4: 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W5,W7: 2x4 SP SS
 SLIDER Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0

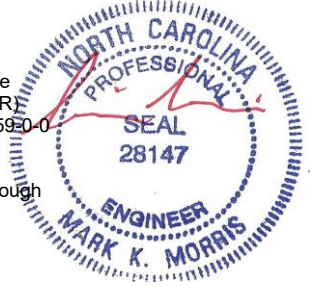
BRACING-
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied. Except:
 6-0-0 oc bracing: 19-21
 WEBS 1 Row at midpt 6-24, 7-22, 10-17, 9-17
 2 Rows at 1/3 pts 8-19

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1341/0-3-8 (min. 0-1-13), 17=3035/0-3-8 (min. 0-2-14), 14=577/0-5-8 (min. 0-1-8)
 Max Horz2=173(LC 14)
 Max Uplift2=-204(LC 14), 17=-9(LC 14), 14=-188(LC 15)
 Max Grav2=1552(LC 45), 17=4181(LC 45), 14=722(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-836/0, 3-35=-2507/268, 4-35=-2342/289, 4-36=-2450/404, 5-36=-2429/405,
 5-6=-2310/421, 6-37=-1266/286, 7-37=-1141/308, 7-38=-650/261, 38-39=-650/261,
 39-40=-650/261, 8-40=-650/261, 8-41=0/1094, 9-41=0/1094, 9-42=0/1238, 10-42=0/1063,
 10-11=-697/421, 11-43=-844/404, 12-43=-855/402, 12-44=-659/288, 13-44=-868/267,
 13-14=-319/0
 BOT CHORD 2-45=-307/2138, 26-45=-307/2138, 26-46=-219/1672, 25-46=-219/1672, 25-47=-219/1672,
 24-47=-219/1672, 23-24=-71/1051, 23-48=-71/1051, 22-48=-71/1051, 22-49=-160/338,
 18-49=-160/338, 18-50=-160/338, 17-50=-160/338, 17-51=-363/268, 16-51=-363/268,
 16-52=-363/268, 15-52=-363/268, 15-53=-148/686, 14-53=-148/686
 WEBS 6-24=-1053/259, 7-24=-109/1129, 7-22=-1167/163, 21-22=-57/1618, 8-21=-30/1739,
 8-19=-2305/219, 17-19=-2401/197, 10-17=-1149/266, 18-20=-301/0, 9-17=-860/123,
 6-26=-182/967, 10-15=-177/1180, 4-26=-485/256, 12-15=-586/255

- NOTES-** (14-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 54-2-6, Exterior(2E) 54-2-6 to 59-0-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 5/16" thick unless otherwise indicated.



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Continued on page 2
 Vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R04	PIGGYBACK BASE	1	1	Job Reference (optional) # 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:14:38 2024 Page 2
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NOTES- (14-17)

- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 2=204, 14=188.
- 13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



10/30/2024

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Scale = 1:99.9

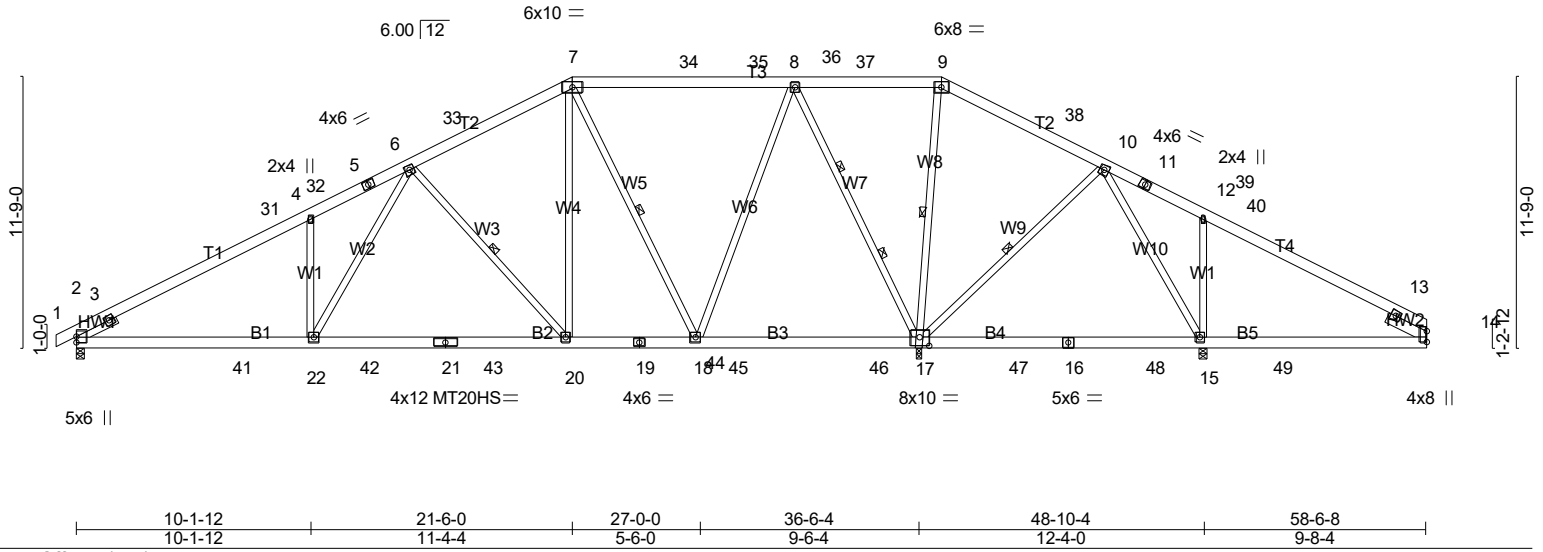


Plate Offsets (X,Y)-- [17:0-5-0,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.70	Vert(LL) 0.12	15-29	>993	240	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.81	Vert(CT) -0.43	20-22	>999	180	MT20HS	187/143
TCDL 10.0	Rep Stress Incr YES		WB 0.95	Horz(CT) 0.05	17	n/a	n/a		
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 452 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W5,W7: 2x4 SP No.1
 SLIDER Left 2x4 SP No.3 1-11-0, Right 2x6 SP No.2 1-11-0

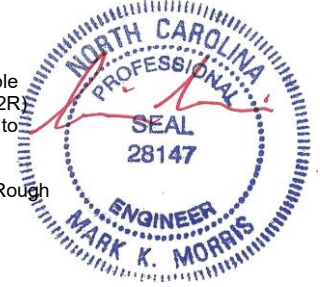
BRACING-
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 6-20, 7-18, 10-17, 9-17
 2 Rows at 1/3 pts 8-17

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 0-3-8 except (jt=length) 14=Mechanical.
 (lb) - Max Horz 2=178(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 15 except 2=207(LC 14), 17=180(LC 11), 14=180(LC 10)
 Max Grav All reactions 250 lb or less at joint(s) except 2=1591(LC 45), 17=3332(LC 45), 14=538(LC 43), 15=621(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-868/0, 3-31=-2583/334, 4-31=-2417/355, 4-32=-2523/431, 5-32=-2501/432, 5-6=-2384/448, 6-33=-1314/355, 7-33=-1181/377, 7-34=-638/344, 34-35=-638/344, 35-36=-638/344, 8-36=-638/344, 8-37=0/845, 9-37=0/845, 9-38=0/970, 10-38=0/795, 10-11=-379/585, 11-39=-498/568, 12-39=-509/566, 12-40=-316/471, 13-40=-517/445, 13-14=-197/452
 BOT CHORD 2-41=-318/2205, 22-41=-318/2205, 22-42=-230/1746, 21-42=-230/1746, 21-43=-230/1746, 20-43=-230/1746, 19-20=-80/1054, 19-44=-80/1054, 18-44=-80/1054, 18-45=-58/335, 45-46=-58/335, 17-46=-58/335, 17-47=-312/255, 16-47=-312/255, 16-48=-312/255, 15-48=-312/255, 15-49=-345/376, 14-49=-345/376
 WEBS 6-20=-1047/259, 7-20=-101/1175, 7-18=-1175/150, 8-18=-76/1466, 8-17=-2061/240, 10-17=-842/343, 9-17=-726/93, 6-22=-182/956, 10-15=-362/676, 12-15=-571/243, 4-22=-478/255

- NOTES-** (15-18)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 to 58-6-8 zone; end vertical left exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.



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8) All plates are 5/16" thick unless otherwise indicated for use. This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R05	PIGGYBACK BASE	5	1	Job Reference (optional) # 53757

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NOTES- (15-18)

- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Refer to girder(s) for truss to truss connections.
- 12) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 2=207, 17=180, 14=180.
- 14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



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Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

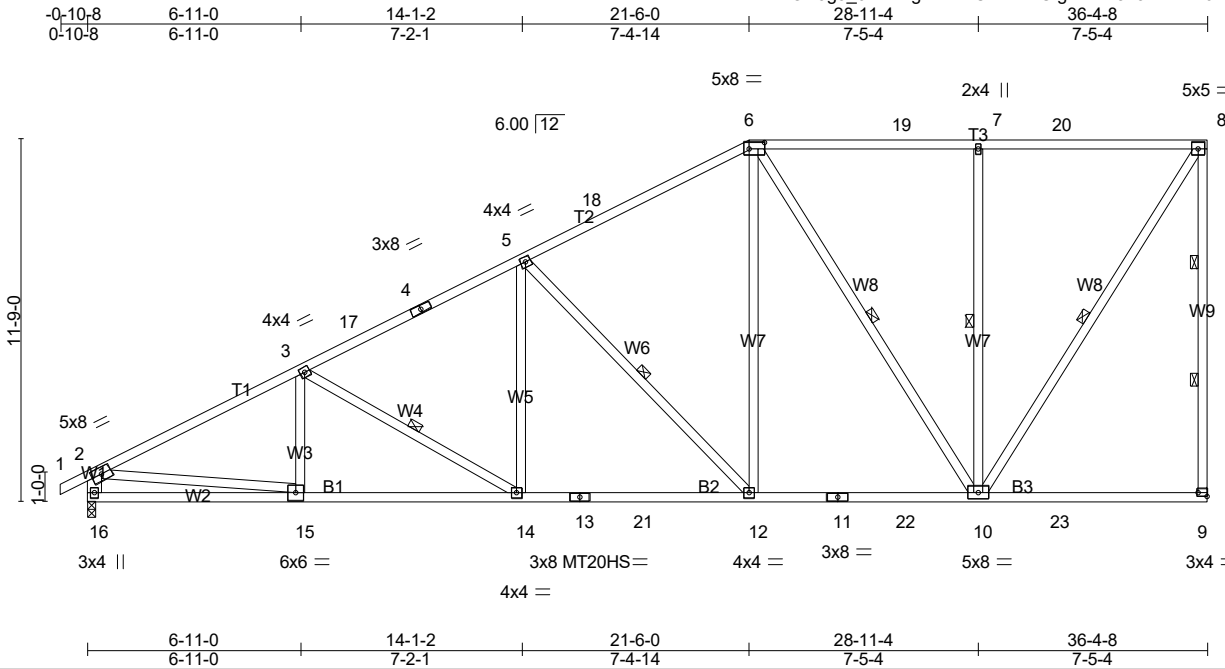


Plate Offsets (X,Y)-- [6:0-6-0,0-2-8], [9:Edge,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.98	Vert(LL) -0.21	12-14	>999	240	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.94	Vert(CT) -0.34	12-14	>999	180	MT20HS	187/143
TCDL 10.0	Rep Stress Incr YES		WB 0.84	Horz(CT) 0.07	9	n/a	n/a		
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-SH						
BCDL 10.0								Weight: 258 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.1 *Except*
 T1: 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W9: 2x4 SP SS, W1: 2x6 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
 WEBS 1 Row at midpt 3-14, 5-12, 6-10, 7-10, 8-10
 2 Rows at 1/3 pts 8-9

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 9=1439/Mechanical, 16=1507/0-3-8 (min. 0-2-1)
 Max Horz 16=373(LC 14)
 Max Uplift 9=-214(LC 11), 16=-174(LC 14)
 Max Grav 9=1909(LC 37), 16=1730(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2679/234, 3-17=-2367/186, 4-17=-2275/197, 4-5=-2160/215, 5-18=-1637/190,
 6-18=-1485/212, 6-19=-953/144, 7-19=-953/144, 7-20=-953/144, 8-20=-953/144,
 8-9=-1715/274, 2-16=-1661/204
 BOT CHORD 15-16=-461/395, 14-15=-506/2316, 13-14=-369/2035, 13-21=-369/2035, 12-21=-369/2035,
 11-12=-240/1341, 11-22=-240/1341, 10-22=-240/1341
 WEBS 3-14=-376/157, 5-14=-5/438, 5-12=-1093/253, 6-12=-108/1067, 6-10=-912/183,
 7-10=-878/214, 8-10=-268/1748, 2-15=-62/1985

- NOTES-** (11-14)
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 31-5-2, Exterior(2E) 31-5-2 to 36-2-12 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) All plates are MT20 plates unless otherwise indicated.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Refer to girder(s) for truss to truss connections.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=214, 16=174.



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Warning!—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R06	PIGGYBACK BASE	5	1	Job Reference (optional) # 53757

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- 11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 13) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 14) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



10/30/2024

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Scale = 1:99.9

Plate Offsets (X,Y)-- [17:0-5-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.70	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.78	Vert(LL) -0.28 15-17 >941 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.97	Vert(CT) -0.42 20-22 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.04 17 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 452 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W5,W7: 2x4 SP No.1
 SLIDER Left 2x4 SP No.3 1-11-0, Right 2x6 SP No.2 1-11-0

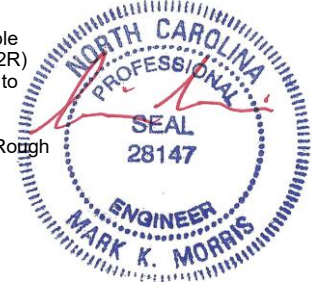
BRACING-
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 6-20, 7-18, 10-17, 9-17
 2 Rows at 1/3 pts 8-17

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1336/0-3-8 (min. 0-1-13), 17=2816/0-3-8 (min. 0-2-9), 14=584/Mechanical
 Max Horz2=178(LC 14)
 Max Uplift2=-217(LC 14), 17=-83(LC 14), 14=-187(LC 15)
 Max Grav2=1520(LC 45), 17=3757(LC 45), 14=719(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-818/0, 3-31=-2441/298, 4-31=-2275/318, 4-32=-2386/430, 5-32=-2363/431,
 5-6=-2246/447, 6-33=-1201/317, 7-33=-1077/338, 7-34=-591/300, 34-35=-591/300,
 35-36=-591/300, 8-36=-591/300, 8-37=0/1042, 9-37=0/1042, 9-38=0/1181, 10-38=0/1006,
 10-11=-672/406, 11-39=-819/389, 12-39=-830/387, 12-40=-656/281, 13-40=-856/260
 BOT CHORD 2-41=-335/2080, 22-41=-335/2080, 22-42=-248/1613, 21-42=-248/1613, 21-43=-248/1613,
 20-43=-248/1613, 19-20=-96/982, 19-44=-96/982, 18-44=-96/982, 18-45=-252/313,
 45-46=-252/313, 17-46=-252/313, 17-47=-301/287, 16-47=-301/287, 16-48=-301/287,
 15-48=-301/287, 15-49=-145/671, 14-49=-145/671
 WEBS 6-20=-1051/258, 7-20=-100/1177, 7-18=-1253/139, 8-18=-66/1540, 8-17=-2099/254,
 10-17=-1144/258, 9-17=-828/118, 6-22=-180/970, 10-15=-152/1137, 12-15=-537/239,
 4-22=-486/254

- NOTES-** (14-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 to 58-6-8 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 5x5 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit



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Continued on page 2
 Between the bottom chord and other members with BCDLs as shown. Design based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R07	PIGGYBACK BASE	4	1	Job Reference (optional) # 53757

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NOTES- (14-17)

- 10) Refer to girder(s) for truss to truss connections.
- 11) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 2=217, 14=187.
- 13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

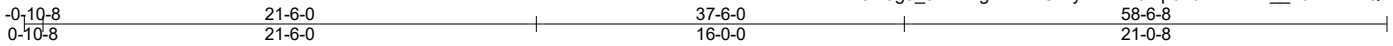


10/30/2024

Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job 24-0270-R01	Truss R08	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC Job Reference (optional) # 53757
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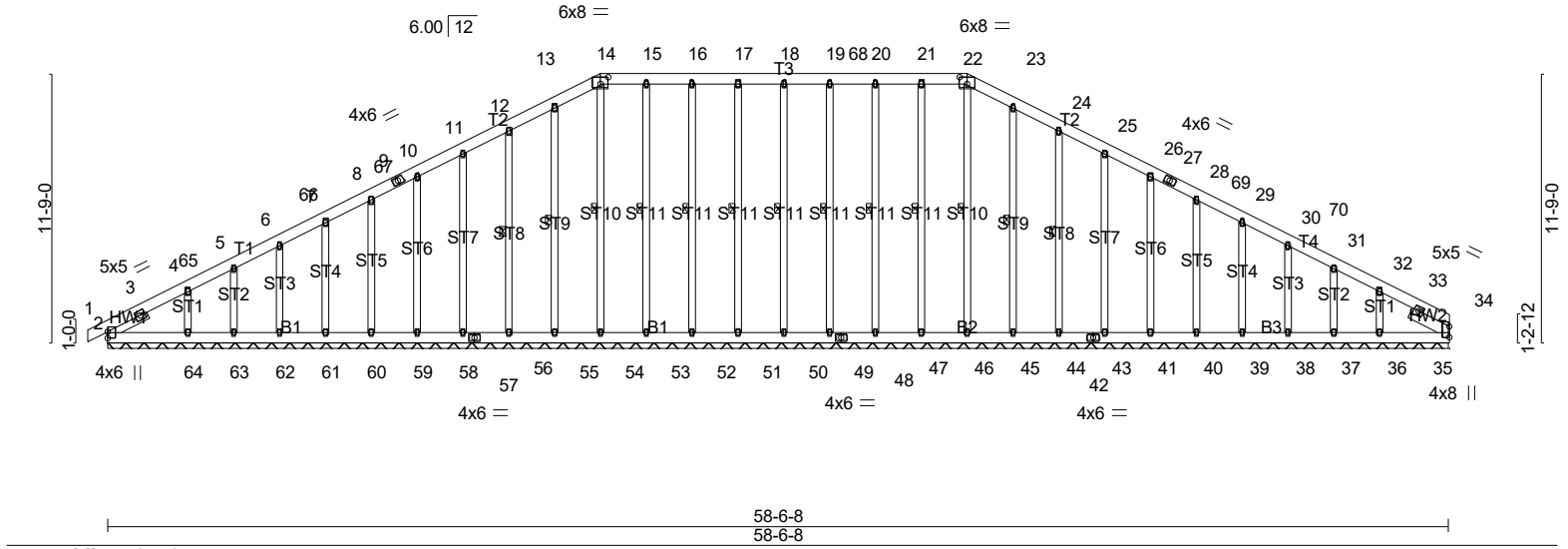


Plate Offsets (X,Y)-- [14:0-4-0,0-3-8], [22:0-4-0,0-3-8]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.06	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) -0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.26	Vert(CT) 0.00 1 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 34 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 598 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt 18-50, 17-51, 16-52, 15-53, 14-54, 13-55, 12-56, 19-49, 20-47, 21-46, 22-45, 23-44, 24-43
SLIDER Left 2x4 SP No.3 1-11-0, Right 2x6 SP No.2 1-11-0	

REACTIONS. All bearings 58-6-8.
 (lb) - Max Horz 2=-169(LC 15)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 50, 51, 52, 53, 55, 56, 58, 59, 60, 61, 62, 63, 49, 47, 46, 44, 43, 41, 40, 39, 38, 37, 36 except 64=-126(LC 14), 35=-119(LC 15)
 Max Grav All reactions 250 lb or less at joint(s) 2, 62, 63, 45, 37, 36, 35, 34 except 50=292(LC 44), 51=292(LC 44), 52=295(LC 44), 53=294(LC 44), 54=258(LC 52), 55=297(LC 47), 56=295(LC 45), 58=292(LC 45), 59=292(LC 45), 60=293(LC 45), 61=283(LC 45), 64=259(LC 54), 49=292(LC 44), 47=295(LC 44), 46=294(LC 44), 44=294(LC 49), 43=295(LC 45), 41=292(LC 45), 40=292(LC 45), 39=293(LC 45), 38=284(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 12-13=-123/293, 13-14=-138/328, 14-15=-130/314, 15-16=-130/314, 16-17=-130/314, 17-18=-130/314, 18-68=-130/314, 19-68=-130/314, 19-20=-130/314, 20-21=-130/314, 21-22=-130/314, 22-23=-138/328, 23-24=-123/293

- NOTES-** (14-17)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 16-8-6, Corner(3R) 16-8-6 to 26-3-10, Exterior(2N) 26-3-10 to 32-8-6, Corner(3R) 32-8-6 to 42-3-10, Exterior(2N) 42-3-10 to 53-6-0, Corner(3E) 53-6-0 to 58-6-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL= 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 50, 51, 52, 53, 55,



10/30/2024

When used on other projects, the user must refer to the design parameters and conditions shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R08	Piggyback Base Supported Gable	1	1	Job Reference (optional) # 53757

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- 14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

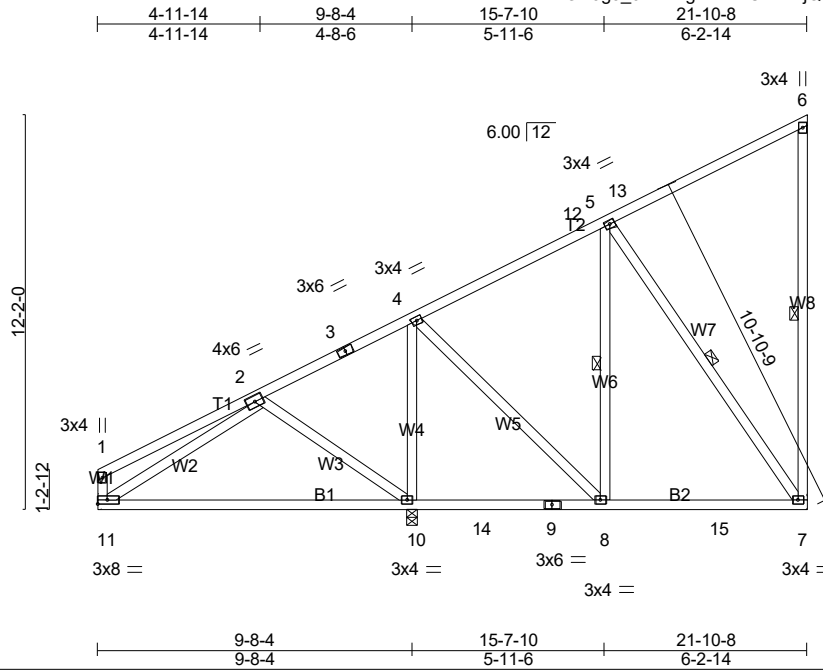


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Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job 24-0270-R01	Truss R09	Truss Type Jack-Closed	Qty 3	Ply 1	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC Job Reference (optional) # 53757
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Scale = 1:71.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.72	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) 0.41 10-11 >281 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.39	Vert(CT) -0.42 10-11 >274 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) -0.01 7 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 152 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-7, 5-8, 5-7

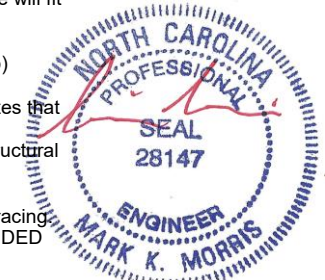
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 11=362/Mechanical, 7=466/Mechanical, 10=899/0-3-8 (min. 0-1-8)
Max Horz 11=371(LC 14)
Max Uplift 11=-2(LC 11), 7=-180(LC 14), 10=-192(LC 14)
Max Grav 11=367(LC 20), 7=620(LC 5), 10=963(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-222/271, 4-12=-325/0
BOT CHORD 10-11=-292/254
WEBS 2-11=-330/91, 2-10=-286/209, 4-10=-593/170, 4-8=0/325, 5-7=-409/152

NOTES- (8-11)

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; End Jack Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-10-4, Interior(1) 4-10-4 to 14-11-5, Exterior(2R) 14-11-5 to 21-8-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 7=180, 10=192.
- 8) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 9) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 10) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 11) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

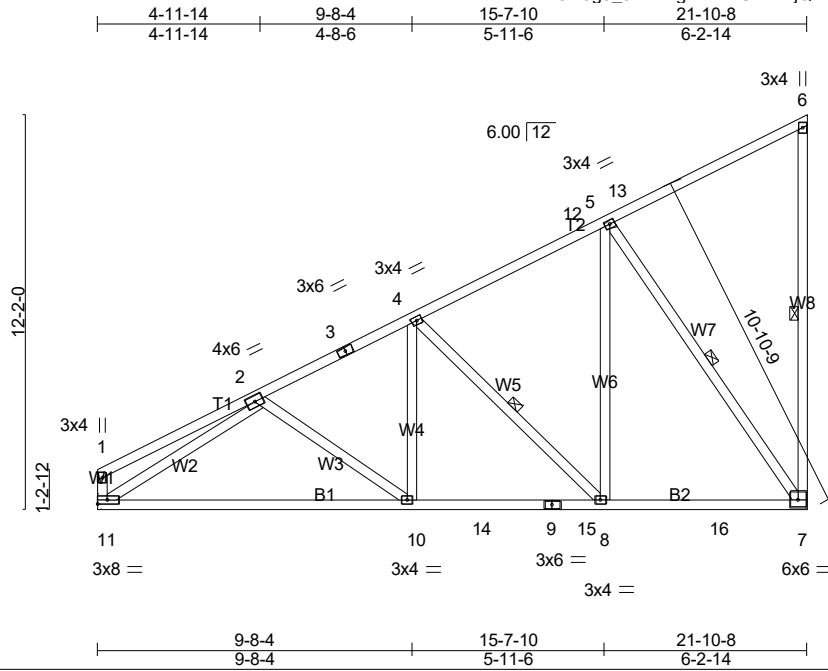


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LOAD CASES: Standard parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job 24-0270-R01	Truss R10	Truss Type Jack-Closed	Qty 2	Ply 1	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC Job Reference (optional) # 53757
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.72	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.80	Vert(LL) 0.40 10-11 >642 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.92	Vert(CT) -0.44 10-11 >582 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.03 7 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 152 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-6-1 oc bracing.
WEBS 1 Row at midpt 6-7, 4-8, 5-7

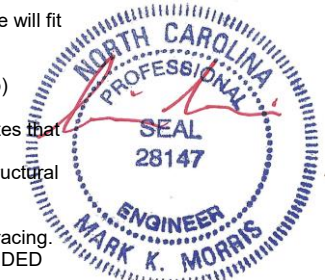
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 11=863/Mechanical, 7=863/Mechanical
Max Horz 11=371(LC 14)
Max Uplift 11=-46(LC 14), 7=-265(LC 14)
Max Grav 11=887(LC 20), 7=1046(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-245/282, 2-3=-1055/640, 3-4=-993/651, 4-12=-657/328, 5-12=-538/331
BOT CHORD 10-11=-886/982, 10-14=-823/895, 9-14=-823/895, 9-15=-823/895, 8-15=-823/895,
8-16=-453/539, 7-16=-453/539
WEBS 2-11=-1009/389, 4-10=-395/348, 4-8=-527/515, 5-8=-630/617, 5-7=-929/782

NOTES- (8-11)

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; End Jack Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-10-4, Interior(1) 4-10-4 to 14-11-5, Exterior(2R) 14-11-5 to 21-8-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 7=265.
- 8) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 9) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 10) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 11) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



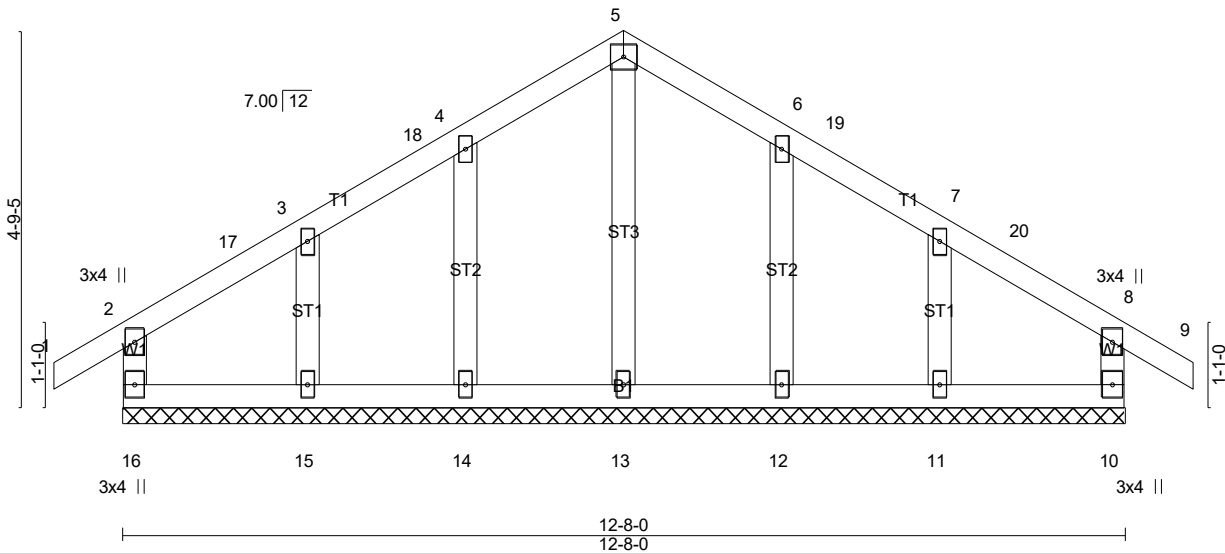
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4x4 =

Scale = 1:29.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00 9 n/r 180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00 9 n/r 80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00 10 n/a n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R					
BCDL	10.0							Weight: 67 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.3
 WEBS 2x4 SP No.3
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 12-8-0.
 (lb) - Max Horz 16=120(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

NOTES- (14-17)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 8-8-14, Corner(3E) 8-8-14 to 13-6-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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) 16, 10, 14, 15, 12, 11.



10/30/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R11	Common Supported Gable	1	1	Job Reference (optional) # 53757

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- 14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



10/30/2024

Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R12	GABLE	1	1	Job Reference (optional) # 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:14:56 2024 Page 2
ID:kHdPkcON9g3_0lfrDBlgKRzexCS-n9PYpS77OxO9HDFkMIOOdcJMFqjZ_07VFGTGzSyO6vj

- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

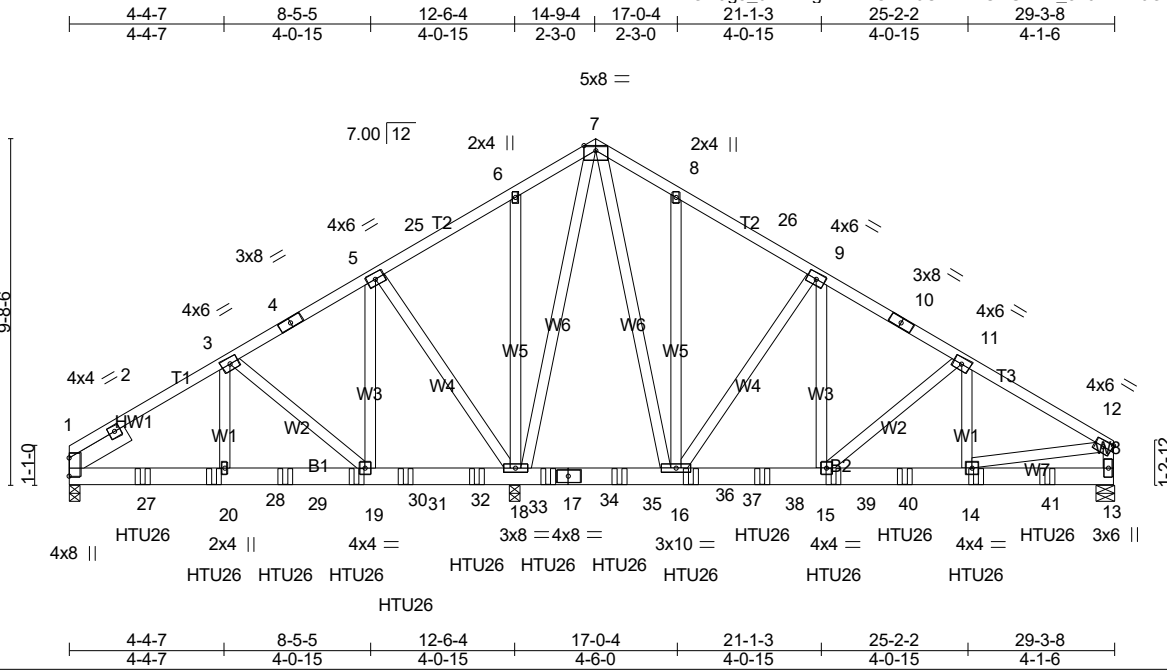


10/30/2024

Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job 24-0270-R01	Truss R13	Truss Type Common Girder	Qty 1	Ply 3	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC Job Reference (optional) # 53757
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Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:15:01 2024 Page 1
ID:kHdPkcON9g3_0lfrDBlgKRzexCS-76CRsABGDU1SN_8h9rzZwf0OdrQDfOgEOYA1efyO6ve



Scale: 3/16"=1'

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.23	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15	BC 0.33	Vert(LL) -0.03 15-16 >999 240		
TCDL 10.0	Rep Stress Incr NO	WB 0.38	Vert(CT) -0.05 15-16 >999 180		
BCLL 0.0 *	Code IRC2021/TPI2014	Matrix-MSH	Horz(CT) 0.01 13 n/a n/a		
BCDL 10.0				Weight: 715 lb	FT = 20%

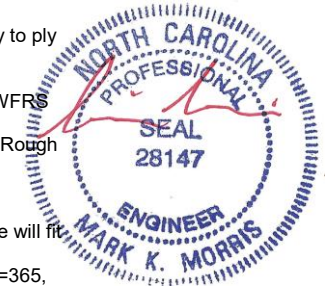
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-18.
WEBS 2x4 SP No.3	
SLIDER Left 2x6 SP No.2 1-11-0	

REACTIONS. (lb/size) 1=1690/0-3-8 (min. 0-1-8), 18=6839/0-3-8 (min. 0-2-11), 13=1964/0-5-8 (min. 0-1-8)
Max Horz 1=209(LC 11)
Max Uplift 1=-365(LC 12), 18=-1226(LC 12), 13=-591(LC 13)
Max Grav 1=1710(LC 18), 18=6839(LC 1), 13=2030(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1027/210, 2-3=-1921/419, 3-4=-606/79, 4-5=-562/91, 5-25=-296/1201, 6-25=-277/1323, 6-7=-242/1247, 7-8=-381/203, 8-26=-312/132, 9-26=-394/120, 9-10=-1497/475, 10-11=-1592/464, 11-12=-2398/703, 12-13=-1710/507
BOT CHORD 1-27=-451/1603, 27-28=-451/1603, 20-28=-451/1603, 20-29=-451/1603, 29-30=-451/1603, 19-30=-451/1603, 19-31=-150/493, 31-32=-150/493, 32-33=-150/493, 18-33=-150/493, 18-34=-398/248, 17-34=-398/248, 17-35=-398/248, 35-36=-398/248, 16-36=-398/248, 16-37=-293/1329, 37-38=-293/1329, 15-38=-293/1329, 15-39=-571/2018, 39-40=-571/2018, 14-40=-571/2018
WEBS 3-20=-384/1391, 3-19=-1430/479, 5-19=-562/2752, 5-18=-2637/620, 6-18=-376/134, 7-18=-3036/675, 7-16=-674/2504, 8-16=-309/126, 9-16=-1802/650, 9-15=-596/1787, 11-15=-903/355, 11-14=-313/797, 12-14=-496/1821

NOTES- (13-16)

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCCL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=365, 18=1226, 13=591.
- Use Simpson Strong-Tie HTU26 (10-16d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 11-4-8 oc max. starting at 2-0-12 from the



10/30/2024

When used on a design, this seal and the name of the engineer shall not be used for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction and BCSI 1-03 Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	R13	Common Girder	1	3	Job Reference (optional) # 53757

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NOTES- (13-16)

- 11) Use Simpson Strong-Tie HTU26 (10-16d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 9-5-4 from the left end to 17-5-4 to connect truss(es) R10 (1 ply 2x4 SP), R09 (1 ply 2x4 SP) to front face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.
- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

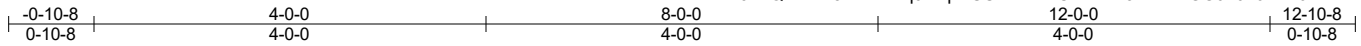
LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-7=-60, 7-12=-60, 13-21=-20
 - Concentrated Loads (lb)
 - Vert: 14=-518(F) 27=-699(F) 28=-699(F) 29=-699(F) 30=-699(F) 31=-867(F) 33=-867(F) 34=-347(F) 35=-347(F) 37=-347(F) 38=-518(F) 39=-518(F) 40=-518(F) 41=-518(F)



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Scale = 1:23.5

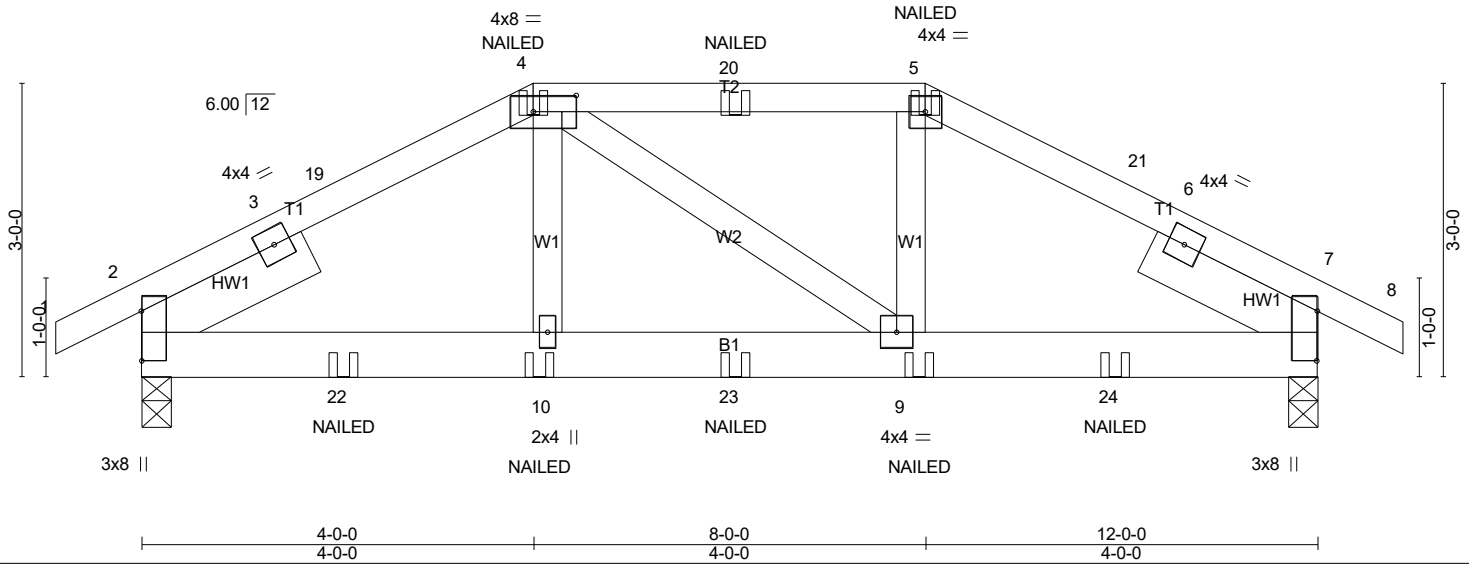


Plate Offsets (X,Y)-- [2:0-6-1,0-0-1], [4:0-5-4,0-2-0], [7:0-6-1,0-0-1]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.60	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.34	Vert(LL) -0.02 9-10 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Vert(CT) -0.04 9-10 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-MSH	Horz(CT) 0.01 7 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 72 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x6 SP No.2 1-11-0, Right 2x6 SP No.2 1-11-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-10-14 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=916/0-3-8 (min. 0-1-8), 7=918/0-3-8 (min. 0-1-8)
 Max Horz2=36(LC 16)
 Max Uplift2=-286(LC 9), 7=-287(LC 8)
 Max Grav2=1074(LC 37), 7=1075(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-364/178, 3-19=-1213/389, 4-19=-1105/377, 4-20=-991/351, 5-20=-991/351, 5-21=-1105/377, 6-21=-1214/389, 6-7=-366/179
 BOT CHORD 2-22=-319/986, 10-22=-319/986, 10-23=-322/992, 9-23=-322/992, 9-24=-301/985, 7-24=-301/985

- NOTES-** (13)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=286, 7=287.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 141 lb down and 53 lb up at 2-0-0, and 141 lb down and 53 lb up at 10-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15



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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	SP01	Hip Girder	1	1	Job Reference (optional) # 53757

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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 5-8=-60, 11-15=-20

Concentrated Loads (lb)

Vert: 4=-94(B) 5=-94(B) 10=-27(B) 9=-27(B) 19=-139(F) 20=-94(B) 21=-139(F) 22=-64(B) 23=-27(B) 24=-64(B)

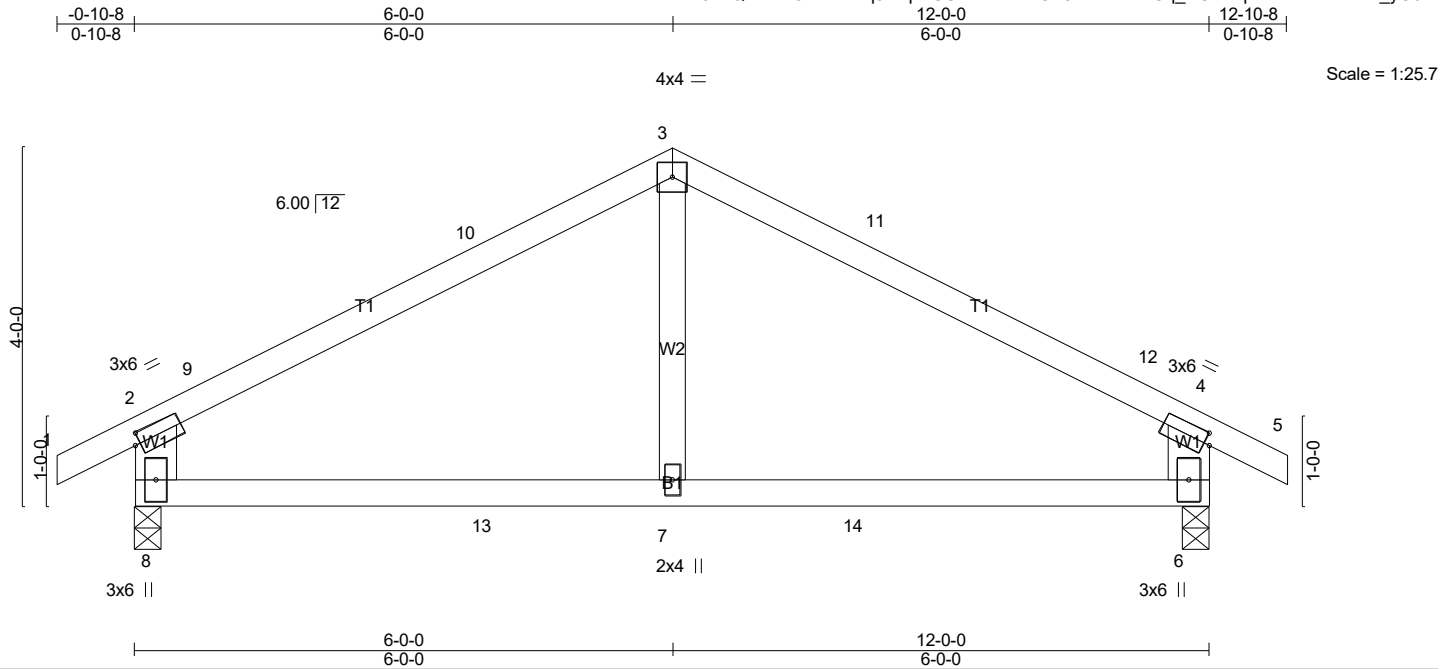


10/30/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	SP02	Common	2	1	# 53757

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Scale = 1:25.7

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.54	Vert(LL) 0.06	6-7	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.37	Vert(CT) -0.06	6-7	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.09	Horz(CT) 0.01	6	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2021/TPI2014						Weight: 49 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x6 SP No.2 *Except*
 W2: 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 8=528/0-3-8 (min. 0-1-8), 6=528/0-3-8 (min. 0-1-8)
 Max Horz 8=63(LC 13)
 Max Uplift 8=-85(LC 11), 6=-85(LC 10)
 Max Grav 8=612(LC 21), 6=612(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-9=-568/596, 9-10=-496/596, 3-10=-424/619, 3-11=-424/618, 11-12=-496/595,
 4-12=-568/595, 2-8=-551/483, 4-6=-551/481
 BOT CHORD 8-13=-381/393, 7-13=-381/393, 7-14=-381/393, 6-14=-381/393
 WEBS 3-7=-330/220

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 8-0-14, Corner(3E) 8-0-14 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

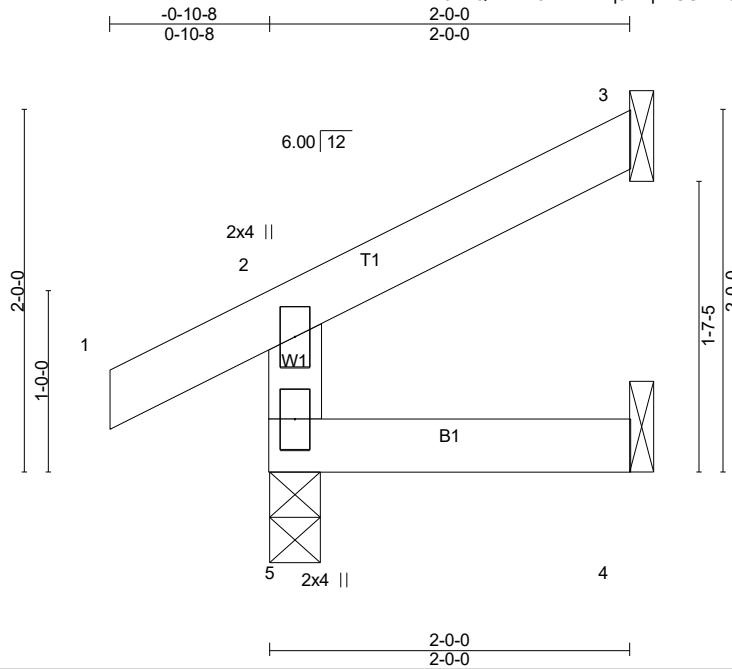


10/30/2024

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Job 24-0270-R01	Truss SPJ01	Truss Type Jack-Open	Qty 2	Ply 1	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC Job Reference (optional) # 53757
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Scale = 1:12.7

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.07	Vert(LL) 0.00 5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 4-5 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MR	Horz(CT) -0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 9 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=152/0-3-8 (min. 0-1-8), 3=41/Mechanical, 4=16/Mechanical
Max Horz 5=41(LC 11)
Max Uplift 5=15(LC 14), 3=31(LC 14), 4=13(LC 11)
Max Grav 5=208(LC 21), 3=57(LC 21), 4=34(LC 7)

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

NOTES- (9)

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.

LOAD CASE(S) Standard

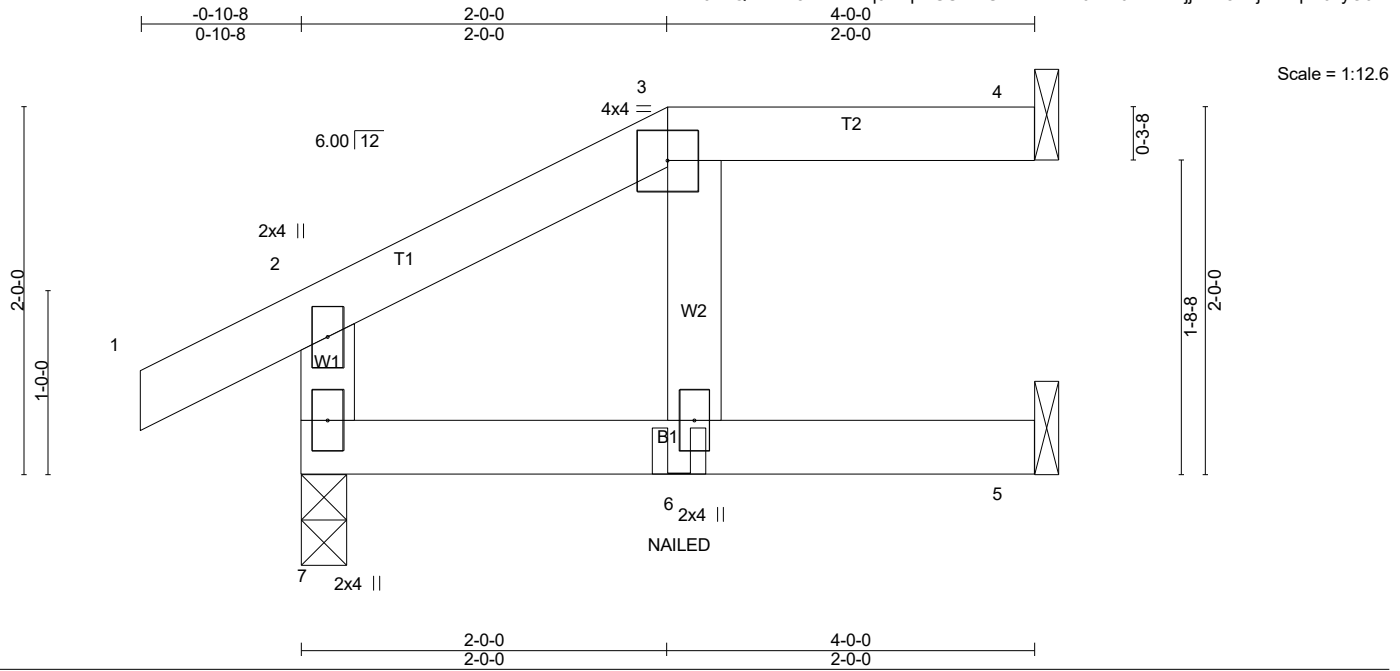


10/30/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	SPJ02	Half Hip Girder	2	1	# 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:15:06 2024 Page 1
 ID:97bQtTowZ8dTULxBq9ksq7zUUzD-U4?KwtFP20fkT10fxPZkdjJFDs8okjXzYquoJsyO6vZ



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.24	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15	BC 0.30	Vert(LL) -0.02 6 >999 240		
TCDL 10.0	Rep Stress Incr NO	WB 0.02	Vert(CT) -0.03 6 >999 180		
BCLL 0.0 *	Code IRC2021/TPI2014	Matrix-MP	Horz(CT) 0.03 4 n/a n/a		
BCDL 10.0				Weight: 17 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

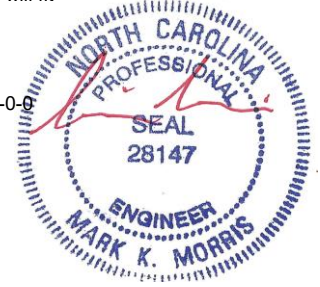
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=96/Mechanical, 7=250/0-3-0 (min. 0-1-8), 5=75/Mechanical
 Max Horz 7=42(LC 9)
 Max Uplift 4=-41(LC 9), 7=-51(LC 9), 5=-33(LC 9)
 Max Grav 4=139(LC 33), 7=343(LC 34), 5=84(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-7=-265/45

- NOTES-** (14)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 7, 5.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 22 lb up at 2-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-7=-20
 Concentrated Loads (lb)
 Vert: 3=-57(F) 6=0(F)

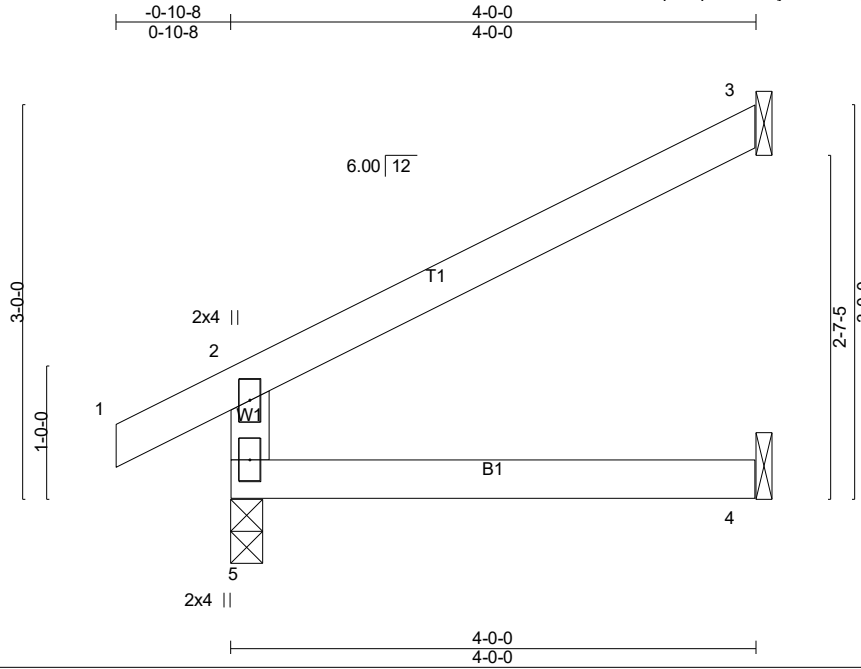


10/30/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	SPJ03	Jack-Open	3	1	Job Reference (optional) # 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:15:07 2024 Page 1
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Scale = 1:17.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) 0.04 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) 0.03 4-5 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MR	Horz(CT) -0.03 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 15 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

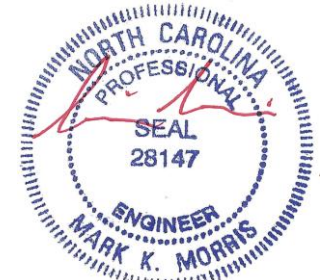
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=221/0-3-0 (min. 0-1-8), 3=101/Mechanical, 4=43/Mechanical
 Max Horz 5=71(LC 14)
 Max Uplift 5=-20(LC 11), 3=-60(LC 14), 4=-19(LC 11)
 Max Grav 5=322(LC 21), 3=154(LC 21), 4=72(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-293/121

- NOTES-** (9)
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.

LOAD CASE(S) Standard

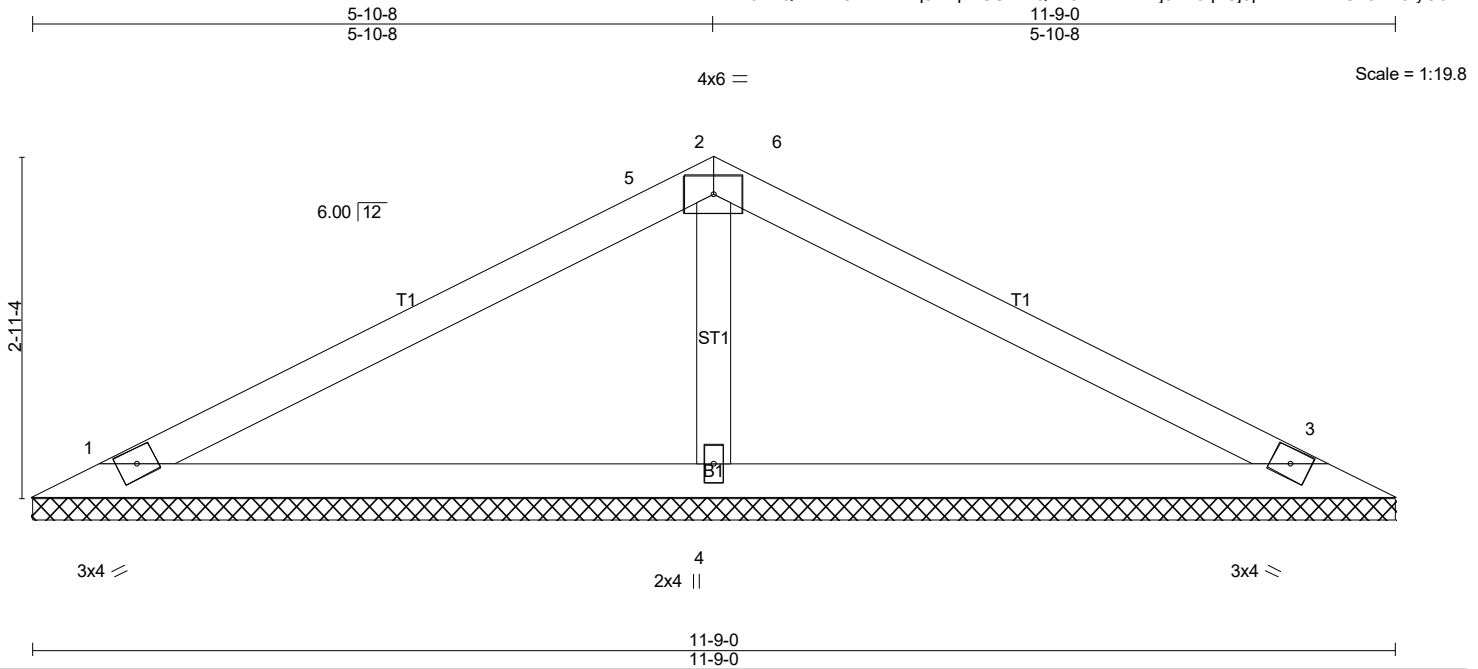


10/30/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	VS01	Valley	1	1	# 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:15:08 2024 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.62	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 39 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

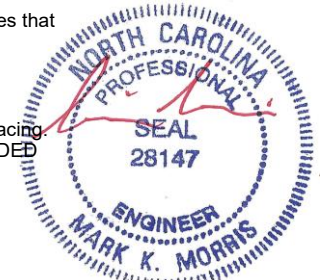
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=191/11-9-0 (min. 0-1-8), 3=191/11-9-0 (min. 0-1-8), 4=459/11-9-0 (min. 0-1-8)
 Max Horz 1=39(LC 14)
 Max Uplift 1=38(LC 14), 3=45(LC 15), 4=27(LC 14)
 Max Grav 1=279(LC 20), 3=279(LC 21), 4=473(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-4=-319/164

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCCL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-7 to 5-5-0, Exterior(2R) 5-5-0 to 6-4-0, Exterior(2E) 6-4-0 to 11-1-9 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



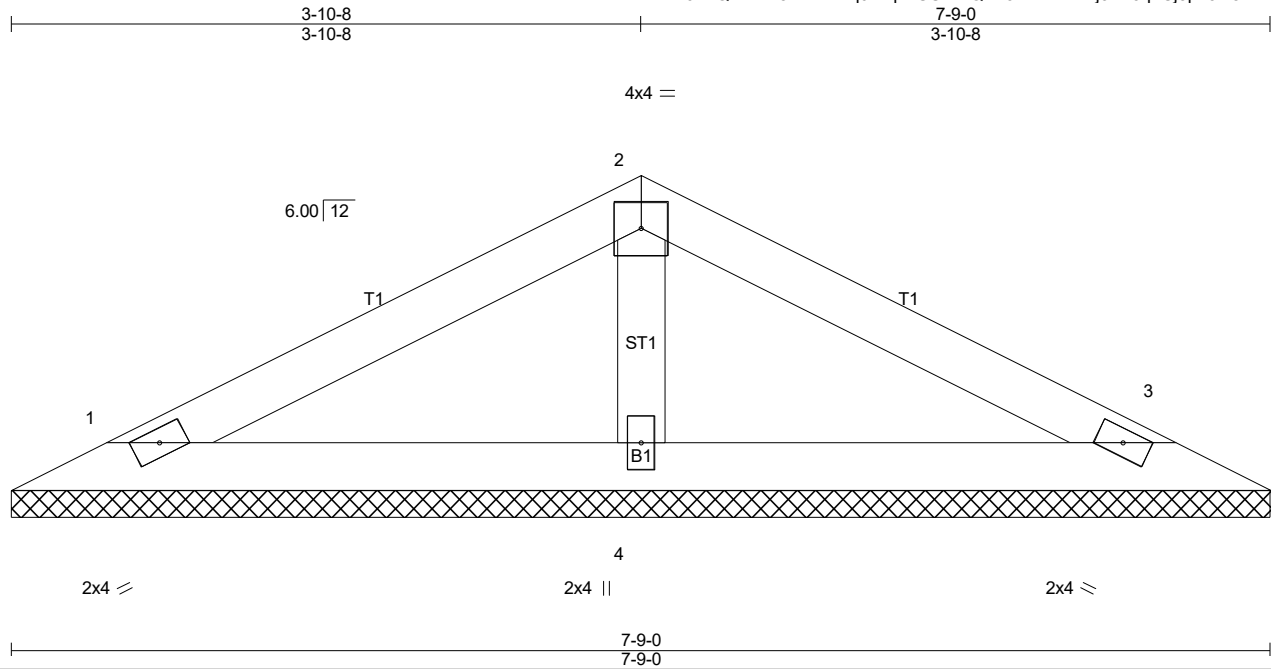
LOAD CASE(S) Standard

10/30/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	VS02	Valley	1	1	# 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:15:08 2024 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 24 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

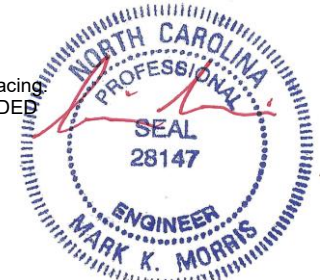
REACTIONS. (lb/size) 1=132/7-9-0 (min. 0-1-8), 3=132/7-9-0 (min. 0-1-8), 4=258/7-9-0 (min. 0-1-8)
 Max Horz 1=24(LC 18)
 Max Uplift 1=-29(LC 14), 3=-34(LC 15), 4=-5(LC 14)
 Max Grav 1=176(LC 20), 3=176(LC 21), 4=258(LC 1)

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

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCCL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

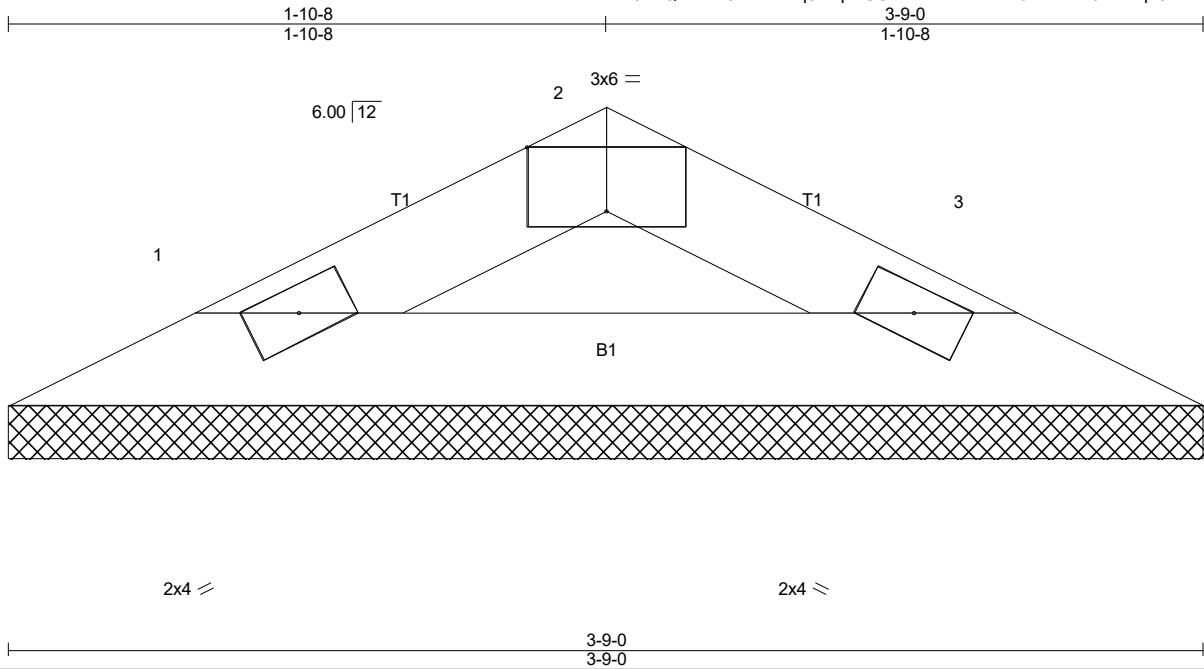


10/30/2024

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Job 24-0270-R01	Truss VS03	Truss Type Valley	Qty 1	Ply 1	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC	# 53757
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Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:15:09 2024 Page 1
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Scale = 1:7.2

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.03	Vert(LL)	n/a	(loc)	-	l/defl	n/a	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a		-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P									
BCDL	10.0											Weight: 10 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

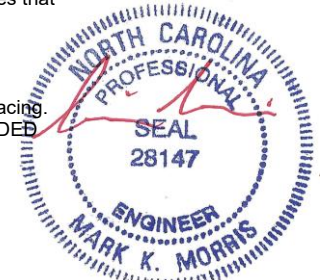
REACTIONS. (lb/size) 1=101/3-9-0 (min. 0-1-8), 3=101/3-9-0 (min. 0-1-8)
Max Horz 1=9(LC 14)
Max Uplift 1=12(LC 14), 3=12(LC 15)
Max Grav 1=108(LC 20), 3=108(LC 21)

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

NOTES- (9-12)

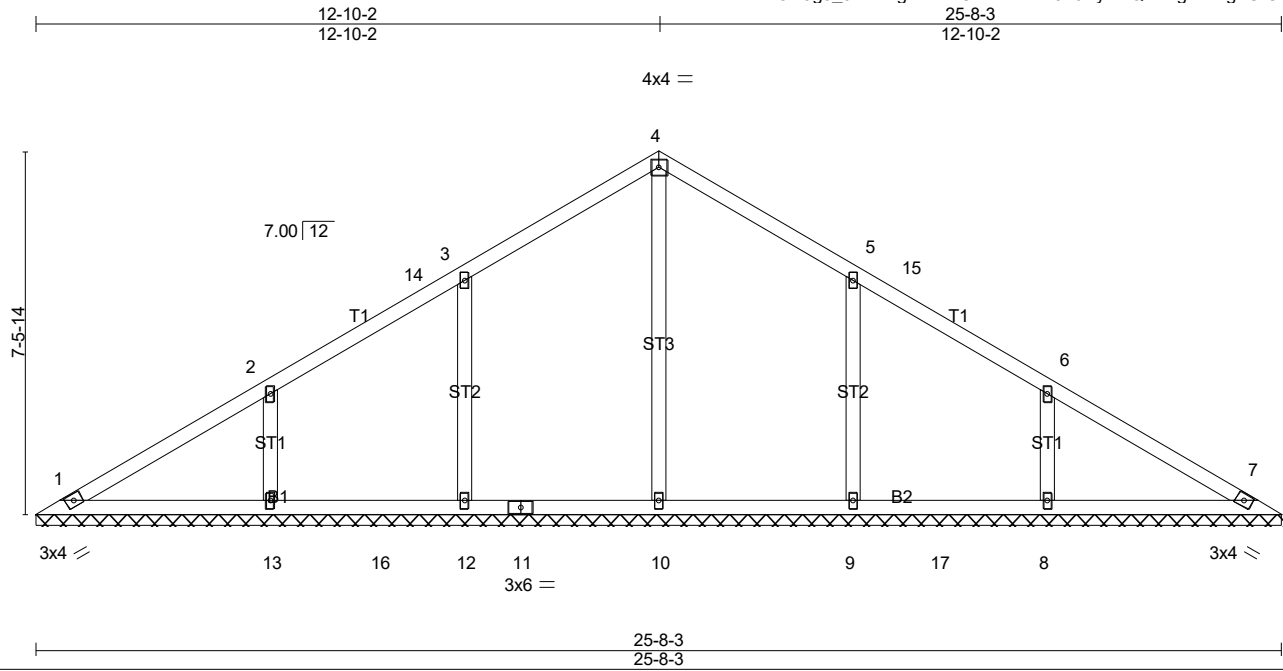
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard



10/30/2024

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.39	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.21	Vert(CT) n/a - n/a 999		
BCDL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 7 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014				Weight: 111 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3

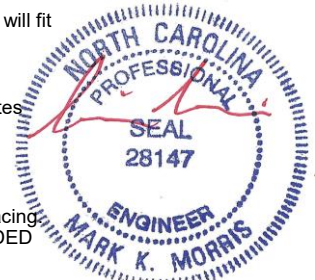
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 25-8-3.
(lb) - Max Horz 1=-158(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=-110(LC 14), 13=-122(LC 14), 9=-109(LC 15), 8=-122(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=456(LC 26), 12=523(LC 5), 13=395(LC 23), 9=523(LC 6), 8=395(LC 24)

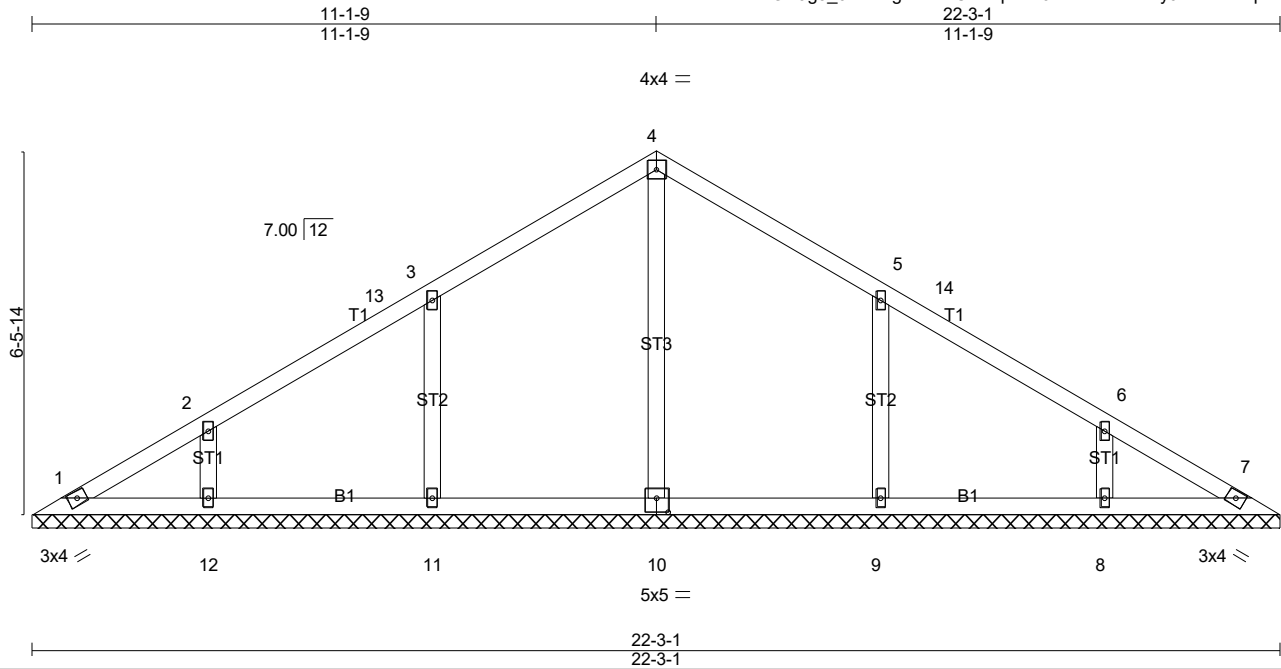
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-362/152, 2-13=-278/155, 5-9=-362/152, 6-8=-278/155

- NOTES-** (10-13)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 8-0-8, Exterior(2R) 8-0-8 to 17-7-11, Interior(1) 17-7-11 to 20-4-2, Exterior(2E) 20-4-2 to 25-1-12 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) All plates are 2x4 MT20 unless otherwise indicated.
 - 6) Gable requires continuous bottom chord bearing.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 12=110, 13=122, 9=109, 8=122.
 - 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



10/30/2024

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LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.29	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf)	20.0	Plate Grip DOL	1.15	BC	0.43	Vert(LL)	n/a	-	n/a		
TCDL	10.0	Lumber DOL	1.15	WB	0.15	Vert(CT)	n/a	-	n/a		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-SH		Horz(CT)	0.00	7	n/a		
BCDL	10.0	Code IRC2021/TPI2014								Weight: 93 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

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.

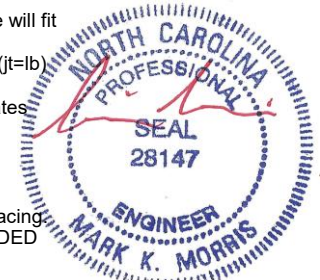
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 22-3-1.
 (lb) - Max Horz 1=-136(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 8 except 11=-118(LC 14), 9=-118(LC 15)
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=457(LC 23), 11=474(LC 5), 12=289(LC 1), 9=474(LC 6), 8=289(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-11=-378/159, 5-9=-378/159

NOTES- (10-13)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 6-3-15, Exterior(2R) 6-3-15 to 15-11-2, Interior(1) 15-11-2 to 16-11-0, Exterior(2E) 16-11-0 to 21-8-10 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 8 except (jt=lb) 11=118, 9=118.
- 10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



10/30/2024

LOADING CASE(S) Standard parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

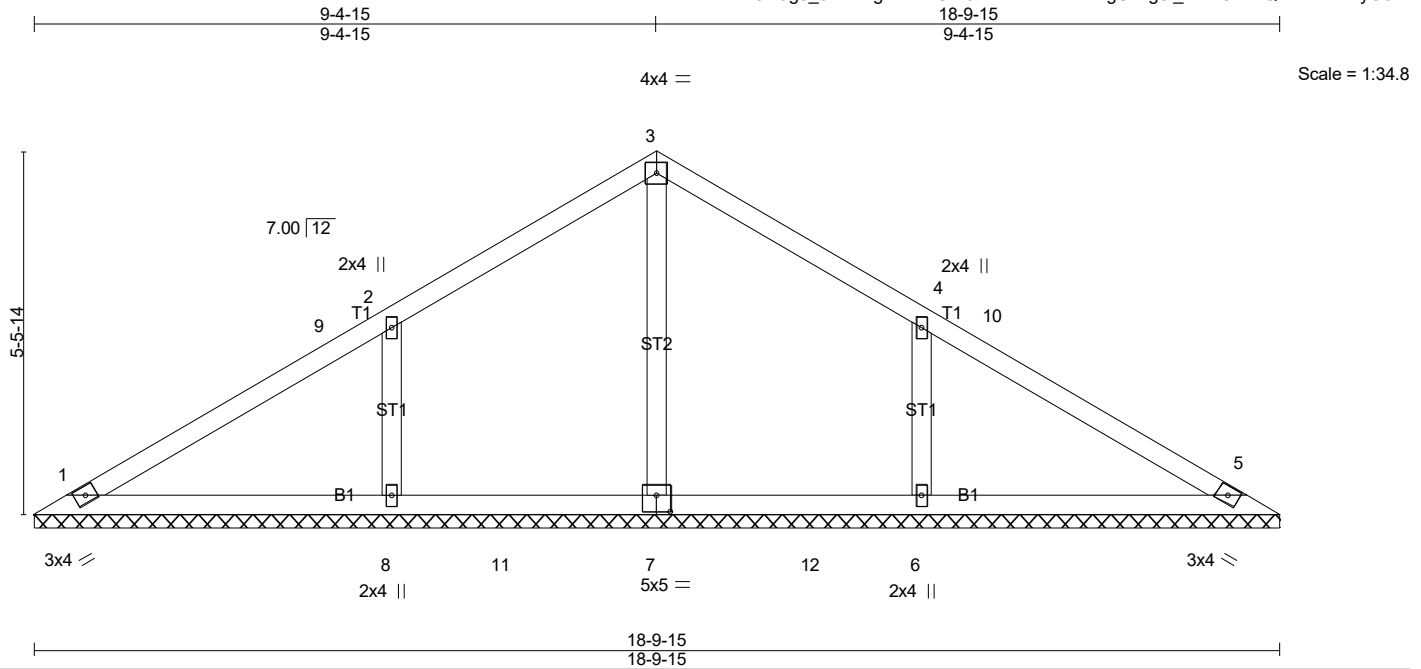


Plate Offsets (X,Y)-- [7:0-2-8,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.37	Vert(LL) n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.31	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr YES		WB 0.10	Horz(CT) 0.00	5	n/a	n/a		
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-SH						
BCDL 10.0								Weight: 74 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

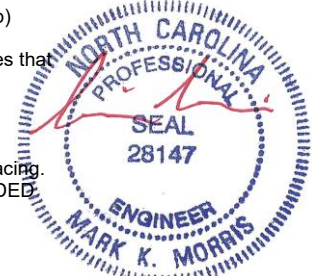
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 18-9-15.
 (lb) - Max Horz 1=-114(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-145(LC 14), 6=-145(LC 15)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=384(LC 6), 8=542(LC 20), 6=542(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-423/180, 4-6=-423/180

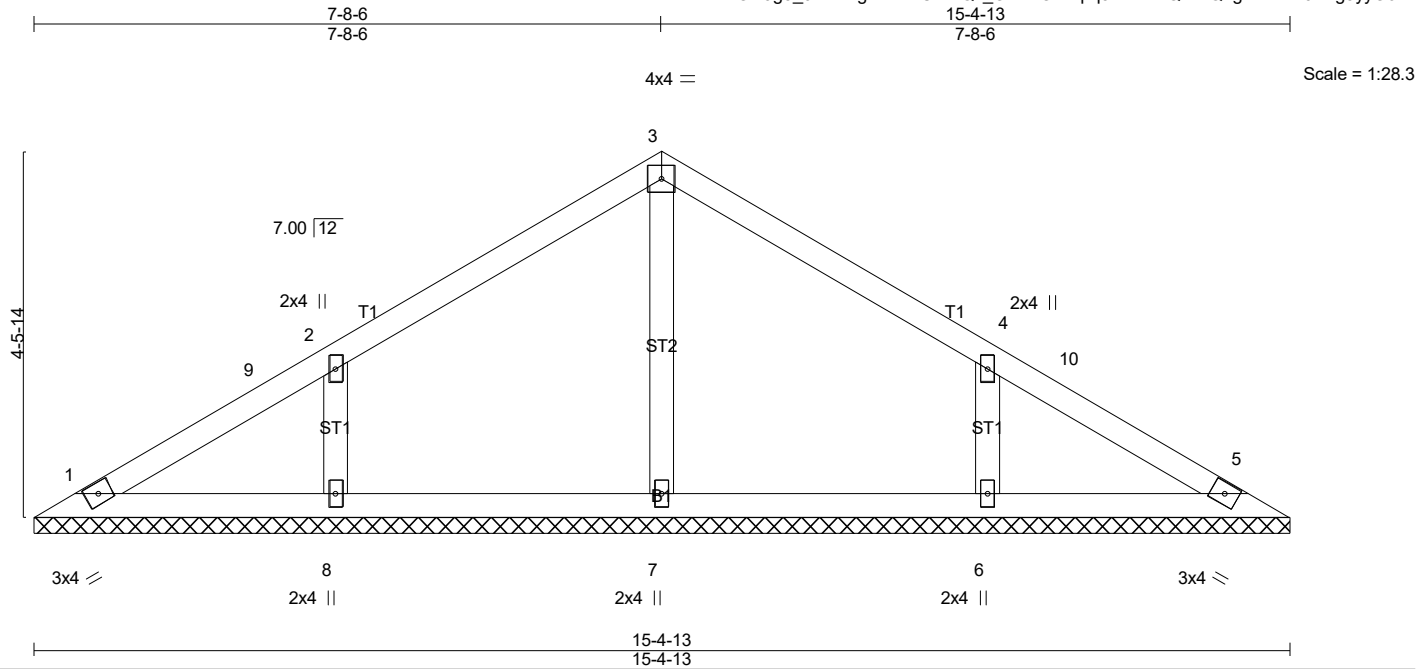
- NOTES-** (9-12)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-15, Exterior(2R) 5-4-15 to 13-4-15, Exterior(2E) 13-4-15 to 18-3-7 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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) 1, 5 except (jt=lb) 8=145, 6=145.
 - 9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
 - 12) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



LOAD CASE(S) Standard

10/30/2024

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0 1.15	TC	0.28	Vert(LL)	n/a - n/a	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a - n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00 5 n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH					
BCDL	10.0							Weight: 58 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3

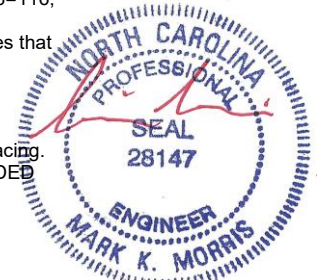
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 15-4-13.
(lb) - Max Horz 1=92(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-116(LC 14), 6=-116(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=284(LC 20), 8=451(LC 20), 6=451(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-370/149, 4-6=-370/149

- NOTES-** (9-12)
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 10-0-11, Exterior(2E) 10-0-11 to 14-10-5 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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) 1 except (jt=lb) 8=116, 6=116.
 - 9) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
 - 10) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
 - 11) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
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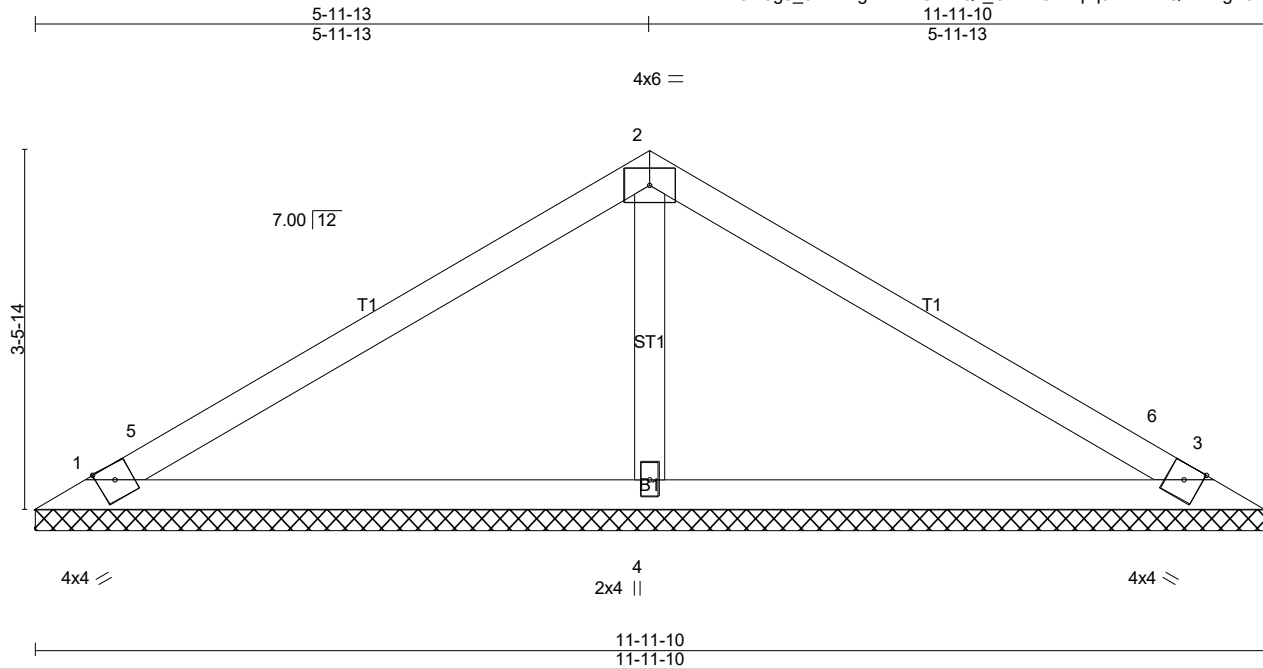
LOAD CASE(S) Standard

10/30/2024

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Job 24-0270-R01	Truss VT05	Truss Type Valley	Qty 1	Ply 1	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
					Job Reference (optional) # 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:15:13 2024 Page 1
ID:kHdPkcON9g3_0lfrDBlgKRzexCS-nQx_OHL0AXlppq3?sNBNQBWLlgRJTK?9P4g3yyO6vS



Scale = 1:22.4

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 41 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

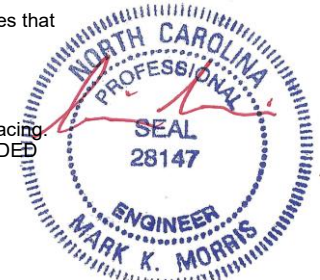
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=202/11-11-10 (min. 0-1-8), 3=202/11-11-10 (min. 0-1-8), 4=468/11-11-10 (min. 0-1-8)
Max Horz 1=-70(LC 12)
Max Uplift 1=-36(LC 14), 3=-46(LC 15), 4=-30(LC 14)
Max Grav 1=276(LC 20), 3=276(LC 21), 4=488(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-305/93

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 6-7-9, Exterior(2E) 6-7-9 to 11-5-3 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



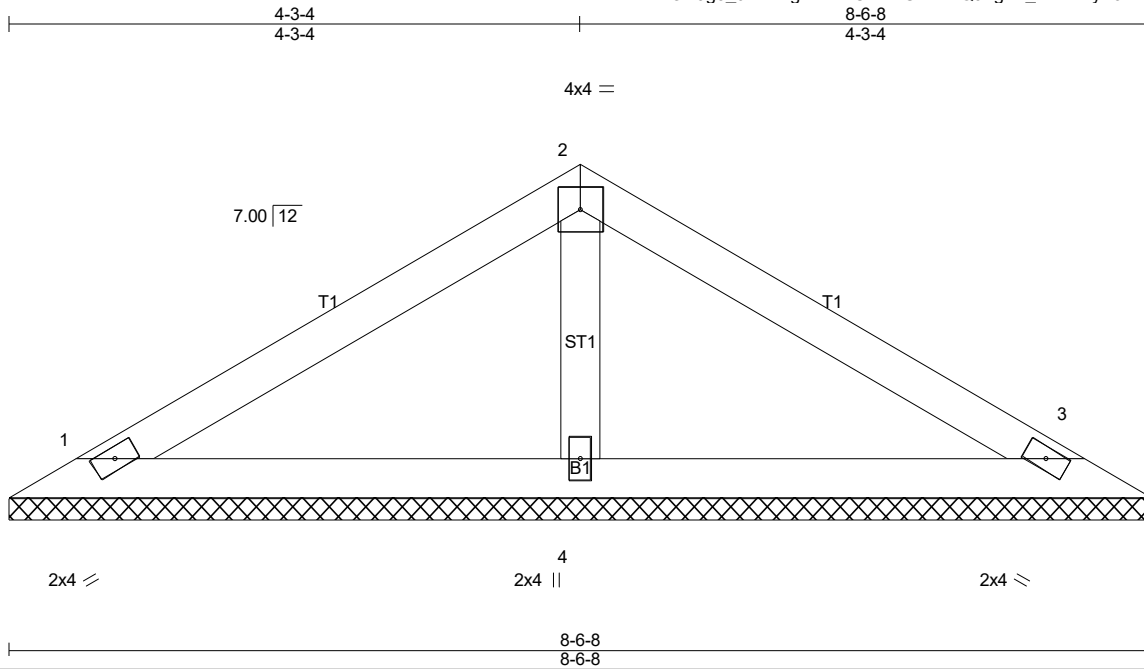
LOAD CASE(S) Standard

10/30/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC
24-0270-R01	VT06	Valley	1	1	# 53757

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:15:14 2024 Page 1
 ID:kHdPkC0N9g3_0lfrDBlgKRzcxCS-FcUMbcLQ9TgcR_eBP4icyP3Zh4ugCL99N3qDcPyO6vR



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 28 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD
 BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
 Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

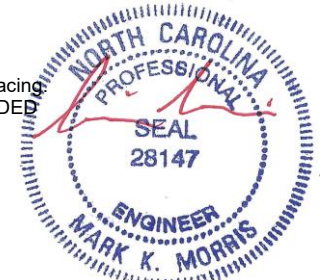
REACTIONS. (lb/size) 1=156/8-6-8 (min. 0-1-8), 3=156/8-6-8 (min. 0-1-8), 4=286/8-6-8 (min. 0-1-8)
 Max Horz 1=48(LC 13)
 Max Uplift1=-34(LC 14), 3=-41(LC 15), 4=-2(LC 14)
 Max Grav 1=215(LC 20), 3=215(LC 21), 4=291(LC 20)

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

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

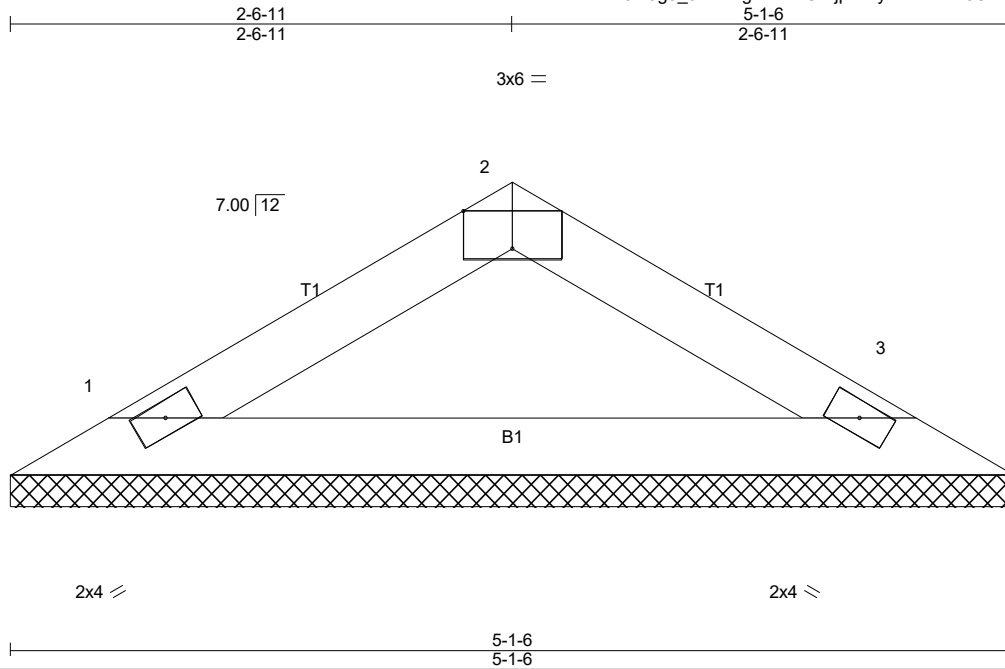


10/30/2024

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Job 24-0270-R01	Truss VT07	Truss Type Valley	Qty 1	Ply 1	LOT 90 PROVIDENCE CREEK 83 DAVINHALL DRIVE FUQUAY-VARINA, NC	# 53757
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Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Oct 30 21:15:15 2024 Page 1
ID:kHdPkON9g3_0lfrDBlgKRzexCS-jp2koyM2wnoT28CNzoDrVcbpDUCGxo3lciZn8ryO6vQ



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP	
TCLL (roof)	20.0	2-0-0	Plate Grip DOL	1.15	TC	0.10	in	(loc)	l/defl	L/d	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(LL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P		Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0										Weight: 15 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

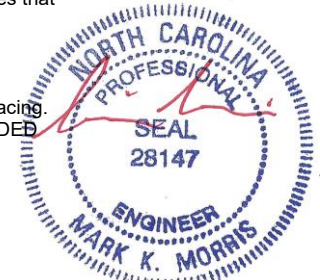
REACTIONS. (lb/size) 1=161/5-1-6 (min. 0-1-8), 3=161/5-1-6 (min. 0-1-8)
Max Horz 1=-26(LC 12)
Max Uplift 1=-19(LC 14), 3=-19(LC 15)
Max Grav 1=182(LC 20), 3=182(LC 21)

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

NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
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LOAD CASE(S) Standard



10/30/2024

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