

Mark Morris, P.E.

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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 #: 46470

JOB: 24-1221-R01

JOB NAME: LOT 0.0092 BLAKE POND

Wind Code: 37

Wind Speed: Vult= 120mph

Exposure Category: B

Mean Roof Height (feet): 23

These truss designs comply with IRC 2015 as well as IRC 2018.

24 Truss Design(s)

Trusses:

R01, R02, R03, R04, R04A, R05, R06, R07, R08, R09, R10, R11, R12, R13, R14, VT01, VT02, VT03, VT04, VT05, VT06, VT07, VT08, VT09



3/13/2024

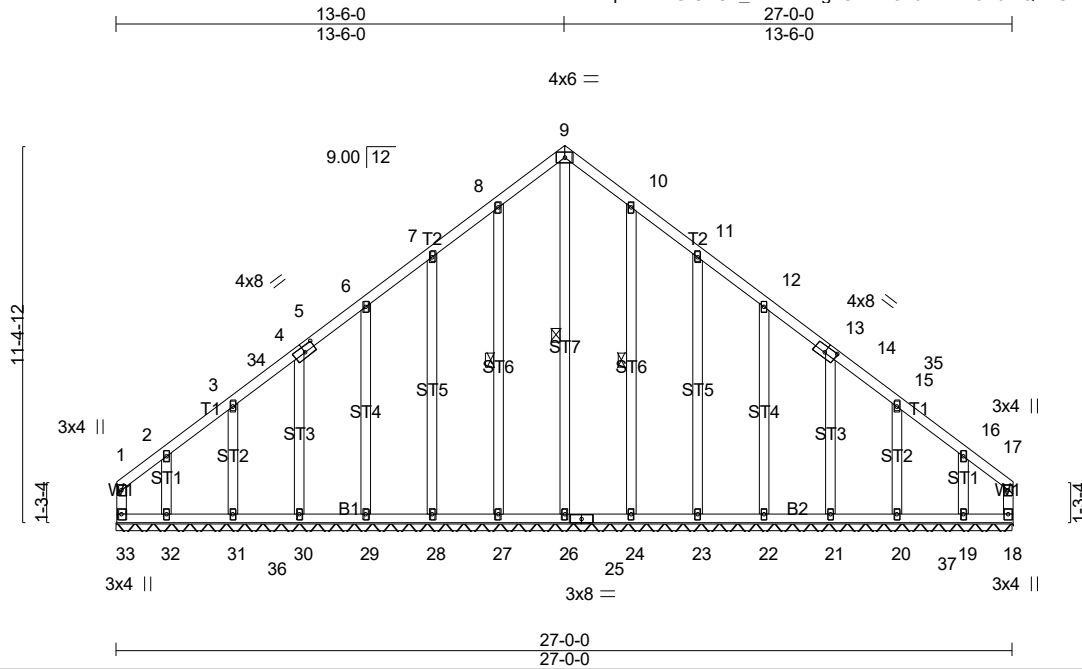
Mark Morris

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*

Job 24-1221-R01	Truss R01	Truss Type Common Supported Gable	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:14:45 2024 Page 1
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Scale = 1:69.4

Plate Offsets (X,Y)-- [5:0-4-0,0-2-4], [13:0-4-0,0-2-4]

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 0.18	Vert(LL) n/a	-	n/a	999	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.18	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr YES		WB 0.18	Horz(CT) 0.00	18	n/a	n/a		
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-R						
BCDL 10.0								Weight: 209 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 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-26, 8-27, 10-24

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

REACTIONS. All bearings 27-0-0.
(lb) - Max Horz 33=196(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 27, 28, 29, 30, 31, 24, 23, 22, 21, 20
except 33=151(LC 10), 18=121(LC 11), 32=165(LC 12), 19=153(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 33, 18, 31, 32, 20, 19 except
26=322(LC 22), 27=263(LC 19), 28=255(LC 19), 29=254(LC 19), 30=263(LC 19),
24=262(LC 20), 23=256(LC 20), 22=254(LC 20), 21=262(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=-177/290, 9-10=-177/290
WEBS 9-26=-290/134

- NOTES-** (12-15)
- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 4-11-6, Exterior(2N) 4-11-6 to 8-8-6, Corner(3R) 8-8-6 to 18-3-10, Exterior(2N) 18-3-10 to 22-0-10, Corner(3E) 22-0-10 to 26-10-4 zone; 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
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 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) 27, 28, 29, 30, 31, 24, 23, 22, 21, 20 except (jt=lb) 33=151, 18=121, 32=165, 19=153.



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Continued on page 2 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 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R01	Common Supported Gable	1	1	Job Reference (optional) # 46470

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- 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

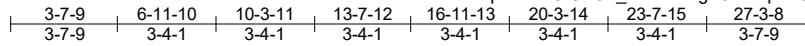


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Job 24-1221-R01	Truss R02	Truss Type Common Girder	Qty 1	Ply 2	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC	# 46470
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10x12 MT20HS

Scale = 1:78.6

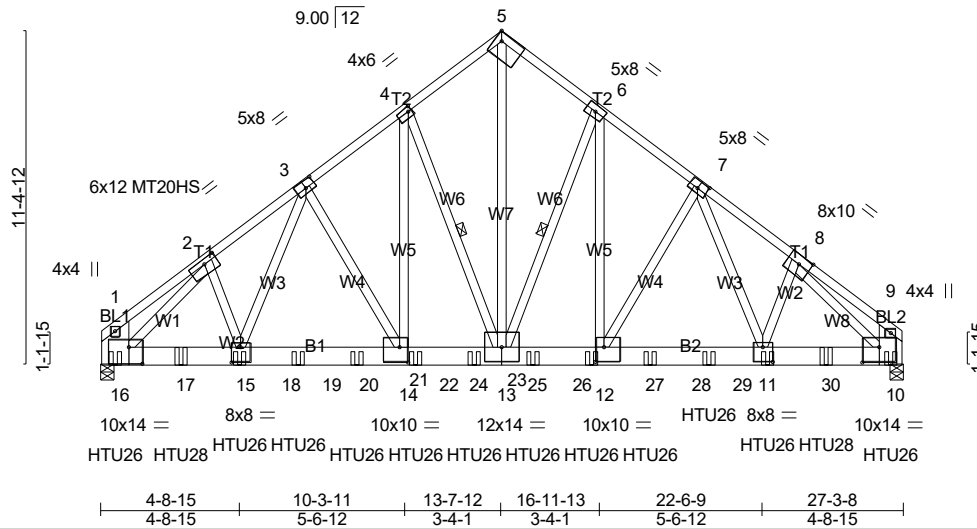


Plate Offsets (X,Y)-- [2:0-5-4,0-2-0], [3:0-4-0,0-3-0], [4:0-1-4,0-1-12], [5:Edge,0-3-8], [7:0-4-0,0-3-0], [8:0-4-12,Edge], [10:0-7-0,0-6-4], [11:0-4-0,0-6-0], [12:0-3-8,0-6-0], [14:0-3-8,0-6-4], [15:0-3-12,0-6-4], [16:0-5-8,0-6-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.93	in (loc) l/defl L/d	MT20	244/190
Snow (PF) 20.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) -0.22 14-15 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 1.00	Vert(CT) -0.42 14-15 >755 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.08 10 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 530 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2 *Except*
 T1: 2x4 SP No.1
 BOT CHORD 2x8 SP DSS
 WEBS 2x4 SP No.3 *Except*
 W7: 2x4 SP No.1, W5,W1,W8: 2x4 SP No.2
 OTHERS 2x12 SP No.2 *Except*
 BL2: 2x10 SP 2400F 2.0E

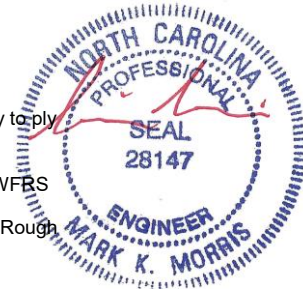
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 6-13, 4-13

REACTIONS. (lb/size) 16=13792/0-5-4 (min. 0-3-7), 10=13527/0-5-4 (min. 0-2-0)
 Max Horz 16=-194(LC 6)
 Max Uplift 16=-884(LC 10), 10=-1048(LC 11)
 Max Grav 16=14786(LC 3), 10=13533(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3622/260, 2-3=-14796/979, 3-4=-12744/905, 4-5=-10329/835, 5-6=-10329/835,
 6-7=-12298/968, 7-8=-13918/1132, 8-9=-3573/314, 1-16=-2325/185, 9-10=-2296/219
 BOT CHORD 16-17=-784/11061, 15-17=-784/11061, 15-18=-747/10959, 18-19=-747/10959,
 19-20=-747/10959, 20-21=-747/10959, 14-21=-747/10959, 14-22=-653/10129,
 22-23=-653/10129, 23-24=-653/10129, 13-24=-653/10129, 13-25=-658/9772,
 25-26=-658/9772, 12-26=-658/9772, 12-27=-740/10426, 27-28=-740/10426,
 28-29=-740/10426, 11-29=-740/10426, 11-30=-773/10480, 10-30=-773/10480
 WEBS 5-13=-930/12056, 6-13=-4447/518, 6-12=-498/5287, 7-12=-1525/250, 7-11=-261/2310,
 8-11=-180/2044, 4-13=-5066/380, 4-14=-332/6076, 3-14=-1654/187, 3-15=-146/2584,
 2-15=-162/2397, 2-16=-12189/729, 8-10=-11233/829

NOTES- (15-18)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 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; TC DL=5.0psf; BC DL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; 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
- All plates are MT20 plates 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 between the bottom chord and any other members, with BC DL = 10.0psf.



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Continued on Page 2 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 24-1221-R01	Truss R02	Truss Type Common Girder	Qty 1	Ply 2	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:14:48 2024 Page 2
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NOTES- (15-18)

- 9) Bearing at joint(s) 16, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=884, 10=1048.
- 11) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 4-2-14 oc max. starting at 0-5-10 from the left end to 12-8-8 to connect truss(es) R04 (1 ply 2x4 SP) to back face of bottom chord.
- 12) Use Simpson Strong-Tie HTU28 (26-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 22-0-0 oc max. starting at 2-8-8 from the left end to 24-8-8 to connect truss(es) R04 (1 ply 2x4 SP), R05 (1 ply 2x4 SP) to back face of bottom chord.
- 13) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 4-2-6 oc max. starting at 14-8-8 from the left end to 26-10-14 to connect truss(es) R04A (1 ply 2x4 SP), R05 (1 ply 2x4 SP), R04A (1 ply 2x4 SP) to back face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-60, 5-9=-60, 10-16=-20

Concentrated Loads (lb)

Vert: 12=-1757(B) 11=-1757(B) 15=-1843(B) 16=-1846(B) 10=-1761(B) 17=-1843(B) 19=-1843(B) 21=-1843(B) 22=-1843(B) 24=-1843(B) 25=-1757(B) 27=-1757(B) 29=-1757(B) 30=-1757(B)



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Job 24-1221-R01	Truss R03	Truss Type Common Supported Gable	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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Scale = 1:77.0

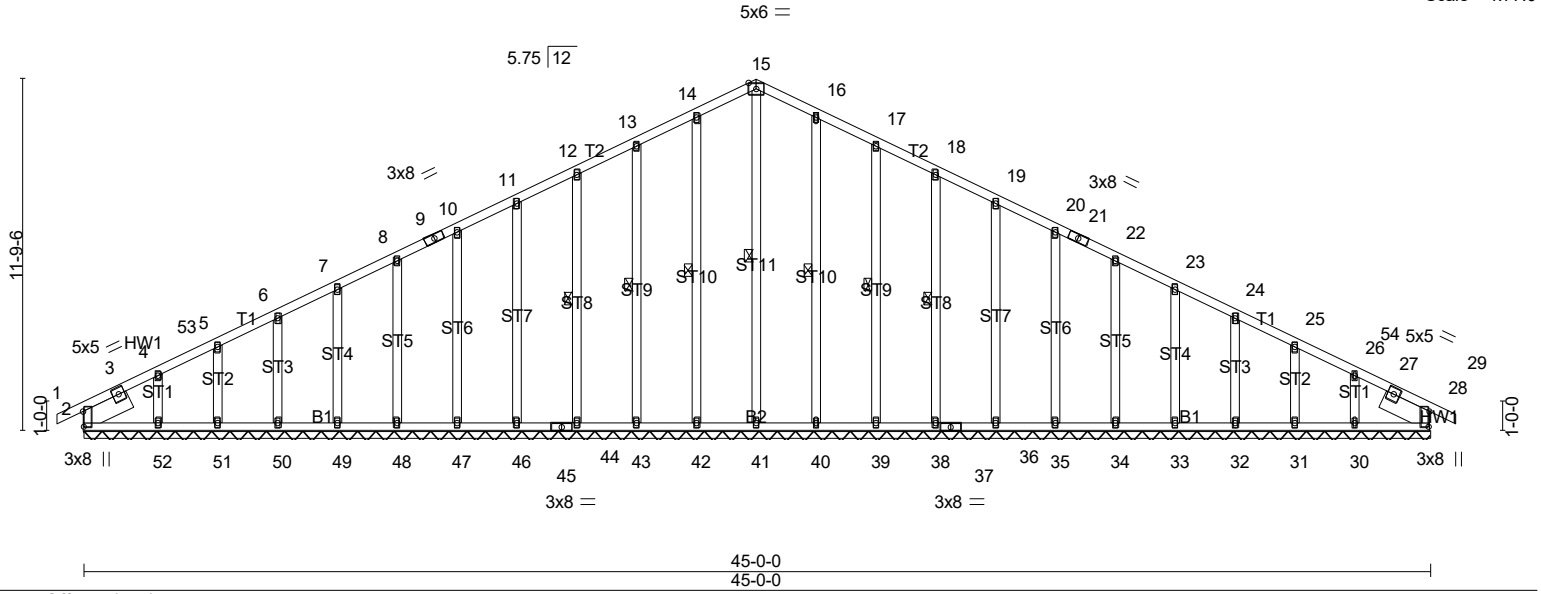


Plate Offsets (X,Y)-- [2:0-6-2,0-0-5], [28:0-6-2,0-0-5]

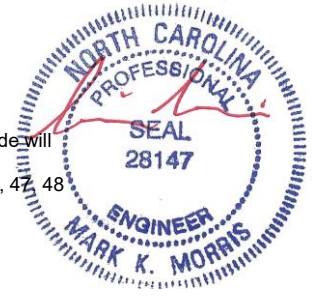
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.09	Vert(LL) -0.00	28	n/r	180	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT) -0.00	28	n/r	80		
TCDL 10.0	Lumber DOL 1.15	WB 0.14	Horz(CT) 0.01	28	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2021/TPI2014							
							Weight: 349 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	WEBS 1 Row at midpt
SLIDER Left 2x8 SP No.2 -° 1-9-0, Right 2x8 SP No.2 -° 1-9-0	

REACTIONS. All bearings 45-0-0.
 (lb) - Max Horz 2=148(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 42, 43, 44, 46, 47, 48, 49, 50, 51, 40, 39, 38, 36, 35, 34, 33, 32, 31, 30, 2 except 52=-110(LC 14)
 Max Grav All reactions 250 lb or less at joint(s) 28, 46, 47, 48, 49, 50, 51, 52, 36, 35, 34, 33, 32, 31, 30, 2 except 41=279(LC 27), 42=293(LC 5), 43=286(LC 5), 44=258(LC 5), 40=293(LC 6), 39=286(LC 6), 38=258(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 13-14=-131/260, 14-15=-146/291, 15-16=-146/291, 16-17=-131/260

- NOTES-** (13-16)
- 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=23ft; 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 17-8-6, Corner(3R) 17-8-6 to 27-3-10, Exterior(2N) 27-3-10 to 41-0-14, Corner(3E) 41-0-14 to 45-10-8 zone;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.
 - 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) 42, 43, 44, 46, 47, 48, 49, 50, 51, 40, 39, 38, 36, 35, 34, 33, 32, 31, 30, 2 except (jt=lb) 52=110.



3/13/2024

Continued on Page 2 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 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R03	Common Supported Gable	1	1	Job Reference (optional) # 46470

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:14:50 2024 Page 2
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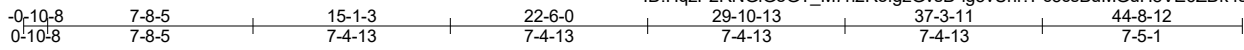
- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the 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 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



3/13/2024

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Scale = 1:86.3

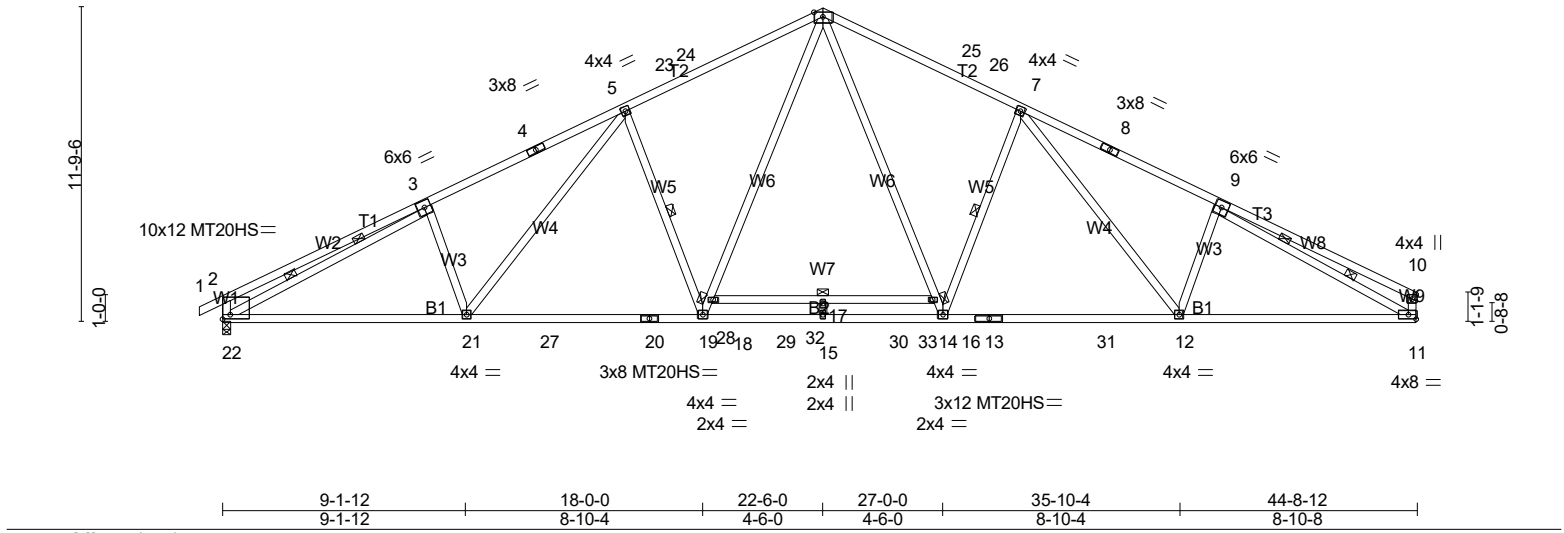


Plate Offsets (X,Y)-- [2:Edge,0-2-0]																																																									
LOADING (psf)	<table border="0"> <tr><td>TCLL (roof)</td><td>20.0</td><td>2-0-0</td></tr> <tr><td>Snow (Pf)</td><td>20.0</td><td>Plate Grip DOL 1.15</td></tr> <tr><td>TCDL</td><td>10.0</td><td>Lumber DOL 1.15</td></tr> <tr><td>BCLL</td><td>0.0 *</td><td>Rep Stress Incr YES</td></tr> <tr><td>BCDL</td><td>10.0</td><td>Code IRC2021/TPI2014</td></tr> </table>	TCLL (roof)	20.0	2-0-0	Snow (Pf)	20.0	Plate Grip DOL 1.15	TCDL	10.0	Lumber DOL 1.15	BCLL	0.0 *	Rep Stress Incr YES	BCDL	10.0	Code IRC2021/TPI2014	<table border="0"> <tr><td>CSI.</td><td></td></tr> <tr><td>TC</td><td>0.92</td></tr> <tr><td>BC</td><td>0.80</td></tr> <tr><td>WB</td><td>0.83</td></tr> <tr><td>Matrix</td><td>SH</td></tr> </table>	CSI.		TC	0.92	BC	0.80	WB	0.83	Matrix	SH	<table border="0"> <tr><td>DEFL.</td><td>in</td><td>(loc)</td><td>l/defl</td><td>L/d</td></tr> <tr><td>Vert(LL)</td><td>-0.49</td><td>17</td><td>>999</td><td>240</td></tr> <tr><td>Vert(CT)</td><td>-0.83</td><td>17</td><td>>645</td><td>180</td></tr> <tr><td>Horz(CT)</td><td>0.18</td><td>11</td><td>n/a</td><td>n/a</td></tr> </table>	DEFL.	in	(loc)	l/defl	L/d	Vert(LL)	-0.49	17	>999	240	Vert(CT)	-0.83	17	>645	180	Horz(CT)	0.18	11	n/a	n/a	<table border="0"> <tr><td>PLATES</td><td>GRIP</td></tr> <tr><td>MT20</td><td>244/190</td></tr> <tr><td>MT20HS</td><td>187/143</td></tr> <tr><td colspan="2" style="text-align: right;">Weight: 283 lb FT = 20%</td></tr> </table>	PLATES	GRIP	MT20	244/190	MT20HS	187/143	Weight: 283 lb FT = 20%	
TCLL (roof)	20.0	2-0-0																																																							
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LUMBER-	<table border="0"> <tr><td>TOP CHORD</td><td>2x4 SP SS *Except* T1,T3: 2x4 SP No.2</td></tr> <tr><td>BOT CHORD</td><td>2x4 SP No.1 *Except* B2: 2x4 SP SS, B3: 2x4 SP No.2</td></tr> <tr><td>WEBS</td><td>2x4 SP No.3 *Except* W1,W2,W8: 2x4 SP No.2</td></tr> </table>	TOP CHORD	2x4 SP SS *Except* T1,T3: 2x4 SP No.2	BOT CHORD	2x4 SP No.1 *Except* B2: 2x4 SP SS, B3: 2x4 SP No.2	WEBS	2x4 SP No.3 *Except* W1,W2,W8: 2x4 SP No.2	BRACING-	<table border="0"> <tr><td>TOP CHORD</td><td>Structural wood sheathing directly applied, except end verticals.</td></tr> <tr><td>BOT CHORD</td><td>Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 16-18</td></tr> <tr><td>WEBS</td><td>1 Row at midpt 5-19, 7-14 2 Rows at 1/3 pts 3-22, 9-11</td></tr> </table>	TOP CHORD	Structural wood sheathing directly applied, except end verticals.	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 16-18	WEBS	1 Row at midpt 5-19, 7-14 2 Rows at 1/3 pts 3-22, 9-11
TOP CHORD	2x4 SP SS *Except* T1,T3: 2x4 SP No.2														
BOT CHORD	2x4 SP No.1 *Except* B2: 2x4 SP SS, B3: 2x4 SP No.2														
WEBS	2x4 SP No.3 *Except* W1,W2,W8: 2x4 SP No.2														
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WEBS	1 Row at midpt 5-19, 7-14 2 Rows at 1/3 pts 3-22, 9-11														

REACTIONS. (lb/size) 22=1924/0-3-8 (min. 0-2-8), 11=1863/Mechanical
 Max Horz 22=156(LC 14)
 Max Uplift 22=116(LC 14), 11=97(LC 15)
 Max Grav 22=2124(LC 3), 11=2075(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-714/179, 3-4=-3556/208, 4-5=-3411/237, 5-23=-3119/231, 23-24=-3062/239,
 6-24=-3031/259, 6-25=-3012/259, 25-26=-3044/238, 7-26=-3100/230, 7-8=-3340/236,
 8-9=-3485/207, 9-10=-449/103, 2-22=-566/161, 10-11=-364/103
 BOT CHORD 21-22=-228/3161, 21-27=-103/2917, 20-27=-103/2917, 20-28=-103/2917, 19-28=-103/2917,
 19-29=0/2371, 15-29=0/2371, 15-30=0/2371, 14-30=0/2371, 13-14=-57/2888,
 13-31=-57/2888, 12-31=-57/2888, 11-12=-114/3079
 WEBS 5-21=-107/471, 5-19=-719/249, 18-19=-137/1168, 6-18=-108/1312, 6-16=-106/1273,
 14-16=-135/1129, 7-14=-698/248, 7-12=-106/424, 3-22=-3060/66, 9-11=-3247/115

- NOTES-** (11-14)
- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 17-8-6, Exterior(2R) 17-8-6 to 27-3-10, Interior(1) 27-3-10 to 39-9-6, Exterior(2E) 39-9-6 to 44-7-0 zone; 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) 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.
 - 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) 11 except (jt=lb) 22=116.



3/13/2024

Continued on Page 2 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 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R04	Common	7	1	Job Reference (optional) # 46470

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:14:51 2024 Page 2
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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



3/13/2024

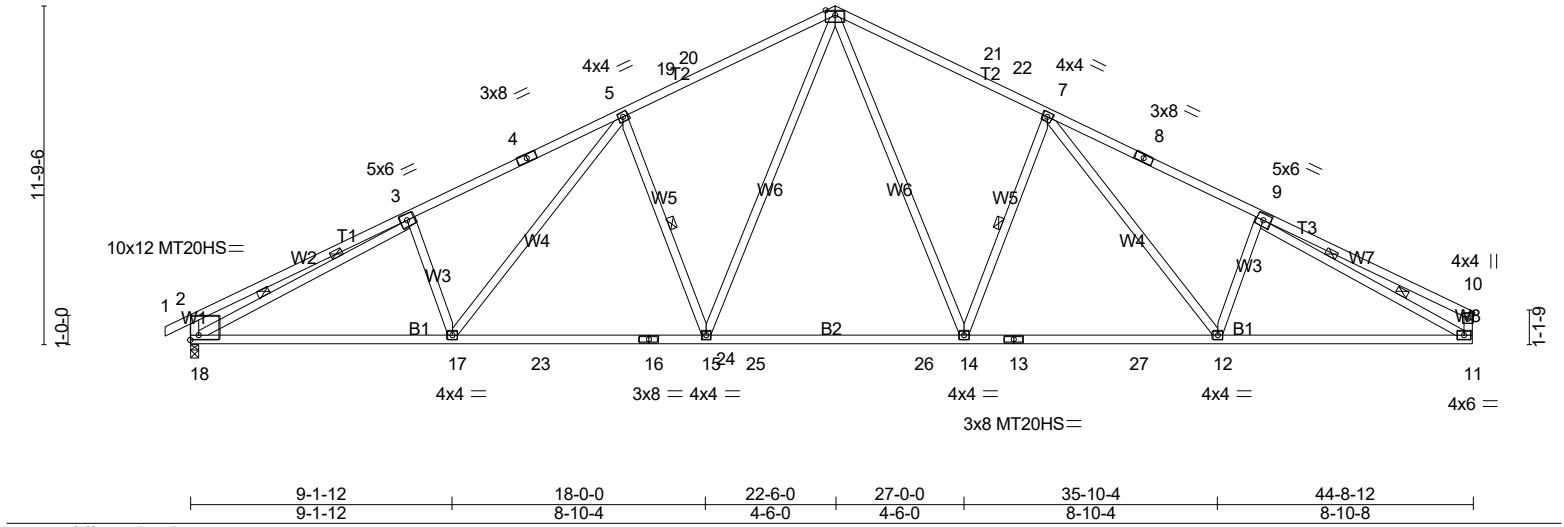
Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – 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 24-1221-R01	Truss R04A	Truss Type Common	Qty 2	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC	# 46470
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:14:51 2024 Page 1
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Scale = 1:80.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	2-0-0	Plate Grip DOL	1.15	TC	0.79	in (loc)	l/defl	L/d	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.75	Vert(LL)	-0.37 15-17	>999	240	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Vert(CT)	-0.59 15-17	>911	180		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH		Horz(CT)	0.16 11	n/a	n/a		
BCDL	10.0										Weight: 270 lb FT = 20%

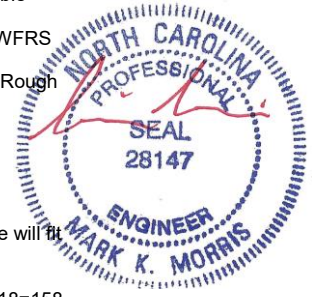
LUMBER-		BRACING-	
TOP CHORD	2x4 SP SS *Except* T1, T3: 2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.1 *Except* B2: 2x4 SP SS	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3 *Except* W1: 2x4 SP No.2	WEBS	1 Row at midpt 5-15, 7-14 2 Rows at 1/3 pts 3-18, 9-11

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

REACTIONS. (lb/size) 18=1839/0-3-8 (min. 0-2-4), 11=1777/Mechanical
 Max Horz 18=156(LC 14)
 Max Uplift 18=-158(LC 14), 11=-140(LC 15)
 Max Grav 18=1933(LC 3), 11=1882(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-711/187, 3-4=-3188/290, 4-5=-3043/319, 5-19=-2701/323, 19-20=-2645/331,
 6-20=-2613/352, 6-21=-2596/351, 21-22=-2627/330, 7-22=-2683/322, 7-8=-2979/317,
 8-9=-3124/288, 9-10=-446/109, 2-18=-565/165, 10-11=-363/106
 BOT CHORD 17-18=-300/2839, 17-23=-185/2550, 16-23=-185/2550, 16-24=-185/2550, 15-24=-185/2550,
 15-25=-56/1973, 25-26=-56/1973, 14-26=-56/1973, 13-14=-138/2523, 13-27=-138/2523,
 12-27=-138/2523, 11-12=-184/2765
 WEBS 5-17=-94/496, 5-15=-730/244, 6-15=-151/1116, 6-14=-149/1080, 7-14=-711/241,
 7-12=-92/452, 3-18=-2710/140, 9-11=-2896/191

- NOTES-** (11-14)
- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 17-8-6, Exterior(2R) 17-8-6 to 27-3-10, Interior(1) 27-3-10 to 39-9-6, Exterior(2E) 39-9-6 to 44-7-0 zone; 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.
 - All plates are MT20 plates 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 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 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) except (jt=lb) 18=158, 11=140.



3/13/2024

Continued on page 2. 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 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R04A	Common	2	1	Job Reference (optional) # 46470

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:14:51 2024 Page 2
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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.
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LOAD CASE(S) Standard



3/13/2024

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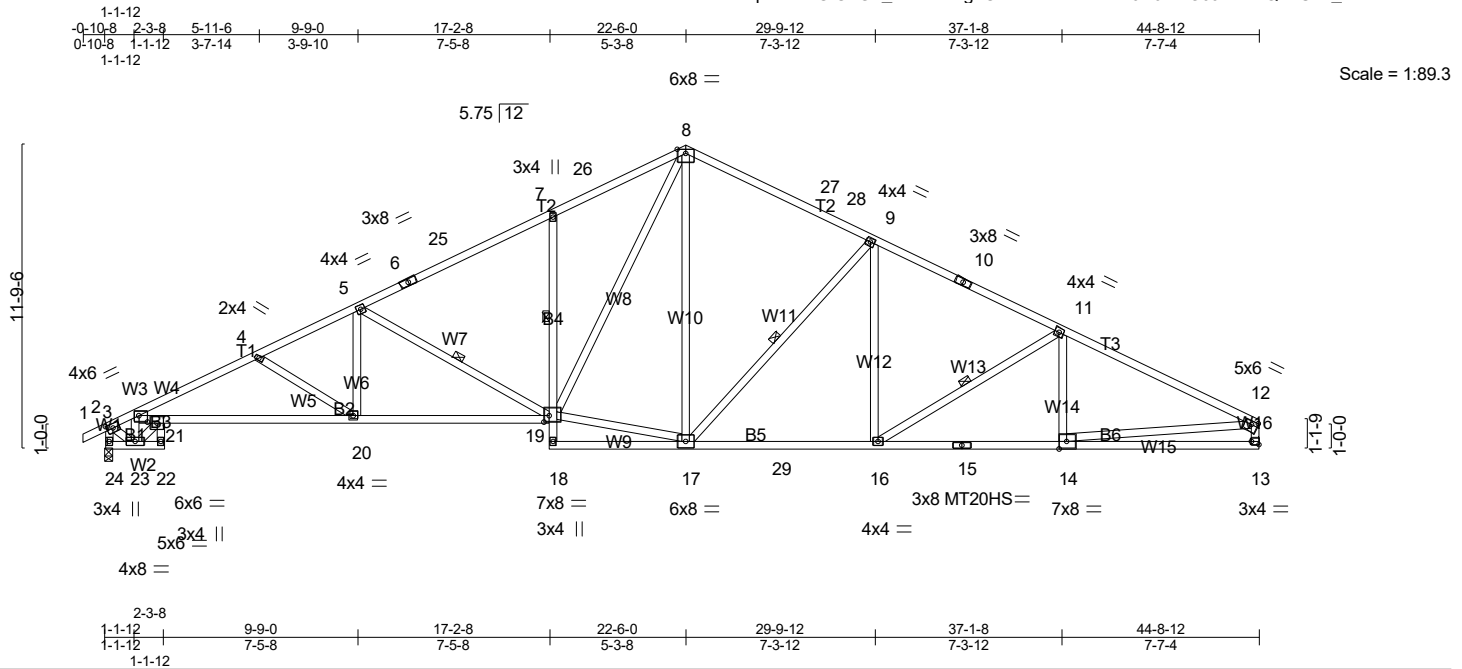


Plate Offsets (X,Y)-- [2:0-2-15,0-2-0], [3:0-4-0,0-3-0], [12:0-2-12,0-1-12], [13:Edge,0-1-8], [14:0-3-8,Edge], [19:0-2-8,0-3-0]

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 0.93	Vert(LL) -0.30	20-21	>999	240	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.92	Vert(CT) -0.68	20-21	>786	180	MT20HS	187/143
TCDL 10.0	Rep Stress Incr YES		WB 0.94	Horz(CT) 0.35	13	n/a	n/a		
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-SH						
BCDL 10.0								Weight: 286 lb	FT = 20%

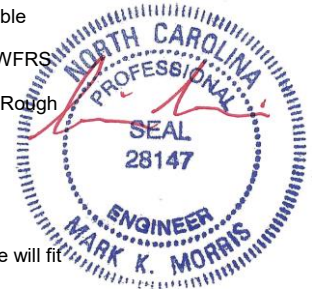
LUMBER-	TOP CHORD	BOT CHORD	WEBS	BRACING-	TOP CHORD	BOT CHORD	WEBS
	2x4 SP SS *Except* T3: 2x4 SP No.1	2x4 SP No.2 *Except* B3,B4: 2x4 SP No.3, B2: 2x4 SP SS	2x4 SP No.3		Structural wood sheathing directly applied, except end verticals.	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-11-14 oc bracing: 20-21 2-2-0 oc bracing: 16-17. 1 Row at midpt 7-19	1 Row at midpt 5-19, 9-17, 11-16

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

REACTIONS. (lb/size) 24=1839/0-3-8 (min. 0-2-3), 13=1777/Mechanical
Max Horz 24=156(LC 14)
Max Uplift 24=-158(LC 14), 13=-140(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1414/123, 3-4=-3910/375, 4-5=-3557/320, 5-6=-2721/296, 6-25=-2627/319,
7-25=-2524/321, 7-26=-2688/388, 8-26=-2679/410, 8-27=-1925/315, 27-28=-1966/294,
9-28=-2031/287, 9-10=-2413/299, 10-11=-2584/270, 11-12=-2914/254, 2-24=-1730/165,
12-13=-1701/173
BOT CHORD 3-21=-231/2595, 20-21=-432/3529, 19-20=-318/3160, 7-19=-538/194, 17-29=-129/2246,
16-29=-129/2246, 15-16=-174/2546, 14-15=-174/2546, 13-14=-49/290
WEBS 4-20=-438/135, 5-20=-5/570, 5-19=-911/189, 17-19=-28/1664, 8-19=-259/1518,
8-17=-100/524, 9-17=-850/198, 9-16=0/450, 11-16=-401/131, 3-23=-1805/270,
2-23=-104/1164, 21-23=-256/1307, 12-14=-144/2276

- NOTES-** (11-14)
- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 17-8-6, Exterior(2R) 17-8-6 to 27-3-10, Interior(1) 27-3-10 to 39-9-6, Exterior(2E) 39-9-6 to 44-7-0 zone; 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.
 - All plates are MT20 plates 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 between the bottom chord and any other members, with BCDL = 10.0psf.
 - 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) except (jt=lb) 24=158



3/13/2024

Continued on page 2 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 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R05	Roof Special	5	1	Job Reference (optional) # 46470

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:14:52 2024 Page 2
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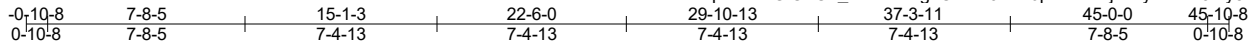
- 11) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 12) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the 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



3/13/2024

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 = 1:89.4

Plate Offsets (X,Y)--	[2:0-2-8,0-1-12], [6:0-1-11,0-1-8], [10:0-3-0,0-1-12]
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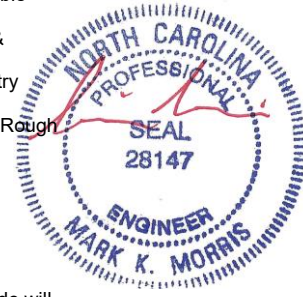
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15		TC 0.83	Vert(LL) -0.17 33-34	>958	240		MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.67	Vert(CT) -0.35 33-34	>469	180			
TCDL 10.0	Rep Stress Incr YES		WB 0.37	Horz(CT) 0.01 28	n/a	n/a			
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-SH						
BCDL 10.0								Weight: 442 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 *Except* T1: 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 33-34,15-16,14-15,13-14,12-13.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-22, 7-22, 7-16, 6-28, 5-28, 3-34
OTHERS 2x4 SP No.3	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 31-6-0 except (jt=length) 34=0-3-8, 32=0-3-8.
 (lb) - Max Horz 34=148(LC 18)
 Max Uplift All uplift 100 lb or less at joint(s) 34, 12, 32 except 22=-136(LC 15), 16=-197(LC 15), 28=-264(LC 14)
 Max Grav All reactions 250 lb or less at joint(s) 25, 26, 27, 29, 31, 24, 23, 21, 19, 18, 17, 15, 14, 13, 32 except 22=648(LC 22), 16=492(LC 22), 28=1222(LC 21), 34=661(LC 21), 12=371(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-539/167, 3-4=-575/111, 4-5=-402/140, 64-65=0/269, 6-65=0/390, 6-66=-24/279, 9-10=-413/199, 2-34=-478/156, 10-12=-421/169
 BOT CHORD 33-34=-132/563
 WEBS 7-22=-466/192, 9-16=-425/199, 6-28=-470/35, 5-28=-827/255, 5-33=-120/661, 3-33=-390/196

- NOTES-** (12-15)
- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 17-8-6, Exterior(2R) 17-8-6 to 27-3-10, Interior(1) 27-3-10 to 41-0-14, Exterior(2E) 41-0-14 to 45-10-8 zone; 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.



3/13/2024

Continued on Page 2 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 24-1221-R01	Truss R06	Truss Type Common Structural Gable	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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NOTES- (12-15)

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 34, 12, 32 except (jt=lb) 22=136, 16=197, 28=264.
- 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

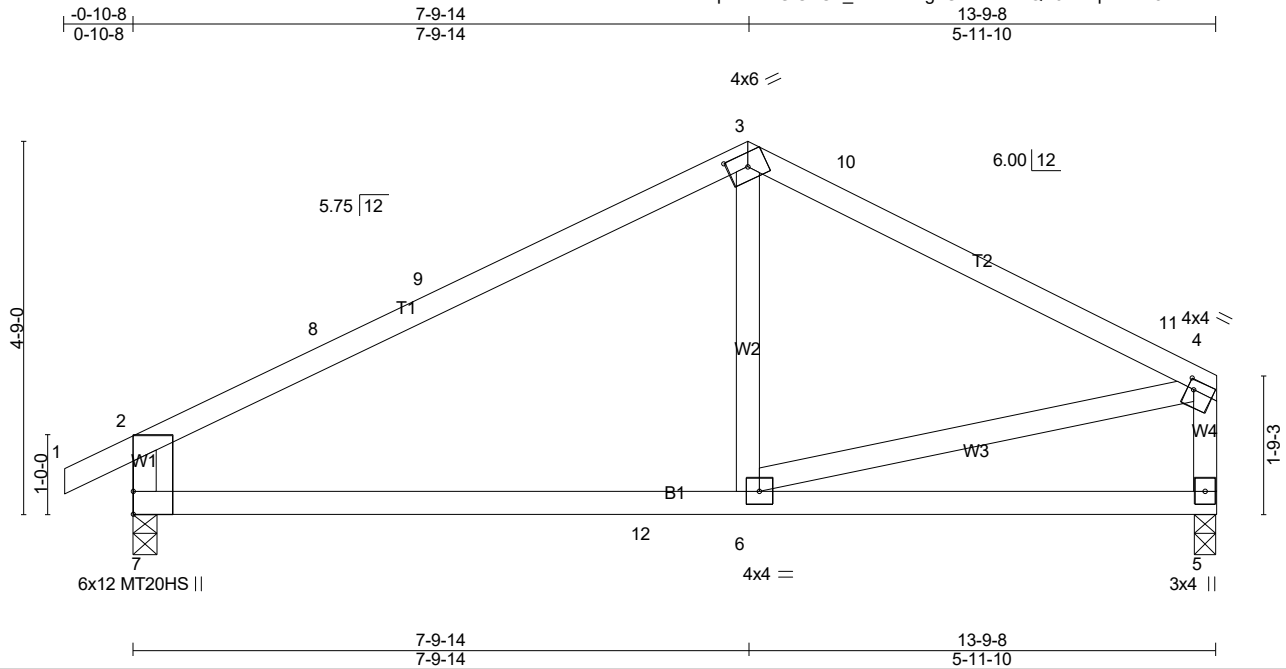


3/13/2024

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Job 24-1221-R01	Truss R07	Truss Type Roof Special	Qty 9	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC	# 46470
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Scale = 1:29.3

Plate Offsets (X,Y)-- [3:0-3-2,0-2-0], [4:0-1-0,0-1-8]

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 0.80	Vert(LL) -0.08	6-7	>999	240	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15		BC 0.47	Vert(CT) -0.16	6-7	>995	180	MT20HS	187/143
TCDL 10.0	Rep Stress Incr YES		WB 0.20	Horz(CT) 0.01	5	n/a	n/a		
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-SH						
BCDL 10.0								Weight: 62 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1 *Except*
T2: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W1: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-15 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) 7=604/0-3-8 (min. 0-1-8), 5=538/0-3-8 (min. 0-1-8)
Max Horz 7=75(LC 14)
Max Uplift 7=-61(LC 14), 5=-35(LC 15)
Max Grav 7=675(LC 21), 5=607(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-677/123, 8-9=-560/129, 3-9=-540/146, 3-10=-500/162, 10-11=-520/148,
4-11=-599/140, 4-5=-555/146, 2-7=-611/195
BOT CHORD 7-12=-89/487, 6-12=-89/487
WEBS 4-6=-71/473

NOTES- (10-13)

- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 8-10-2, Exterior(2E) 8-10-2 to 13-7-12 zone; 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.
- All plates are MT20 plates 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 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) 7, 5.
- 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



3/13/2024

CONSIDERATIONS.

Continued on page 2
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 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R07	Roof Special	9	1	Job Reference (optional) # 46470

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LOAD CASE(S) Standard

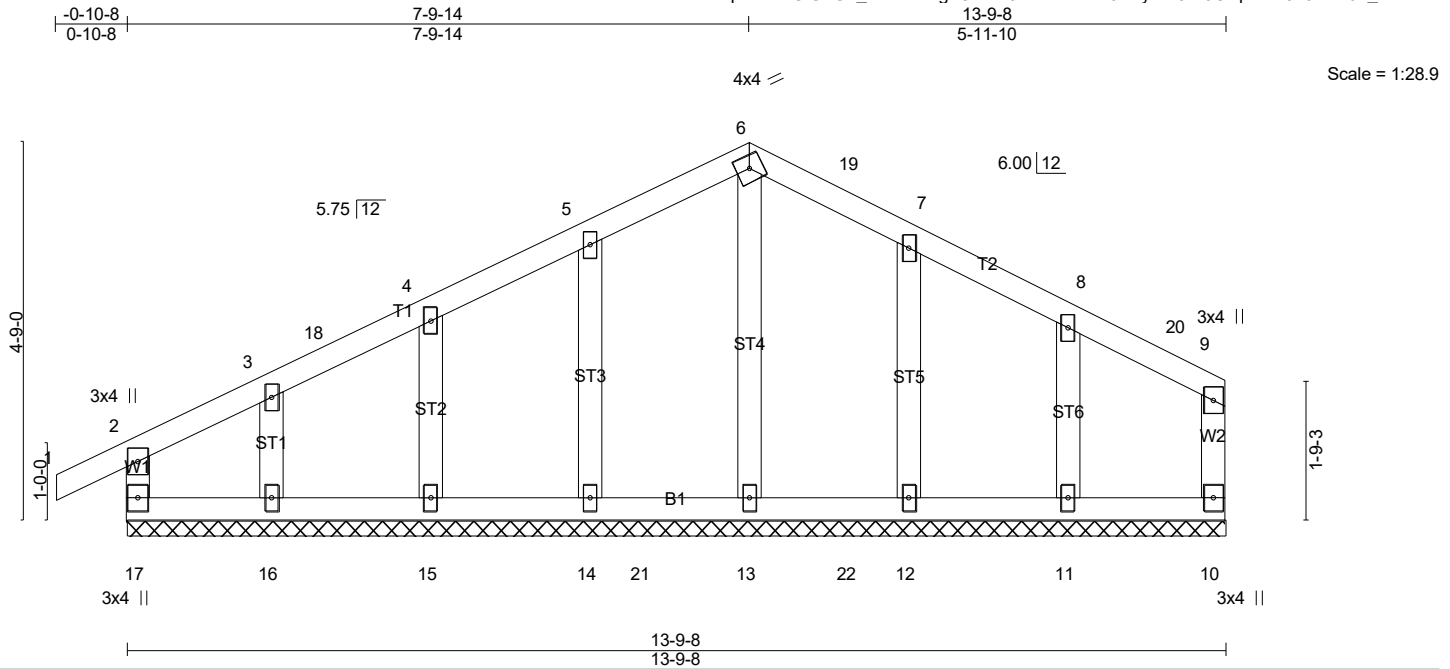


3/13/2024

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 24-1221-R01	Truss R08	Truss Type GABLE	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	in (loc) l/def L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) -0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.00 1 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 10 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 72 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 13-9-8.
(lb) - Max Horz 17=75(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 17, 10, 14, 15, 16, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 17, 10, 13, 14, 15, 16, 12, 11

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

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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-9-14, Corner(3R) 3-9-14 to 8-10-2, Corner(3E) 8-10-2 to 13-7-12 zone;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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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) 17, 10, 14, 15, 16, 12, 11.



3/13/2024

Continued on Page 2 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 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R08	GABLE	1	1	Job Reference (optional) # 46470

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:14:55 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

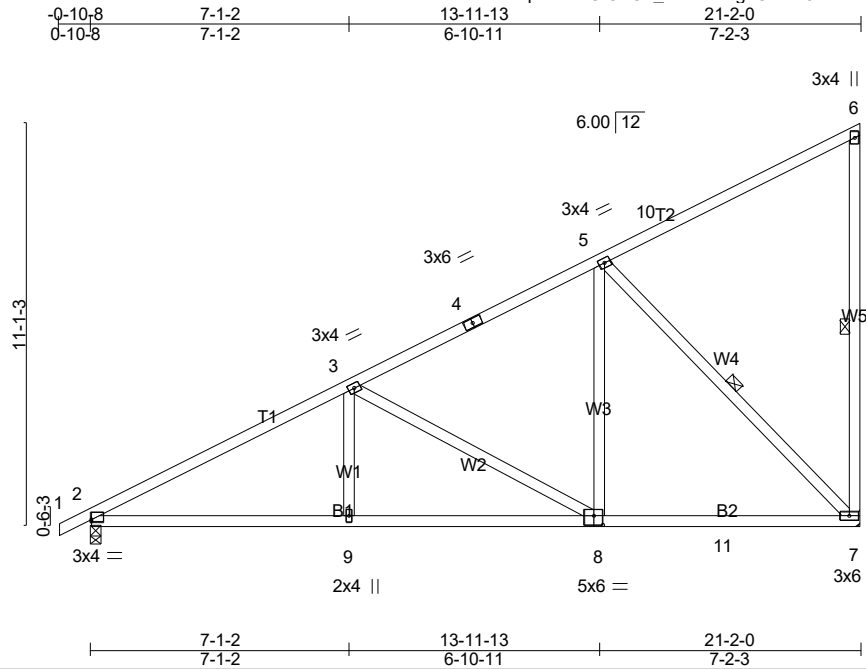


3/13/2024

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 24-1221-R01	Truss R09	Truss Type Monopitch	Qty 9	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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ID:HqzP2RNGiGoGT_M7h2RofgzGvsD-5duoXVm7D8iuzymK3RtJChpQJlrqo_PBKJ7_N1zaafk



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2:0-0-0,0-0-10], [8:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.96	Vert(LL) -0.12	7-8	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.62	Vert(CT) -0.20	7-8	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.71	Horz(CT) 0.03	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2021/TPI2014							
							Weight: 125 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7, 5-7

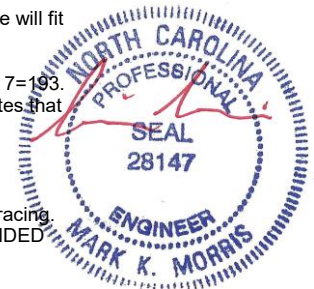
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 7=834/Mechanical, 2=898/0-3-8 (min. 0-1-8)
Max Horz 2=333(LC 14)
Max Uplift 7=-193(LC 14), 2=-43(LC 14)
Max Grav 7=1002(LC 21), 2=923(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1411/17, 3-4=-811/0, 4-5=-653/0, 6-7=-284/82
BOT CHORD 2-9=-271/1161, 8-9=-271/1161, 8-11=-138/652, 7-11=-138/652
WEBS 3-9=0/294, 3-8=-602/152, 5-8=0/523, 5-7=-915/195

NOTES- (9-12)

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-2-10, Exterior(2E) 16-2-10 to 21-0-4 zone; 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) 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, with BCDL = 10.0psf.
- 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) 2 except (jt=lb) 7=193.
- 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.



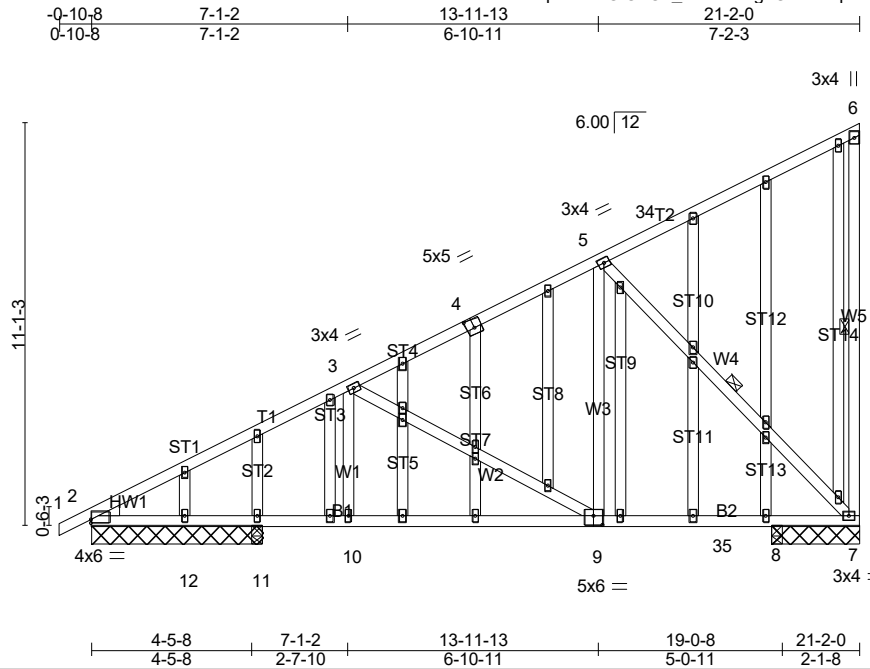
3/13/2024

LOAD CASE(S) Standard

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Job 24-1221-R01	Truss R10	Truss Type Monopitch Structural Gable	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2:0-0-0,0-1-2], [4:0-2-8,0-3-0], [9:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.96	Vert(LL) -0.06	9-10	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.72	Vert(CT) -0.15	9-10	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.57	Horz(CT) 0.03	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2021/TPI2014							
							Weight: 208 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7, 5-7

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

REACTIONS. All bearings 4-9-0 except (jt=length) 7=2-5-0, 8=0-3-8.
(lb) - Max Horz 2=333(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 12, 2 except 7=224(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 11, 11, 12, 8 except 7=909(LC 21), 2=728(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1242/12, 3-4=-762/0, 4-5=-596/0, 6-7=-283/82
BOT CHORD 2-12=-267/1009, 11-12=-267/1009, 10-11=-267/1009, 9-10=-267/1009, 9-35=-146/609,
8-35=-146/609, 7-8=-146/609
WEBS 3-9=-482/138, 5-9=-3/427, 5-7=-857/204

- NOTES-** (11-14)
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-2-10, Exterior(2E) 16-2-10 to 21-0-4 zone; 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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) 12, 2 except (jt=15) 7=224.



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Continued on Page 2
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 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R10	Monopitch Structural Gable	1	1	Job Reference (optional) # 46470

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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

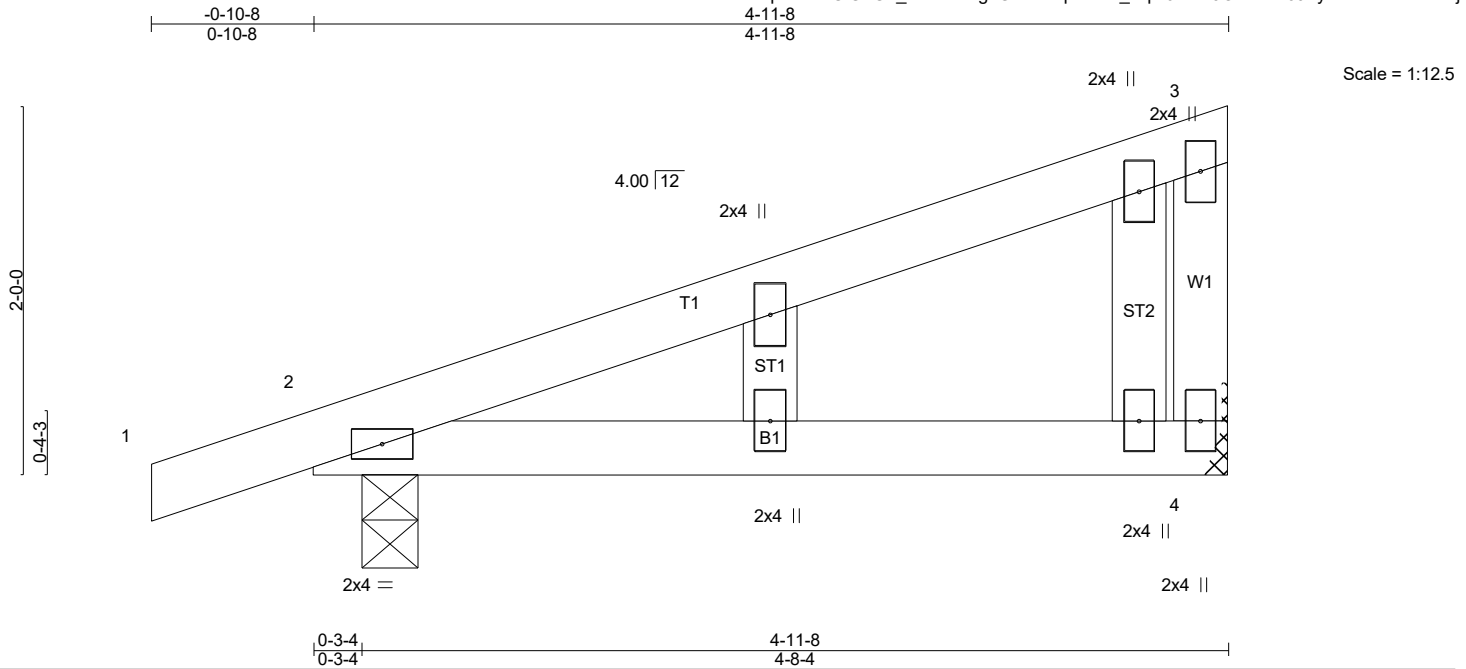


3/13/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R11	GABLE	2	1	
Job Reference (optional)					# 46470

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.56	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.31	Vert(LL) -0.03 2-4 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.06 2-4 >984 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 22 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-11-8 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=180/Mechanical, 2=255/0-3-8 (min. 0-1-8)
 Max Horz 2=60(LC 10)
 Max Uplift 4=-32(LC 14), 2=-51(LC 10)
 Max Grav 4=241(LC 21), 2=349(LC 21)

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

NOTES- (11-14)

- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; 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.
- 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.
- 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, 2.
- 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.



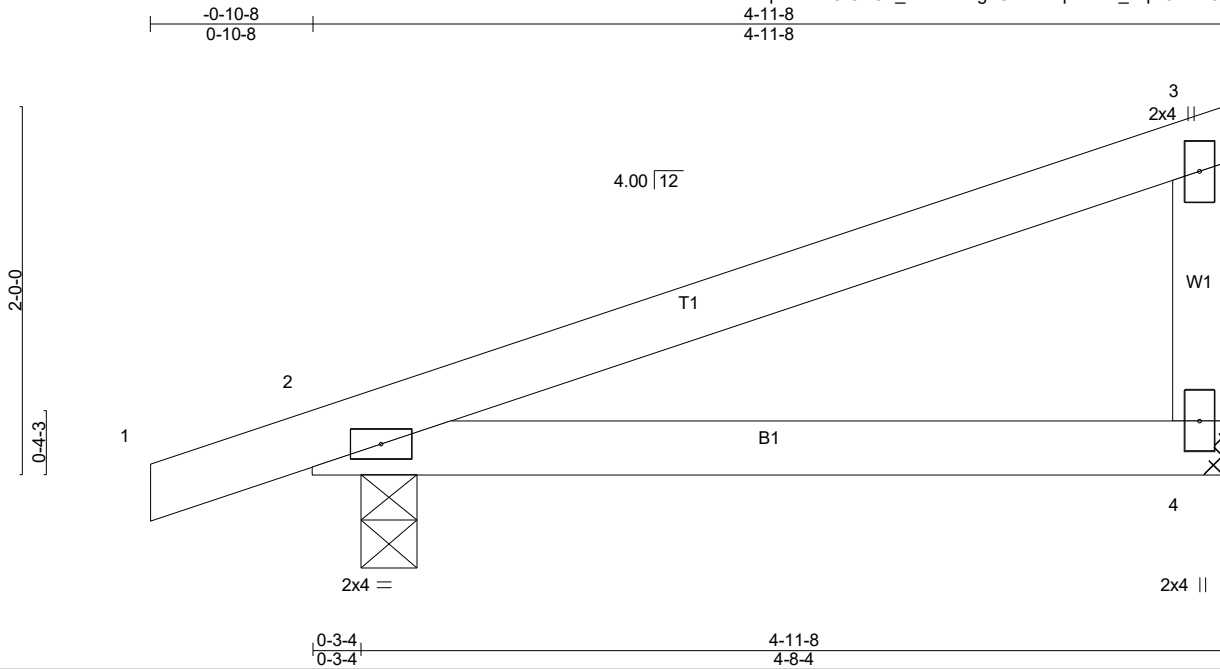
LOAD CASE(S) Standard

3/13/2024

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Job 24-1221-R01	Truss R12	Truss Type Monopitch	Qty 13	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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Scale = 1:12.5

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.56	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.31	Vert(LL) -0.03 2-4 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.06 2-4 >984 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 19 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 4-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

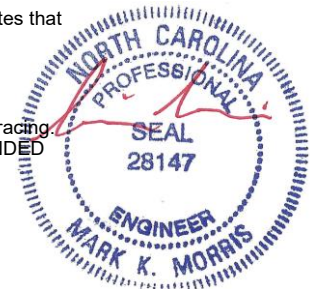
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=180/Mechanical, 2=255/0-3-8 (min. 0-1-8)
Max Horz 2=60(LC 10)
Max Uplift 4=-32(LC 14), 2=-51(LC 10)
Max Grav 4=241(LC 21), 2=349(LC 21)

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

NOTES- (9-12)

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; 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) 4, 2.
- 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.



3/13/2024

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 24-1221-R01	Truss R13	Truss Type GABLE	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC	# 46470
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0-10-8 11-0-0 22-0-0 22-10-8
0-10-8 11-0-0 11-0-0 0-10-8

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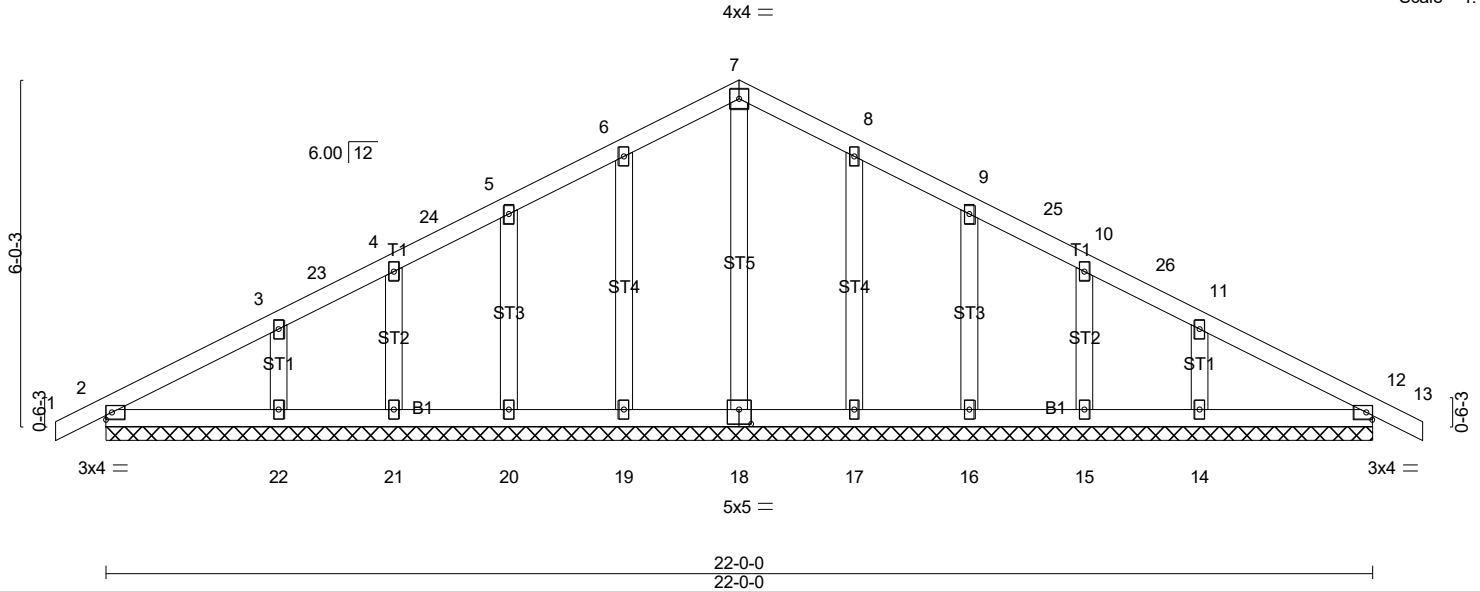


Plate Offsets (X,Y)-- [18:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.10	Vert(LL) 0.00 12 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.09	Vert(CT) 0.00 13 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 12 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 116 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 22-0-0.
(lb) - Max Horz 2=78(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 21, 22, 16, 15, 14, 12 except 19=297(LC 5), 17=297(LC 6)

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

NOTES- (13-16)

- 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=23ft; 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 6-2-6, Corner(3R) 6-2-6 to 15-9-10, Exterior(2N) 15-9-10 to 18-0-14, Corner(3E) 18-0-14 to 22-10-8 zone;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=1.00; 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.
- 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, 19, 20, 21, 22, 17, 16, 15, 14, 12.



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Continued on page 2
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 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R13	GABLE	1	1	Job Reference (optional) # 46470

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- 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 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

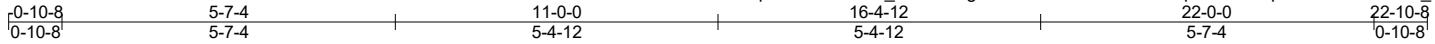


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Warning !—Verify design parameters and read notes before use. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation 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 24-1221-R01	Truss R14	Truss Type Common	Qty 5	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC	# 46470
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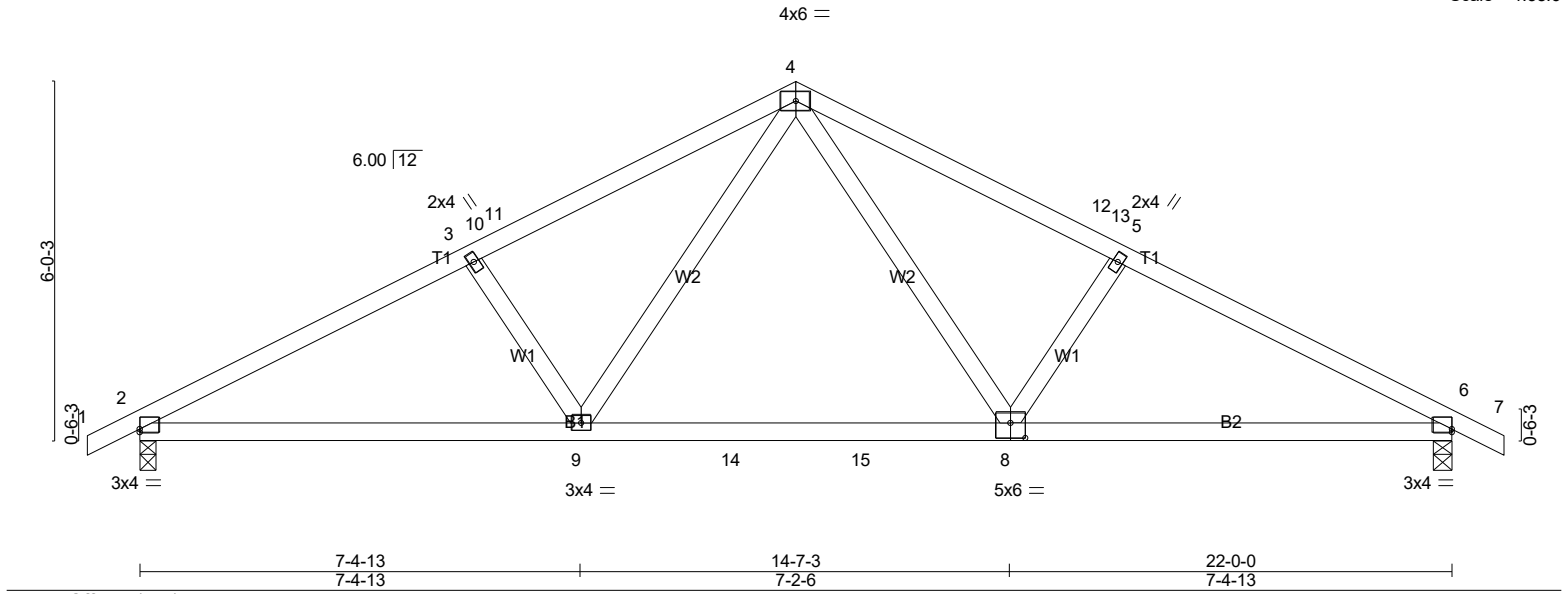


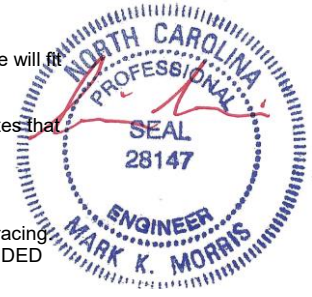
Plate Offsets (X,Y)-- [2:0-0-0,0-0-10], [6:0-0-0,0-0-10], [8:0-3-0,0-3-0]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.55	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.59	Vert(LL) -0.13 8-9 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.23	Vert(CT) -0.20 8-9 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.04 6 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 102 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-2-15 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=930/0-3-8 (min. 0-1-8), 6=930/0-3-8 (min. 0-1-8)
 Max Horz 2=78(LC 14)
 Max Uplift 2=-85(LC 14), 6=-85(LC 15)
 Max Grav 2=960(LC 21), 6=960(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1526/227, 3-10=-1355/216, 10-11=-1345/218, 4-11=-1233/240, 4-12=-1233/240,
 12-13=-1345/218, 5-13=-1355/216, 5-6=-1526/227
 BOT CHORD 2-9=-137/1299, 9-14=-38/828, 14-15=-38/828, 8-15=-38/828, 6-8=-137/1299
 WEBS 4-8=-64/548, 5-8=-366/148, 4-9=-64/548, 3-9=-366/148

- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 6-2-6, Exterior(2R) 6-2-6 to 15-9-10, Interior(1) 15-9-10 to 18-0-14, Exterior(2E) 18-0-14 to 22-10-8 zone; 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) 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.
 - 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) 2, 6.
 - 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 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.

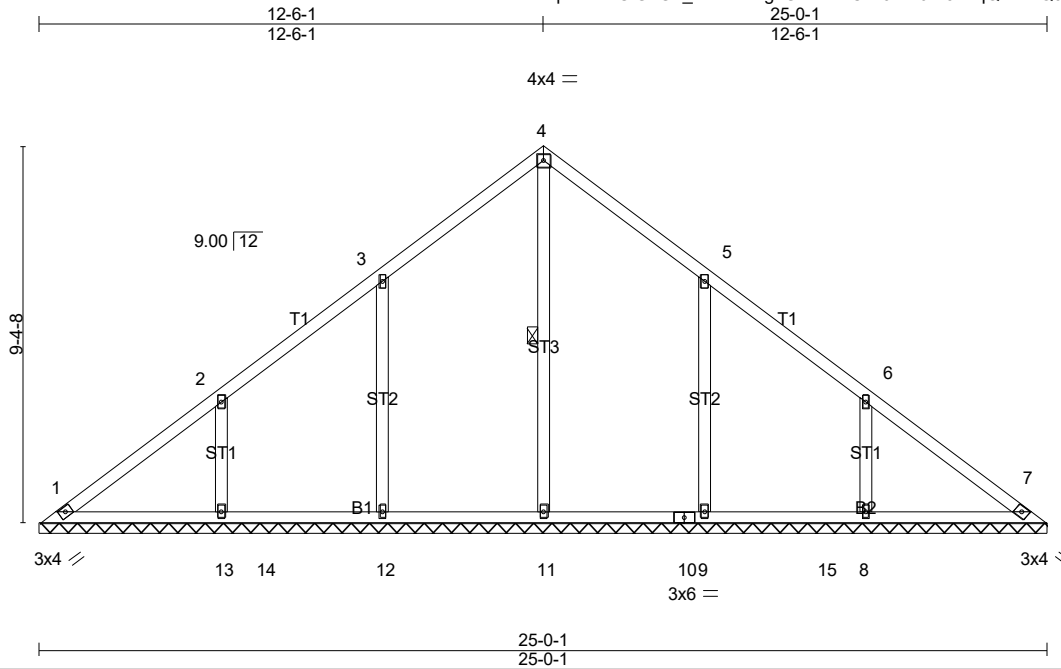


3/13/2024

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Job 24-1221-R01	Truss VT01	Truss Type Valley	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.38	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.18	Vert(CT) n/a - n/a 999		
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: 121 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.
WEBS 1 Row at midpt 4-11

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

REACTIONS. All bearings 25-0-1.
(lb) - Max Horz 1=-177(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=-117(LC 12), 13=-124(LC 12), 9=-117(LC 13), 8=-125(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=448(LC 22), 12=524(LC 19), 13=418(LC 19), 9=523(LC 20), 8=418(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-264/160, 2-13=-267/156, 5-9=-264/159, 6-8=-268/156

- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 5-2-14, Interior(1) 5-2-14 to 7-8-7, Exterior(2R) 7-8-7 to 17-3-10, Interior(1) 17-3-10 to 19-9-4, Exterior(2E) 19-9-4 to 24-6-13 zone;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
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 12=117, 13=124, 9=117, 8=125.
 - 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.

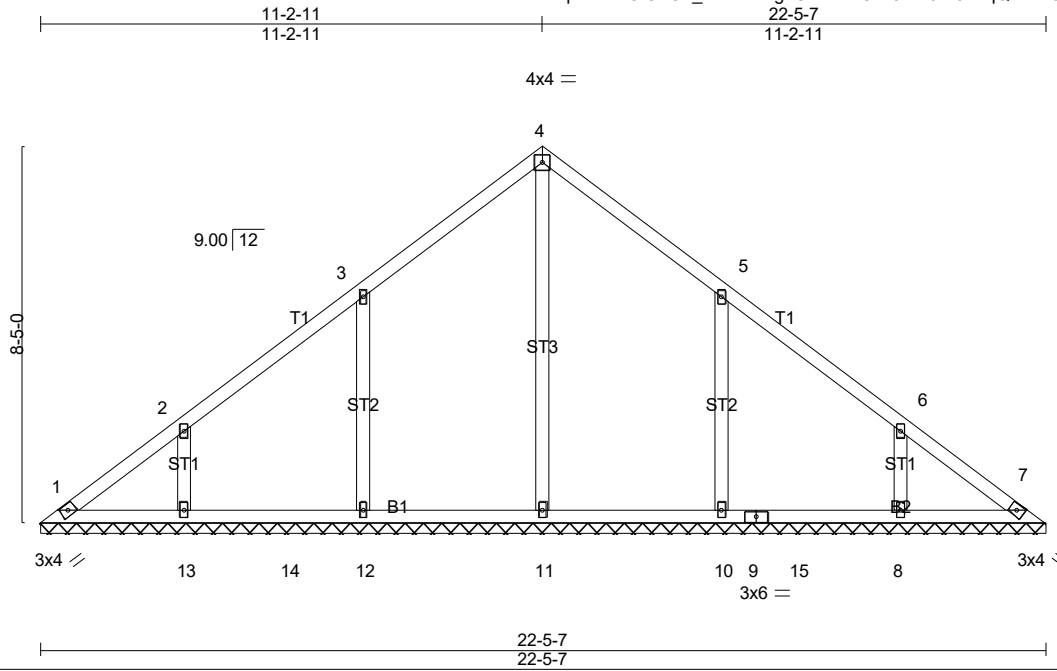


3/13/2024

LOAD CASE(S) Standard
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 24-1221-R01	Truss VT02	Truss Type Valley	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) n/a	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15	BC 0.39	Vert(CT) n/a		
TCDL 10.0	Rep Stress Incr YES	WB 0.22	Horz(CT) 0.00		
BCLL 0.0 *	Code IRC2021/TPI2014	Matrix-SH			
BCDL 10.0					Weight: 105 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.

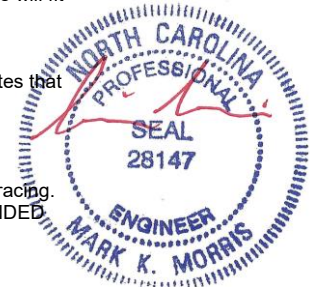
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 22-5-7.
(lb) - Max Horz 1=158(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=124(LC 12), 13=101(LC 12), 10=123(LC 13), 8=101(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=445(LC 26), 12=512(LC 19), 13=313(LC 19), 10=511(LC 20), 8=313(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-275/165, 5-10=-275/165

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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 5-2-14, Interior(1) 5-2-14 to 6-5-2, Exterior(2R) 6-5-2 to 16-0-5, Interior(1) 16-0-5 to 17-2-9, Exterior(2E) 17-2-9 to 22-0-3 zone; 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
- All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 12=124, 13=101, 10=123, 8=101.
- 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.



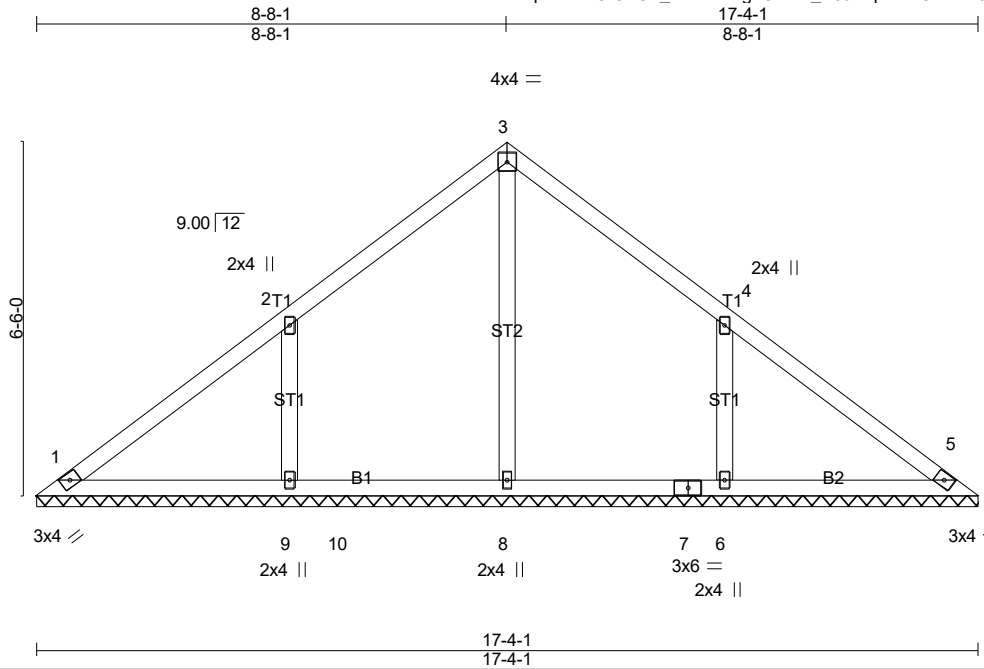
LOAD CASE(S) Standard

3/13/2024

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Job 24-1221-R01	Truss VT04	Truss Type Valley	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC	# 46470
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:14:59 2024 Page 1
 ID:HqzP2RNGiGoGT_M7h2RofgzGvsD-_P8JNspeHNCKRZ45IHxFM7_GcNFHkyemFx5CWOzoaafg



Scale = 1:42.4

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.23	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.40	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Vert(CT) n/a - n/a 999		
BCDL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			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
 BOT CHORD

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

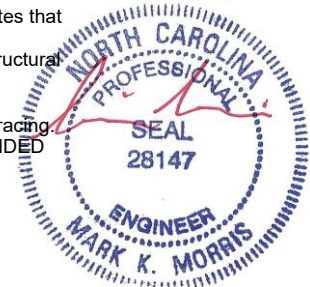
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 17-4-1.
 (lb) - Max Horz 1=121(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=141(LC 12), 6=141(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=419(LC 22), 9=455(LC 19), 6=463(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-9=-297/173, 4-6=-297/173

- NOTES-** (8-11)
- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 5-2-14, Exterior(2R) 5-2-14 to 12-1-4, Exterior(2E) 12-1-4 to 16-10-13 zone; 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
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=141, 6=141.
 - 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

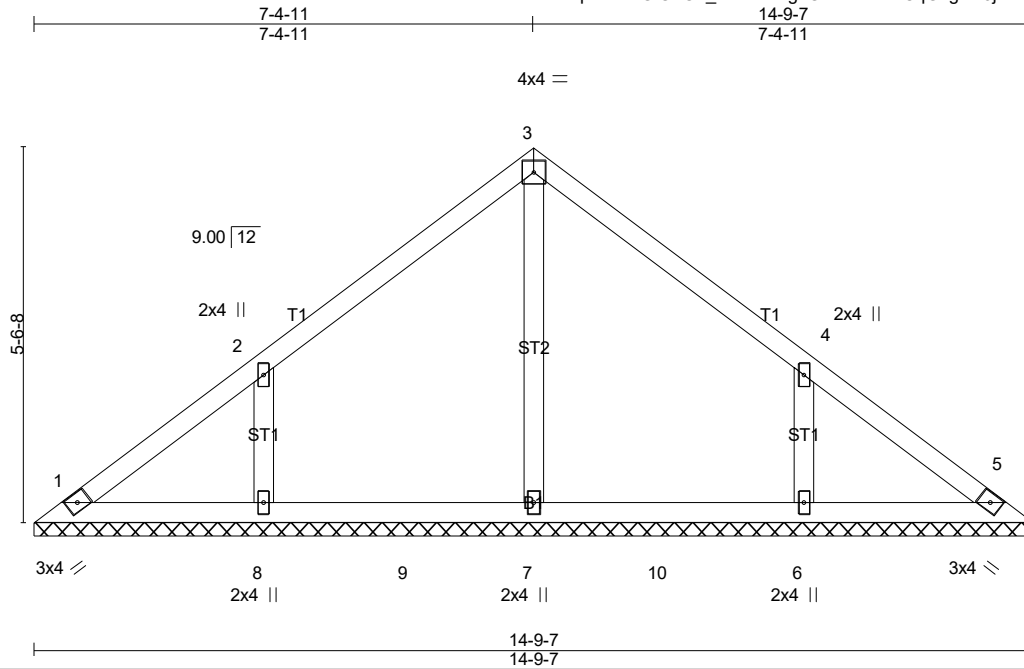


3/13/2024

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Job 24-1221-R01	Truss VT05	Truss Type Valley	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Mar 15 21:15:00 2024 Page 1
ID:HqzP2RNGiGoGT_M7h2RofgzGvsD-SbihaCqG2gKB3jfHs?TUVLXSCmdJTPHwUbq3Ezaaff



Scale = 1:34.1

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.28	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.09	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 61 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.

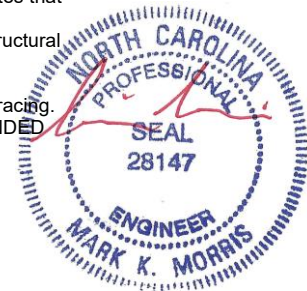
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 14-9-7.
(lb) - Max Horz 1=-102(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-120(LC 12), 6=-119(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=382(LC 19), 8=353(LC 19), 6=353(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-256/152, 4-6=-256/152

- NOTES-** (8-11)
- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 5-2-14, Exterior(2R) 5-2-14 to 9-6-9, Exterior(2E) 9-6-9 to 14-4-3 zone; 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
 - 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=120, 6=119.
 - 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

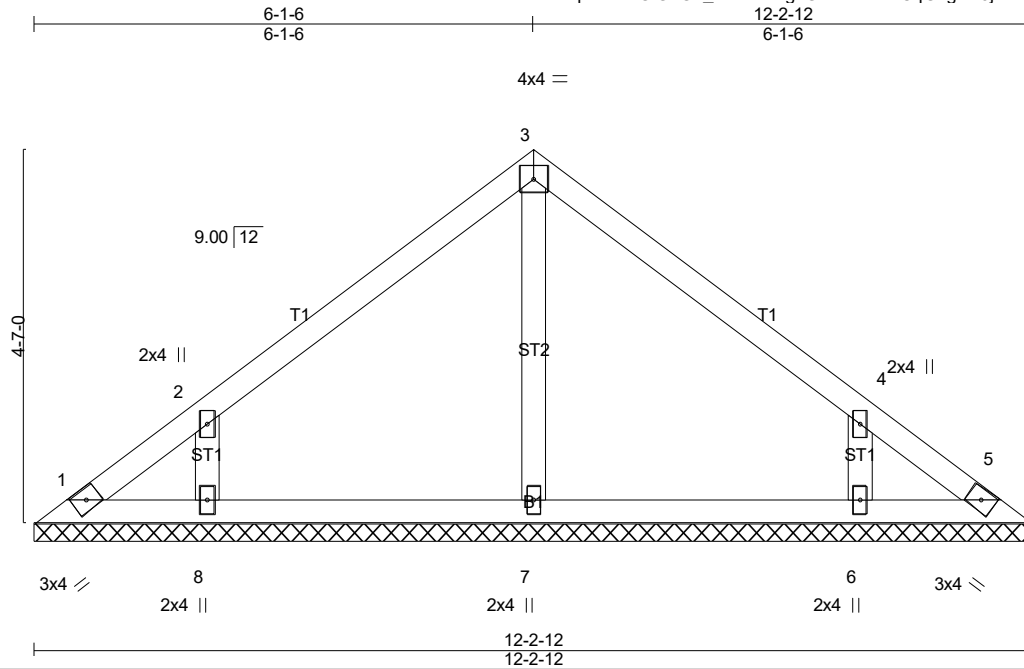


3/13/2024

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Job 24-1221-R01	Truss VT06	Truss Type Valley	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC	Job Reference (optional) # 46470
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Scale = 1:28.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.21	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 48 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.

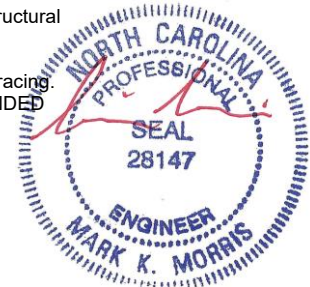
REACTIONS. All bearings 12-2-12.
(lb) - Max Horz 1=-83(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-110(LC 12), 6=-109(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=257(LC 1), 8=302(LC 19), 6=302(LC 20)

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

NOTES- (8-11)

- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 5-2-14, Exterior(2R) 5-2-14 to 6-11-14, Exterior(2E) 6-11-14 to 11-9-8 zone; 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
- 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, 5 except (jt=lb) 8=110, 6=109.
- 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

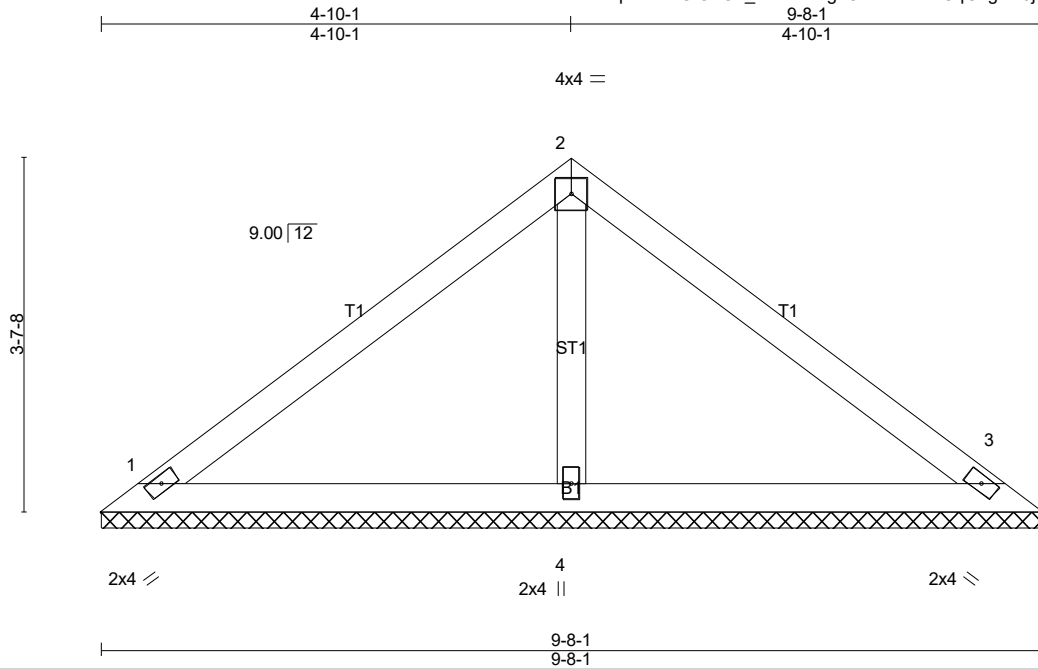


3/13/2024

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Job 24-1221-R01	Truss VT07	Truss Type Valley	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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Scale = 1:23.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.32	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	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: 35 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=175/9-8-1 (min. 0-1-8), 3=175/9-8-1 (min. 0-1-8), 4=354/9-8-1 (min. 0-1-8)
Max Horz 1=-64(LC 8)
Max Uplift1=-20(LC 12), 3=-29(LC 13), 4=-8(LC 12)

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

NOTES- (8-11)

- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; 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
- 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

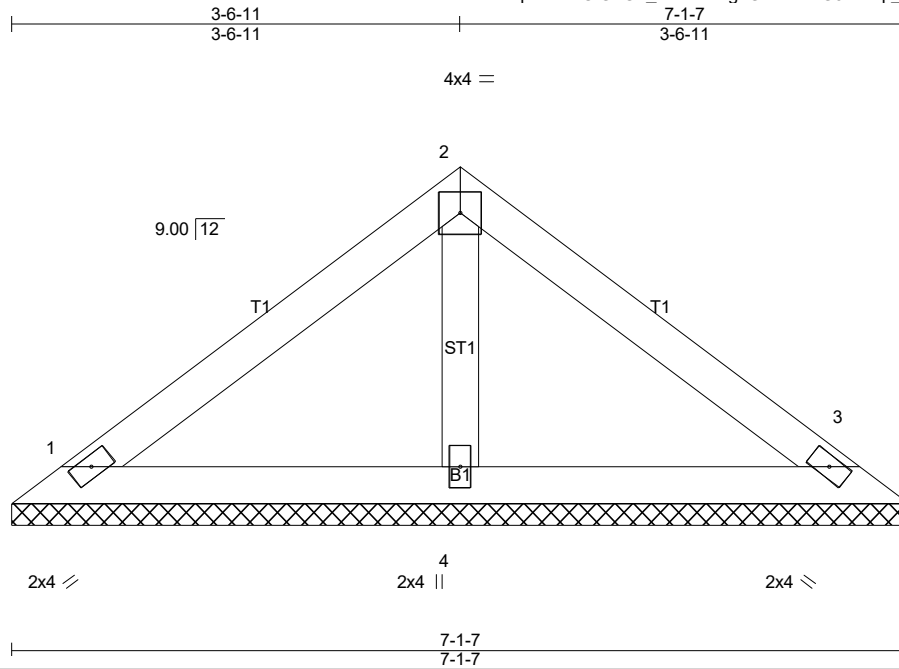


3/13/2024

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Job 24-1221-R01	Truss VT08	Truss Type Valley	Qty 1	Ply 1	LOT 0.0092 BLAKE POND 122 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) # 46470
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Scale = 1:18.3

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	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: 25 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.

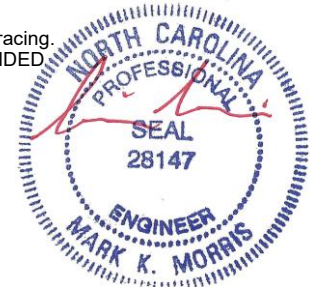
REACTIONS. (lb/size) 1=139/7-1-7 (min. 0-1-8), 3=139/7-1-7 (min. 0-1-8), 4=222/7-1-7 (min. 0-1-8)
Max Horz 1=46(LC 11)
Max Uplift1=-22(LC 12), 3=-28(LC 13)

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

NOTES- (8-11)

- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; 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
- 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



3/13/2024

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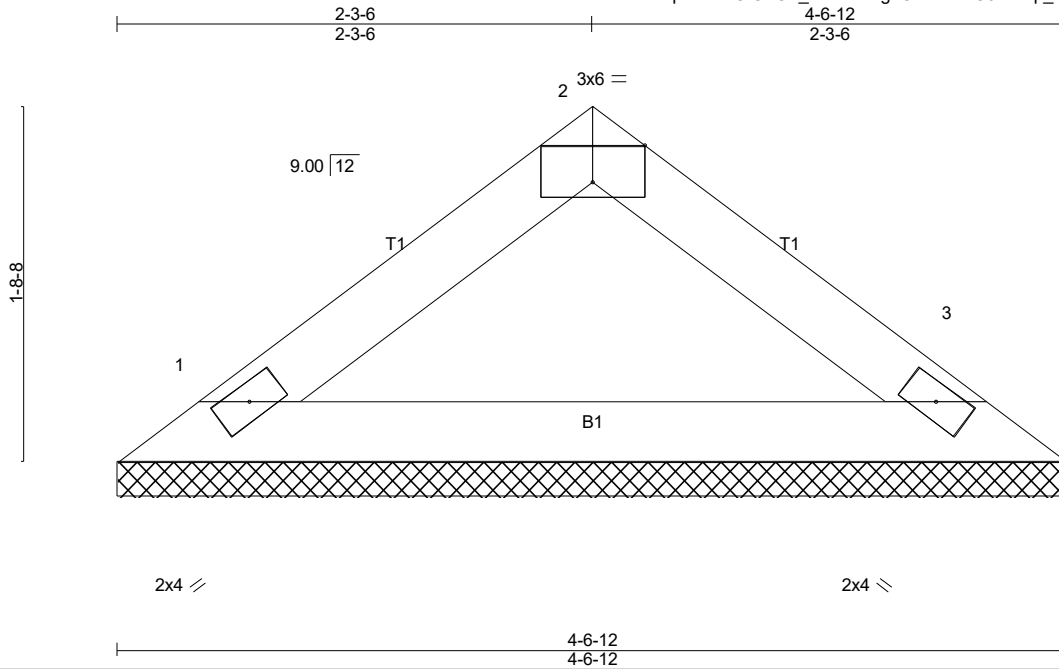


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

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 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf) 20.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-P						
BCDL 10.0								Weight: 14 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 4-6-12 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.

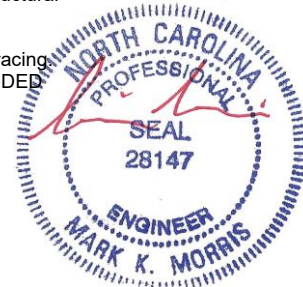
REACTIONS. (lb/size) 1=147/4-6-12 (min. 0-1-8), 3=147/4-6-12 (min. 0-1-8)
Max Horz 1=-27(LC 8)
Max Uplift 1=-10(LC 12), 3=-10(LC 13)

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

NOTES- (8-11)

- 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=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; 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) Gable requires continuous bottom chord bearing.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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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