

# 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 #: 44390

JOB: 23-B625-R01

JOB NAME: LOT 0.0097 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.

*21 Truss Design(s)*

Trusses:

PB01, R01, R02, R04, R05, R06, R07, R08, R09, R10, R13, R14, R15, R16, R17, R18, R19,  
V01, V02, V03, V04



1/22/2024

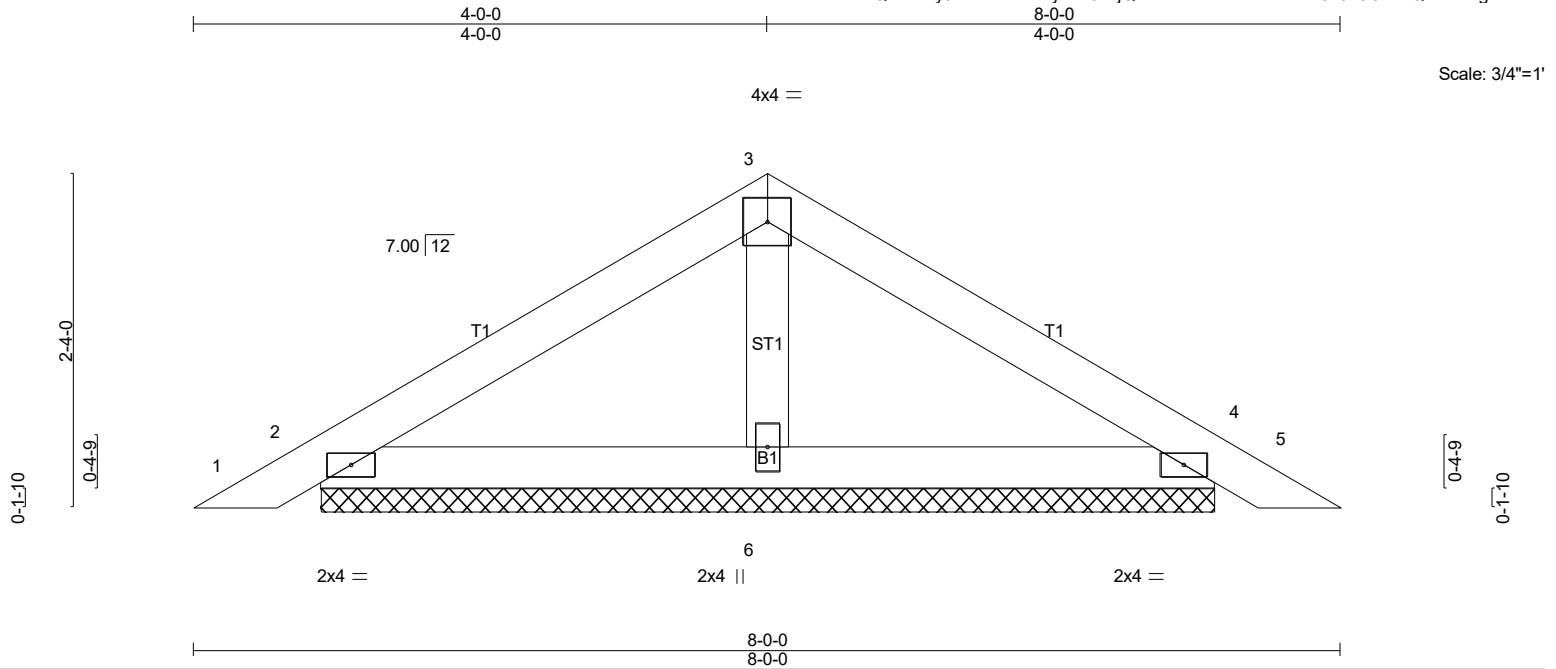
**Mark Morris**

**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

Job	Truss	Truss Type	Qty	Ply	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	PB01	Piggyback	15	1	
Job Reference (optional)					# 44390

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 24 19:59:14 2024 Page 1  
ID:BSBRQeSNfsyJEFuISDlVBeyBPr9-YjQYLNsTtFBYNSZsLVcHc8k3?5ONXIQVXFaugSzs2sR



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 0.17	Vert(LL) 0.01 5 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Vert(CT) 0.01 5 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 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 Structural wood sheathing directly applied or 6'-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

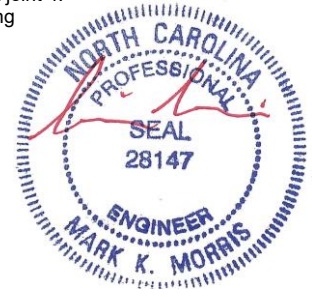
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=169/6-2-13 (min. 0-1-8), 4=169/6-2-13 (min. 0-1-8), 6=232/6-2-13 (min. 0-1-8)  
Max Horz2=42(LC 12)  
Max Uplift2=33(LC 14), 4=39(LC 15)  
Max Grav2=238(LC 21), 4=238(LC 22), 6=236(LC 21)

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

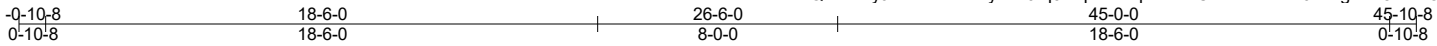
- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCCL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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 33 lb uplift at joint 2 and 39 lb uplift at joint 4.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



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Scale = 1:77.2

Plate Offsets (X,Y)-- [16:0-3-0,0-1-12], [22:0-3-0,0-1-12], [38:0-4-3,0-1-8], [72:0-4-3,0-1-8]

<b>LOADING</b> (psf)	TCLL (roof) 20.0	Snow (Pf) 20.0	TCDL 10.0	BCLL 0.0 *	BCDL 10.0	<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>					<b>PLATES</b>	<b>GRIP</b>
						Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	37	n/r	180	MT20	244/190
						Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.00	37	n/r	80		
						Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	38	n/a	n/a		
						Code IRC2021/TPI2014		Matrix-R								
															Weight: 472 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.  
WEBS 1 Row at midpt 19-55, 18-56, 17-57, 16-58, 15-59, 14-61, 13-62, 20-54, 21-53, 22-52, 23-51, 24-49, 25-48

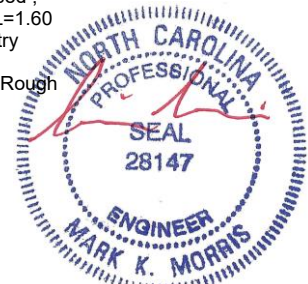
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 45-0-0.  
(lb) - Max Horz 72=236(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 72, 38, 55, 56, 57, 59, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 54, 53, 51, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39 except 71=108(LC 14)  
Max Grav All reactions 250 lb or less at joint(s) 72, 38, 55, 56, 57, 58, 59, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 54, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 14-15=-156/251, 15-16=-167/269, 22-23=-167/269, 23-24=-156/251

**NOTES-** (15)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-10-0, Exterior(2N) 3-10-0 to 13-8-6, Corner(3R) 13-8-6 to 31-3-10, Exterior(2N) 31-3-10 to 41-0-14, Corner(3E) 41-0-14 to 45-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 1-4-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) \* 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



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fit between the bottom chord and any other members, with BCDL = 10.0psf.  
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 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	R01	GABLE	1	1	Job Reference (optional) # 44390

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**NOTES-** (15)

14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 72, 38, 55, 56, 57, 59, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 54, 53, 51, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39 except (jt=lb) 71=108.

**LOAD CASE(S)** Standard

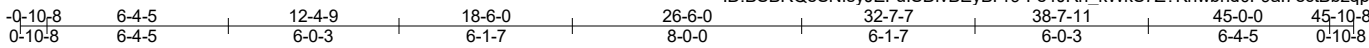


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Job 23-B625-R01	Truss R02	Truss Type Piggyback Base	Qty 6	Ply 1	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC	# 44390
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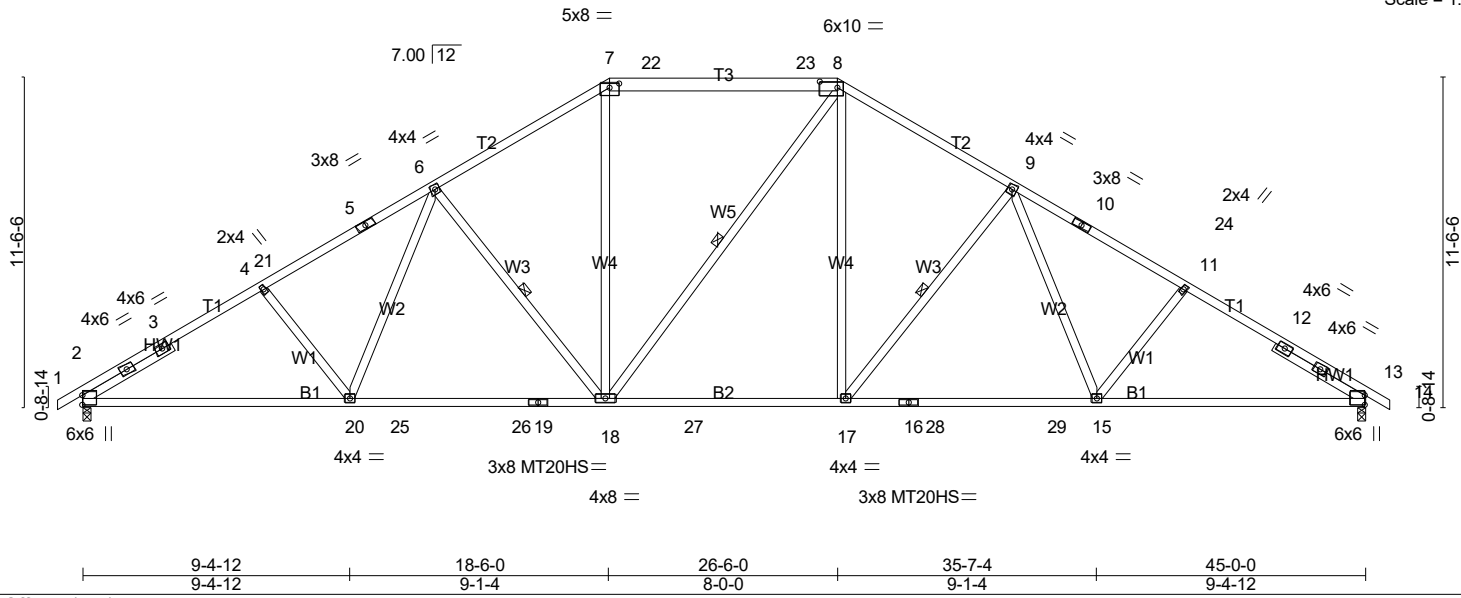


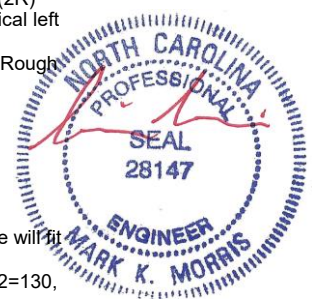
Plate Offsets (X,Y)-- [7:0-4-0,0-1-11], [8:0-7-8,0-2-8]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.97	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.88	Vert(LL) -0.43 18-20 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.44	Vert(CT) -0.64 15-17 >849 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.18 13 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 282 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* T3: 2x6 SP No.2, T1: 2x4 SP SS	TOP CHORD Structural wood sheathing directly applied.
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	WEBS 1 Row at midpt 6-18, 8-18, 9-17
SLIDER Left 2x4 SP No.3 - 3-7-15, Right 2x4 SP No.3 -Ø 3-7-15	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=1852/0-3-8 (min. 0-2-11), 13=1852/0-3-8 (min. 0-2-11)  
 Max Horz 2=-220(LC 12)  
 Max Uplift 2=-130(LC 14), 13=-130(LC 15)  
 Max Grav 2=2265(LC 39), 13=2265(LC 39)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3681/185, 3-4=-3594/203, 4-21=-3483/184, 5-21=-3477/198, 5-6=-3349/214,  
 6-7=-2801/221, 7-22=-2286/218, 22-23=-2286/218, 8-23=-2286/218, 8-9=-2833/221,  
 9-10=-3376/214, 10-24=-3505/199, 11-24=-3510/184, 11-12=-3621/203, 12-13=-3709/185  
 BOT CHORD 2-20=-237/3158, 20-25=-128/2855, 25-26=-128/2855, 19-26=-128/2855, 18-19=-128/2855,  
 18-27=0/2313, 17-27=0/2313, 16-17=-20/2806, 16-28=-20/2806, 28-29=-20/2806,  
 15-29=-20/2806, 13-15=-88/3047  
 WEBS 6-20=-36/489, 6-18=-883/199, 7-18=-23/1018, 8-18=-248/250, 8-17=-71/1125,  
 9-17=-880/198, 9-15=-36/484

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 13-8-6, Exterior(2R) 13-8-6 to 31-3-10, Interior(1) 31-3-10 to 41-0-14, Exterior(2E) 41-0-14 to 45-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - 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) except (jt=lb) 2=130, 13=130.

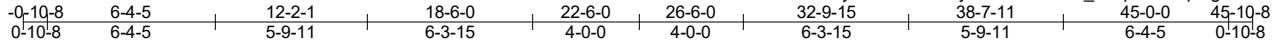


1/22/2024

**LOAD CASE(S)** Standard  
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Job 23-B625-R01	Truss R04	Truss Type Piggyback Base	Qty 7	Ply 1	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC	# 44390
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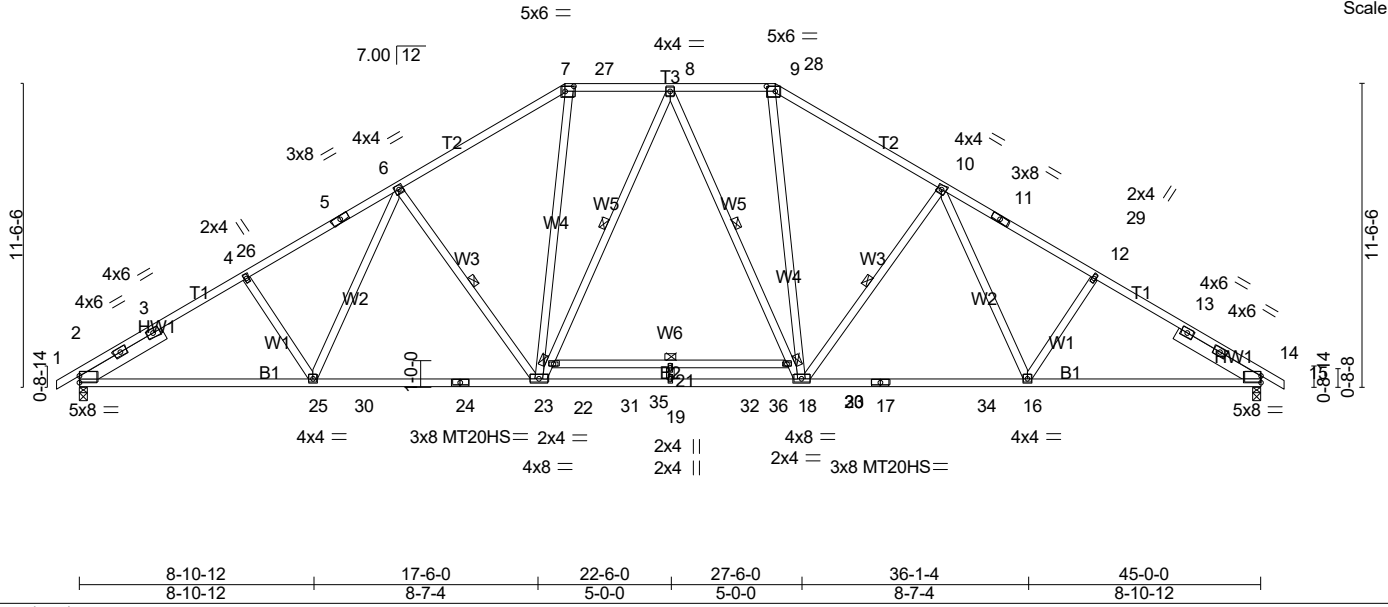


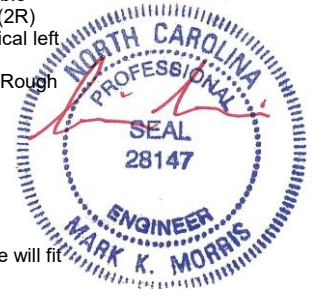
Plate Offsets (X,Y)-- [2:0-0-0,0-3-1], [7:0-4-0,0-2-4], [9:0-4-0,0-2-4], [14:0-0-0,0-3-1]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.90	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.92	Vert(LL) -0.67 21 >805 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.53	Vert(CT) -1.05 21 >517 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.19 14 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014				Weight: 309 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 *Except* T3: 2x4 SP No.2, T1: 2x4 SP SS	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.1 *Except* B2: 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 6-0-0 oc bracing: 20-22
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-23, 10-18, 8-22, 8-20
SLIDER Left 2x6 SP No.2 -Ø 3-8-0, Right 2x6 SP No.2 -Ø 3-8-0	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=1945/0-3-8 (min. 0-2-15), 14=1945/0-3-8 (min. 0-2-15)  
 Max Horz2=221(LC 13)  
 Max Uplift2=-84(LC 14), 14=-84(LC 15)  
 Max Grav2=2464(LC 47), 14=2464(LC 49)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4058/100, 3-4=-3970/118, 4-26=-3872/111, 5-26=-3868/114, 5-6=-3669/141,  
 6-7=-3312/134, 7-27=-2612/143, 8-27=-2612/144, 8-28=-2612/144, 9-28=-2612/143,  
 9-10=-3312/134, 10-11=-3669/141, 11-29=-3867/114, 12-29=-3873/111, 12-13=-3970/118,  
 13-14=-4058/100  
 BOT CHORD 2-25=-165/3473, 25-30=-58/3226, 24-30=-58/3226, 23-24=-58/3226, 23-31=0/2675,  
 19-31=0/2675, 19-32=0/2675, 32-33=0/2675, 18-33=0/2675, 17-18=0/3149, 17-34=0/3149,  
 16-34=0/3149, 14-16=-16/3339  
 WEBS 6-25=-58/393, 6-23=-858/213, 7-23=0/1276, 9-18=0/1276, 10-18=-858/213, 10-16=-58/394,  
 22-23=-409/136, 8-22=-299/175, 8-20=-299/175, 18-20=-408/134

- NOTES-** (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; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 13-8-6, Exterior(2R) 13-8-6 to 31-3-10, Interior(1) 31-3-10 to 41-0-14, Exterior(2E) 41-0-14 to 45-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 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) 2, 14.



1/22/2024

**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 23-B625-R01	Truss R05	Truss Type GABLE COMMON	Qty 1	Ply 1	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC	Job Reference (optional) <b># 44390</b>
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 24 19:59:27 2024 Page 1  
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0-10-8 6-4-6 12-4-9 18-6-0 26-6-0 45-0-0 45-10-8  
0-10-8 6-4-6 6-0-3 6-1-7 8-0-0 18-6-0 0-10-8

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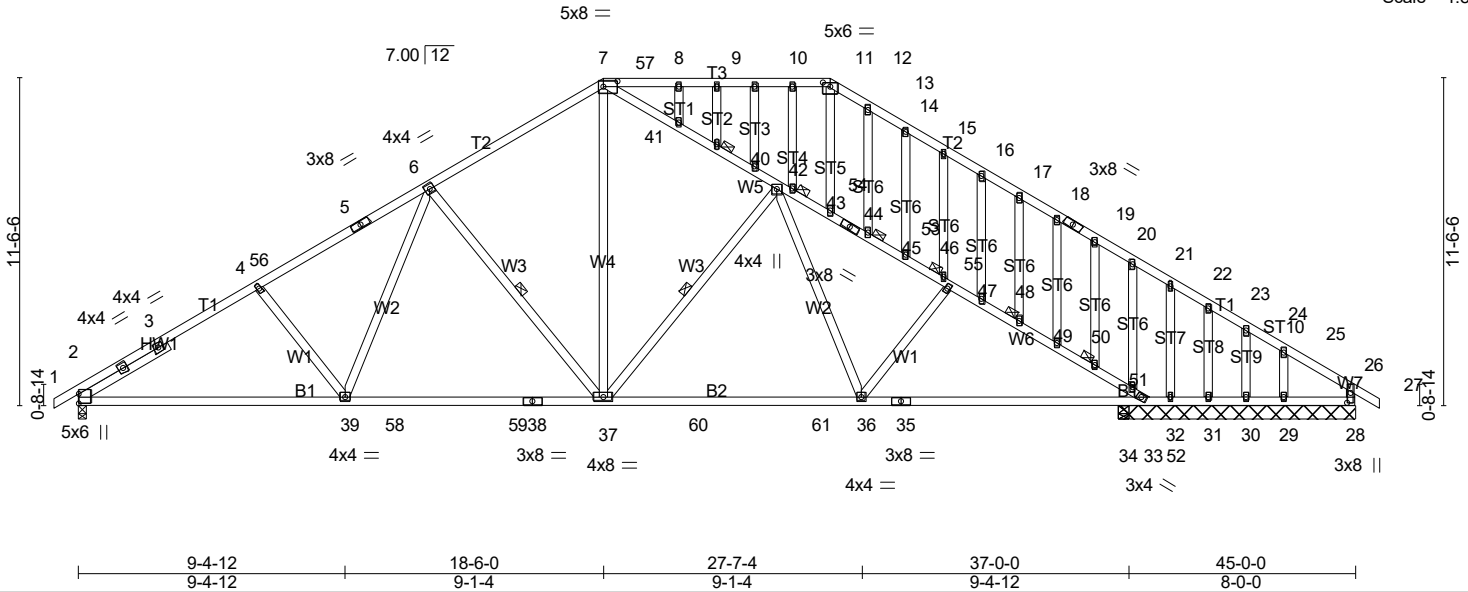


Plate Offsets (X,Y)-- [7:0-6-0,0-2-4], [12:0-3-0,0-1-12], [28:0-4-3,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	1-7-3	TC 0.85	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.83	Vert(LL) -0.32 37-39 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.98	Vert(CT) -0.48 37-39 >929 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.11 28 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 359 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
B2: 2x4 SP No.1  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 -Ø 3-8-0

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 6-37, 37-54  
JOINTS 1 Brace at Jt(s): 40, 43, 45, 47, 49, 51

**REACTIONS.** All bearings 8-3-8 except (jt=length) 2=0-3-8, 34=0-3-8, 34=0-3-8.  
(lb) - Max Horz 2=183(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 32 except 31=-137(LC 39), 29=-119(LC 53), 33=-205(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 31, 30, 29 except 2=1558(LC 39), 32=375(LC 39), 28=494(LC 39), 33=921(LC 45), 34=504(LC 7), 34=289(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2480/136, 3-4=-2397/150, 4-56=-2292/135, 5-56=-2275/146, 5-6=-2089/159, 6-7=-1680/142, 7-57=-429/123, 8-57=-429/123, 8-9=-429/123, 9-10=-429/123, 10-11=-429/123, 11-12=-430/123, 12-13=-504/130, 13-14=-525/114, 14-15=-561/102, 15-16=-465/54, 16-17=-471/37, 17-18=-504/27, 18-19=-489/13, 19-20=-516/11, 20-21=-633/17, 21-22=-531/0, 22-23=-428/0, 23-24=-524/0, 24-25=-491/0, 25-26=-573/0, 26-28=-426/0  
BOT CHORD 2-39=-175/2108, 39-58=-88/1837, 58-59=-88/1837, 38-59=-88/1837, 37-38=-88/1837, 37-60=-31/1546, 60-61=-31/1546, 36-61=-31/1546, 35-36=0/1999, 34-35=0/1999, 33-34=0/1999, 32-33=0/454, 31-32=0/454, 30-31=0/454, 29-30=0/454, 28-29=0/454  
WEBS 15-47=-289/88, 21-52=-314/80, 22-32=-282/83, 7-41=-1093/81, 40-41=-1079/78, 40-42=-1091/82, 42-54=-1088/83, 43-54=-1560/56, 43-44=-1571/66, 44-53=-1517/51, 45-53=-1517/51, 45-46=-1546/59, 46-47=-1563/63, 47-55=-1679/94, 48-55=-1735/106, 48-49=-1791/117, 49-50=-1809/121, 50-51=-1853/130, 51-52=-1798/121, 33-52=-1956/151, 6-39=-29/417, 7-37=-36/1070, 6-37=-731/162, 37-54=-456/57, 36-54=-38/592, 36-55=-454/139

- NOTES-** (13)  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 3-11-2, Interior(1) 3-11-2 to 13-8-6, Exterior(2E) 13-8-6 to 31-3-10, Interior(1) 31-3-10 to 41-0-14, Exterior(2E) 41-0-14 to 45-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10  
5) Unbalanced snow loads have been considered for this design.



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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 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	R05	GABLE COMMON	1	1	Job Reference (optional) # 44390

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 24 19:59:28 2024 Page 2  
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**NOTES-** (13)

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable studs spaced at 1-4-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) \* 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.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 32 except (jt=lb) 31=137, 29=119, 33=205.

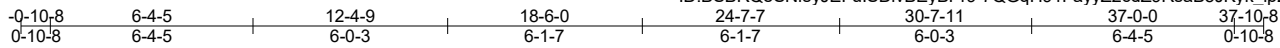
**LOAD CASE(S)** Standard



1/22/2024

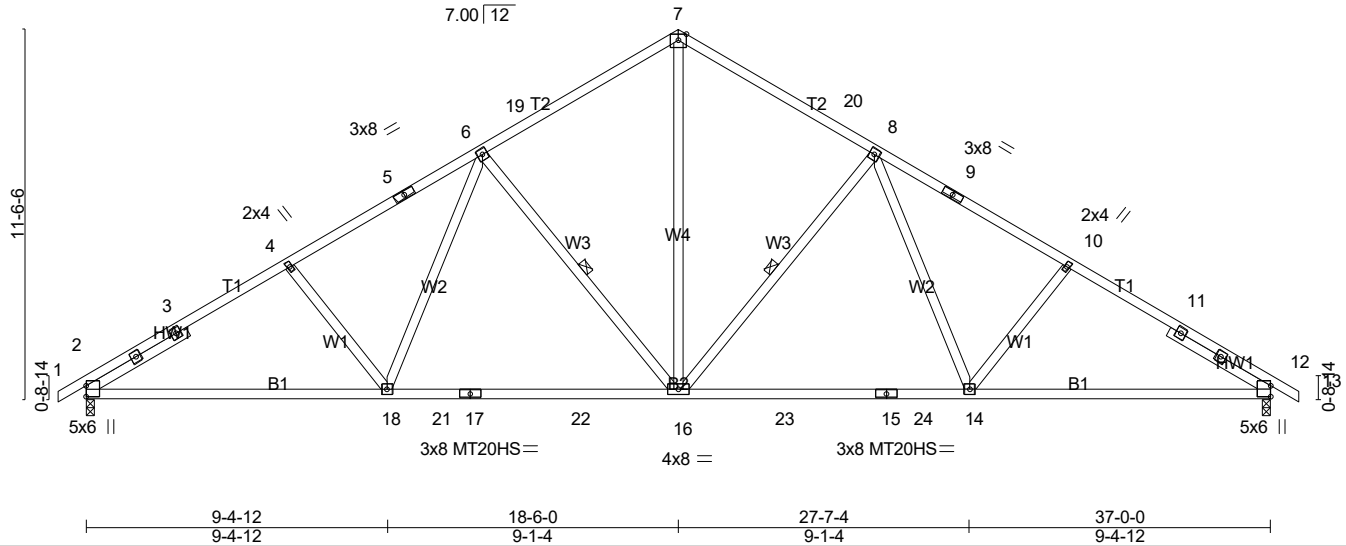
**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building 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.





5x6 =

Scale = 1:72.0



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>		<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d		MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.93	Vert(LL) -0.32 16-18 >999 240		MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.53	Vert(CT) -0.50 16-18 >884 180			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.11 12 n/a n/a			
BCDL 10.0	Code IRC2021/TPI2014					Weight: 216 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
B2: 2x4 SP No.1	WEBS 1 Row at midpt 8-16, 6-16
WEBS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 -Ø 3-7-15, Right 2x4 SP No.3 -Ø 3-7-15	

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

**REACTIONS.** (lb/size) 2=1532/0-3-8 (min. 0-1-14), 12=1533/0-3-8 (min. 0-1-14)  
 Max Horz 2=-221(LC 12)  
 Max Uplift 2=-125(LC 14), 12=-125(LC 15)  
 Max Grav 2=1598(LC 24), 12=1598(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2469/177, 3-4=-2392/196, 4-5=-2284/191, 5-6=-2146/207, 6-19=-1665/174,  
 7-19=-1581/201, 7-20=-1581/201, 8-20=-1665/174, 8-9=-2146/207, 9-10=-2285/191,  
 10-11=-2392/196, 11-12=-2469/178  
 BOT CHORD 2-18=-230/2163, 18-21=-122/1854, 17-21=-122/1854, 17-22=-122/1854, 16-22=-122/1854,  
 16-23=-23/1744, 15-23=-23/1744, 15-24=-23/1744, 14-24=-23/1744, 12-14=-81/1998  
 WEBS 7-16=-101/1304, 8-16=-683/202, 8-14=-36/497, 6-16=-683/202, 6-18=-36/497

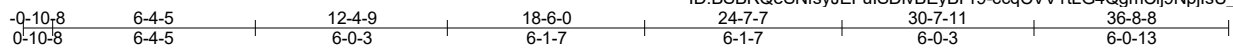
- NOTES-** (11)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 13-8-6, Exterior(2R) 13-8-6 to 23-3-10, Interior(1) 23-3-10 to 33-0-14, Exterior(2E) 33-0-14 to 37-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) All plates are 4x4 MT20 unless otherwise indicated.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=-125, 12=125.



**LOAD CASE(S)** Standard

1/22/2024

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Scale = 1:71.8

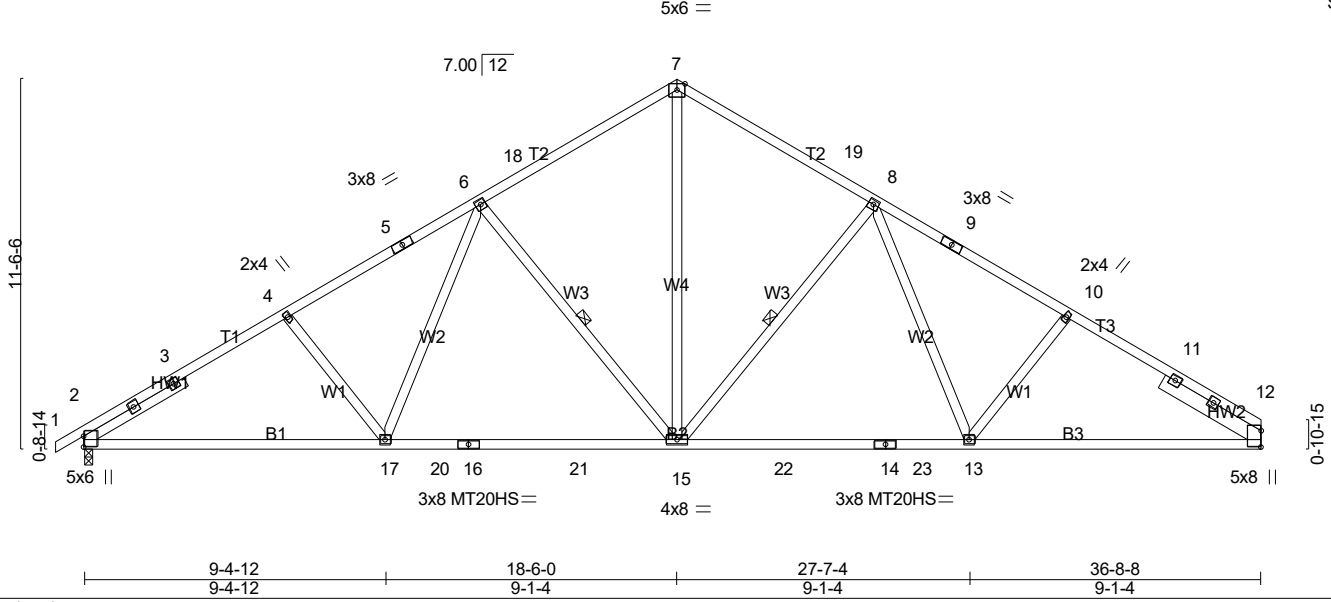


Plate Offsets (X,Y)-- [12:0-6-2,0-0-1]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.78	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.92	Vert(LL) -0.32 15-17 >999 240	MT20HS	187/143
TCDL 10.0	Lumber DOL 1.15	WB 0.53	Vert(CT) -0.50 13-15 >879 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.10 12 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014				Weight: 216 lb FT = 20%

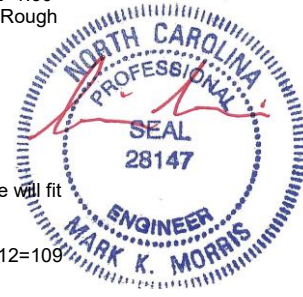
**LUMBER-**  
 TOP CHORD 2x4 SP No.2 \*Except\*  
 T3: 2x4 SP No.1  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 B2: 2x4 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -Ø 3-7-15, Right 2x6 SP No.2 -Ø 3-7-0

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-4-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 2-2-0 oc bracing: 2-17.  
 WEBS 1 Row at midpt 8-15, 6-15  
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 12=1468/Mechanical, 2=1521/0-3-8 (min. 0-1-14)  
 Max Horz 2=220(LC 11)  
 Max Uplift 12=-109(LC 15), 2=-125(LC 14)  
 Max Grav 12=1539(LC 25), 2=1587(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2448/177, 3-4=-2372/195, 4-5=-2264/190, 5-6=-2126/206, 6-18=-1643/172,  
 7-18=-1559/200, 7-19=-1560/201, 8-19=-1645/173, 8-9=-2073/202, 9-10=-2196/186,  
 10-11=-2307/191, 11-12=-2395/171  
 BOT CHORD 2-17=-231/2146, 17-20=-123/1836, 16-20=-123/1836, 15-21=-123/1836,  
 15-22=-23/1708, 14-22=-23/1708, 14-23=-23/1708, 13-23=-23/1708, 12-13=-77/1901  
 WEBS 8-15=-654/201, 8-13=-32/436, 7-15=-101/1284, 6-15=-683/202, 6-17=-36/498

- NOTES-** (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 13-8-6, Exterior(2R) 13-8-6 to 23-3-10, Interior(1) 23-3-10 to 31-10-14, Exterior(2E) 31-10-14 to 36-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) All plates are MT20 plates unless otherwise indicated.
  - 7) All plates are 4x4 MT20 unless otherwise indicated.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 10) Refer to girder(s) for truss to truss connections.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=109, 2=125.



1/22/2024

**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 23-B625-R01	Truss R08	Truss Type GABLE	Qty 1	Ply 1	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC	# 44390
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 0-10-8 18-6-0 18-6-0 0-10-8

5x6 =

Scale = 1:72.0

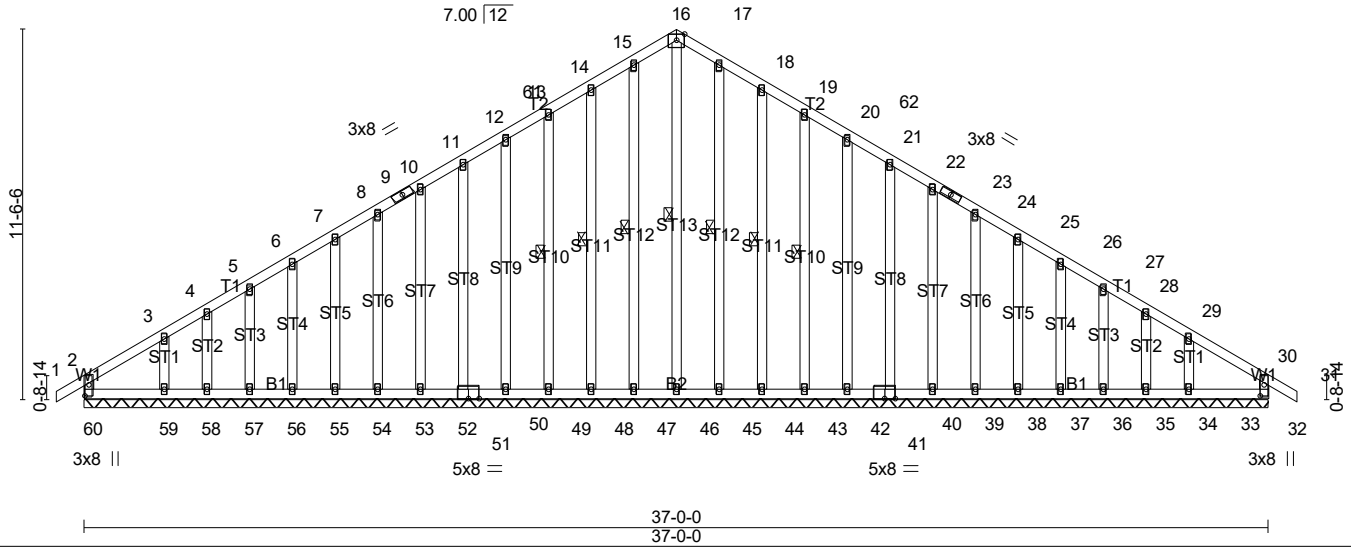


Plate Offsets (X,Y)-- [32:0-4-3,0-1-8], [60:0-4-3,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.12	Vert(LL) -0.00	31	n/r	180	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.07	Vert(CT) -0.00	31	n/r	80		
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Horz(CT) 0.01	32	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R						
BCDL 10.0	Code IRC2021/TPI2014							
							Weight: 351 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

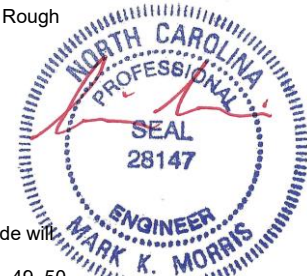
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 16-46, 15-47, 14-48, 13-49, 17-45, 18-44, 19-43

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

**REACTIONS.** All bearings 37-0-0.  
 (lb) - Max Horz 60=-235(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 60, 32, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 44, 43, 42, 40, 39, 38, 37, 36, 35, 34, 33 except 59=-108(LC 14)  
 Max Grav All reactions 250 lb or less at joint(s) 60, 32, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 45, 44, 43, 42, 40, 39, 38, 37, 36, 35, 34, 33

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 15-16=-160/256, 16-17=-160/256

- NOTES-** (14)
- 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 3-10-0, Exterior(2N) 3-10-0 to 13-8-6, Corner(3R) 13-8-6 to 23-3-10, Exterior(2N) 23-3-10 to 33-0-14, Corner(3E) 33-0-14 to 37-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 1-4-0 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) 60, 32, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 44, 43, 42, 40, 39, 38, 37, 36, 35, 34, 33 except (jt=lb) 59=108.



1/22/2024

**LOAD CASE(S)** Standard  
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Job	Truss	Truss Type	Qty	Ply	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	R09	GABLE	2	1	# 44390

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 24 19:59:36 2024 Page 1  
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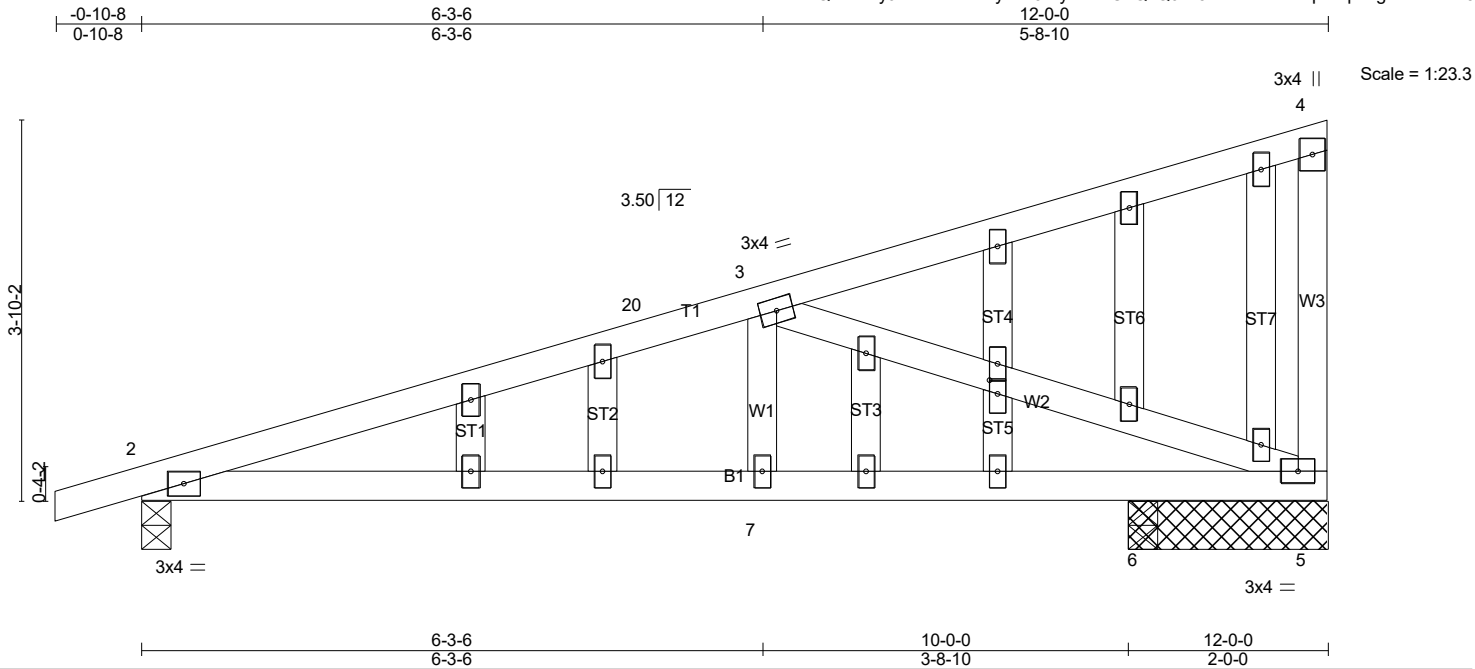


Plate Offsets (X,Y)-- [16:0-1-11,0-1-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.54	Vert(LL) -0.05	2-7	>999	240	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.48	Vert(CT) -0.11	2-7	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.68	Horz(CT) 0.02	5	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-SH						
BCDL 10.0	Code IRC2021/TPI2014						Weight: 69 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 5-1-8 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) 5=394/2-0-0 (min. 0-1-8), 2=520/0-3-8 (min. 0-1-8), 6=83/0-3-8 (min. 0-1-8)  
 Max Horz 2=118(LC 11)  
 Max Uplift 5=-83(LC 14), 2=-89(LC 10)  
 Max Grav 5=508(LC 21), 2=568(LC 21), 6=127(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-20=-1072/148, 3-20=-971/158  
 BOT CHORD 2-7=-129/982, 6-7=-129/982, 5-6=-129/982  
 WEBS 3-5=-1015/184

- NOTES-** (11)
- 1) 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) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 7-0-10, Exterior(2E) 7-0-10 to 11-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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.
  - 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 7) Gable studs spaced at 1-4-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.

**LOAD CASE(S)** Standard

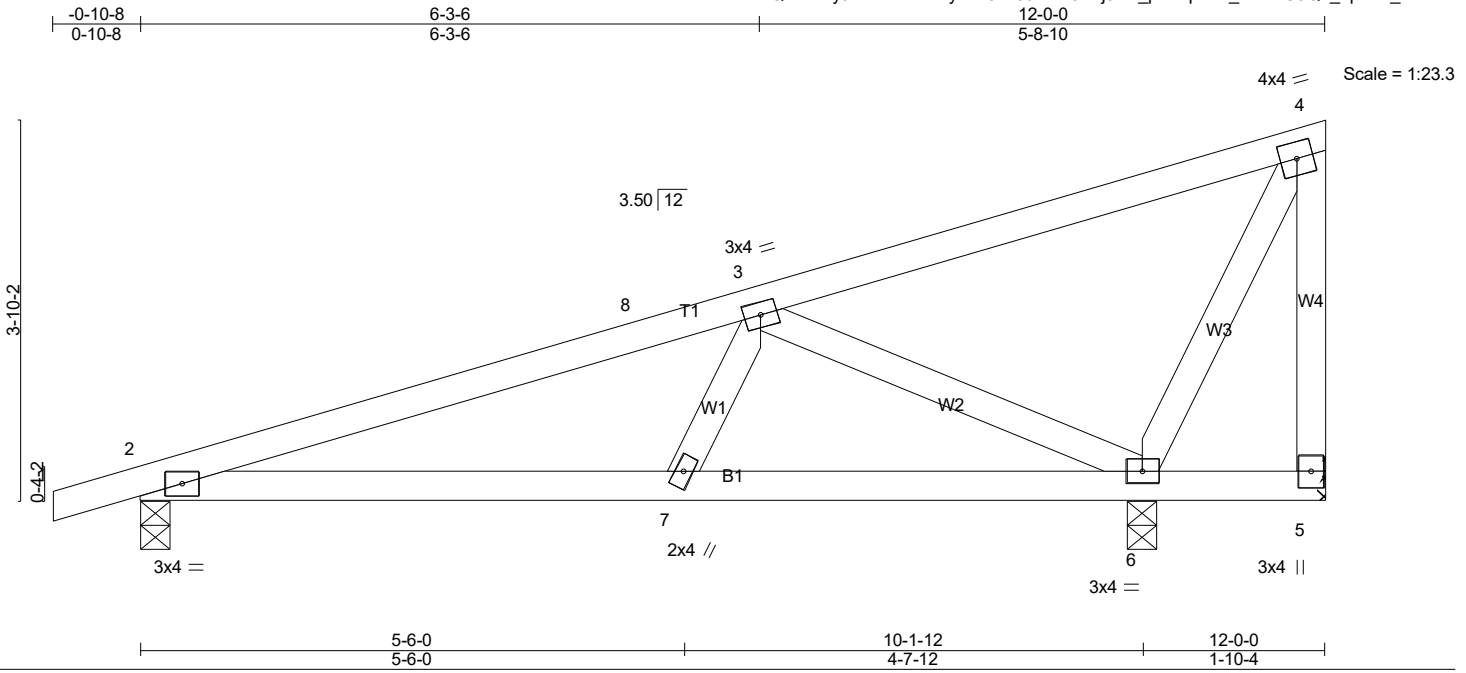


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Job	Truss	Truss Type	Qty	Ply	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	R10	Monopitch	7	1	Job Reference (optional) # 44390

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<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.59	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.15	BC 0.34	Vert(LL) -0.03 2-7 >999 240		
TCDL 10.0	Rep Stress Incr YES	WB 0.36	Vert(CT) -0.06 2-7 >999 180		
BCLL 0.0 *	Code IRC2021/TPI2014	Matrix-SH	Horz(CT) 0.01 5 n/a n/a		
BCDL 10.0				Weight: 57 lb	FT = 20%

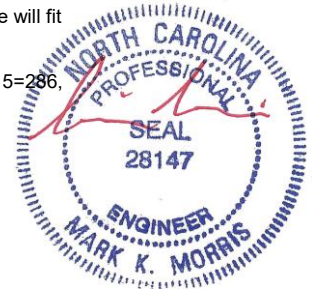
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 5=-262/Mechanical, 2=408/0-3-8 (min. 0-1-8), 6=852/0-3-8 (min. 0-1-8)  
 Max Horz 2=118(LC 13)  
 Max Uplift 5=-286(LC 21), 2=-72(LC 10), 6=-102(LC 14)  
 Max Grav 5=18(LC 14), 2=432(LC 21), 6=1023(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-661/71, 3-8=-560/80, 3-4=-47/319, 4-5=-24/286  
 BOT CHORD 2-7=-65/588, 6-7=-86/533  
 WEBS 3-6=-872/180, 4-6=-626/91

- NOTES-** (9)
- 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 7-0-10, Exterior(2E) 7-0-10 to 11-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 2 except (jt=lb) 5=286, 6=102.

**LOAD CASE(S)** Standard

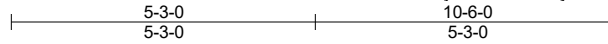


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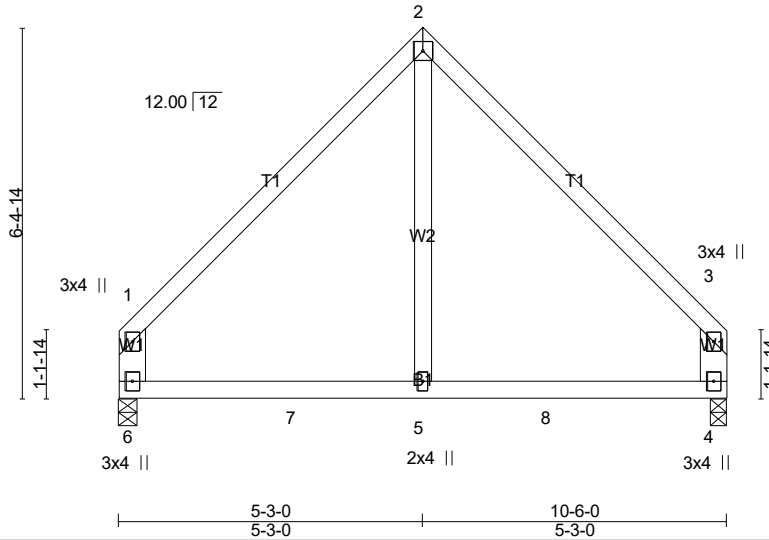
Job 23-B625-R01	Truss R13	Truss Type Common	Qty 1	Ply 1	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC	# 44390
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4x4 =

Scale = 1:39.8



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.33	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.30	Vert(LL) -0.03 5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.11	Vert(CT) -0.05 4-5 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 51 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 6=402/0-3-8 (min. 0-1-8), 4=402/0-3-8 (min. 0-1-8)  
Max Horz 6=-128(LC 8)  
Max Uplift 6=-25(LC 13), 4=-25(LC 12)  
Max Grav 6=464(LC 20), 4=464(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-449/105, 2-3=-449/105, 1-6=-372/117, 3-4=-372/117  
BOT CHORD 6-7=-21/269, 5-7=-21/269, 5-8=-21/269, 4-8=-21/269  
WEBS 2-5=0/291

- NOTES-** (7)
- 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; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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
  - 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) 6, 4.

**LOAD CASE(S)** Standard

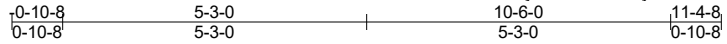


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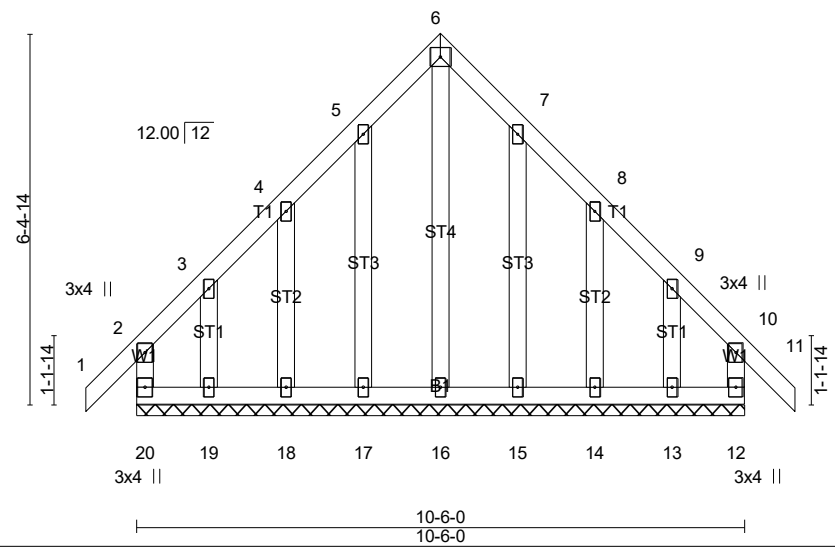
Job	Truss	Truss Type	Qty	Ply	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	R14	GABLE	1	1	# 44390

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4x4 =

Scale = 1:39.8



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) -0.00 11 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.24	Vert(CT) -0.00 11 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 12 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 81 lb	FT = 20%

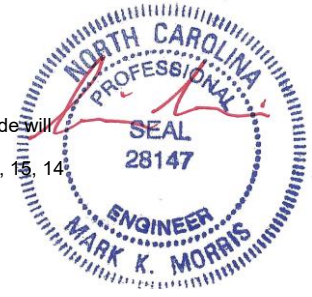
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.3  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**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 10-6-0.  
 (lb) - Max Horz 20=147(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 15, 14 except 19=-108(LC 12), 13=-104(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 5-6=-118/298, 6-7=-118/298  
 WEBS 6-16=-351/93

- NOTES-** (13)
- 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 3-11-0, Corner(3R) 3-11-0 to 6-7-0, Corner(3E) 6-7-0 to 11-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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
  - 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 1-4-0 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) 20, 12, 17, 18, 15, 14 except (jt=lb) 19=108, 13=104.

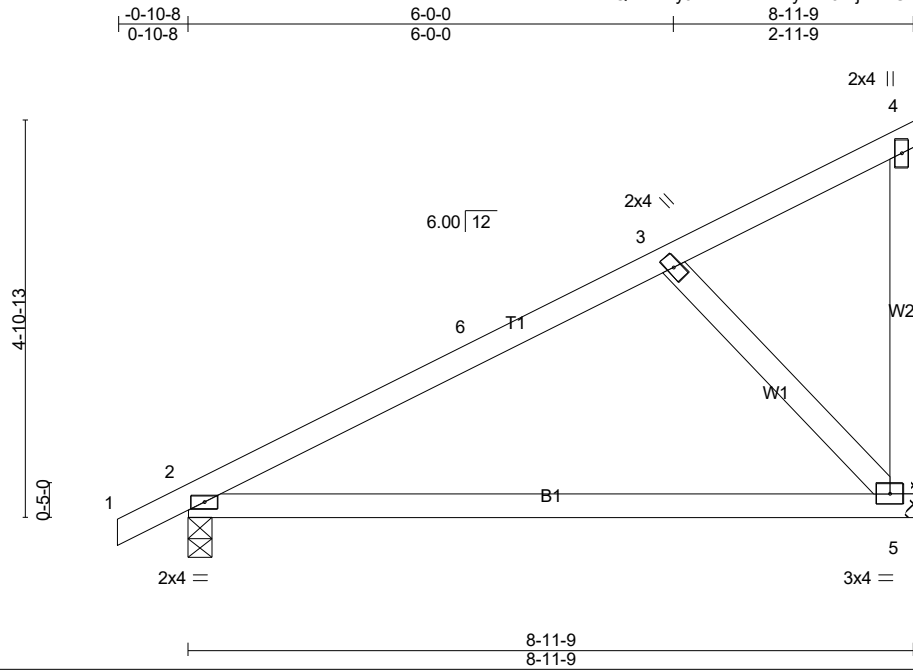


1/22/2024

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

Job	Truss	Truss Type	Qty	Ply	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	R15	Monopitch	5	1	Job Reference (optional) # 44390

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 24 19:59:40 2024 Page 1  
 ID:BSBRQeSNfsyJEFuISDlvBEyBP9-nj?NoGAmleTsUSYssz4OgdpTuaBSdUrKWtGbxzs2s1



Scale = 1:28.5

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.35	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.49	Vert(LL) -0.26 2-5 >394 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Vert(CT) -0.53 2-5 >197 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 42 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP SS  
 WEBS 2x4 SP No.3

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

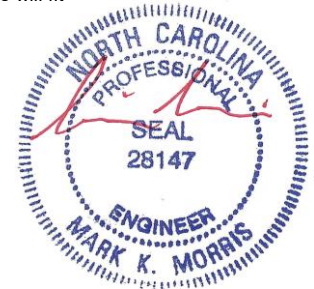
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 5=343/Mechanical, 2=412/0-3-8 (min. 0-1-8)  
 Max Horz 2=145(LC 11)  
 Max Uplift 5=-63(LC 14), 2=-45(LC 14)  
 Max Grav 5=464(LC 21), 2=462(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-6=-398/97, 3-6=-314/112  
 BOT CHORD 2-5=-80/302  
 WEBS 3-5=-436/209

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

**LOAD CASE(S)** Standard



1/22/2024

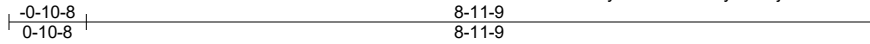
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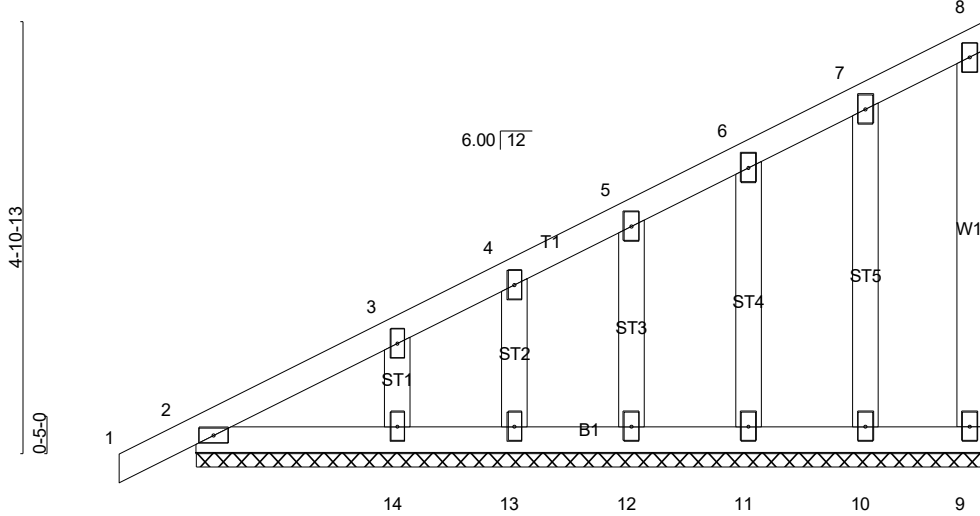


Job	Truss	Truss Type	Qty	Ply	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	R17	GABLE	1	1	Job Reference (optional) # 44390

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Scale = 1:26.3



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.07	Vert(LL) 0.00 1 n/r 180		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(CT) 0.00 1 n/r 80		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 9 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 54 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.  
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 8-11-9.  
 (lb) - Max Horz 2=145(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14  
 Max Grav All reactions 250 lb or less at joint(s) 9, 2, 10, 11, 12, 13, 14

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

- NOTES-** (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 Corner(3E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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.
  - 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 2x4 MT20 unless otherwise indicated.
  - 7) Gable requires continuous bottom chord bearing.
  - 8) Gable studs spaced at 1-4-0 oc.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2, 10, 11, 12, 13, 14.

**LOAD CASE(S)** Standard



1/22/2024

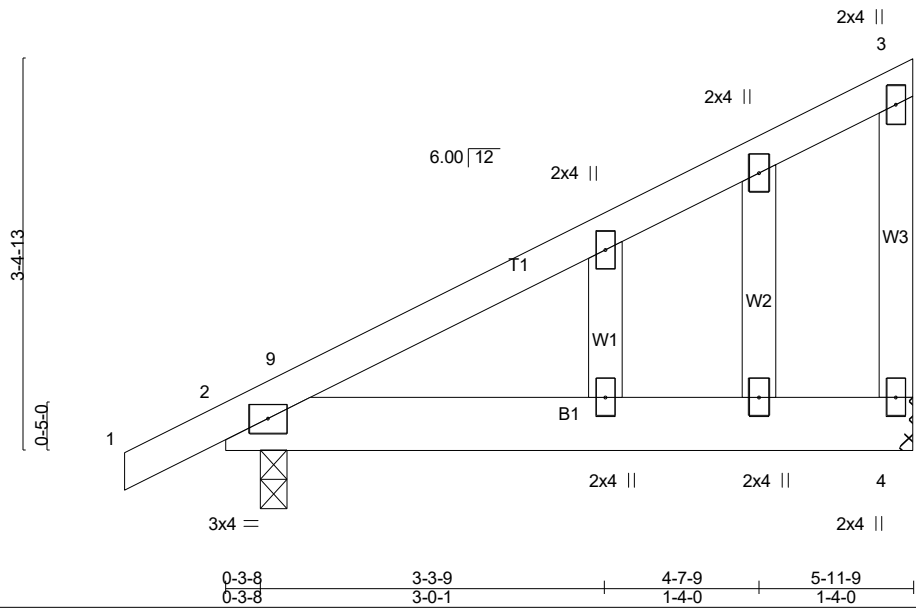
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Job	Truss	Truss Type	Qty	Ply	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	R18	Monopitch	2	1	Job Reference (optional) # 44390

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Scale = 1:20.0



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.97	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) -0.03 2-4 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 34 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 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.

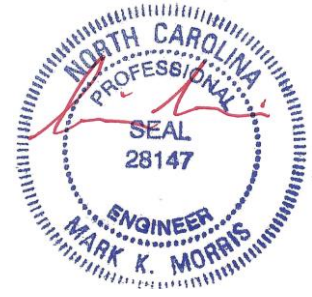
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 4=222/Mechanical, 2=293/0-3-0 (min. 0-1-8)  
 Max Horz 2=97(LC 11)  
 Max Uplift 4=40(LC 14), 2=36(LC 14)  
 Max Grav 4=317(LC 21), 2=370(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-260/92

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

**LOAD CASE(S)** Standard

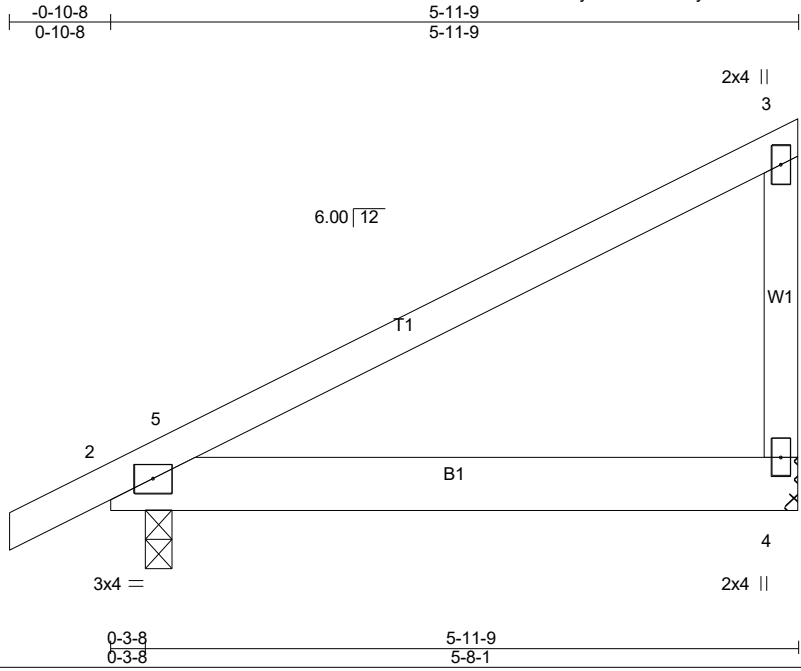


1/22/2024

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC
23-B625-R01	R19	Monopitch	13	1	Job Reference (optional) # 44390

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Scale = 1:20.0

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.97	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) -0.03 2-4 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 29 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 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.

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

**REACTIONS.** (lb/size) 4=222/Mechanical, 2=293/0-3-0 (min. 0-1-8)  
 Max Horz 2=97(LC 11)  
 Max Uplift 4=40(LC 14), 2=36(LC 14)  
 Max Grav 4=317(LC 21), 2=370(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-260/92

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

**LOAD CASE(S)** Standard

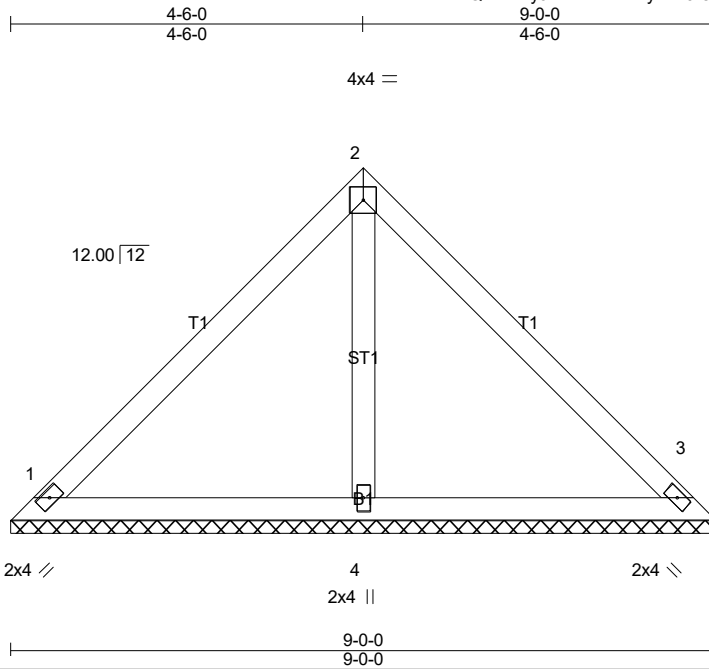


1/22/2024

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Job 23-B625-R01	Truss V01	Truss Type Valley	Qty 1	Ply 1	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 44390</b>
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Scale = 1:29.4

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.34	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.30	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-P	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014			Weight: 37 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=200/9-0-0 (min. 0-1-8), 3=200/9-0-0 (min. 0-1-8), 4=264/9-0-0 (min. 0-1-8)  
Max Horz 1=-81(LC 8)  
Max Uplift1=-37(LC 13), 3=-37(LC 13)

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

**NOTES-** (8)

- 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; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.

**LOAD CASE(S)** Standard

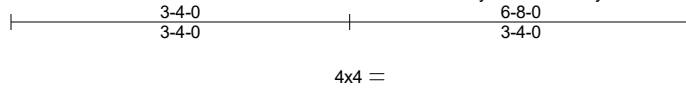


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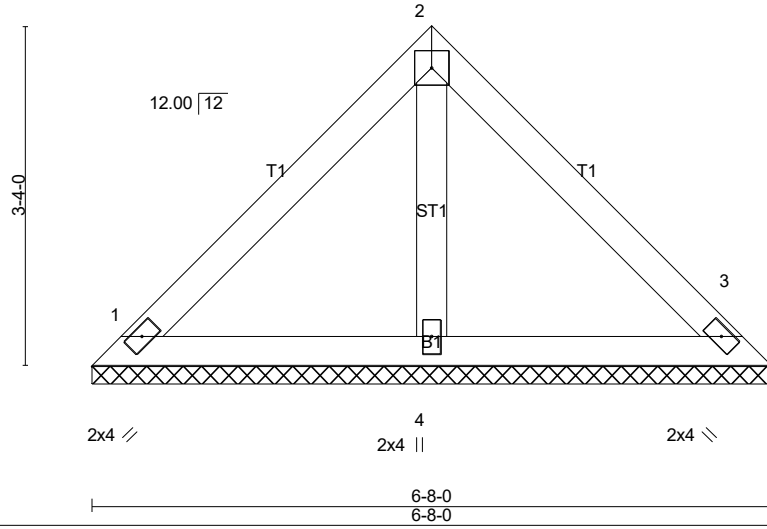
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Job 23-B625-R01	Truss V02	Truss Type Valley	Qty 1	Ply 1	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 44390</b>
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Scale = 1:22.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) n/a - n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a		
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: 27 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.

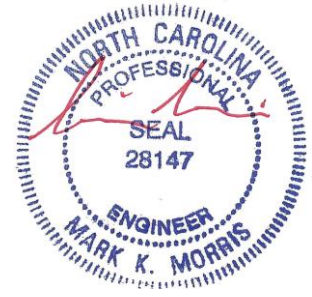
**REACTIONS.** (lb/size) 1=144/6-8-0 (min. 0-1-8), 3=144/6-8-0 (min. 0-1-8), 4=190/6-8-0 (min. 0-1-8)  
Max Horz 1=-58(LC 10)  
Max Uplift1=-27(LC 13), 3=-27(LC 13)

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

**NOTES-** (8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.

**LOAD CASE(S)** Standard

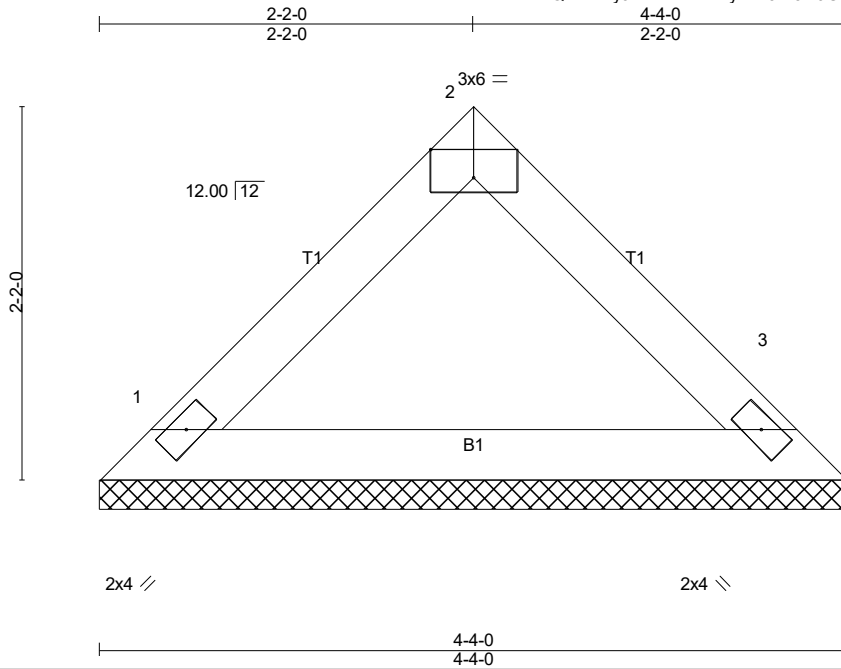


1/22/2024

**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 23-B625-R01	Truss V03	Truss Type Valley	Qty 1	Ply 1	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 44390</b>
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 24 19:59:47 2024 Page 1  
ID:BSBRQeSNfsyJEFuISDlvBEyBPr9-43w0GfFA5oMsqXaCnxi1S5ckaOdUmh5M7u38K1zs2w



Scale = 1:13.4

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.27	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2021/TPI2014						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 4-4-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 1=145/4-4-0 (min. 0-1-8), 3=145/4-4-0 (min. 0-1-8)  
Max Horz 1=-35(LC 10)  
Max Uplift1=-7(LC 12), 3=-7(LC 13)

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

**NOTES-** (8)

- 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; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.

**LOAD CASE(S)** Standard

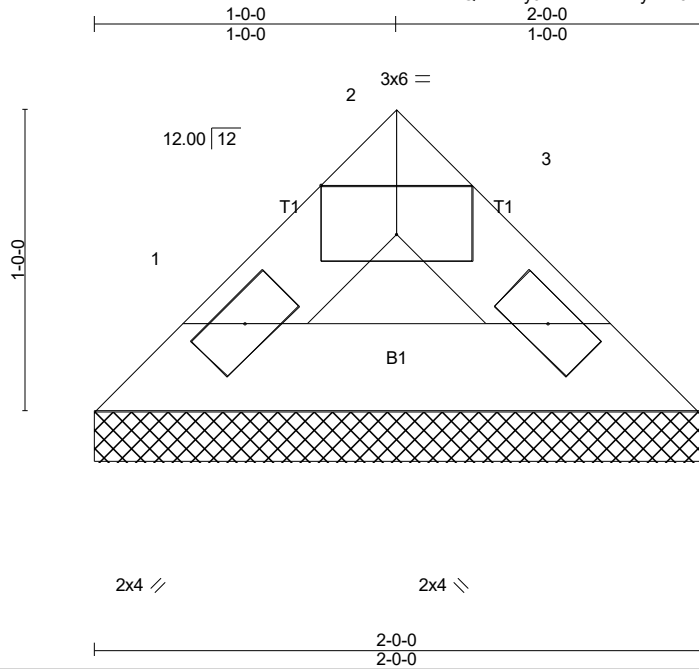


1/22/2024

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Job 23-B625-R01	Truss V04	Truss Type Valley	Qty 1	Ply 1	LOT 0.0097 BLAKE POND   109 WHIMBREL COURT LILLINGTON, NC Job Reference (optional) <b># 44390</b>
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Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 24 19:59:48 2024 Page 1  
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Scale = 1:7.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.01	Vert(LL)	n/a	-	n/a	MT20	244/190
Snow (Pf) 20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2021/TPI2014						Weight: 6 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 2-0-0 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.** (lb/size) 1=52/2-0-0 (min. 0-1-8), 3=52/2-0-0 (min. 0-1-8)  
Max Horz 1=-13(LC 10)  
Max Uplift 1=-3(LC 12), 3=-3(LC 13)

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

**NOTES-** (8)

- 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; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.

**LOAD CASE(S)** Standard



1/22/2024

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