Mark Morris, P.E.

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843 209-5784, Fax (866)-213-4614

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

AST #: 49568
JOB: 24-5147-R01
JOB NAME: LOT 0.0109 BLAKE POND
Wind Code: ASCE7-16
Wind Speed: Vult= 120mph
Exposure Category: B
Mean Roof Height (feet): 23
These truss designs comply with IRC 2015 as well as IRC 2018.
44 Truss Design(s)

Trusses:
J01, J01A, J02, J02A, J03, J03A, J05, J06, J08, J09, J10, R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R12, R13, R14, R14A, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, SP01, SP02

6/13/2024
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 Handling*,

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J01	Jack-Open	3	1	Job Reference (optional) **# 49568**

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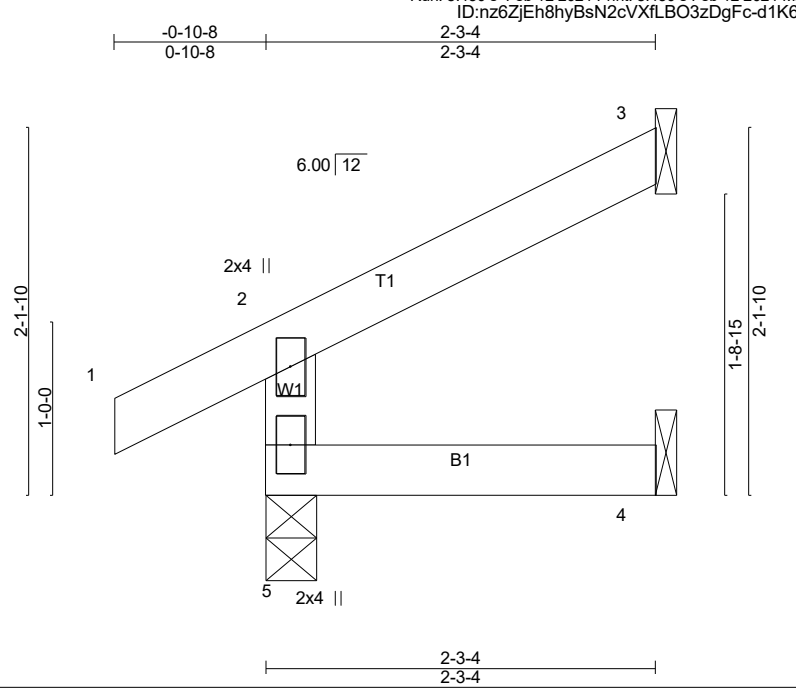


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 10 lb	FT = 20%
BCDL	10.0											

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

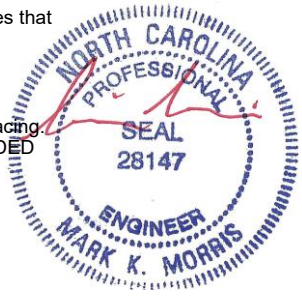
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 5=159/0-3-8 (min. 0-1-8), 3=48/Mechanical, 4=19/Mechanical
Max Horz 5=45(LC 14)
Max Uplift5=-9(LC 14), 3=-30(LC 14)
Max Grav 5=220(LC 21), 3=69(LC 21), 4=38(LC 7)

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; End Jack 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) 5, 3.
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.



LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J01A	Jack-Open	1	1	Job Reference (optional) **# 49568**

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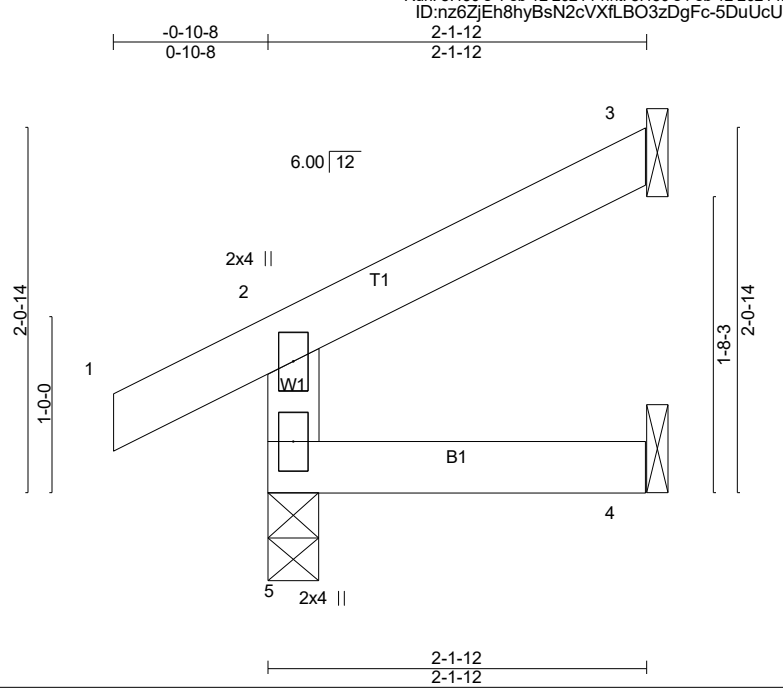


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 9 lb	FT = 20%
BCDL	10.0											

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

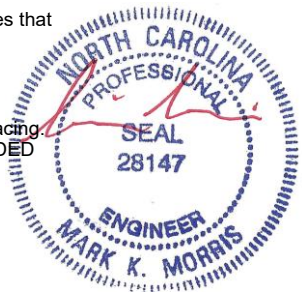
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-1-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 5=155/0-3-8 (min. 0-1-8), 3=44/Mechanical, 4=17/Mechanical
Max Horz 5=43(LC 14)
Max Uplift5=-8(LC 14), 3=-28(LC 14)
Max Grav 5=213(LC 21), 3=62(LC 21), 4=36(LC 7)

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; End Jack 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) 5, 3.
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.



LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J02	Jack-Open Girder	3	1	Job Reference (optional) **# 49568**

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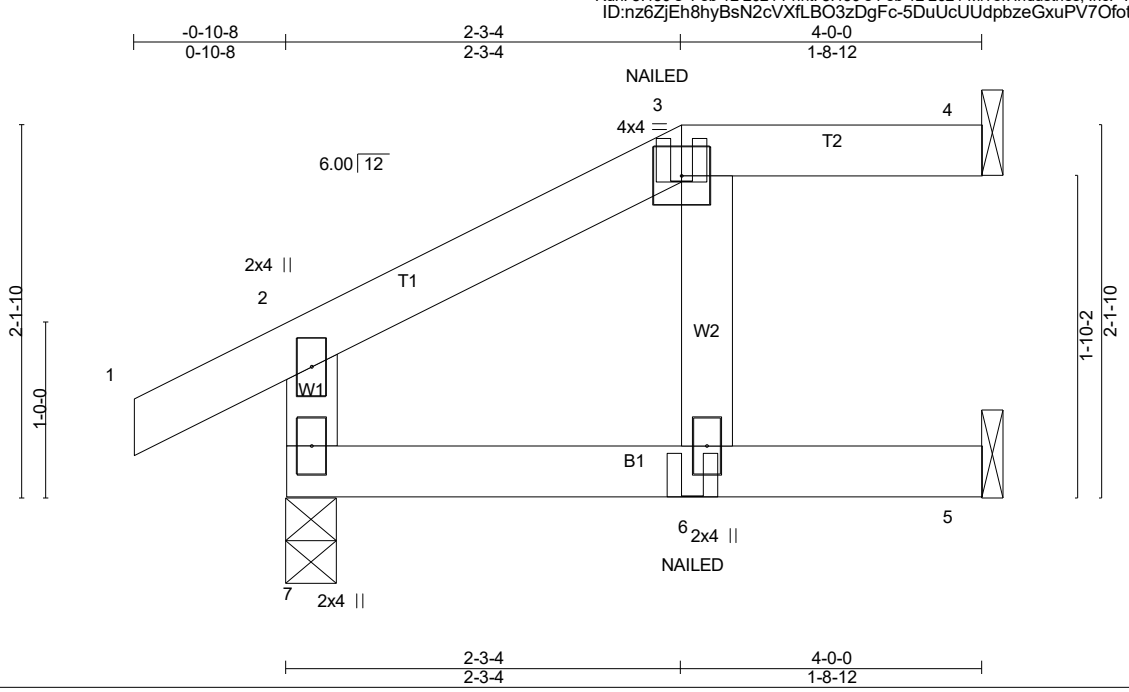


LOADING (psf)

TCLL (roof)	20.0
Snow (Pf)	20.0
TCDL	10.0
BCLL	0.0 *
BCDL	10.0

SPACING- 2-0-0
Plate Grip DOL 1.15
Lumber DOL 1.15
Rep Stress Incr NO
Code IRC2021/TPI2014

CSI.

TC	0.19
BC	0.22
WB	0.01
Matrix-P	

DEFL.

	in	(loc)	l/defl	L/d
Vert(LL)	-0.01	6	>999	240
Vert(CT)	-0.03	6	>999	180
Horz(CT)	0.02	4	n/a	n/a

PLATES MT20 **GRIP** 244/190

Weight: 17 lb FT = 20%

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

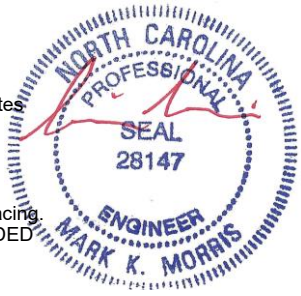
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 7=226/0-3-8 (min. 0-1-8), 4=82/Mechanical, 5=68/Mechanical
Max Horz 7=46(LC 12)
Max Uplift 7=-27(LC 12), 4=-22(LC 9), 5=-10(LC 12)
Max Grav 7=325(LC 34), 4=117(LC 33), 5=71(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-261/35

NOTES- (13-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; 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) Provide adequate drainage to prevent water ponding.
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.
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) 7, 4, 5.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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.



6/13/2024

LOAD CASE(S) Standard

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.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-12(F) 6=-0(F)

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J02A	Jack-Open Girder	1	1	Job Reference (optional) **# 49568**

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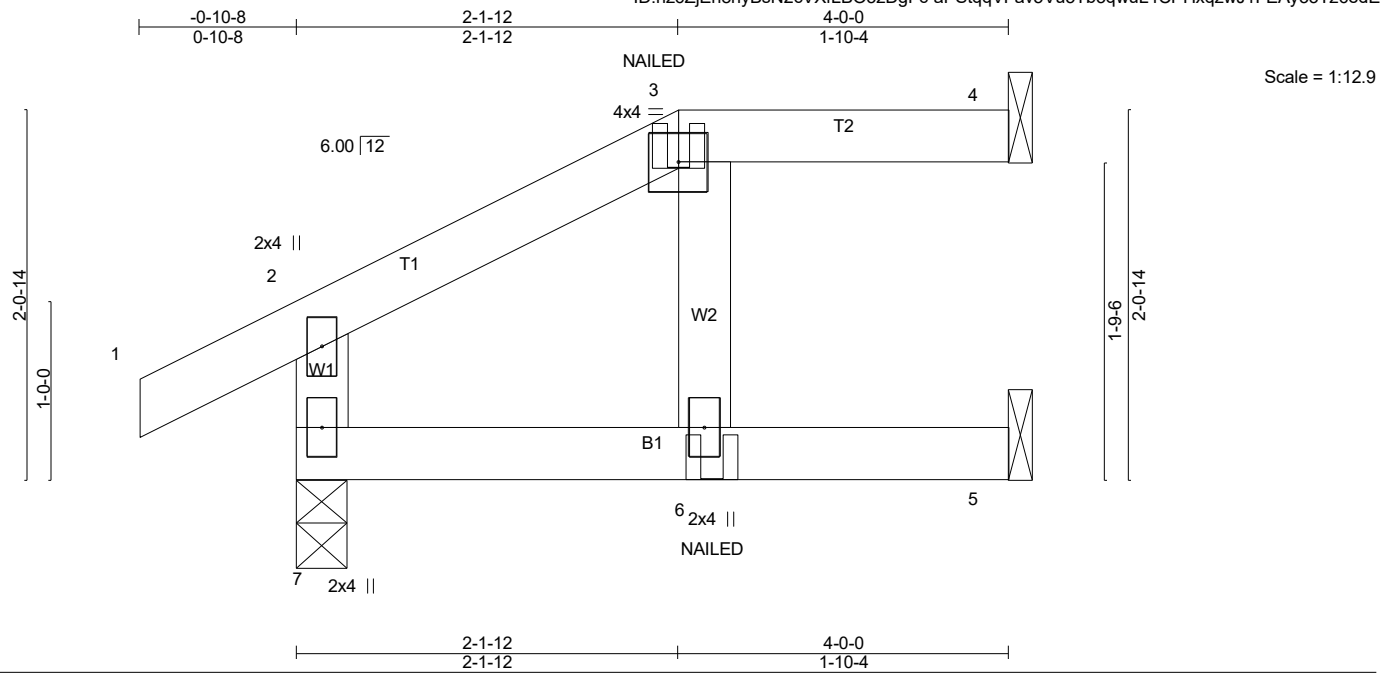

LOADING (psf)

TCLL (roof)	20.0
Snow (Pf)	20.0
TCDL	10.0
BCLL	0.0 *
BCDL	10.0

SPACING-	2-0-0
Plate Grip DOL	1.15
Lumber DOL	1.15
Rep Stress Incr	NO
Code IRC2021/TPI2014	

CSI.	
TC	0.18
BC	0.22
WB	0.01
Matrix-P	

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.01	6	>999	240
Vert(CT)	-0.03	6	>999	180
Horz(CT)	0.02	4	n/a	n/a

PLATES	**GRIP**
MT20	244/190

Weight: 17 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 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. (lb/size) 7=224/0-3-8 (min. 0-1-8), 4=83/Mechanical, 5=64/Mechanical
Max Horz 7=44(LC 55)
Max Uplift7=-31(LC 12), 4=-24(LC 9), 5=-9(LC 12)
Max Grav 7=321(LC 34), 4=121(LC 33), 5=68(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-257/36

NOTES- (13-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; 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) Provide adequate drainage to prevent water ponding.
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.
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) 7, 4, 5.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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.
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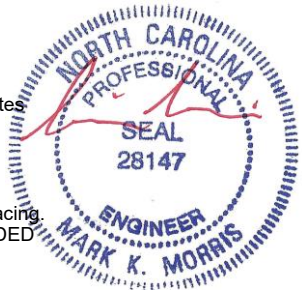
16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.



6/13/2024

LOAD CASE(S) Standard

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.

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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J03	Jack-Open	31	1	Job Reference (optional) **# 49568**

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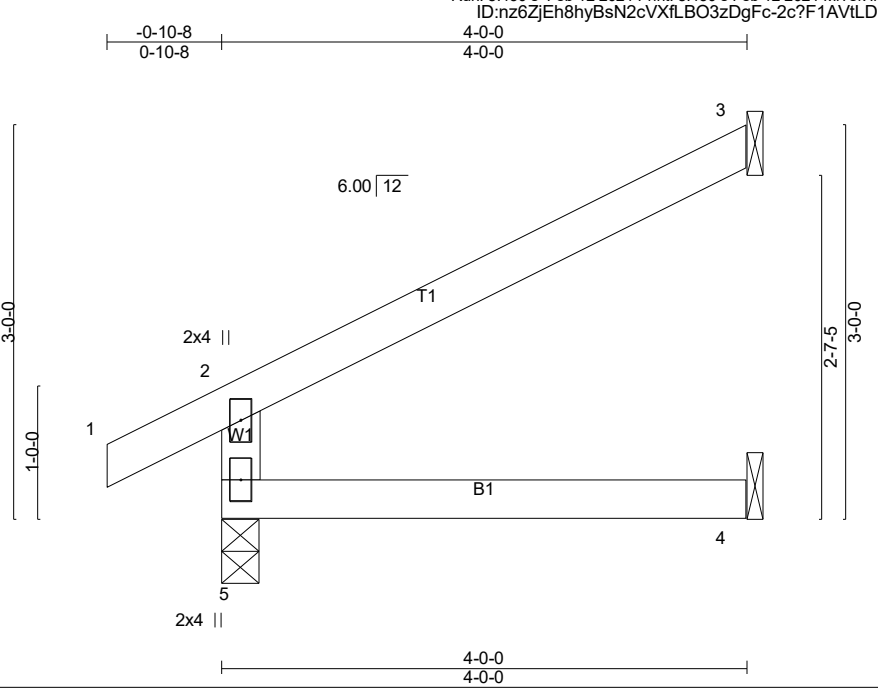


LOADING (psf)

TCLL (roof)	20.0
Snow (Pf)	20.0
TCDL	10.0
BCLL	0.0 *
BCDL	10.0

SPACING-	2-0-0
Plate Grip DOL	1.15
Lumber DOL	1.15
Rep Stress Incr	YES
Code IRC2021/TPI2014	

CSI.	
TC	0.32
BC	0.15
WB	0.00
Matrix-R	

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.01	4-5	>999	240
Vert(CT)	-0.02	4-5	>999	180
Horz(CT)	0.02	3	n/a	n/a

PLATES	**GRIP**
MT20	244/190

Weight: 15 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.

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

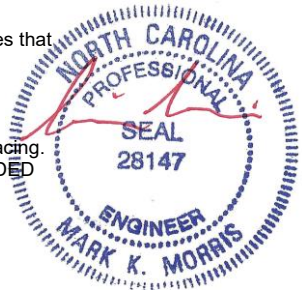
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 5=221/0-3-8 (min. 0-1-8), 3=101/Mechanical, 4=43/Mechanical
Max Horz 5=71(LC 14)
Max Uplift5=-11(LC 14), 3=-51(LC 14)
Max Grav 5=322(LC 21), 3=154(LC 21), 4=72(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-293/83

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; End Jack 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) 5, 3.
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.



LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J03A	Jack-Open	5	1	Job Reference (optional) **# 49568**

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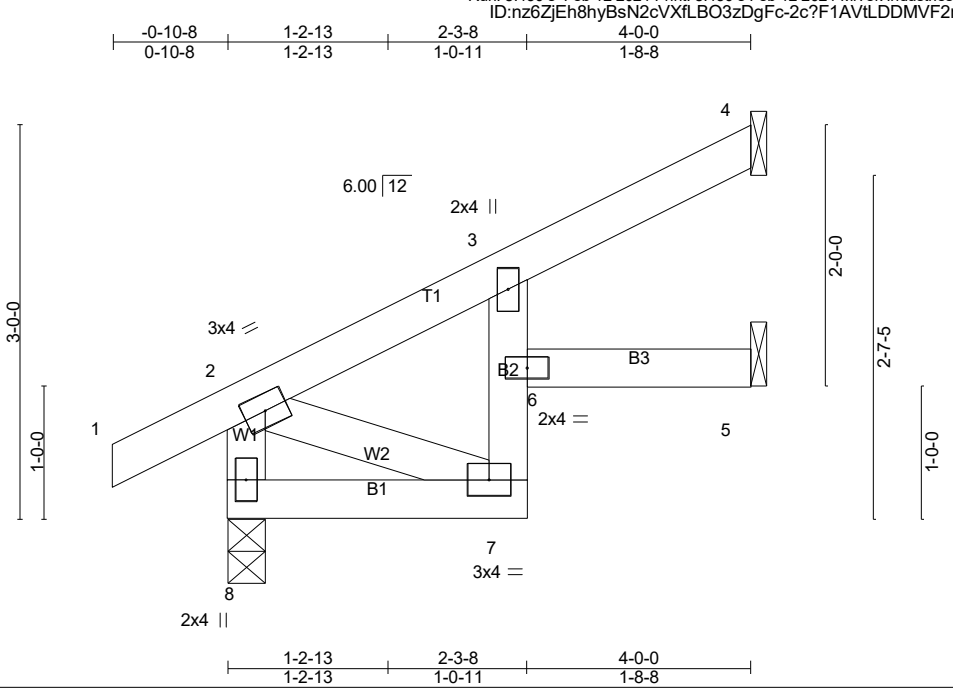


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.04	7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.06	7	>704	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.03	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 20 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B2: 2x4 SP No.3
WEBS 2x4 SP No.3

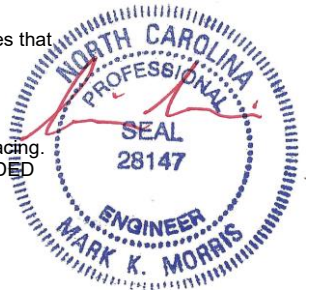
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 8=221/0-3-8 (min. 0-1-8), 4=126/Mechanical, 5=18/Mechanical
Max Horz 8=71(LC 14)
Max Uplift 8=-11(LC 14), 4=-55(LC 14)
Max Grav 8=322(LC 21), 4=183(LC 21), 5=36(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-302/56

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; End Jack 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) 8, 4.
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.



LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J05	Jack-Closed Girder	1	1	Job Reference (optional) **# 49568**

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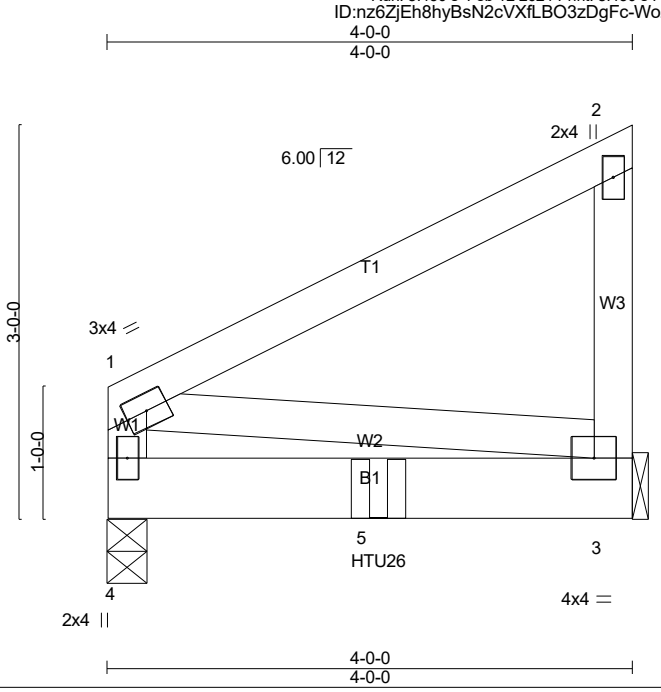


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.03	3-4	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.07	3-4	>663	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 25 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3

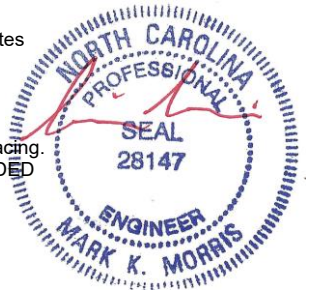
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-10-4 oc bracing.

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

REACTIONS. (lb/size) 4=802/0-3-8 (min. 0-1-8), 3=848/Mechanical
Max Horz 4=57(LC 12)
Max Uplift4=-26(LC 12), 3=-78(LC 12)
Max Grav 4=856(LC 18), 3=901(LC 18)

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

NOTES- (11-14)
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; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 3.
8) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 2-0-12 from the left end to connect truss(es) R12 (1 ply 2x4 SP) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
9) Fill all nail holes where hanger is in contact with lumber.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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

6/13/2024

Continued on page 2

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.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 3-4=-20
Concentrated Loads (lb)
Vert: 5=-1353(F)

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J06	Jack-Open	1	1	Job Reference (optional) **# 49568**

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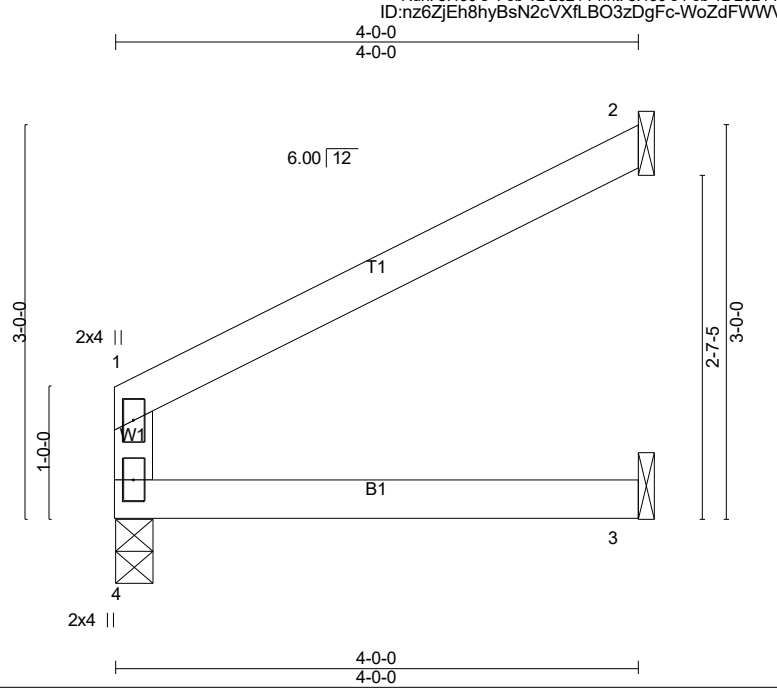


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.01	3-4	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	3-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 14 lb	FT = 20%
BCDL	10.0											

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

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

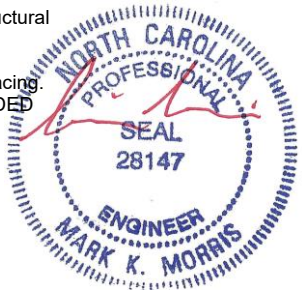
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 4=152/0-3-8 (min. 0-1-8), 2=106/Mechanical, 3=46/Mechanical
Max Horz 4=58(LC 14)
Max Uplift2=-52(LC 14)
Max Grav 4=207(LC 20), 2=156(LC 20), 3=73(LC 7)

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

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

LOAD CASE(S) Standard



6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J08	Jack-Open	1	1	Job Reference (optional) **# 49568**

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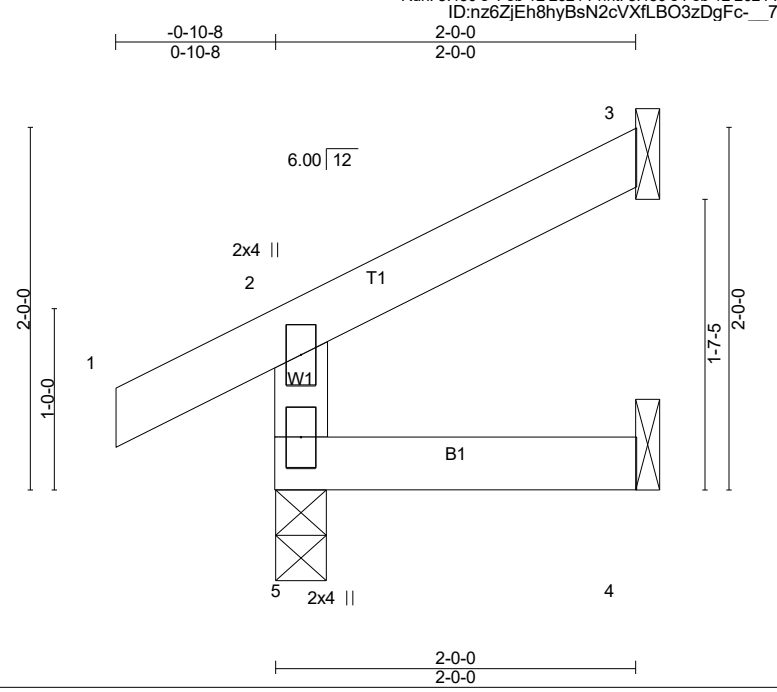


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 9 lb	FT = 20%
BCDL	10.0											

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

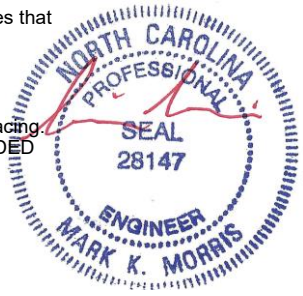
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 5=152/0-3-8 (min. 0-1-8), 3=41/Mechanical, 4=16/Mechanical
Max Horz 5=41(LC 14)
Max Uplift5=-8(LC 14), 3=-27(LC 14)
Max Grav 5=208(LC 21), 3=57(LC 21), 4=34(LC 7)

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

NOTES- (9-12)
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; End Jack 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) 5, 3.
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.



LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J09	Jack-Open	1	1	**# 49568**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:16:34 2024 Page 1
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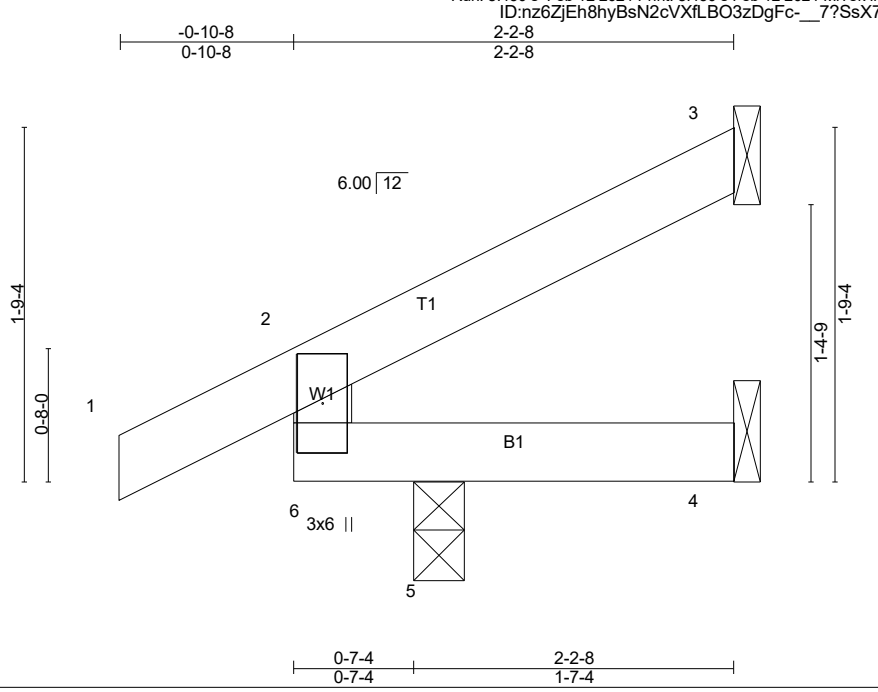


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 9 lb	FT = 20%
BCDL	10.0											

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

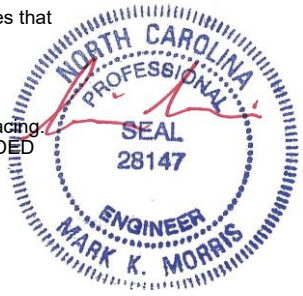
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 3=33/Mechanical, 4=-33/Mechanical, 5=221/0-3-0 (min. 0-1-8)
Max Horz 5=44(LC 14)
Max Uplift3=-24(LC 14), 4=-52(LC 21), 5=-22(LC 14)
Max Grav 3=47(LC 21), 4=9(LC 14), 5=306(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; End Jack Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever 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) 3, 4, 5.
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.



LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	J10	Jack-Open	3	1	Job Reference (optional) **# 49568**

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:16:35 2024 Page 1
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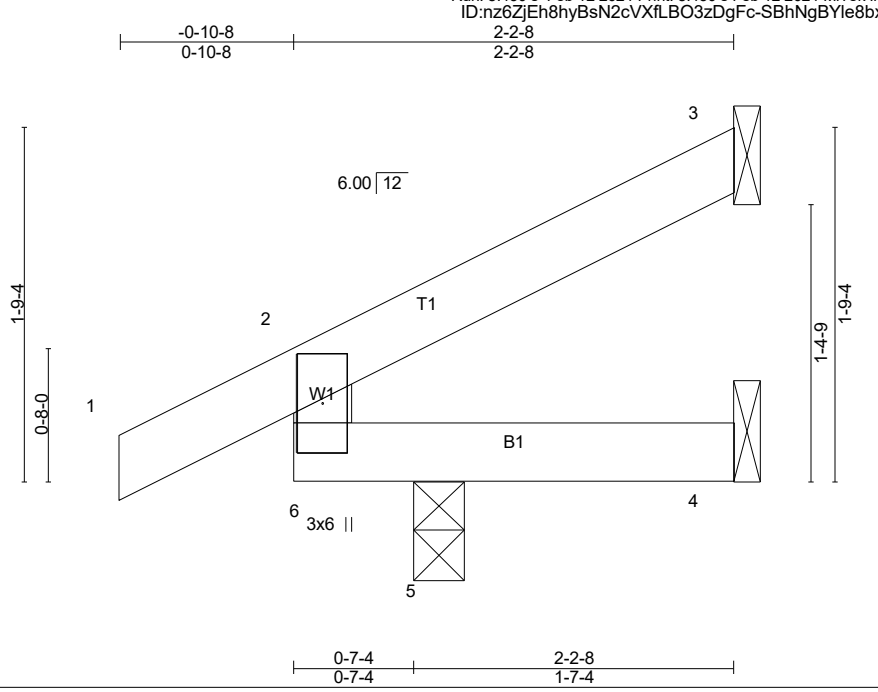


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 9 lb	FT = 20%
BCDL	10.0											

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

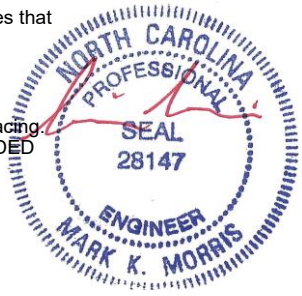
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 3=33/Mechanical, 4=-33/Mechanical, 5=221/0-3-0 (min. 0-1-8)
Max Horz 5=44(LC 14)
Max Uplift3=-24(LC 14), 4=-52(LC 21), 5=-22(LC 14)
Max Grav 3=47(LC 21), 4=9(LC 14), 5=306(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; End Jack Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever 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) 3, 4, 5.
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.



LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R01	HIP GIRDER	1	2	Job Reference (optional) **# 49568**

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-0-10-8	4-0-0	9-1-4	14-0-12	19-0-4	23-11-12	28-11-4	33-10-12	39-0-0	43-0-0	43-10-8
0-10-8	4-0-0	5-1-4	4-11-8	4-11-8	4-11-8	4-11-8	4-11-8	5-1-4	4-0-0	0-10-8

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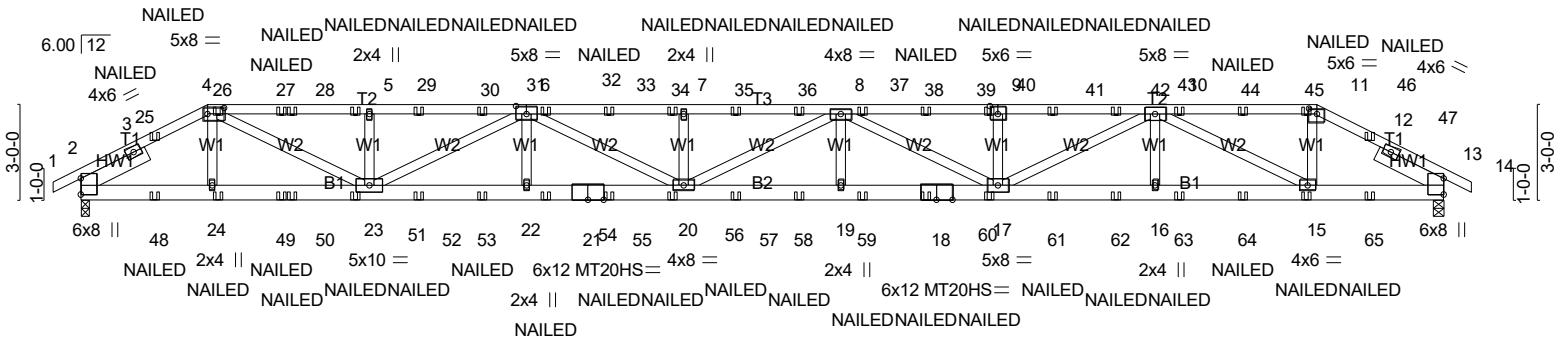

4-0-0	9-1-4	14-0-12	19-0-4	23-11-12	28-11-4	33-10-12	39-0-0	43-0-0
4-0-0	5-1-4	4-11-8	4-11-8	4-11-8	4-11-8	4-11-8	5-1-4	4-0-0

Plate Offsets (X,Y)-- [4:0-6-4,0-2-4], [6:0-4-0,0-3-0], [9:0-3-0,0-3-0], [11:0-3-0,0-2-0]

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	0.98	Vert(LL)	-0.83	19-20	>623	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-1.32	19-20	>392	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.18	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 521 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
W2: 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -° 2-4-0, Right 2x6 SP No.2 -° 2-4-0

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

REACTIONS. (lb/size) 2=3068/0-3-8 (min. 0-1-14), 13=2999/0-3-8 (min. 0-1-14)
Max Horz 2=-32(LC 61)
Max Uplift2=-434(LC 9), 13=-422(LC 8)
Max Grav 2=3202(LC 36), 13=3156(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5315/737, 3-25=-5305/742, 4-25=-5261/743, 4-26=-9172/1308, 26-27=-9172/1308, 27-28=-9172/1308, 28-29=-9171/1308, 5-29=-9171/1308, 5-30=-9172/1308, 30-31=-9172/1308, 31-32=-9172/1308, 6-32=-9172/1308, 6-33=-13193/1880, 33-34=-13193/1880, 34-35=-13193/1880, 7-35=-13193/1880, 7-36=-13193/1880, 36-37=-13193/1880, 8-37=-13193/1880, 8-38=-11832/1671, 38-39=-11832/1671, 39-40=-11832/1671, 9-40=-11832/1671, 9-41=-11832/1671, 41-42=-11832/1671, 42-43=-11832/1671, 10-43=-11832/1671, 10-44=-4551/644, 44-45=-4552/644, 45-46=-4552/644, 11-46=-4552/644, 11-47=-5128/714, 12-47=-5172/712, 12-13=-5182/708
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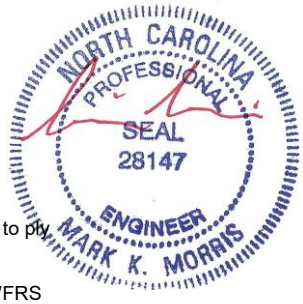
WEBS 4-23=-750/5212, 5-23=-730/213, 6-23=-3192/454, 6-22=0/312, 6-20=-207/1372, 7-20=-515/176, 8-19=0/326, 8-17=-1661/258, 9-17=-579/168, 10-17=-434/3025, 10-16=0/344, 10-15=-5212/747, 11-15=-250/2257

NOTES- (14-17)
1) 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: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60



6/13/2024

Continued on page 2

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.

NOTES- (14-17)

5) 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
6) Unbalanced snow loads have been considered for this design.
7) 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.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
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.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=434, 13=422.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-60, 4-11=-60, 11-14=-60, 2-13=-20
   Concentrated Loads (lb)
   Vert: 24=-27(F) 9=-94(F) 17=-27(F) 15=-27(F) 25=-57(F) 26=-94(F) 27=-94(F) 28=-94(F) 29=-94(F) 30=-94(F) 32=-94(F) 33=-94(F) 34=-94(F) 35=-94(F) 36=-94(F) 37=-94(F) 38=-94(F) 40=-94(F) 41=-94(F) 43=-94(F) 44=-94(F) 45=-94(F) 46=-94(F) 47=-57(F) 48=-51(F) 49=-27(F) 50=-27(F) 51=-27(F) 52=-27(F) 53=-27(F) 54=-27(F) 55=-27(F) 56=-27(F) 57=-27(F) 58=-27(F) 59=-27(F) 60=-27(F) 61=-27(F) 62=-27(F) 63=-27(F) 64=-27(F) 65=-51(F)

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R02	Hip	1	1	Job Reference (optional) **# 49568**

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:16:45 2024 Page 1
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-0-10-8	7-10-8	14-8-4	21-6-0	28-3-12	35-1-8	43-0-0	43-10-8
0-10-8	7-10-8	6-9-12	6-9-12	6-9-12	6-9-12	7-10-8	0-10-8

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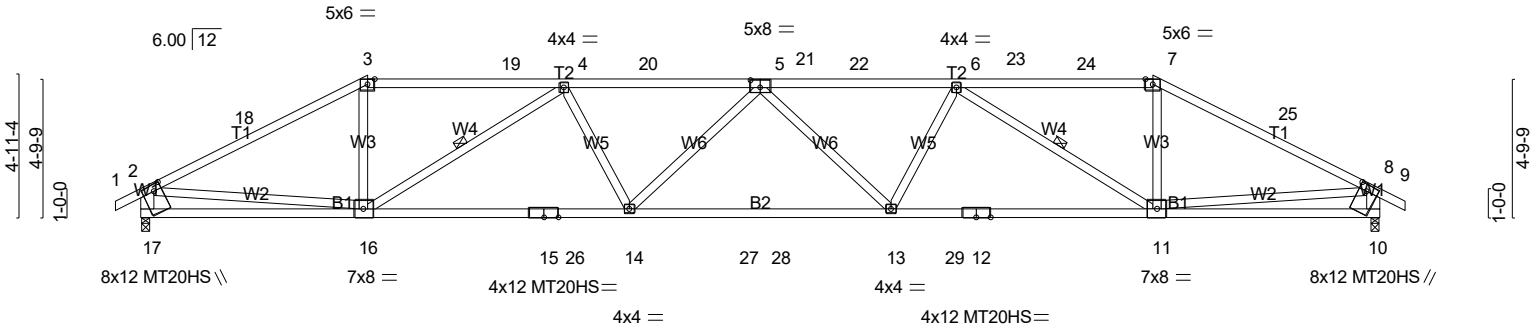


7-10-8	16-11-8	26-0-8	35-1-8	43-0-0
7-10-8	9-1-0	9-1-0	9-1-0	7-10-8

Plate Offsets (X,Y)-- [5:0-4-0,0-3-0], [10:0-2-12,0-3-4], [17:0-2-12,0-3-4]

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	0.70	Vert(LL)	-0.49	13-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.82	13-14	>619	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.20	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 227 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP SS
BOT CHORD 2x4 SP No.1 *Except*
B2: 2x4 SP SS
WEBS 2x4 SP No.3 *Except*
W1: 2x6 SP No.2, W2: 2x4 SP No.2

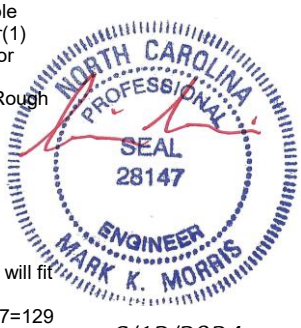
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-16, 6-11

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

REACTIONS. (lb/size) 17=1768/0-3-8 (min. 0-2-7), 10=1768/0-3-8 (min. 0-2-7)
Max Horz 17=57(LC 14)
Max Uplift17=-129(LC 11), 10=-129(LC 10)
Max Grav 17=2048(LC 38), 10=2048(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-18=-3488/278, 3-18=-3428/295, 3-19=-3040/305, 4-19=-3044/304, 4-20=-5218/413, 20-21=-5218/413, 5-21=-5218/413, 5-22=-5218/413, 22-23=-5218/413, 6-23=-5218/413, 6-24=-3044/304, 7-24=-3040/305, 7-25=-3428/295, 8-25=-3488/278, 2-17=-1975/238, 8-10=-1975/238
BOT CHORD 16-17=-205/791, 15-16=-387/4977, 15-26=-387/4977, 14-26=-387/4977, 14-27=-429/5513, 27-28=-429/5513, 13-28=-429/5513, 13-29=-361/4977, 12-29=-361/4977, 11-12=-361/4977, 10-11=-151/791
WEBS 3-16=-31/1132, 4-16=-2308/256, 4-14=0/539, 5-14=-416/107, 5-13=-416/107, 6-13=0/539, 6-11=-2308/255, 7-11=-30/1132, 2-16=-174/2723, 8-11=-175/2723

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; 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, Exterior(2R) 3-11-2 to 12-8-2, Interior(1) 12-8-2 to 30-3-14, Exterior(2R) 30-3-14 to 39-0-14, Exterior(2E) 39-0-14 to 43-10-8 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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) 17=129, 10=129.



6/13/2024

Continued on page 2

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.

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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R03	Hip	1	1	# 49568
					Job Reference (optional)

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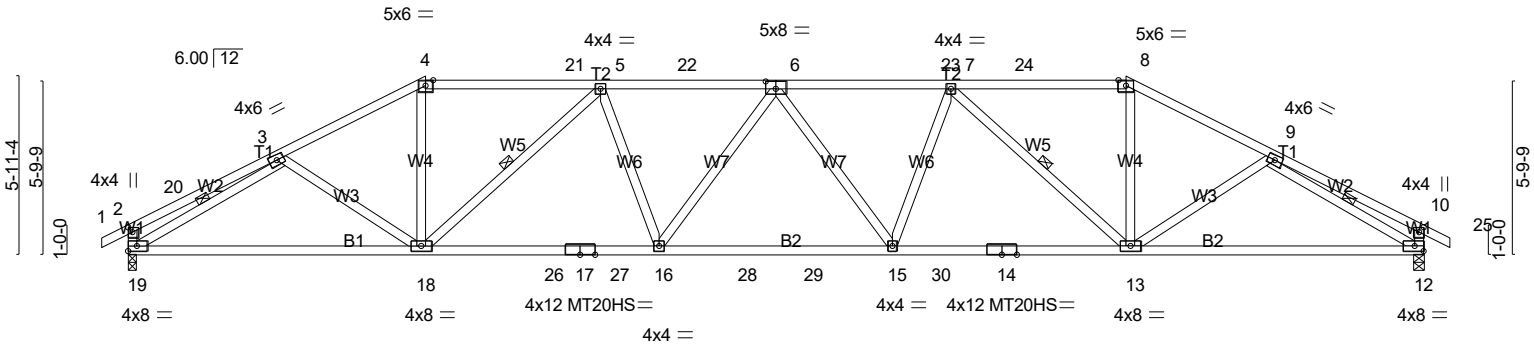
-0-10-8 | 5-1-0 | 9-10-8 | 15-8-4 | 21-6-0 | 27-3-12 | 33-1-8 | 37-11-0 | 43-0-0 | 43-10-8
0-10-8 | 5-1-0 | 4-9-8 | 5-9-12 | 5-9-12 | 5-9-12 | 5-9-12 | 4-9-8 | 5-1-0 | 0-10-8

Scale = 1:76.5



9-10-8 | 17-7-8 | 25-4-8 | 33-1-8 | 43-0-0
9-10-8 | 7-9-0 | 7-9-0 | 7-9-0 | 9-10-8

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [6:0-4-0,0-3-0], [10:0-2-0,0-1-12]

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	0.87	Vert(LL)	-0.38	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.67	15-16	>766	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.22	12	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 244 lb	FT = 20%
BCDL	10.0											

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

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, Except: 2-2-0 oc bracing: 15-16.
WEBS 1 Row at midpt 5-18, 7-13, 3-19, 9-12

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

REACTIONS. (lb/size) 19=1770/0-3-8 (min. 0-2-5), 12=1770/0-3-8 (min. 0-2-5)
Max Horz 19=70(LC 14)
Max Uplift19=-100(LC 11), 12=-100(LC 10)
Max Grav 19=1949(LC 38), 12=1949(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-523/46, 3-4=-3294/338, 4-21=-2916/332, 5-21=-2919/331, 5-22=-4259/397, 6-22=-4259/397, 6-23=-4259/397, 7-23=-4259/397, 7-24=-2919/331, 8-24=-2916/332, 8-9=-3294/338, 9-10=-523/46, 2-19=-537/77, 10-12=-537/77
BOT CHORD 18-19=-246/2678, 18-26=-273/4107, 17-26=-273/4107, 17-27=-273/4107, 16-27=-273/4107, 16-28=-292/4458, 28-29=-292/4458, 15-29=-292/4458, 15-30=-251/4107, 14-30=-251/4107, 13-14=-251/4107, 12-13=-246/2678
WEBS 3-18=-184/372, 4-18=-26/1108, 5-18=-1622/190, 5-16=0/532, 6-16=-346/87, 6-15=-346/87, 7-15=0/532, 7-13=-1622/190, 8-13=-26/1108, 9-13=-184/372, 3-19=-2809/332, 9-12=-2809/332

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; 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 4-11-5, Exterior(2R) 4-11-5 to 14-8-2, Interior(1) 14-8-2 to 28-3-14, Exterior(2R) 28-3-14 to 38-0-11, Interior(1) 38-0-11 to 39-0-14, Exterior(2E) 39-0-14 to 43-10-8 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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) 19, 12.

6/13/2024

Continued on page 2

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.

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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R04	Hip	1	1	# 49568
					Job Reference (optional)

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-0-10-8	6-1-0	11-10-8	16-8-4	21-6-0	26-3-12	31-1-8	36-10-4	42-10-8
0-10-8	6-1-0	5-9-8	4-9-12	4-9-12	4-9-12	4-9-12	5-8-12	6-0-4

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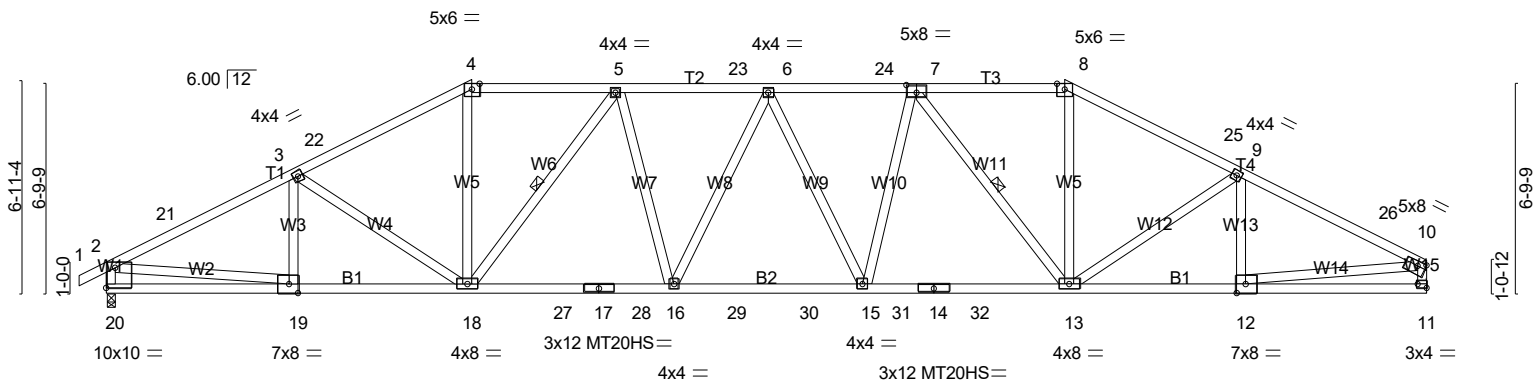


6-1-0	11-10-8	18-3-8	24-8-8	31-1-8	36-10-4	42-10-8
6-1-0	5-9-8	6-5-0	6-5-0	6-5-0	5-8-12	6-0-4

Plate Offsets (X,Y)-- [7:0-4-0,0-3-0], [10:Edge,0-1-12], [11:Edge,0-1-8], [12:0-3-8,Edge], [19:0-3-8,Edge], [20:Edge,0-7-13]

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	0.99	Vert(LL)	-0.29	16-18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.50	16-18	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.15	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 263 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B2: 2x4 SP No.1
WEBS 2x4 SP No.3

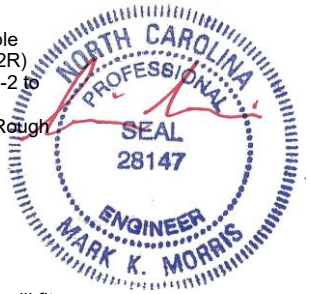
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 16-18,13-15.
WEBS 1 Row at midpt 5-18, 7-13

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

REACTIONS. (lb/size) 20=1765/0-3-8 (min. 0-2-6), 11=1703/Mechanical
Max Horz 20=91(LC 14)
Max Uplift20=-87(LC 14), 11=-69(LC 15)
Max Grav 20=2023(LC 39), 11=1913(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-21=-2990/309, 3-21=-2898/326, 3-22=-2981/336, 4-22=-2942/359, 4-5=-2624/354, 5-23=-3408/390, 6-23=-3408/390, 6-24=-3404/390, 7-24=-3404/390, 7-8=-2609/352, 8-25=-2925/358, 9-25=-2965/336, 9-26=-2861/322, 10-26=-2943/304, 2-20=-1955/237, 10-11=-1846/203
BOT CHORD 19-20=-135/407, 18-19=-248/2592, 18-27=-241/3314, 17-27=-241/3314, 17-28=-241/3314, 16-28=-241/3314, 16-29=-246/3521, 29-30=-246/3521, 15-30=-246/3521, 15-31=-241/3311, 14-31=-241/3311, 14-32=-241/3311, 13-32=-241/3311, 12-13=-246/2559, 11-12=-27/282
WEBS 3-18=-447/175, 4-18=-38/1028, 5-18=-1151/141, 5-16=-2/470, 6-16=-259/75, 6-15=-268/75, 7-15=-2/478, 7-13=-1164/141, 8-13=-39/1022, 9-13=-430/194, 2-19=-210/2347, 10-12=-231/2398

NOTES- (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=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 7-0-14, Exterior(2R) 7-0-14 to 16-7-13, Interior(1) 16-7-13 to 26-3-12, Exterior(2R) 26-3-12 to 35-11-2, Interior(1) 35-11-2 to 37-11-2, Exterior(2E) 37-11-2 to 42-8-12 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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.



6/13/2024

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R04	Hip	1	1	Job Reference (optional) **# 49568**

NOTES- (12-15)

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11.
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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R05	Roof Special Girder	1	1	Job Reference (optional) **# 49568**

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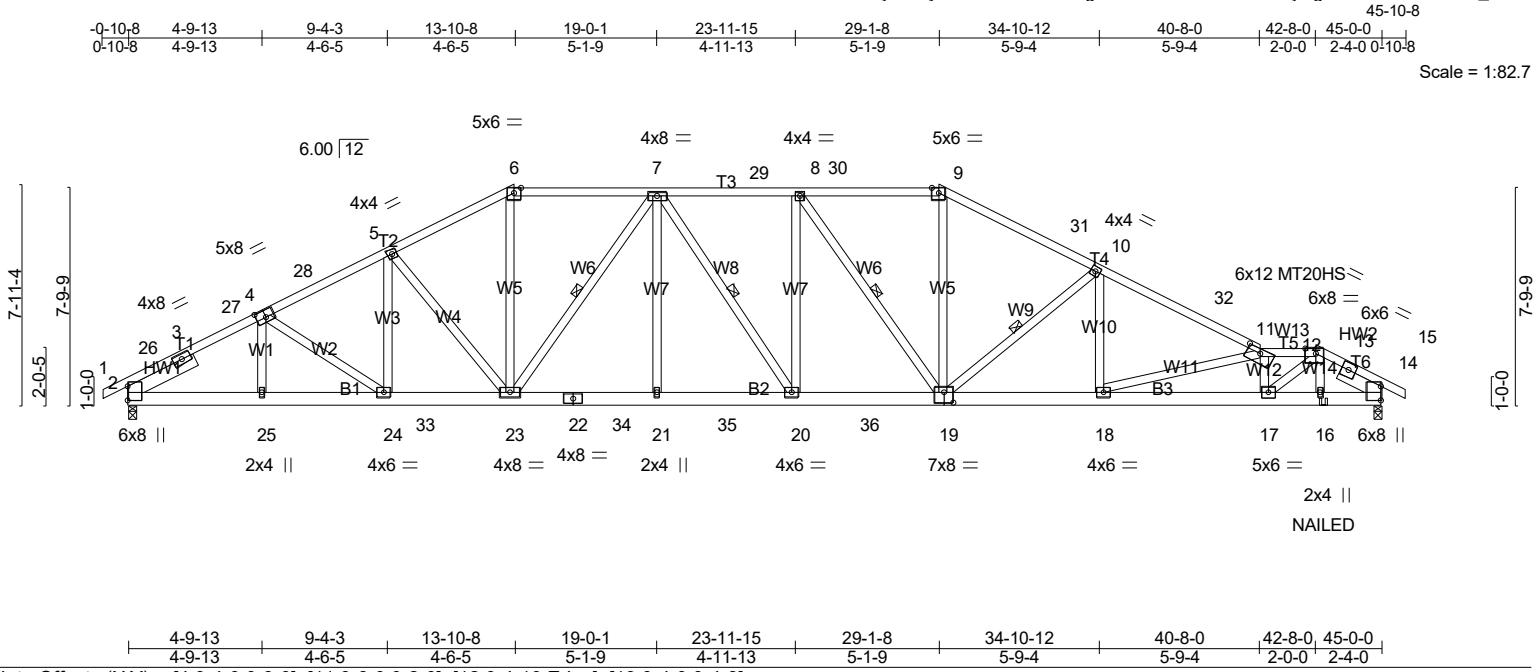

Plate Offsets (X,Y)-- [4:0-4-0,0-3-0], [11:0-6-0,0-2-0], [12:0-4-10,Edge], [19:0-4-0,0-4-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.24	20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.45	20-21	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.13	14	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 332 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* T4,T6,T1: 2x4 SP SS
BOT CHORD 2x6 SP No.1 *Except* B2: 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* W13: 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -° 2-8-8, Right 2x6 SP No.2 -° 1-7-14

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-23, 7-20, 8-19, 10-19

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

REACTIONS. (lb/size) 2=1858/0-3-8 (min. 0-2-9), 14=1951/0-3-8 (min. 0-2-11)
Max Horz 2=96(LC 16)
Max Uplift2=-103(LC 12), 14=-151(LC 13)
Max Grav 2=2177(LC 41), 14=2284(LC 41)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-26=-3487/122, 3-26=-3376/131, 3-27=-3387/135, 4-27=-3307/145, 4-28=-3276/132, 5-28=-3217/144, 5-6=-2913/158, 6-7=-2576/153, 7-29=-3161/179, 29-30=-3161/179, 8-30=-3161/179, 8-9=-2742/165, 9-31=-3052/164, 10-31=-3141/141, 10-32=-3971/192, 11-32=-4053/175, 11-12=-4574/253, 12-13=-3085/205, 13-14=-3183/200
BOT CHORD 2-25=-160/2910, 24-25=-162/2913, 24-33=-102/2881, 23-33=-102/2881, 22-23=-114/3130, 22-34=-114/3130, 21-34=-114/3130, 21-35=-114/3130, 20-35=-114/3130, 20-36=-97/3161, 19-36=-97/3161, 18-19=-72/3536, 17-18=-216/4727, 16-17=-134/2610, 14-16=-136/2600
WEBS 4-24=-38/289, 5-23=-622/126, 6-23=-1/1044, 7-23=-961/113, 7-21=0/328, 8-20=-99/280, 8-19=-782/109, 9-19=0/1104, 10-19=-1106/170, 10-18=0/514, 11-18=-1242/150, 11-17=-1802/124, 12-17=-97/2673

NOTES- (13-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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=103, 14=151.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

6/13/2024

Continued on page 2

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.

NOTES- (13-16)

12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-60, 6-9=-60, 9-11=-60, 11-12=-60, 12-15=-60, 2-14=-20
   Concentrated Loads (lb)
   Vert: 16=-104(F)

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R06	Roof Special	1	1	# 49568

Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:16:49 2024 Page 1
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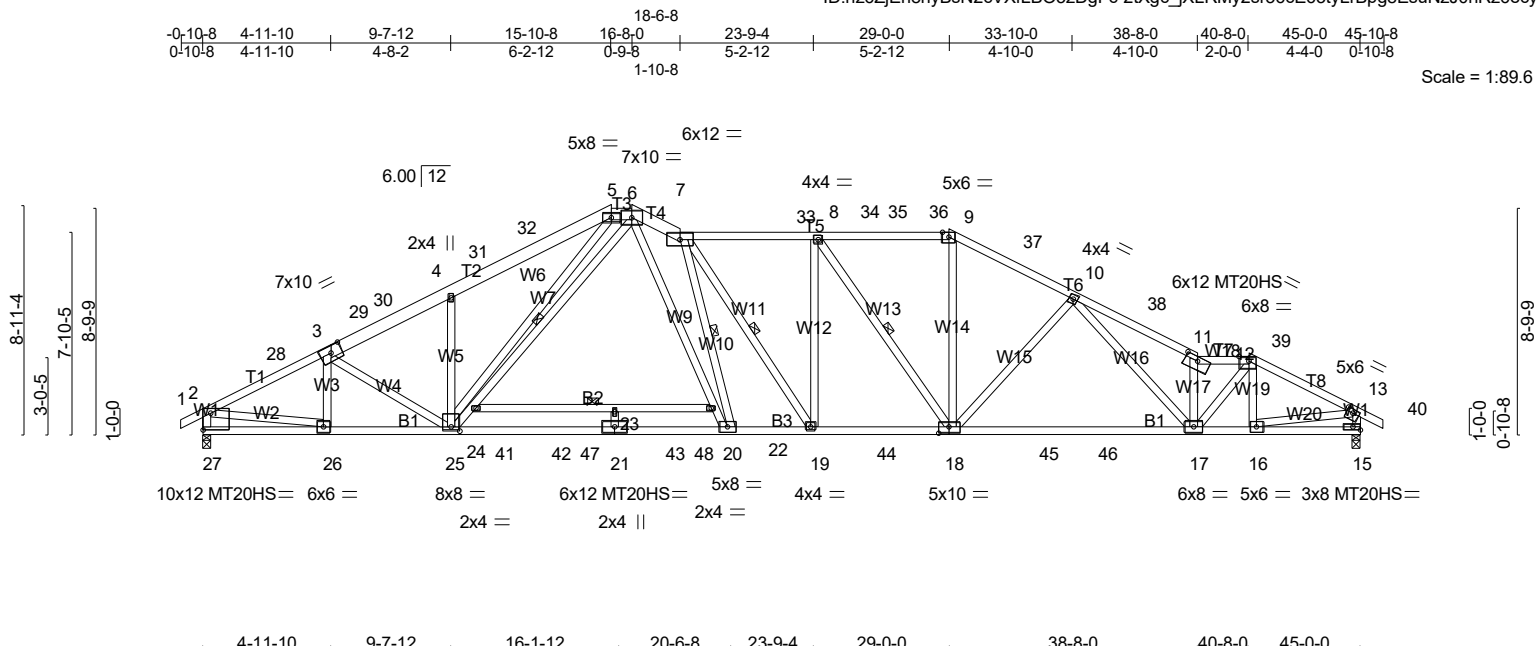

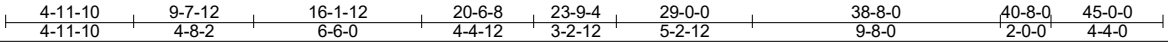

Plate Offsets (X,Y)-- [3:0-5-0,0-3-4], [11:0-6-0,0-2-0], [12:0-4-10,Edge], [13:0-3-0,0-1-12], [18:0-4-12,0-3-0], [25:0-4-0,0-2-0], [27:Edge,0-7-13]

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	0.75	Vert(LL)	-0.69	23-24	>775	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-1.19	23-24	>451	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.15	15	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 341 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SP No.2 *Except* T2,T3,T4: 2x6 SP No.2, T6: 2x4 SP No.1
BOT CHORD 2x4 SP SS *Except* B2: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* W7,W20,W2: 2x4 SP No.2, W9: 2x4 SP No.1

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, Except: 2-2-0 oc bracing: 19-20. 6-0-0 oc bracing: 22-24
WEBS 1 Row at midpt 6-25, 7-20, 7-19, 8-18

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

REACTIONS. (lb/size) 27=1976/0-3-8 (min. 0-2-13), 15=1913/0-3-8 (min. 0-2-12)
Max Horz 27=-108(LC 15)
Max Uplift 27=-54(LC 14), 15=-169(LC 15)
Max Grav 27=2385(LC 47), 15=2350(LC 47)

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

TOP CHORD 2-28=-3711/167, 3-28=-3644/177, 3-29=-3956/177, 29-30=-3879/185, 4-30=-3871/195, 4-31=-3978/263, 31-32=-3884/274, 5-32=-3778/287, 5-6=-2835/281, 6-7=-4404/353, 7-33=-3333/318, 33-34=-3333/318, 8-34=-3333/318, 8-35=-3043/312, 35-36=-3043/313, 9-36=-3042/313, 9-37=-3384/318, 10-37=-3484/308, 10-38=-4749/386, 11-38=-4821/373, 11-12=-4366/321, 12-39=-3212/260, 13-39=-3381/258, 13-15=-2281/210, 2-27=-2305/158
BOT CHORD 26-27=-131/381, 25-26=-104/3297, 25-41=-11/2867, 41-42=-11/2867, 21-42=-11/2867, 21-43=-11/2867, 20-43=-11/2867, 19-20=-31/3526, 19-44=-108/3333, 18-44=-108/3333, 18-45=-201/3551, 45-46=-201/3551, 17-46=-201/3551, 16-17=-178/2972, 15-16=-36/311
WEBS 4-25=-556/169, 24-25=-575/133, 6-24=-488/157, 6-22=-179/2842, 20-22=-224/2716, 7-20=-2072/329, 7-19=-432/145, 8-19=-160/275, 8-18=-677/59, 9-18=-29/1284, 10-18=-864/173, 10-17=-85/1047, 11-17=-2346/221, 12-17=-113/2290, 12-16=-572/34, 13-16=-169/2702, 5-25=-24/1095, 3-26=-549/41, 2-26=-93/2982, 3-25=0/366

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; 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 11-0-14, Exterior(2R) 11-0-14 to 16-8-0, Exterior(2E) 16-8-0 to 18-6-8, Interior(1) 18-6-8 to 24-2-6, Exterior(2R) 24-2-6 to 33-10-0, Interior(1) 33-10-0 to 38-8-0, Exterior(2R) 38-8-0 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
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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

6/13/2024

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 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R06	Roof Special	1	1	Job Reference (optional) **# 49568**

NOTES- (11-14)

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) 27 except (jt=lb) 15=169.
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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R07	Roof Special	1	1	Job Reference (optional) **# 49568**

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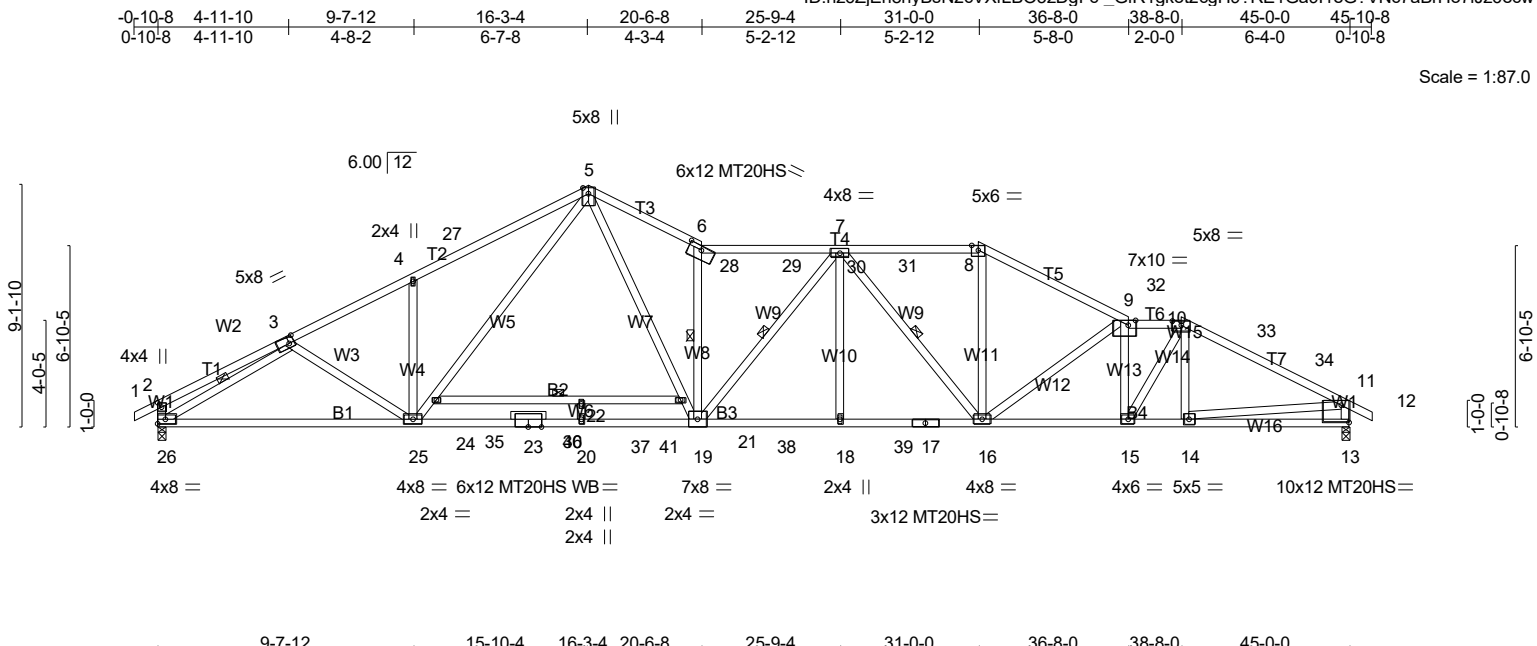


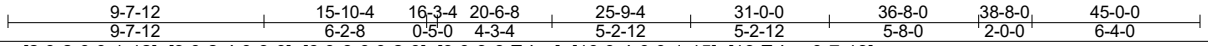


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [3:0-2-4,0-3-0], [6:0-6-0,0-2-0], [9:0-3-6,Edge], [10:0-4-0,0-1-15], [13:Edge,0-7-13]

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	0.88	Vert(LL)	-0.78	20-25	>687	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-1.29	22-24	>415	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.16	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 303 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T2,T5: 2x4 SP SS, T7: 2x4 SP No.1
BOT CHORD 2x4 SP SS *Except*
B4: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
W7,W1,W16: 2x4 SP No.2
OTHERS 2x4 SP No.3

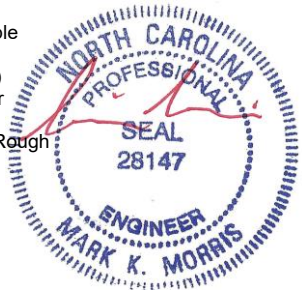
BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 21-24
WEBS 1 Row at midpt 6-19, 7-19, 7-16, 3-26

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

REACTIONS. (lb/size) 13=1914/0-3-8 (min. 0-2-9), 26=1977/0-3-8 (min. 0-2-9)
Max Horz 26=113(LC 14)
Max Uplift13=-170(LC 15), 26=-56(LC 14)
Max Grav 13=2147(LC 45), 26=2148(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-483/74, 3-4=-3539/178, 4-27=-3615/256, 5-27=-3516/278, 5-6=-4200/343, 6-28=-3770/278, 28-29=-3771/278, 7-29=-3773/277, 7-30=-2998/339, 30-31=-2998/340, 8-31=-2995/340, 8-32=-3380/340, 9-32=-3403/319, 9-10=-3579/375, 10-33=-3128/305, 33-34=-3135/295, 11-34=-3262/281, 2-26=-424/94, 11-13=-2077/235
BOT CHORD 25-26=-121/2914, 25-35=0/2555, 35-36=0/2555, 23-36=0/2555, 20-23=0/2555, 20-37=0/2555, 19-37=0/2555, 19-38=-144/3649, 18-38=-144/3649, 18-39=-144/3649, 17-39=-144/3649, 16-17=-144/3649, 15-16=-263/3529, 14-15=-200/2823, 13-14=-92/560
WEBS 3-25=0/344, 4-25=-577/181, 24-25=-158/959, 5-24=-113/1029, 5-21=-167/2870, 19-21=-212/2739, 6-19=-2116/201, 7-19=-139/432, 7-16=-1069/25, 8-16=-22/1272, 9-16=-850/145, 9-15=-1350/150, 10-15=-138/1594, 3-26=-3127/129, 11-14=-137/2449

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; 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 11-5-10, Exterior(2R) 11-5-10 to 16-3-4, Exterior(2E) 16-3-4 to 20-6-8, Interior(1) 20-6-8 to 26-2-6, Exterior(2R) 26-2-6 to 35-9-10, Interior(1) 35-9-10 to 36-8-0, Exterior(2R) 36-8-0 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
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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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.



6/13/2024

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R07	Roof Special	1	1	Job Reference (optional) **# 49568**

NOTES- (11-14)

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26 except (jt=lb) 13=170.
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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R08	Roof Special	1	1	Job Reference (optional) **# 49568**

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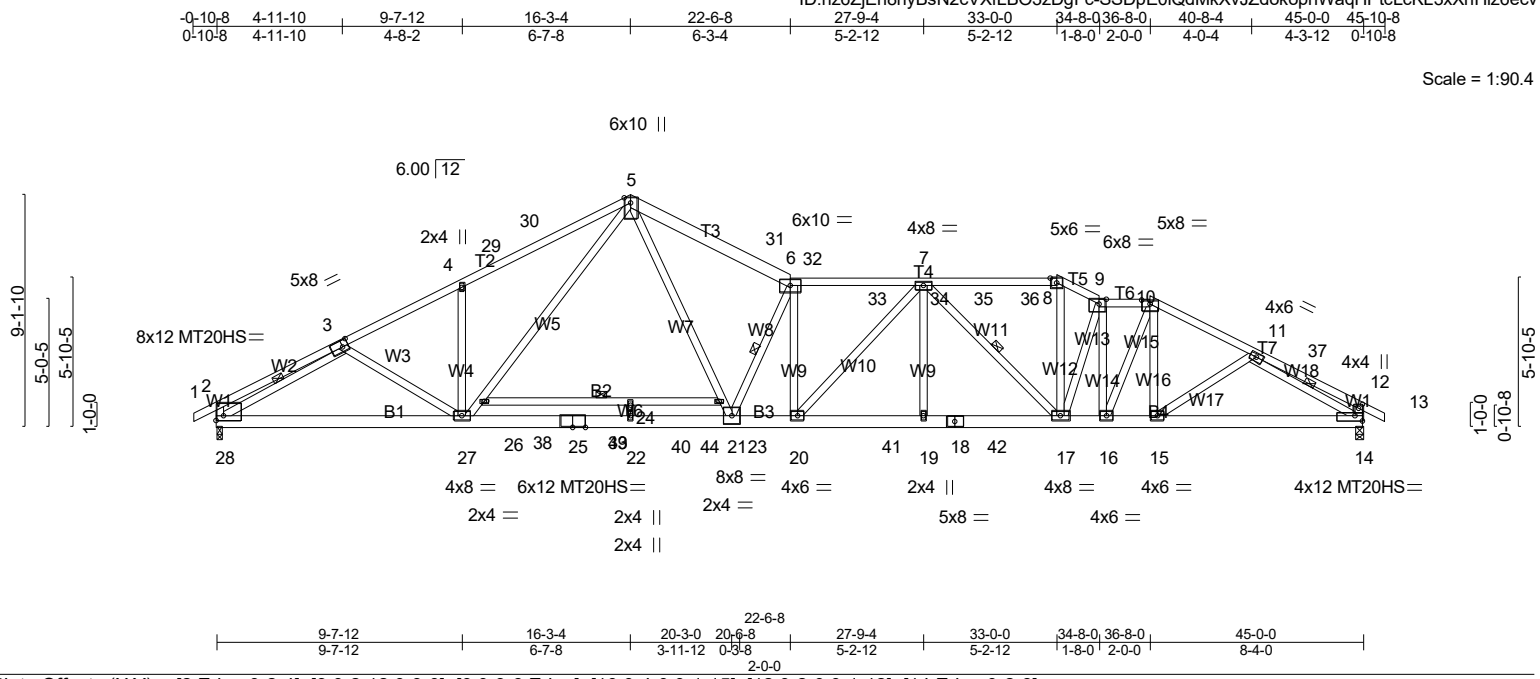

Plate Offsets (X,Y)-- [2:Edge,0-2-4], [3:0-2-12,0-3-0], [9:0-3-6,Edge], [10:0-4-0,0-1-15], [12:0-2-0,0-1-12], [14:Edge,0-2-8]

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)	-0.40	24-26	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.72	24-26	>741	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.12	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 349 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
T2: 2x4 SP SS, T3: 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
B1: 2x6 SP No.1, B2: 2x4 SP No.2, B3: 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
W7: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 23-26
WEBS 1 Row at midpt 6-21, 7-17, 3-28, 11-14

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

REACTIONS. (lb/size) 28=1977/0-3-8 (min. 0-2-8), 14=1914/0-3-8 (min. 0-2-8)
Max Horz 28=-112(LC 15)
Max Uplift28=-57(LC 14), 14=-170(LC 15)
Max Grav 28=2099(LC 36), 14=2121(LC 45)

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

TOP CHORD 2-3=-627/83, 3-4=-3490/213, 4-29=-3556/281, 29-30=-3512/286, 5-30=-3457/308, 5-31=-4076/337, 31-32=-4107/315, 6-32=-4141/314, 6-33=-4206/357, 7-33=-4207/357, 7-34=-3186/339, 34-35=-3186/339, 35-36=-3184/340, 8-36=-3184/340, 8-9=-3571/367, 9-10=-3281/351, 10-11=-3135/318, 11-37=-429/70, 12-37=-591/68, 2-28=-488/100, 12-14=-550/84

BOT CHORD 27-28=-120/2924, 27-38=-24/2573, 38-39=-24/2573, 25-39=-24/2573, 22-25=-24/2573, 22-40=-24/2573, 21-40=-24/2573, 20-21=-199/4224, 20-41=-216/4099, 19-41=-216/4099, 18-19=-216/4099, 18-42=-216/4099, 17-42=-216/4099, 16-17=-215/3320, 15-16=-173/2808, 14-15=-230/2646

WEBS 3-27=0/290, 4-27=-542/176, 6-21=-1904/299, 6-20=-737/0, 7-20=-19/466, 7-19=0/340, 7-17=-1349/49, 8-17=-83/1358, 9-17=-527/102, 9-16=-1263/72, 10-16=-108/1293, 11-15=-46/358, 3-28=-2948/149, 11-14=-2673/289, 5-23=-115/2748, 21-23=-132/2689, 26-27=-146/918, 5-26=-110/981, 22-24=-316/0

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; 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 11-5-10, Exterior(2R) 11-5-10 to 21-0-14, Interior(1) 21-0-14 to 28-2-6, Exterior(2R) 28-2-6 to 33-0-0, Exterior(2E) 33-0-0 to 34-8-0, Exterior(2R) 34-8-0 to 40-10-0, Exterior(2E) 40-10-0 to 45-10-8 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

6/13/2024

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R08	Roof Special	1	1	Job Reference (optional) **# 49568**

NOTES- (11-14)

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) 28 except (jt=lb) 14=170.
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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R09	Roof Special	1	1	Job Reference (optional) **# 49568**

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-0-10-8 4-11-10 9-7-12 16-3-4 20-4-14 24-6-8 30-9-4 37-0-0 45-0-0 45-10-8
0-10-8 4-11-10 4-8-2 6-7-8 4-1-10 4-1-10 6-2-12 6-2-12 8-0-0 0-10-8

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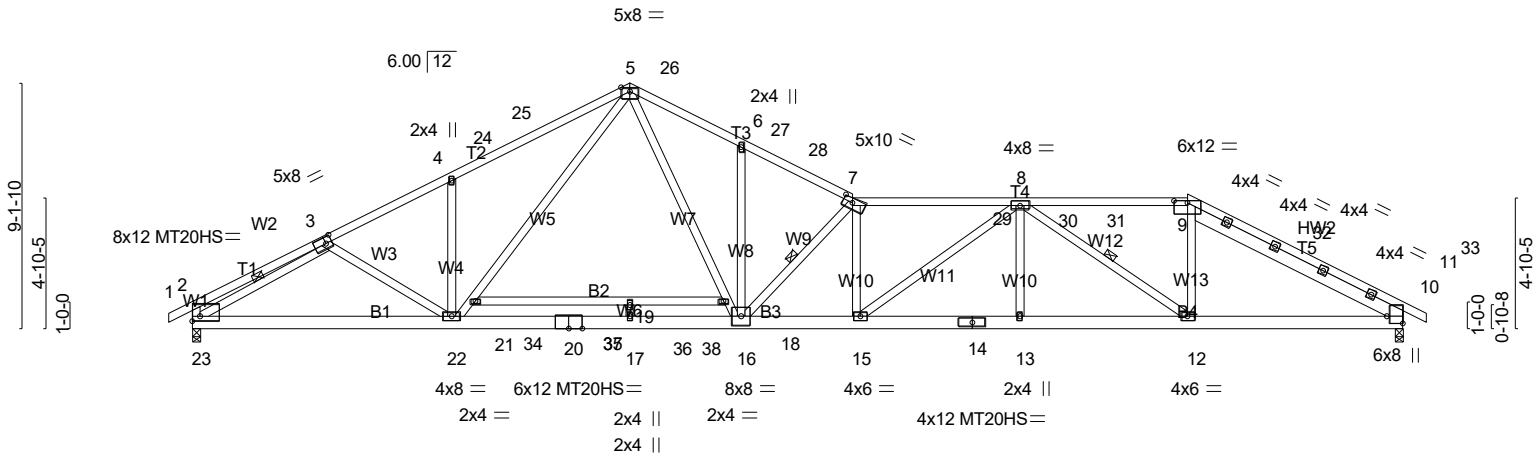


9-7-12 16-3-4 20-4-14 24-6-8 30-9-4 37-0-0 45-0-0
9-7-12 6-7-8 4-1-10 4-1-10 6-2-12 6-2-12 8-0-0

Plate Offsets (X,Y)-- [2:Edge,0-2-4], [3:0-2-12,0-3-0], [7:0-4-4,0-2-0], [9:0-6-0,0-0-15], [10:Edge,0-7-2]

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	0.89	Vert(LL)	-0.44	19-21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.81	19-21	>667	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.13	10	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 328 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T2,T4: 2x4 SP SS
BOT CHORD 2x4 SP No.2 *Except*
B1: 2x6 SP No.1, B4: 2x6 SP No.2, B3: 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
W5: 2x4 SP No.2, W7: 2x4 SP No.1
SLIDER Right 2x6 SP No.2 -° 8-8-9

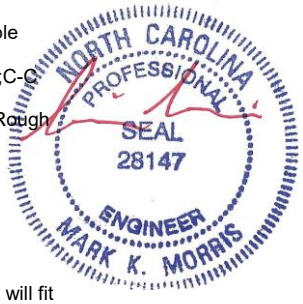
BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-16, 8-12, 3-23

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

REACTIONS. (lb/size) 10=1910/0-3-8 (min. 0-2-7), 23=1983/0-3-8 (min. 0-2-7)
Max Horz 23=-116(LC 15)
Max Uplift10=-169(LC 15), 23=-56(LC 14)
Max Grav 10=2075(LC 41), 23=2040(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-621/85, 3-4=-3386/196, 4-24=-3469/269, 24-25=-3424/274, 5-25=-3365/296, 5-26=-3871/350, 6-26=-3973/341, 6-27=-3906/280, 27-28=-3913/277, 7-28=-3987/270, 7-29=-4739/369, 8-29=-4741/369, 8-30=-3025/315, 30-31=-3031/315, 9-31=-3044/314, 9-32=-3442/300, 32-33=-3490/281, 10-33=-3493/262, 2-23=-486/100
BOT CHORD 22-23=-116/2838, 22-34=-5/2277, 34-35=-5/2277, 20-35=-5/2277, 17-20=-5/2277, 17-36=-5/2277, 16-36=-5/2277, 15-16=-246/4758, 14-15=-251/4408, 13-14=-251/4408, 12-13=-251/4408, 10-12=-195/3033
WEBS 3-22=0/291, 4-22=-578/181, 6-16=-411/124, 7-16=-2324/252, 7-15=-675/21, 8-15=-10/884, 8-13=0/275, 8-12=-1713/68, 9-12=0/1134, 21-22=-144/1079, 5-21=-112/1049, 5-18=-170/2574, 16-18=-195/2595, 17-19=-304/0, 3-23=-2870/132

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; 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 11-5-10, Exterior(2R) 11-5-10 to 21-0-14, Interior(1) 21-0-14 to 32-4-2, Exterior(2R) 32-4-2 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
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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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.



6/13/2024

Continued on page 2

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.

NOTES- (11-14)

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23 except (jt=lb) 10=169.
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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R10	Roof Special	1	1	**# 49568**
					Job Reference (optional)

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-0-10-8	4-11-10	9-7-12	16-3-4	20-4-14	26-6-8	29-8-12	32-9-4	39-0-0	45-0-0	45-10-8
0-10-8	4-11-10	4-8-2	6-7-8	4-1-10	6-1-10	3-2-4	3-0-8	6-2-12	6-0-0	0-10-8

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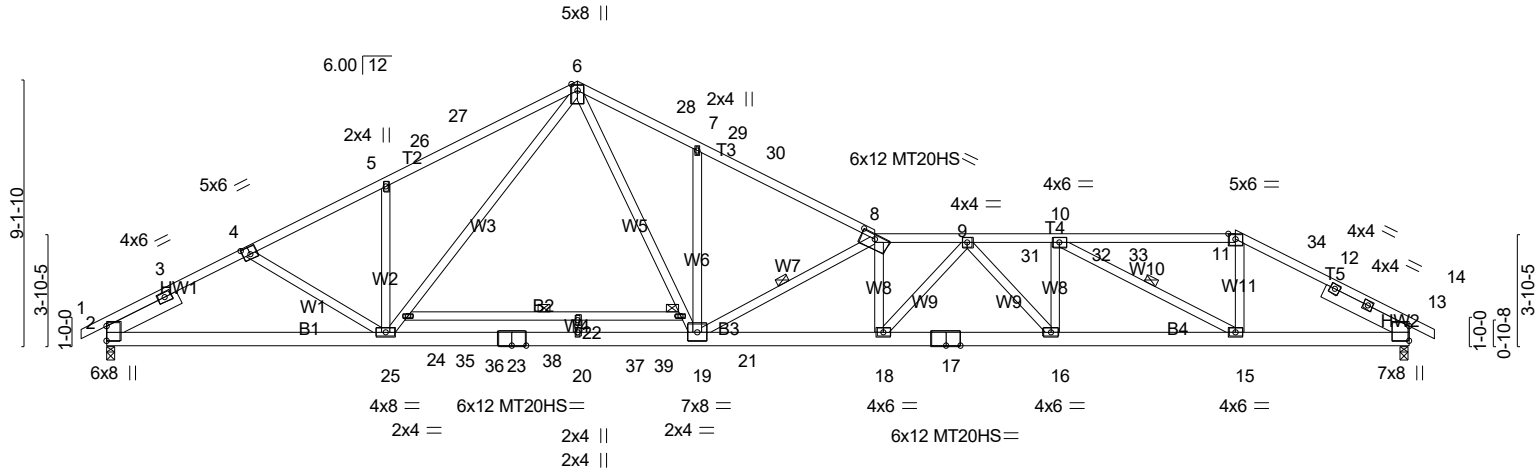


9-7-12	16-3-4	20-4-14	26-6-8	32-9-4	39-0-0	45-0-0
9-7-12	6-7-8	4-1-10	6-1-10	6-2-12	6-2-12	6-0-0

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

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)	-0.50	22-24	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.94	22-24	>577	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.15	13	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 312 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP SS
BOT CHORD 2x6 SP No.1 *Except*
B2: 2x4 SP No.2, B3: 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
W5: 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -° 2-9-7, Right 2x6 SP No.2 -° 3-3-7

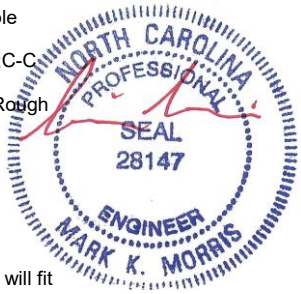
BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 21-24
WEBS 1 Row at midpt 8-19, 10-15

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

REACTIONS. (lb/size) 2=1982/0-3-8 (min. 0-2-6), 13=1918/0-3-8 (min. 0-2-7)
Max Horz 2=113(LC 14)
Max Uplift 2=-54(LC 14), 13=-168(LC 15)
Max Grav 2=2033(LC 3), 13=2052(LC 41)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3439/169, 3-4=-3368/190, 4-5=-3400/184, 5-26=-3504/259, 26-27=-3459/265, 6-27=-3397/286, 6-28=-4114/338, 7-28=-4154/321, 7-29=-3976/254, 29-30=-3978/251, 8-30=-4180/239, 8-9=-5913/404, 9-31=-5142/383, 10-31=-5142/383, 10-32=-2795/264, 32-33=-2792/265, 11-33=-2791/265, 11-34=-3228/271, 12-34=-3244/262, 12-13=-3279/245
BOT CHORD 2-25=-109/2871, 25-35=-18/2454, 35-36=-18/2454, 23-36=-18/2454, 20-23=-18/2454, 20-37=-18/2454, 19-37=-18/2454, 18-19=-320/5941, 17-18=-315/5530, 16-17=-315/5530, 15-16=-297/5142, 13-15=-179/2842
WEBS 4-25=0/307, 5-25=-626/183, 24-25=-145/1029, 6-24=-115/1104, 6-21=-185/2733, 19-21=-208/2688, 7-19=-572/167, 8-19=-3102/309, 8-18=-721/41, 10-16=0/958, 10-15=-2685/136, 11-15=-11/1240, 20-22=-311/0, 9-18=-5/853, 9-16=-1007/27

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; 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 11-5-10, Exterior(2R) 11-5-10 to 21-0-14, Interior(1) 21-0-14 to 34-2-6, Exterior(2R) 34-2-6 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
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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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) 2 except (jt=lb) 13=168.



6/13/2024

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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.

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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R11	Roof Special Girder	1	1	# 49568
					Job Reference (optional)

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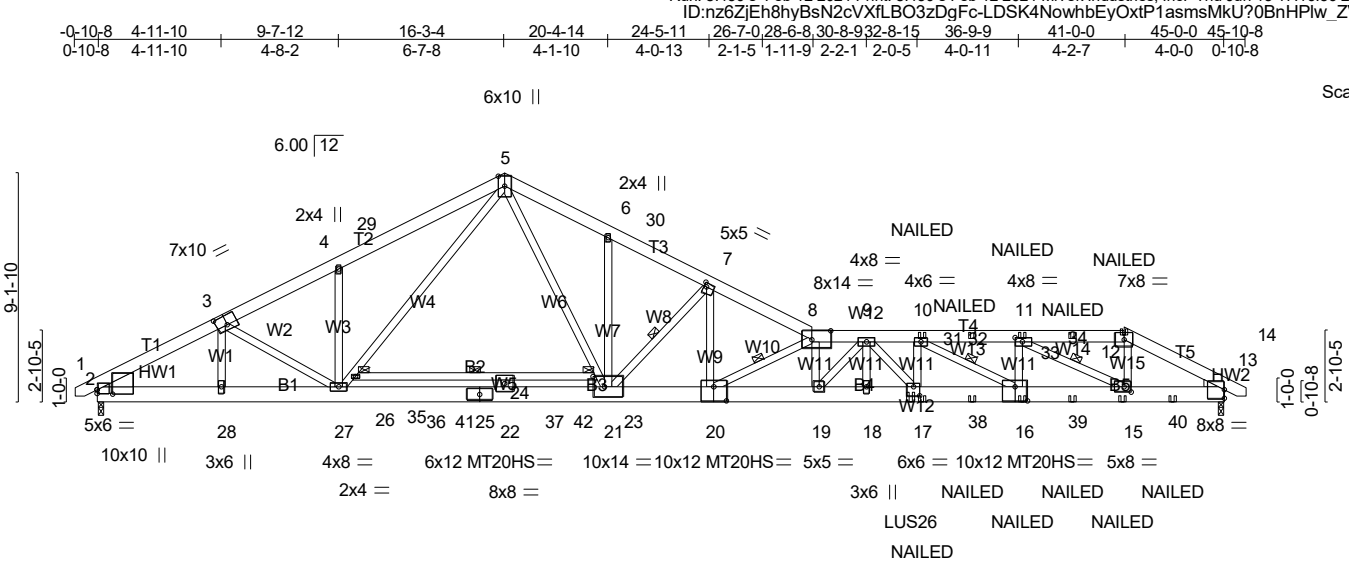


4-11-10	9-7-12	16-3-4	20-4-14	24-5-11	26-7-0	28-6-8	30-8-9	32-8-15	36-9-9	41-0-0	45-0-0
4-11-10	4-8-2	6-7-8	4-1-10	4-0-13	2-1-5	1-11-9	2-2-1	2-0-5	4-0-11	4-2-7	4-0-0

Plate Offsets (X,Y)-- [2:0-0-0,0-1-13], [2:0-2-2,0-7-7], [3:0-5-0,0-4-8], [7:0-1-4,0-2-0], [8:0-9-0,0-4-4], [11:0-3-8,0-2-0], [13:0-0-0,0-4-1], [15:0-3-8,0-2-8], [16:0-6-0,0-6-12], [17:0-3-0,0-4-4], [20:0-6-0,0-6-12], [21:0-5-8,0-5-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.71	19-20	>759	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-1.34	19-20	>402	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.18	13	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 388 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
T4: 2x6 SP No.1, T5: 2x6 SP DSS
BOT CHORD 2x8 SP DSS *Except*
B1: 2x8 SP No.1, B2: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W6: 2x4 SP No.1, W9,W14,W15,W10: 2x4 SP No.2
WEDGE
Left: 2x8 SP No.2 , Right: 2x4 SP No.3

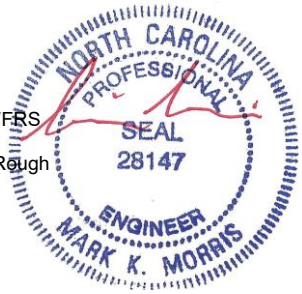
BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-8-5 oc bracing. Except:
6-0-0 oc bracing: 23-26
WEBS 1 Row at midpt 7-21, 10-16, 11-15, 8-20

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

REACTIONS. (lb/size) 2=2326/0-3-8 (min. 0-2-12), 13=3217/0-3-8 (min. 0-3-7)
Max Horz 2=112(LC 68)
Max Uplift2=-108(LC 12), 13=-360(LC 13)
Max Grav 2=2349(LC 4), 13=3391(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4083/164, 3-4=-4148/147, 4-29=-4196/219, 5-29=-4100/246, 5-6=-5439/392, 6-30=-5382/324, 7-30=-5494/308, 7-8=-8001/567, 8-9=-12553/993, 9-10=-12058/1105, 10-31=-9019/904, 31-32=-9019/904, 11-32=-9019/904, 11-33=-4749/526, 33-34=-4748/526, 12-34=-4747/526, 12-13=-5840/600
BOT CHORD 2-28=-198/3438, 27-28=-198/3438, 27-35=-36/3231, 35-36=-36/3231, 25-36=-36/3231, 22-25=-36/3231, 22-37=-36/3231, 21-37=-36/3231, 20-21=-399/7090, 19-20=-922/12563, 18-19=-1020/12684, 17-18=-1020/12684, 17-38=-1037/12058, 16-38=-1037/12058, 16-39=-836/9019, 15-39=-836/9019, 15-40=-468/4908, 13-40=-468/4908
WEBS 3-27=0/390, 4-27=-536/180, 26-27=-159/956, 5-26=-138/1051, 5-23=-285/3735, 21-23=-304/3695, 6-21=-334/126, 7-21=-3511/422, 7-20=-329/3316, 8-19=-711/246, 10-17=-5/1516, 10-16=-3505/232, 11-16=-40/1853, 11-15=-4846/430, 12-15=-190/2628, 22-24=-361/0, 9-18=-35/492, 8-20=-6345/607, 9-19=-752/768, 9-17=-1349/196

NOTES- (16-19)
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; MWFRS (envelope) gable end zone; 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) The Fabrication Tolerance at joint 20 = 8%
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



6/13/2024

Continued on page 2

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.

NOTES- (16-19)

10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=108, 13=360.
12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 32-5-12 from the left end to connect truss(es) J05 (1 ply 2x6 SP) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
16) 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.
17) 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.
18) 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.
19) 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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-60, 5-8=-60, 8-12=-60, 12-14=-60, 2-13=-20, 23-26=-20
   Concentrated Loads (lb)
   Vert: 12=-94(B) 10=-96(B) 17=-913(B) 16=-27(B) 11=-94(B) 15=-27(B) 32=-94(B) 34=-94(B) 38=-27(B) 39=-27(B) 40=-175(B)

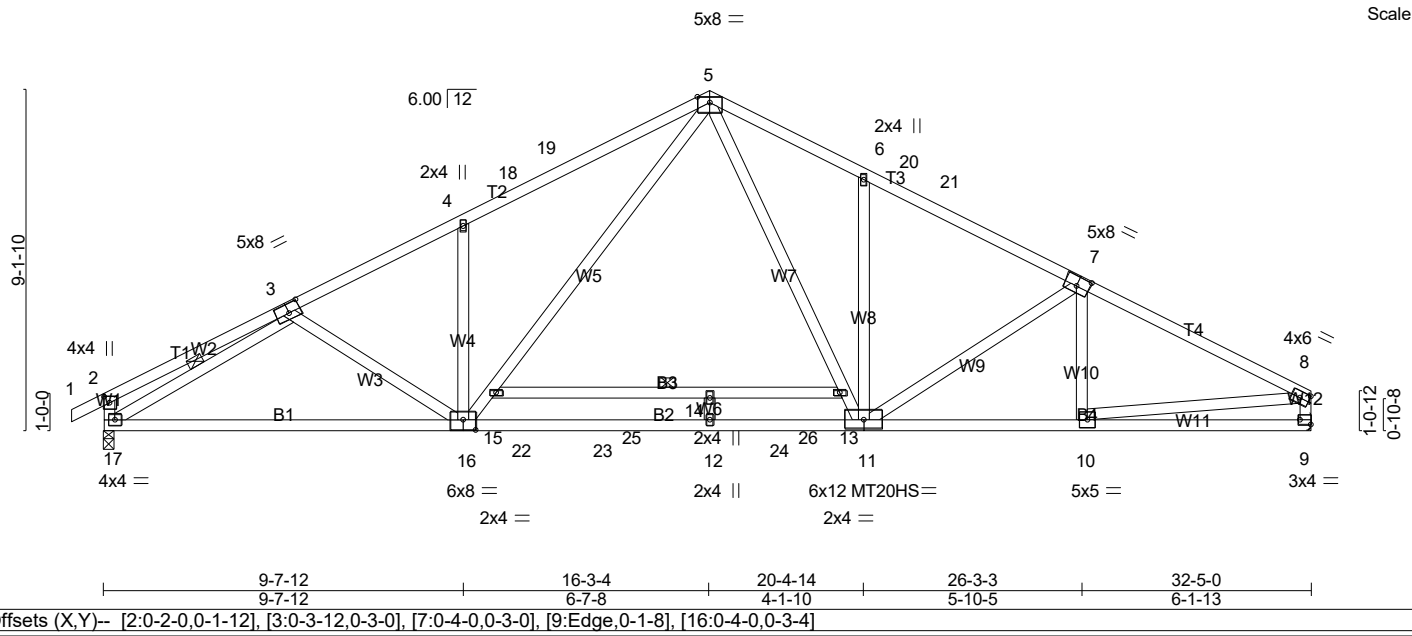
6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R12	Common	1	1	**# 49568**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:16:56 2024 Page 1
ID:nz6ZjEh8hyBsN2cVXfLBO3zDgFc-LDSK4NowhbEyOxtP1asmsMkUG0B3HSPw_ZVuQXz6ecr

-0-10-8	4-11-10	9-7-12	16-3-4	20-4-14	26-3-3	32-5-0
0-10-8	4-11-10	4-8-2	6-7-8	4-1-10	5-10-5	6-1-13

Scale = 1:61.9



9-7-12	16-3-4	20-4-14	26-3-3	32-5-0
9-7-12	6-7-8	4-1-10	5-10-5	6-1-13

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [3:0-3-12,0-3-0], [7:0-4-0,0-3-0], [9:Edge,0-1-8], [16:0-4-0,0-3-4]

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	0.93	Vert(LL)	-0.71	12-16	>544	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-1.08	14-15	>358	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.06	9	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 208 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T2: 2x4 SP No.1
BOT CHORD 2x4 SP SS *Except*
B1: 2x4 SP No.1
WEBS 2x4 SP No.3

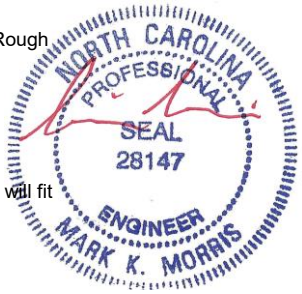
BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 13-15
WEBS 1 Row at midpt 3-17

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

REACTIONS. (lb/size) 17=1449/0-3-8 (min. 0-1-12), 9=1373/Mechanical
Max Horz 17=121(LC 14)
Max Uplift 17=-66(LC 14), 9=-55(LC 15)
Max Grav 17=1499(LC 3), 9=1419(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-403/74, 3-4=-2295/116, 4-18=-2352/189, 18-19=-2308/194, 5-19=-2254/216, 5-6=-2121/214, 6-20=-2017/139, 20-21=-2026/136, 7-21=-2134/116, 7-8=-2205/127, 2-17=-379/94, 8-9=-1332/95
BOT CHORD 16-17=-143/1938, 16-22=0/1465, 22-23=0/1465, 12-23=0/1465, 12-24=0/1465, 11-24=0/1465, 10-11=-69/1920
WEBS 4-16=-483/182, 15-16=-157/907, 5-15=-111/1055, 5-13=-86/1078, 11-13=-129/916, 6-11=-408/141, 7-11=-281/144, 3-17=-2052/76, 8-10=-52/1701

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; 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 11-5-10, Exterior(2R) 11-5-10 to 21-0-14, Interior(1) 21-0-14 to 27-5-10, Exterior(2E) 27-5-10 to 32-3-4 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) 17, 9.



6/13/2024

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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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R13	Common	1	1	# 49568
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:16:57 2024 Page 1
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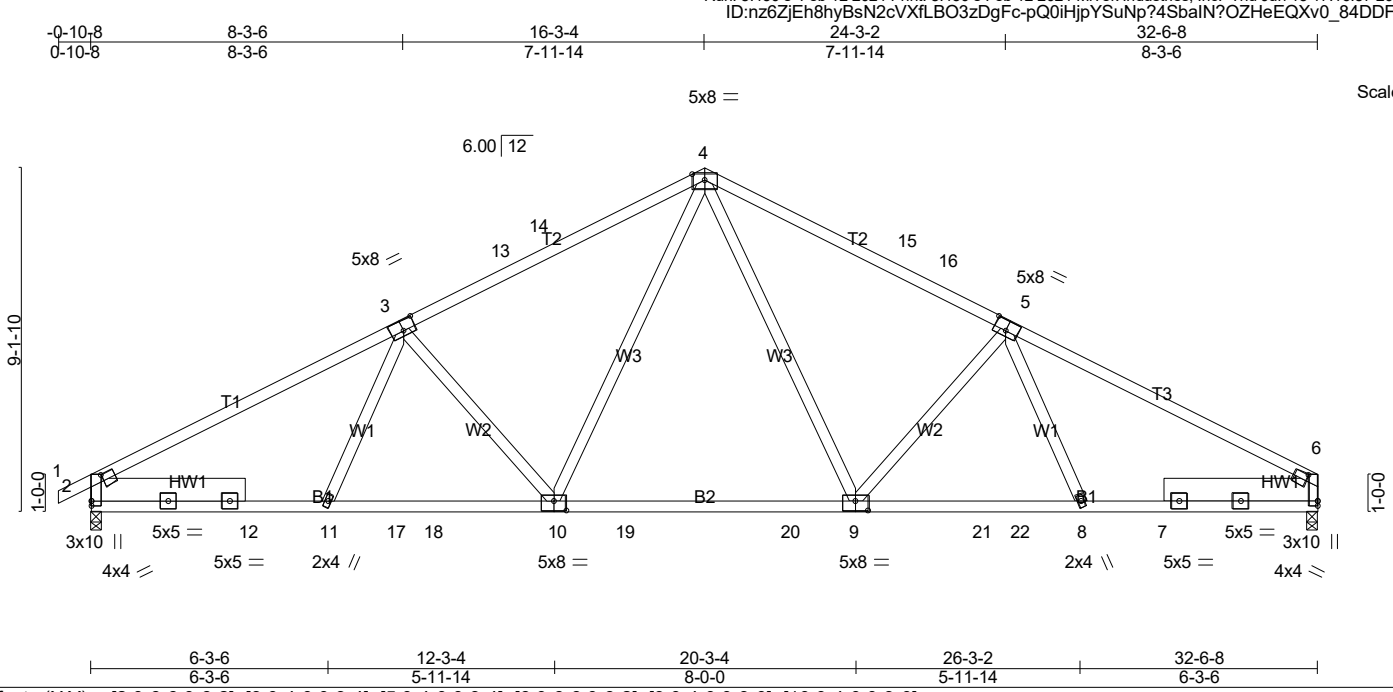

Plate Offsets (X,Y)-- [2:0-6-6,0-6-2], [3:0-4-0,0-3-4], [5:0-4-0,0-3-4], [6:0-6-6,0-6-2], [9:0-4-0,0-3-0], [10:0-4-0,0-3-0]

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	0.98	Vert(LL)	-0.27	9-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.43	9-10	>907	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.07	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH								
BCDL	10.0										Weight: 190 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP SS *Except*
T1,T3: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x8 SP No.2 -° 4-1-0, Right 2x8 SP No.2 -° 4-1-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 9-10.

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

REACTIONS. (lb/size) 2=1355/0-3-8 (min. 0-1-10), 6=1301/0-3-8 (min. 0-1-9)
Max Horz 2=-120(LC 19)
Max Uplift2=-116(LC 14), 6=-102(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2213/221, 3-13=-1790/243, 13-14=-1717/245, 4-14=-1692/266, 4-15=-1692/267, 15-16=-1718/245, 5-16=-1791/244, 5-6=-2217/224
BOT CHORD 2-12=-171/1825, 11-12=-171/1825, 11-17=-185/1756, 17-18=-185/1756, 10-18=-185/1756, 10-19=-37/1253, 19-20=-37/1253, 9-20=-37/1253, 9-21=-138/1758, 21-22=-138/1758, 8-22=-138/1758, 7-8=-120/1828, 6-7=-120/1828
WEBS 4-9=-84/674, 5-9=-533/201, 5-8=0/282, 4-10=-84/673, 3-10=-530/200, 3-11=0/280

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; 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 11-5-10, Exterior(2R) 11-5-10 to 21-0-14, Interior(1) 21-0-14 to 27-8-14, Exterior(2E) 27-8-14 to 32-6-8 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) 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) except (jt=lb) 2=116, 6=102.

6/13/2024

Continued on page 2

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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.

LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R14	Common	1	1	Job Reference (optional) **# 49568**

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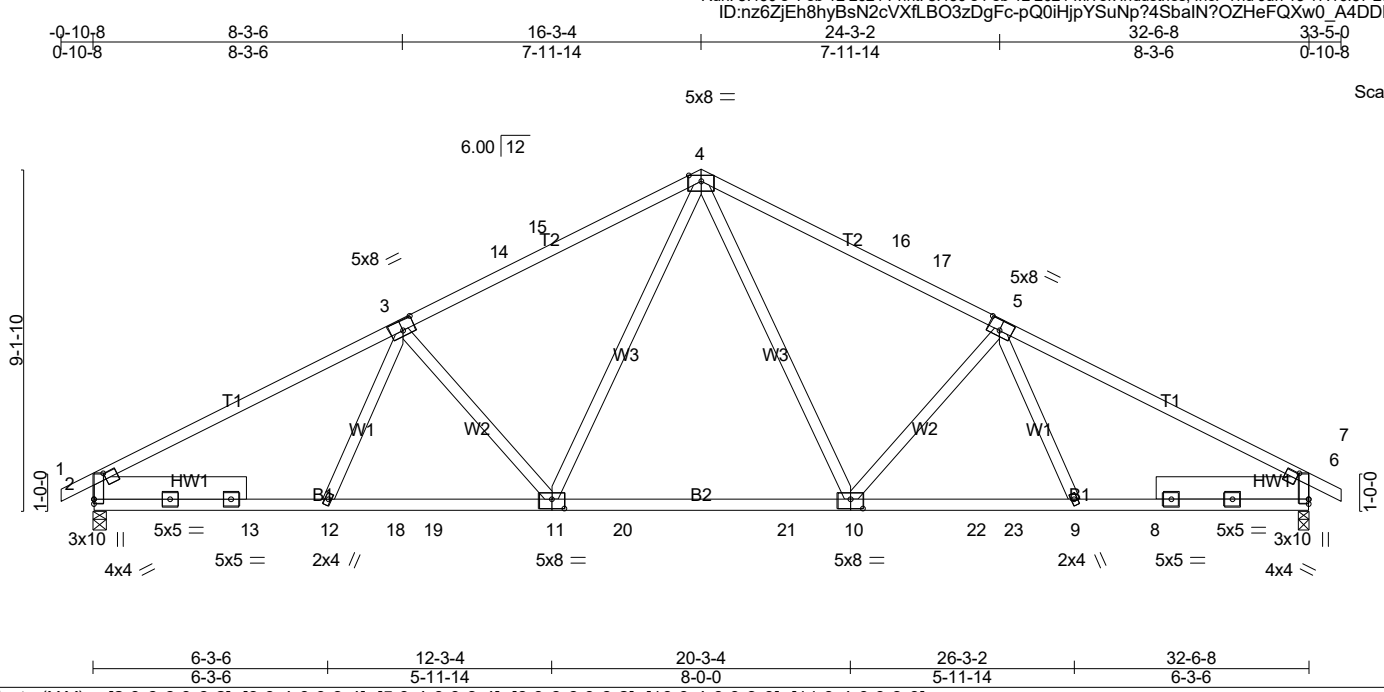

Plate Offsets (X,Y)-- [2:0-6-6,0-6-2], [3:0-4-0,0-3-4], [5:0-4-0,0-3-4], [6:0-6-6,0-6-2], [10:0-4-0,0-3-0], [11:0-4-0,0-3-0]

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	0.98	Vert(LL)	-0.27	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.43	10-11	>907	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.07	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 192 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP SS *Except*
T1: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x8 SP No.2 -° 4-1-0, Right 2x8 SP No.2 -° 4-1-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 10-11.

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

REACTIONS. (lb/size) 2=1354/0-3-8 (min. 0-1-10), 6=1354/0-3-8 (min. 0-1-10)
Max Horz 2=113(LC 18)
Max Uplift2=-116(LC 14), 6=-116(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2212/220, 3-14=-1789/243, 14-15=-1716/244, 4-15=-1690/265, 4-16=-1690/265, 16-17=-1716/244, 5-17=-1789/243, 5-6=-2212/220
BOT CHORD 2-13=-174/1824, 12-13=-174/1824, 12-18=-188/1755, 18-19=-188/1755, 11-19=-188/1755, 11-20=-47/1252, 20-21=-47/1252, 10-21=-47/1252, 10-22=-146/1755, 22-23=-146/1755, 9-23=-146/1755, 8-9=-128/1824, 6-8=-128/1824
WEBS 4-10=-84/673, 5-10=-531/200, 5-9=0/280, 4-11=-84/673, 3-11=-531/200, 3-12=0/280

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; 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 11-5-10, Exterior(2R) 11-5-10 to 21-0-14, Interior(1) 21-0-14 to 28-7-6, Exterior(2E) 28-7-6 to 33-5-0 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) 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) except (jt=lb) 2=116, 6=116.

6/13/2024

Continued on page 2

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.

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.

LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R14A	Hip	1	1	Job Reference (optional) **# 49568**

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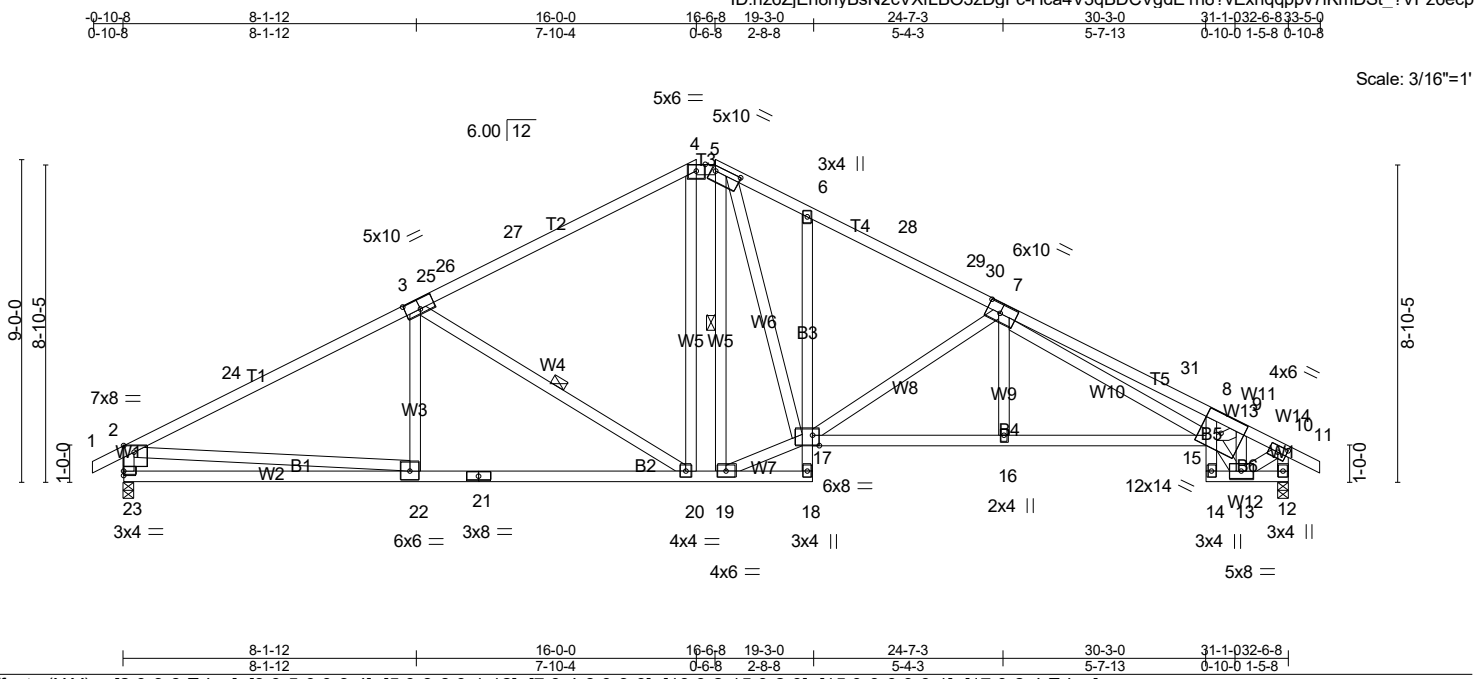


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-5-0,0-3-4], [5:0-8-8,0-1-12], [7:0-4-8,0-3-0], [10:0-2-15,0-2-0], [15:0-0-0,0-0-1], [17:0-2-4,Edge]

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	0.93	Vert(LL)	-0.23	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.39	20-22	>988	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.25	12	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 220 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T2: 2x4 SP SS, T1,T5: 2x4 SP No.1
BOT CHORD 2x4 SP No.2 *Except*
B3: 2x4 SP No.3, B4: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
W1,W11: 2x4 SP No.2

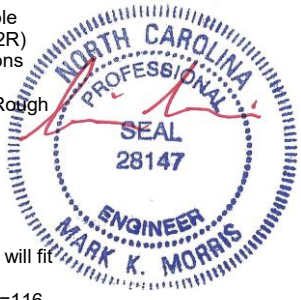
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-18.
WEBS 1 Row at midpt 3-20, 5-19

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

REACTIONS. (lb/size) 23=1351/0-3-8 (min. 0-2-3), 12=1351/0-3-8 (min. 0-2-3)
Max Horz 23=110(LC 14)
Max Uplift 23=-116(LC 14), 12=-116(LC 15)
Max Grav 23=1868(LC 39), 12=1868(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-2947/200, 3-24=-2676/222, 3-25=-2206/210, 25-26=-2182/214, 26-27=-2073/223, 4-27=-2014/245, 4-5=-1775/253, 5-6=-2599/317, 6-28=-2598/262, 28-29=-2604/252, 29-30=-2709/241, 7-30=-2744/240, 7-31=-4842/350, 8-31=-4914/329, 8-9=-4482/260, 9-10=-1638/108, 2-23=-1790/183, 10-12=-1770/149
BOT CHORD 22-23=-210/590, 21-22=-166/2523, 20-21=-166/2523, 19-20=-29/1800, 6-17=-292/119, 16-17=-137/3167, 15-16=-137/3169, 8-15=-423/148, 13-14=-29/356
WEBS 3-20=-846/175, 5-19=-484/0, 17-19=-20/1853, 5-17=-130/1625, 7-17=-1011/135, 7-16=0/280, 2-22=-71/1942, 9-13=-2254/97, 10-13=-71/1471, 13-15=-43/1600, 9-15=-161/2857, 4-20=0/433, 7-15=-185/1373

NOTES- (10-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=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 11-2-6, Exterior(2R) 11-2-6 to 21-4-2, Interior(1) 21-4-2 to 28-7-6, Exterior(2E) 28-7-6 to 33-5-0 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) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=116, 12=116.



6/13/2024

Continued on page 2

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10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R15	Hip	1	1	# 49568
					Job Reference (optional)

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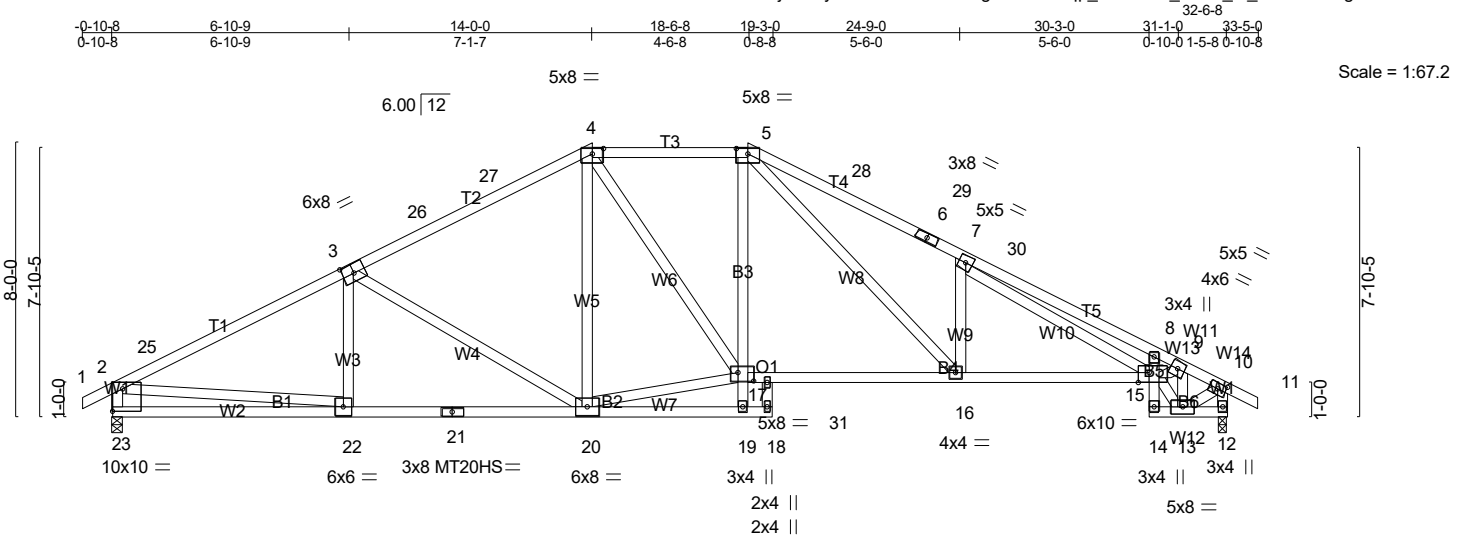

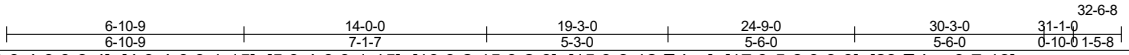

Plate Offsets (X,Y)-- [3:0-4-0,0-3-4], [4:0-4-0,0-1-15], [5:0-4-0,0-1-15], [10:0-2-15,0-2-0], [15:0-3-12,Edge], [17:0-5-8,0-3-0], [23:Edge,0-7-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.23	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.38	16-17	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.23	12	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 210 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.1 *Except*
T3: 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B3,B5: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
W1,W11: 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
10-0-0 oc bracing: 17-19

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

REACTIONS. (lb/size) 23=1358/0-3-8 (min. 0-2-2), 12=1361/0-3-8 (min. 0-2-2)
Max Horz 23=97(LC 14)
Max Uplift23=-102(LC 14), 12=-100(LC 15)
Max Grav 23=1820(LC 39), 12=1822(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-25=-2797/220, 3-25=-2544/247, 3-26=-2165/249, 26-27=-1986/256, 4-27=-1967/270, 4-5=-2028/288, 5-28=-3318/390, 28-29=-3322/378, 6-29=-3434/367, 6-7=-3480/366, 7-30=-4551/367, 8-30=-4756/362, 8-9=-4368/296, 9-10=-1596/122, 2-23=-1750/192, 10-12=-1726/162
BOT CHORD 22-23=-153/461, 21-22=-149/2392, 20-21=-149/2392, 5-17=-28/307, 17-31=-82/2042, 16-31=-82/2042, 15-16=-176/2982, 8-15=-432/128, 13-14=-26/322
WEBS 3-20=-708/152, 7-16=-846/204, 2-22=-132/1943, 17-20=-57/1744, 4-17=-28/529, 9-13=-2223/123, 10-13=-85/1435, 13-15=-65/1598, 9-15=-175/2774, 7-15=-160/1431, 5-16=-188/1375

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; 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 9-2-6, Exterior(2R) 9-2-6 to 23-4-2, Interior(1) 23-4-2 to 28-7-6, Exterior(2E) 28-7-6 to 33-5-0 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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) 23=102, 12=100.

6/13/2024

Continued on 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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R16	Hip	1	1	# 49568
					Job Reference (optional)

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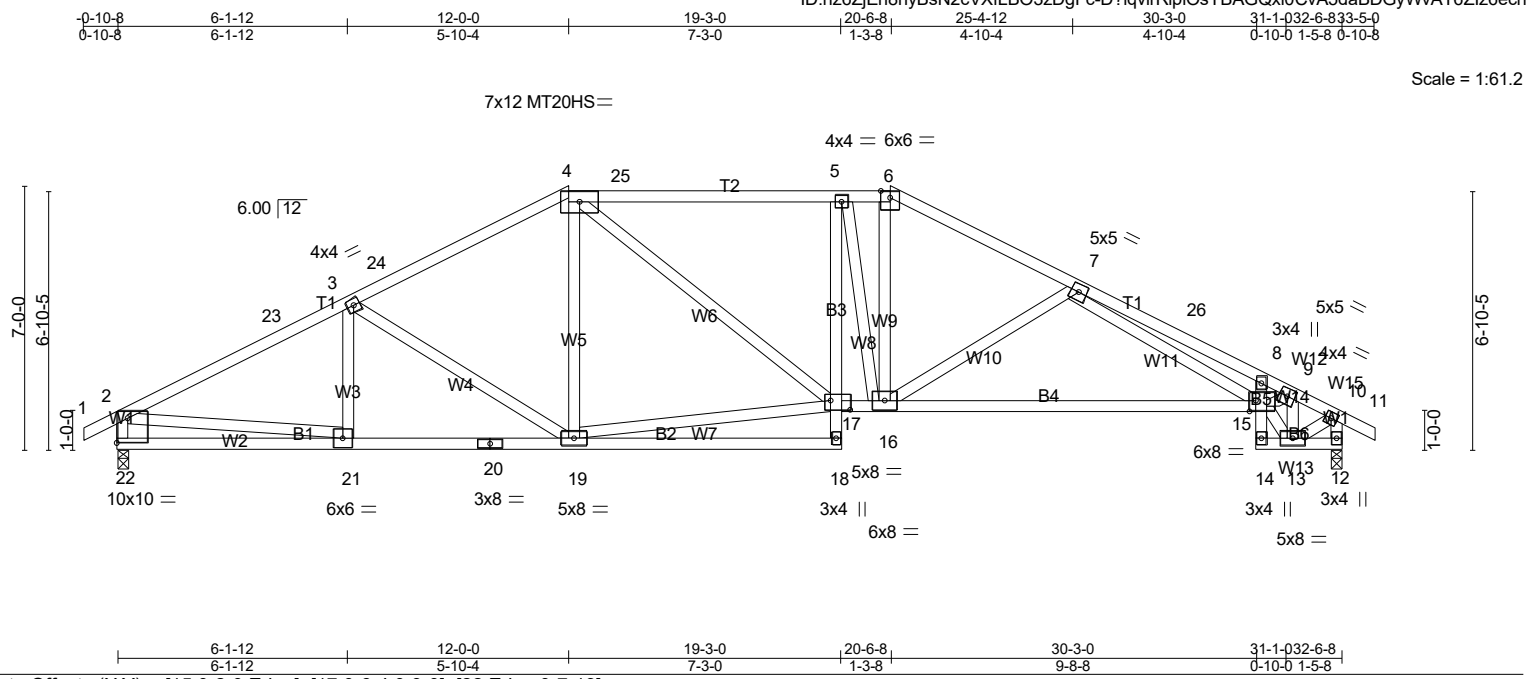


Scale = 1:61.2

Plate Offsets (X,Y)-- [15:0-2-0,Edge], [17:0-6-4,0-3-0], [22:Edge,0-7-13]

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	0.94	Vert(LL)	-0.26	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.58	15-16	>667	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.21	12	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 212 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T2: 2x4 SP No.1
BOT CHORD 2x4 SP No.2 *Except*
B3,B5: 2x4 SP No.3, B4: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
W12: 2x4 SP No.2

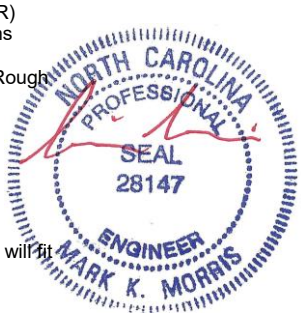
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 22=1351/0-3-8 (min. 0-2-1), 12=1351/0-3-8 (min. 0-2-1)
Max Horz 22=-84(LC 15)
Max Uplift 22=-92(LC 14), 12=-92(LC 15)
Max Grav 22=1764(LC 39), 12=1764(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-23=-2533/267, 3-23=-2288/282, 3-24=-2036/286, 4-24=-1890/309, 4-25=-2038/367, 5-25=-2039/366, 5-6=-2036/326, 6-7=-2367/327, 7-26=-4339/385, 8-26=-4420/371, 8-9=-4010/347, 9-10=-1480/146, 2-22=-1698/213, 10-12=-1672/187
BOT CHORD 21-22=-131/391, 20-21=-184/2147, 19-20=-184/2147, 5-17=-331/9, 16-17=-179/2035, 15-16=-264/2701, 8-15=-362/102, 13-14=-44/258
WEBS 3-19=-530/129, 4-19=-9/255, 17-19=-144/1513, 4-17=-72/569, 5-16=-531/203, 6-16=-119/1067, 7-16=-811/170, 7-15=-60/1436, 2-21=-169/1770, 9-13=-2106/146, 10-13=-109/1344, 13-15=-70/1531, 9-15=-202/2517

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; 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 7-2-6, Exterior(2R) 7-2-6 to 25-6-8, Interior(1) 25-6-8 to 28-7-6, Exterior(2E) 28-7-6 to 33-5-0 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 12.



6/13/2024

Continued on page 2

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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R17	Hip	1	1	# 49568
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:17:01 2024 Page 1
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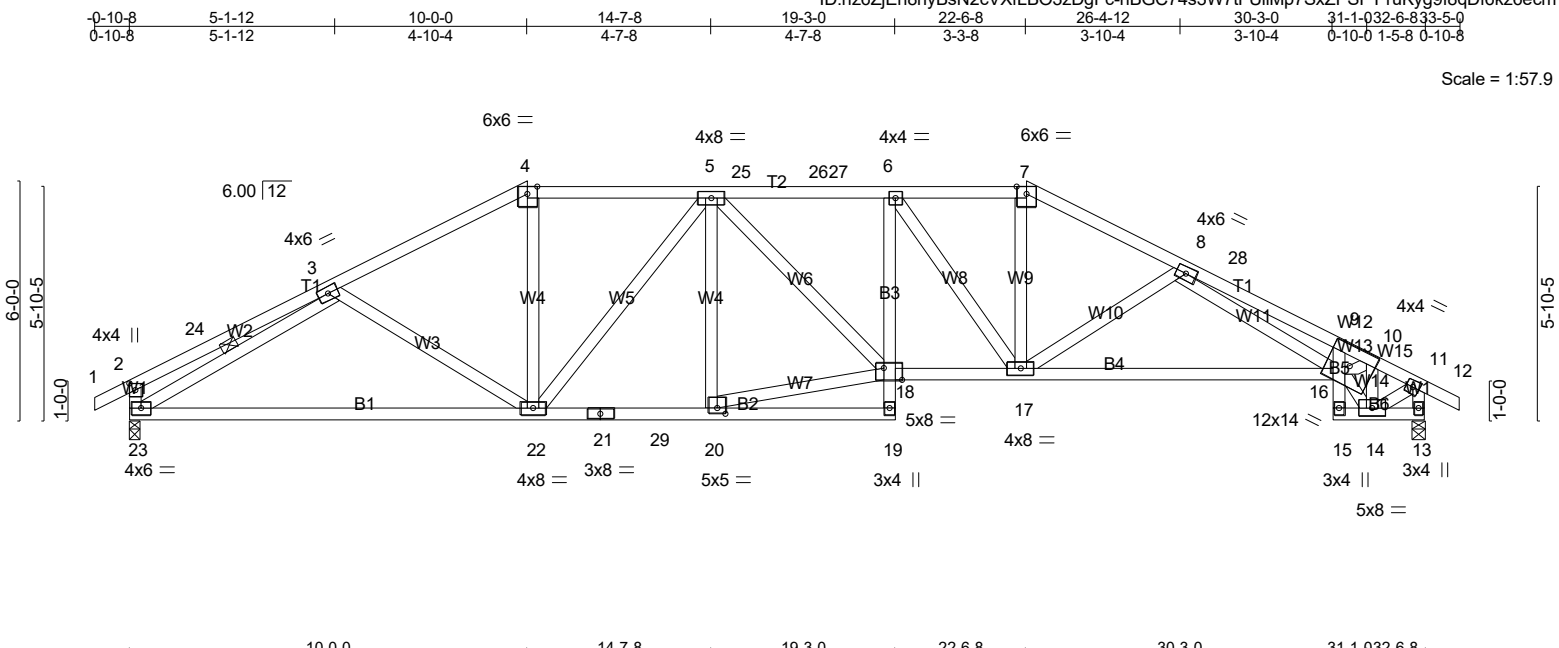

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [16:0-0-0,0-0-1], [18:0-5-8,0-3-8], [20:0-2-8,0-1-12]

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	0.64	Vert(LL)	-0.27	22-23	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.57	22-23	>676	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.21	13	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 207 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B3,B5: 2x4 SP No.3
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 22-23.
WEBS 1 Row at midpt 3-23

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

REACTIONS. (lb/size) 13=1351/0-3-8 (min. 0-1-15), 23=1351/0-3-8 (min. 0-1-15)
Max Horz 23=71(LC 14)
Max Uplift13=-77(LC 15), 23=-77(LC 14)
Max Grav 13=1625(LC 39), 23=1625(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-505/27, 3-24=-367/41, 3-4=-2050/297, 4-5=-1833/296, 5-25=-2623/377, 25-26=-2623/377, 26-27=-2623/377, 6-27=-2623/377, 6-7=-2219/328, 7-8=-2461/338, 8-28=-3794/395, 9-28=-3933/384, 9-10=-3620/359, 10-11=-1353/150, 2-23=-527/75, 11-13=-1542/190
BOT CHORD 22-23=-218/1877, 21-22=-184/2232, 21-29=-184/2232, 20-29=-184/2232, 17-18=-219/2633, 16-17=-273/2548, 9-16=-250/75
WEBS 3-22=-278/188, 4-22=-20/616, 5-22=-641/111, 18-20=-193/2125, 5-18=-48/557, 6-17=-716/115, 7-17=-67/895, 3-23=-1823/309, 5-20=-430/69, 10-14=-1921/160, 14-16=-85/1396, 10-16=-206/2241, 11-14=-113/1233, 8-17=-682/136, 8-16=-40/1140

NOTES- (10-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=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 5-0-0, Exterior(2R) 5-0-0 to 14-7-8, Interior(1) 14-7-8 to 17-8-14, Exterior(2R) 17-8-14 to 27-4-2, Interior(1) 27-4-2 to 28-7-6, Exterior(2E) 28-7-6 to 33-5-0 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) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 23.

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

6/13/2024

Continued on page 2

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.

10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R18	Hip	1	1	**# 49568**
					Job Reference (optional)

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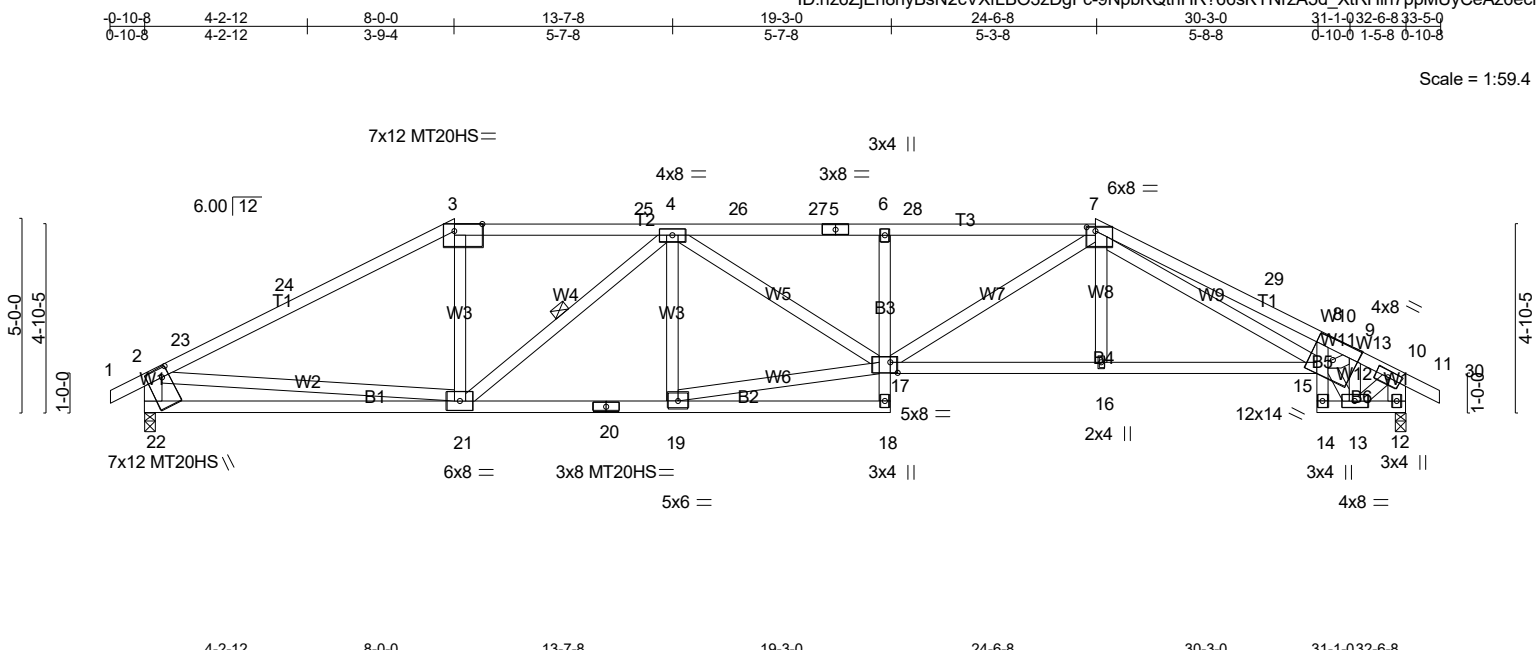

Plate Offsets (X,Y)-- [3:0-8-10,Edge], [7:0-2-12,0-1-4], [15:0-0-0,0-0-1], [17:0-2-4,0-3-4], [22:0-2-12,0-2-4]

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	0.86	Vert(LL)	-0.26	17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.43	16-17	>891	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.21	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 194 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP SS *Except*
T2,T3: 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B3,B5: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
W6: 2x4 SP No.2, W1: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-21

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

REACTIONS. (lb/size) 22=1350/0-3-8 (min. 0-1-12), 12=1350/0-3-8 (min. 0-1-12)
Max Horz 22=58(LC 14)
Max Uplift 22=-69(LC 11), 12=-69(LC 10)
Max Grav 22=1485(LC 39), 12=1485(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-2359/248, 3-24=-2298/266, 3-25=-2083/277, 4-25=-2086/276, 4-26=-3665/386, 26-27=-3665/386, 5-27=-3665/386, 5-6=-3665/386, 6-28=-3710/391, 7-28=-3710/391, 7-29=-3566/488, 8-29=-3672/470, 8-9=-3375/355, 9-10=-1209/131, 2-22=-1408/224, 10-12=-1411/186
BOT CHORD 21-22=-202/817, 20-21=-200/2932, 19-20=-200/2932, 6-17=-566/119, 16-17=-190/2676, 15-16=-187/2683, 8-15=-624/184
WEBS 3-21=-0/679, 4-21=-1106/133, 4-19=-403/87, 17-19=-188/2762, 4-17=-63/875, 7-17=-148/1237, 7-16=0/281, 2-21=-101/1706, 9-13=-1699/126, 10-13=-93/1044, 13-15=-56/1203, 9-15=-250/2177, 7-15=-210/1383

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; 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, Exterior(2R) 3-11-2 to 12-9-10, Interior(1) 12-9-10 to 19-8-14, Exterior(2R) 19-8-14 to 28-7-6, Exterior(2E) 28-7-6 to 33-5-0 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 12.

6/13/2024

Continued on page 2

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.

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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R19	HIP GIRDER	1	2	Job Reference (optional) **# 49568**

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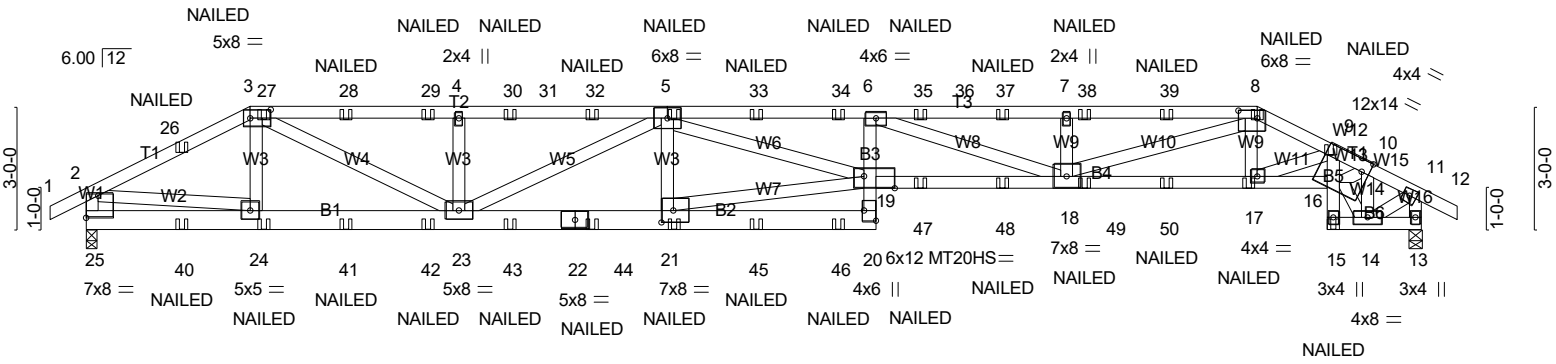
0-10-8	4-0-0	9-1-0	14-2-0	19-3-0	23-10-12	28-6-8	30-3-0	31-1-0	32-6-8	33-5-0
0-10-8	4-0-0	5-1-0	5-1-0	5-1-0	4-7-12	4-7-12	1-8-8	0-10-0	1-5-8	0-10-8

Scale = 1:56.1



4-0-0	9-1-0	14-2-0	19-3-0	23-10-12	28-6-8	30-3-0	31-1-0	32-6-8
4-0-0	5-1-0	5-1-0	5-1-0	4-7-12	4-7-12	1-8-8	0-10-0	1-5-8

Plate Offsets (X,Y)-- [3:0-6-0,0-2-8], [8:0-5-8,0-2-4], [9:0-2-3,Edge], [19:0-9-0,Edge], [20:Edge,0-3-8], [21:0-3-8,0-3-8], [25:Edge,0-6-8]

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	0.95	Vert(LL)	-0.63	19	>616	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.98	19	>396	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.26	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 392 lb	FT = 20%
BCDL	10.0											

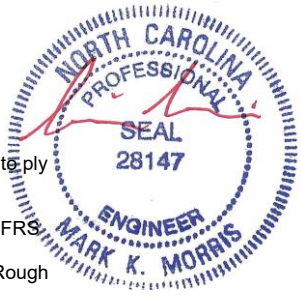
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
B1,B2: 2x6 SP No.2, B3: 2x4 SP No.1, B4: 2x4 SP SS
WEBS 2x4 SP No.3 *Except*
W7: 2x4 SP No.2

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

REACTIONS. (lb/size) 25=2247/0-3-8 (min. 0-1-8), 13=2261/0-3-8 (min. 0-1-8)
Max Horz 25=-32(LC 13)
Max Uplift 25=-321(LC 9), 13=-356(LC 8)
Max Grav 25=2401(LC 36), 13=2417(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-26=-3767/513, 3-26=-3679/523, 3-27=-6333/911, 27-28=-6332/911, 28-29=-6332/911, 4-29=-6332/911, 4-30=-6332/911, 30-31=-6332/911, 31-32=-6332/911, 5-32=-6332/911, 5-33=-11286/1675, 33-34=-11286/1675, 6-34=-11286/1675, 6-35=-9414/1426, 35-36=-9414/1426, 36-37=-9414/1426, 7-37=-9414/1426, 7-38=-9414/1426, 38-39=-9414/1426, 8-39=-9414/1426, 8-9=-5648/861, 9-10=-5971/904, 10-11=-2197/336, 11-13=-2285/343, 2-25=-2305/323
BOT CHORD 25-40=-93/406, 24-40=-93/406, 24-41=-447/3305, 41-42=-447/3305, 23-42=-447/3305, 23-43=-1103/7816, 22-43=-1103/7816, 22-44=-1103/7816, 21-44=-1103/7816, 21-45=-197/1400, 45-46=-197/1400, 20-46=-197/1400, 6-19=0/294, 19-47=-1723/11837, 47-48=-1723/11837, 18-48=-1724/11836, 18-49=-743/5128, 49-50=-743/5128, 17-50=-743/5128, 16-17=-823/5599, 9-16=-59/410, 14-15=-72/489
WEBS 3-24=-336/116, 3-23=-502/3405, 4-23=-664/193, 5-23=-1670/256, 5-21=-1125/261, 19-21=-922/6530, 5-19=-578/3668, 7-18=-675/182, 8-18=-694/4566, 8-17=-21/431, 10-14=-3090/466, 14-16=-316/2177, 11-14=-295/2018, 9-17=-608/103, 10-16=-545/3688, 6-18=-2572/356, 2-24=-397/2965

NOTES- (15-18)
1) 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: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
5) 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
6) Unbalanced snow loads have been considered for this design.



6/13/2024

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NOTES- (15-18)

7) 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.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
10) The Fabrication Tolerance at joint 19 = 16%
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 25=321, 13=356.
14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
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 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

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-60, 3-8=-60, 8-11=-60, 11-12=-60, 20-25=-20, 16-19=-20, 13-15=-20
   Concentrated Loads (lb)
   Vert: 8=-123(B) 9=-61(B) 24=-27(B) 5=-94(B) 21=-27(B) 16=-48(B) 26=-57(B) 27=-94(B) 28=-94(B) 29=-94(B) 30=-94(B) 32=-94(B) 33=-94(B) 34=-94(B) 35=-123(B) 37=-123(B) 38=-123(B) 39=-123(B) 40=-51(B) 41=-27(B) 42=-27(B) 43=-27(B) 44=-27(B) 45=-27(B) 46=-27(B)

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R20	Half Hip Girder	1	1	Job Reference (optional) **# 49568**

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:17:08 2024 Page 1
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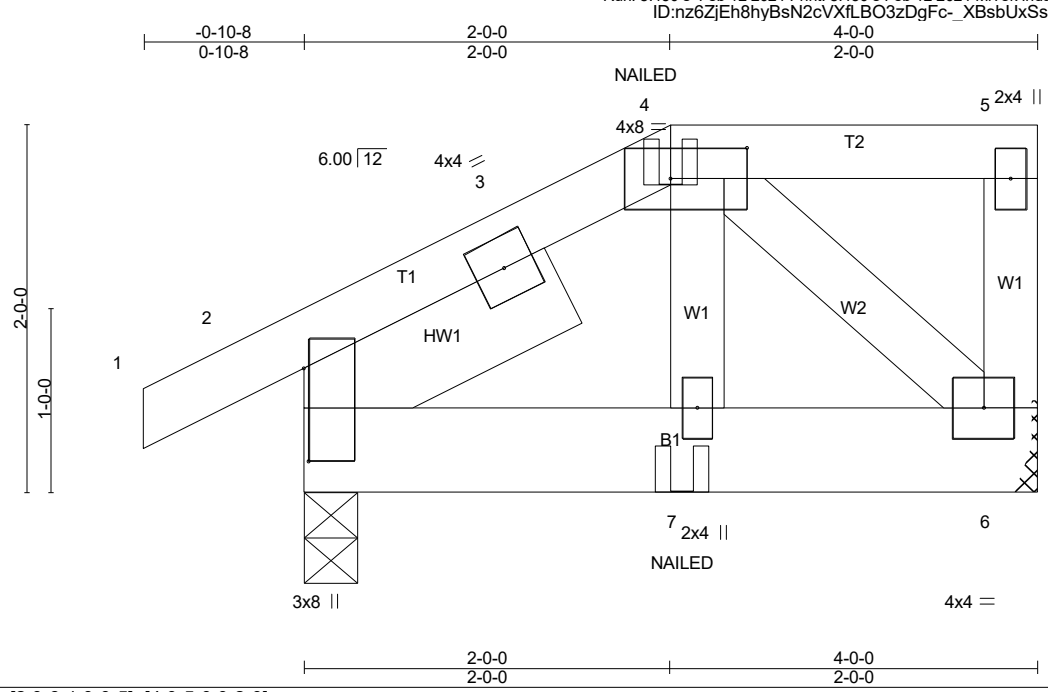


Plate Offsets (X,Y)-- [2:0-6-1,0-0-5], [4:0-5-0,0-2-0]

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	0.11	Vert(LL)	-0.00	2	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 27 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -° 1-6-12

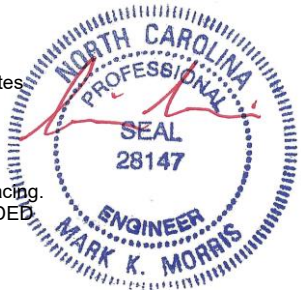
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 6=150/Mechanical, 2=214/0-3-8 (min. 0-1-8)
Max Horz 2=45(LC 12)
Max Uplift 6=-30(LC 9), 2=-29(LC 12)
Max Grav 6=195(LC 33), 2=302(LC 34)

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

NOTES- (12-15)
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; MWFRS (envelope) gable end zone; 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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

6/13/2024

Continued on page 2

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.

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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R21	Half Hip	1	1	Job Reference (optional) **# 49568**

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:17:08 2024 Page 1
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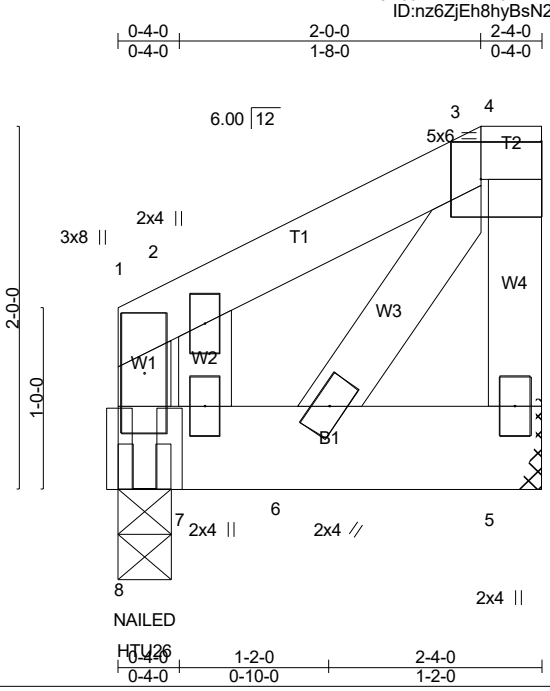

Plate Offsets (X,Y)-- [3:Edge,0-2-8]

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	0.05	Vert(LL)	-0.00	7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 15 lb	FT = 20%
BCDL	10.0											

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 or 2-4-0 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=82/Mechanical, 8=2064/0-3-8 (min. 0-2-8)
Max Horz 8=29(LC 14)
Max Uplift 5=-25(LC 14), 8=-86(LC 14)
Max Grav 5=124(LC 35), 8=2106(LC 35)

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

NOTES- (13-16)
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; Hip 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) Provide adequate drainage to prevent water ponding.
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, 8.
9) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 0-1-12 from the left end to connect truss(es) R04 (1 ply 2x4 SP) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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.

6/13/2024

LOAD CASE(S) Standard

Continued on page 2

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.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-4=-60, 5-8=-20
   Concentrated Loads (lb)
   Vert: 8=-1983(F=-82, B=-1901)

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R22	Half Hip	1	1	Job Reference (optional) **# 49568**

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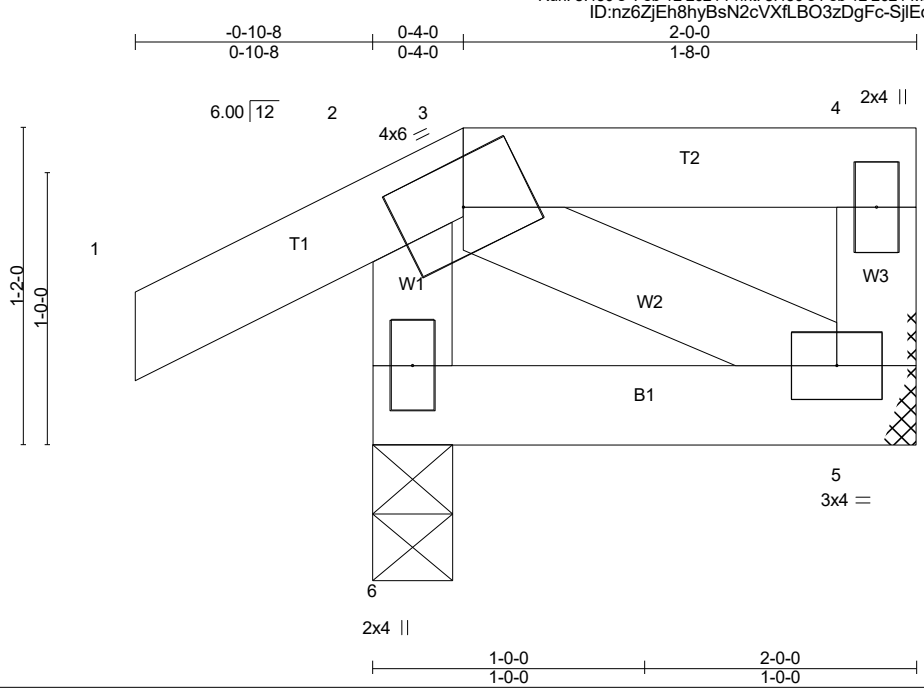


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 12 lb	FT = 20%
BCDL	10.0											

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

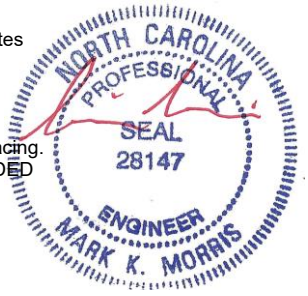
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 5=50/Mechanical, 6=148/0-3-8 (min. 0-1-8)
Max Horz 6=16(LC 14)
Max Uplift 5=-11(LC 11), 6=-15(LC 14)
Max Grav 5=93(LC 35), 6=191(LC 36)

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

NOTES- (10-13)
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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-10-4 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R23	Half Hip	1	1	Job Reference (optional) **# 49568**

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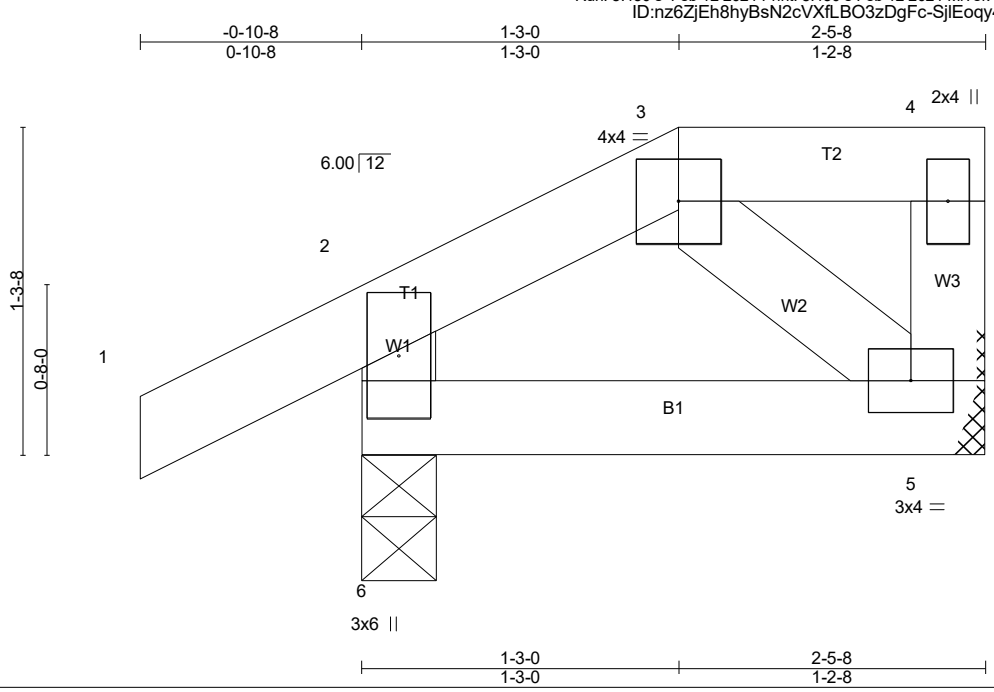


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 12 lb	FT = 20%
BCDL	10.0											

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

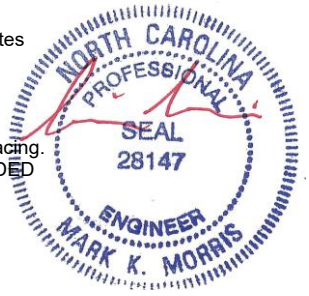
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 5=72/Mechanical, 6=162/0-3-8 (min. 0-1-8)
Max Horz 6=31(LC 14)
Max Uplift5=-11(LC 11), 6=-22(LC 14)
Max Grav 5=104(LC 35), 6=241(LC 36)

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

NOTES- (10-13)
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; Hip 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R24	Monopitch Girder	1	1	Job Reference (optional) **# 49568**

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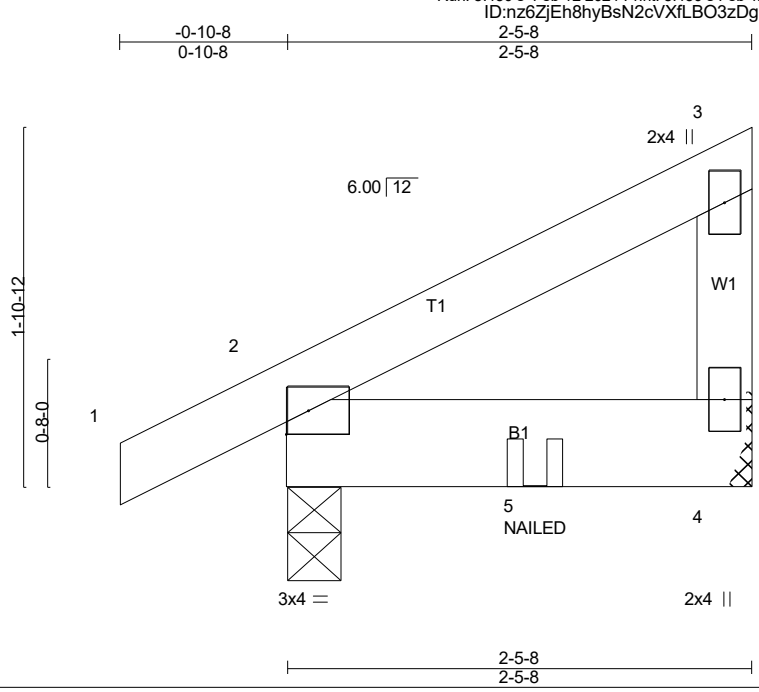


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	2	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 13 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

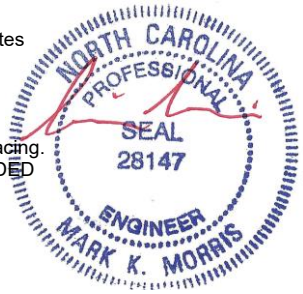
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 4=118/Mechanical, 2=201/0-3-8 (min. 0-1-8)
Max Horz 2=48(LC 12)
Max Uplift4=-33(LC 12), 2=-27(LC 12)
Max Grav 4=140(LC 19), 2=264(LC 19)

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

NOTES- (11-14)
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; MWFRS (envelope) gable end zone; 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) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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

6/13/2024

Continued on page 2

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 2-4=-20
Concentrated Loads (lb)
Vert: 5=-84(F)

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R25	Monopitch	9	1	Job Reference (optional) **# 49568**

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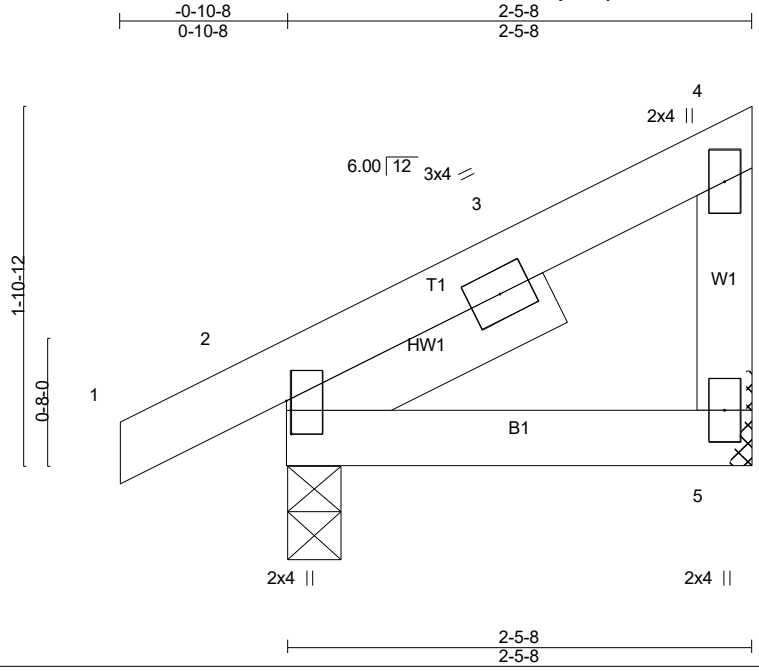


Plate Offsets (X,Y)-- [2:0-2-1,0-0-5]

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	0.10	Vert(LL)	-0.00	2-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	2-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 14 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -° 1-6-7

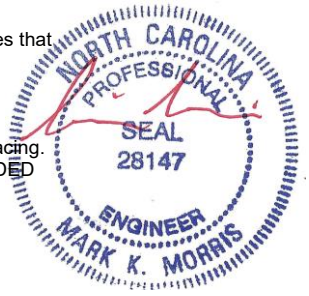
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 5=83/Mechanical, 2=155/0-3-8 (min. 0-1-8)
Max Horz 2=48(LC 14)
Max Uplift5=-25(LC 14), 2=-14(LC 14)
Max Grav 5=109(LC 21), 2=214(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) 5, 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 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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R26	Half Hip	2	1	Job Reference (optional) **# 49568**

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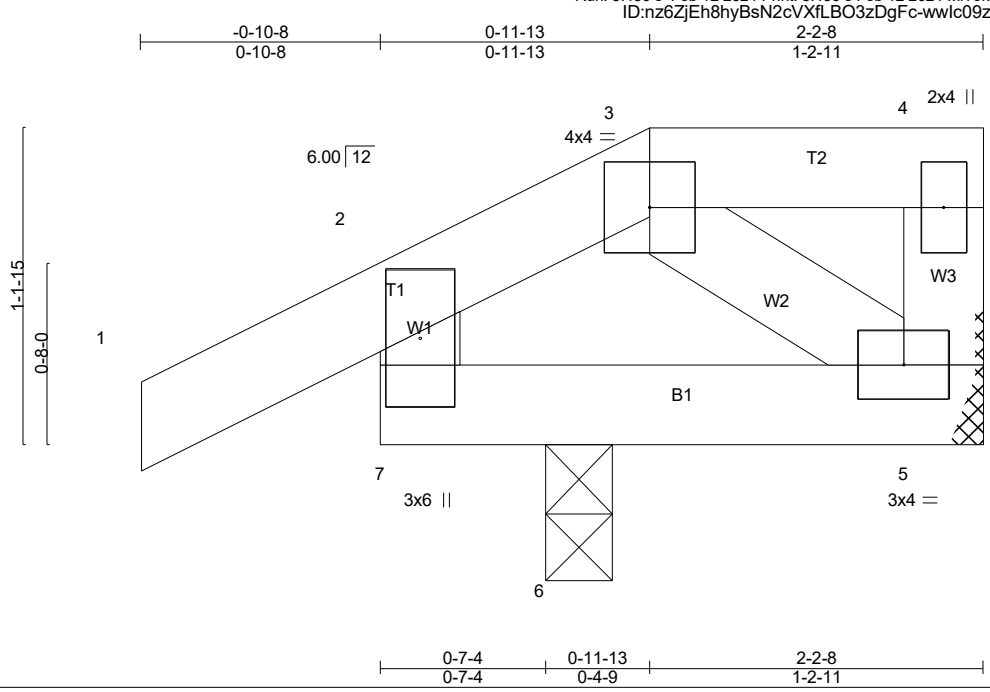


LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.00	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	0.00	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 11 lb	FT = 20%
BCDL	10.0											

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

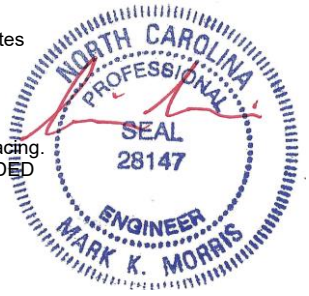
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS. (lb/size) 5=-7/Mechanical, 6=222/0-3-0 (min. 0-1-8)
Max Horz 6=27(LC 14)
Max Uplift5=-64(LC 36), 6=-31(LC 14)
Max Grav 5=46(LC 35), 6=325(LC 36)

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

NOTES- (10-13)
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; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-12 zone; cantilever 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R27	Half Hip Girder	2	1	# 49568
					Job Reference (optional)

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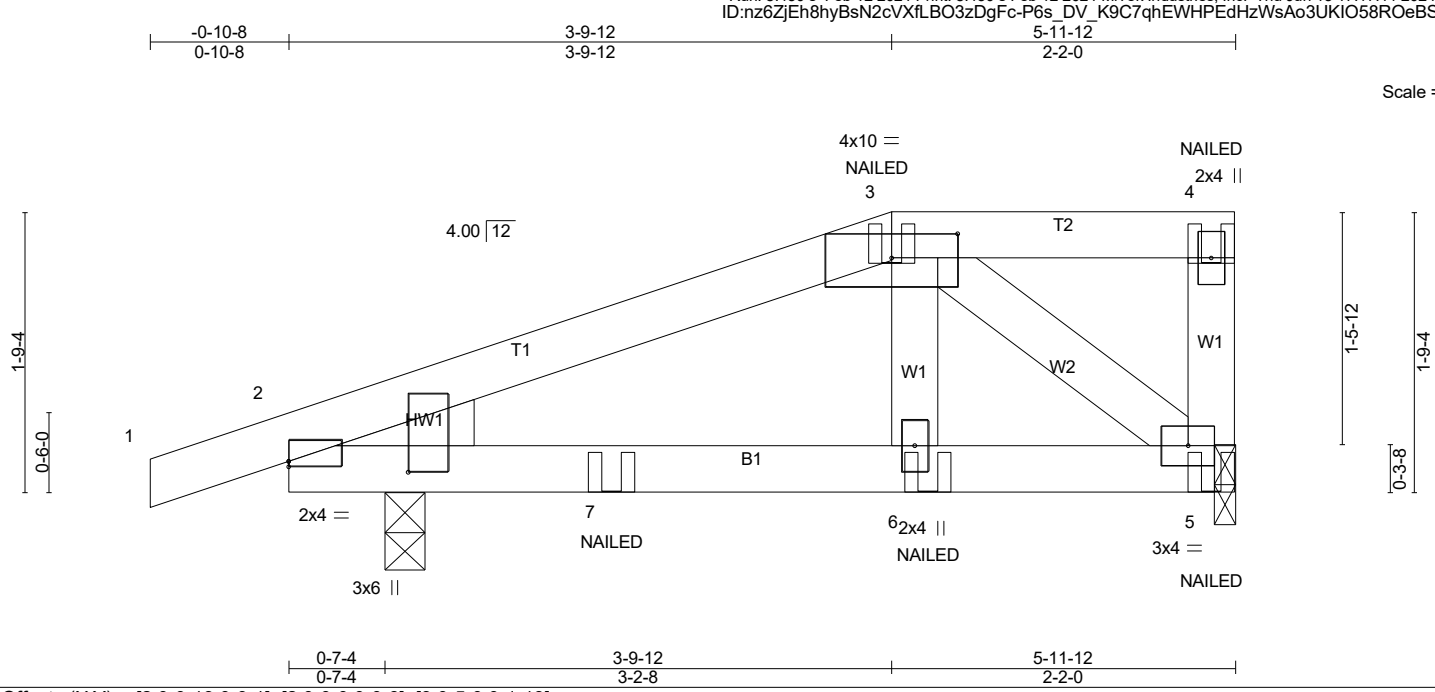

Plate Offsets (X,Y)-- [2:0-0-13,0-9-1], [2:0-0-0,0-0-6], [3:0-5-0,0-1-13]

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	0.40	Vert(LL)	0.01	2-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.02	2-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 27 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-12 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) 2=313/0-3-0 (min. 0-1-8), 5=223/0-1-8 (min. 0-1-8)
Max Horz 2=49(LC 64)
Max Uplift2=-71(LC 8), 5=-65(LC 8)
Max Grav 2=424(LC 34), 5=234(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-327/29
WEBS 3-5=-307/51

NOTES- (13-16)
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; MWFRS (envelope) gable end zone; cantilever left exposed ; 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) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

6/13/2024

Continued on page 2

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.

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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 4=-16(B) 6=23(B) 5=14(B) 7=-41(B)

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R28	Monopitch	6	1	Job Reference (optional) **# 49568**

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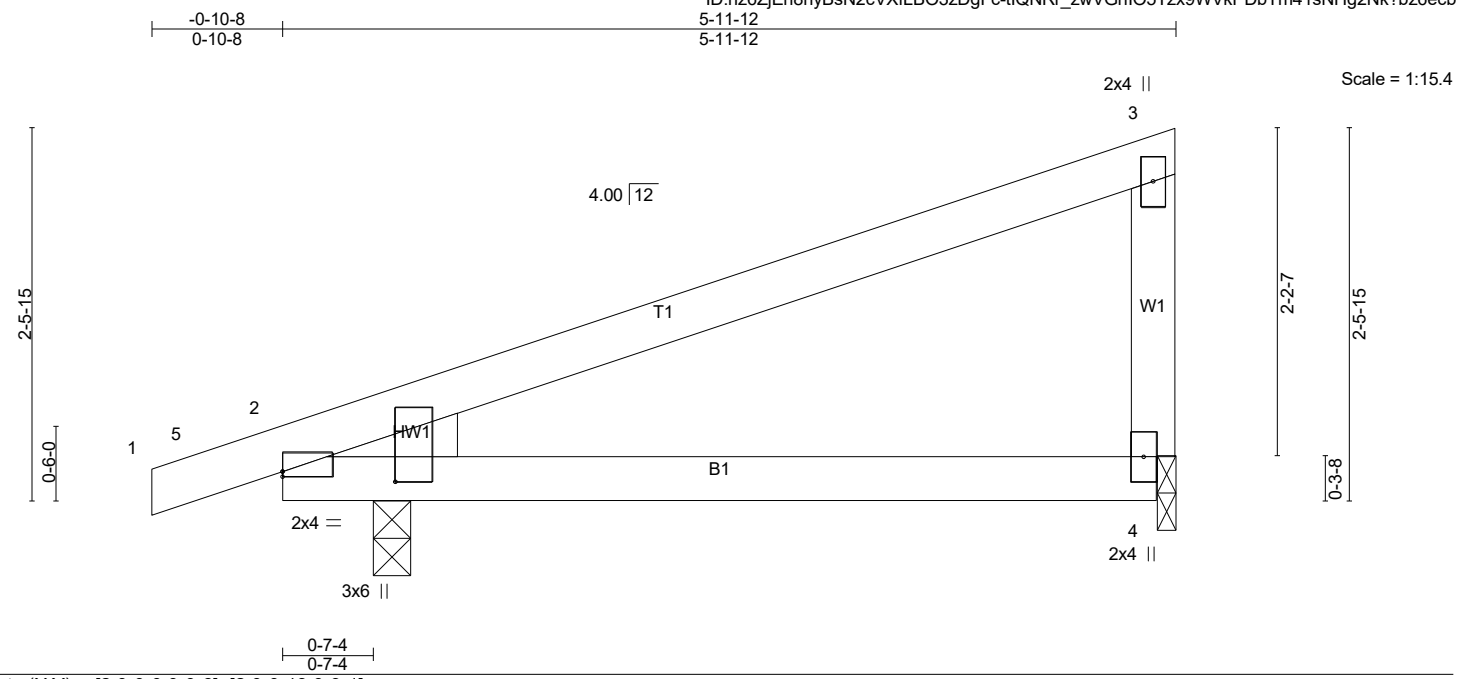


Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [2:0-0-13,0-9-1]

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	0.91	Vert(LL)	-0.06	2-4	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.13	2-4	>538	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 24 lb	FT = 20%
BCDL	10.0											

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

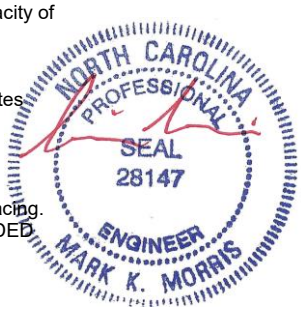
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 2=294/0-3-0 (min. 0-1-8), 4=223/0-1-8 (min. 0-1-8)
Max Horz 2=69(LC 10)
Max Uplift2=-51(LC 10), 4=-41(LC 14)
Max Grav 2=388(LC 21), 4=300(LC 21)

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

NOTES- (10-13)
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 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R29	Hip	1	1	**# 49568**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Jun 13 17:17:13 2024 Page 1
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-0-10-8	5-10-8	12-2-9	18-4-14	24-7-2	30-9-7	37-1-8	43-0-0	43-10-8
0-10-8	5-10-8	6-4-1	6-2-5	6-2-5	6-2-5	6-4-1	5-10-8	0-10-8

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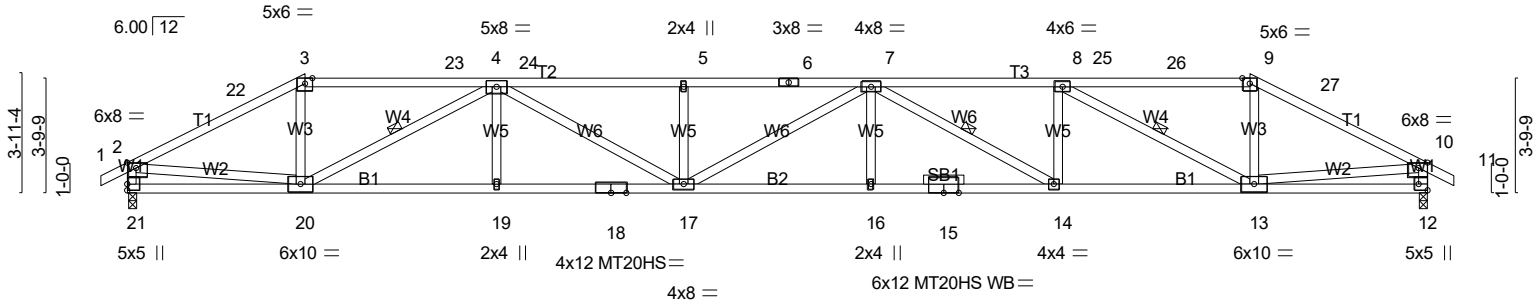


5-10-8	12-2-9	18-4-14	24-7-2	30-9-7	37-1-8	43-0-0
5-10-8	6-4-1	6-2-5	6-2-5	6-2-5	6-4-1	5-10-8

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [10:0-3-8,Edge], [12:Edge,0-3-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.74	16-17	>690	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-1.21	16-17	>424	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.25	12	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 232 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2 *Except*
	T2: 2x4 SP SS, T3: 2x4 SP No.1
BOT CHORD	2x4 SP SS
WEBS	2x4 SP No.3 *Except*
	W1,W2: 2x4 SP No.2
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-9-13 oc bracing.
WEBS	1 Row at midpt 4-20, 7-14, 8-13

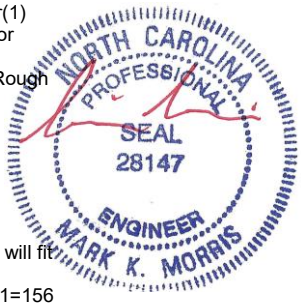
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 21=1770/0-3-8 (min. 0-2-8), 12=1770/0-3-8 (min. 0-2-8)
Max Horz 21=-44(LC 19)
Max Uplift 21=-156(LC 11), 12=-156(LC 10)
Max Grav 21=2099(LC 38), 12=2099(LC 38)

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

TOP CHORD	2-22=-3493/280, 3-22=-3420/293, 3-23=-3051/275, 4-23=-3055/274, 4-24=-6793/626, 5-24=-6793/626, 5-6=-6793/626, 6-7=-6793/626, 7-25=-5746/524, 8-25=-5746/524, 8-26=-3056/274, 9-26=-3053/275, 9-27=-3421/293, 10-27=-3494/281, 2-21=-2036/207, 10-12=-2036/207
BOT CHORD	20-21=-116/439, 19-20=-490/5747, 18-19=-490/5747, 17-18=-490/5747, 16-17=-584/6795, 15-16=-584/6795, 14-15=-584/6795, 13-14=-466/5746, 12-13=-74/441
WEBS	3-20=-53/1183, 4-20=-3065/310, 4-19=0/254, 4-17=-137/1202, 5-17=-468/125, 7-14=-1206/138, 8-14=-4/719, 8-13=-3063/309, 9-13=-53/1183, 2-20=-210/2882, 10-13=-212/2885

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; 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, Exterior(2R) 3-11-2 to 10-8-2, Interior(1) 10-8-2 to 32-3-14, Exterior(2R) 32-3-14 to 39-0-14, Exterior(2E) 39-0-14 to 43-10-8 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=156 , 12=156.



6/13/2024

Continued on page 2

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.

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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	R30	Hip	1	1	# 49568
					Job Reference (optional)

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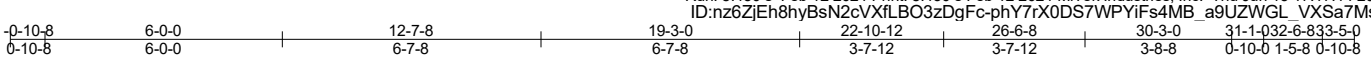

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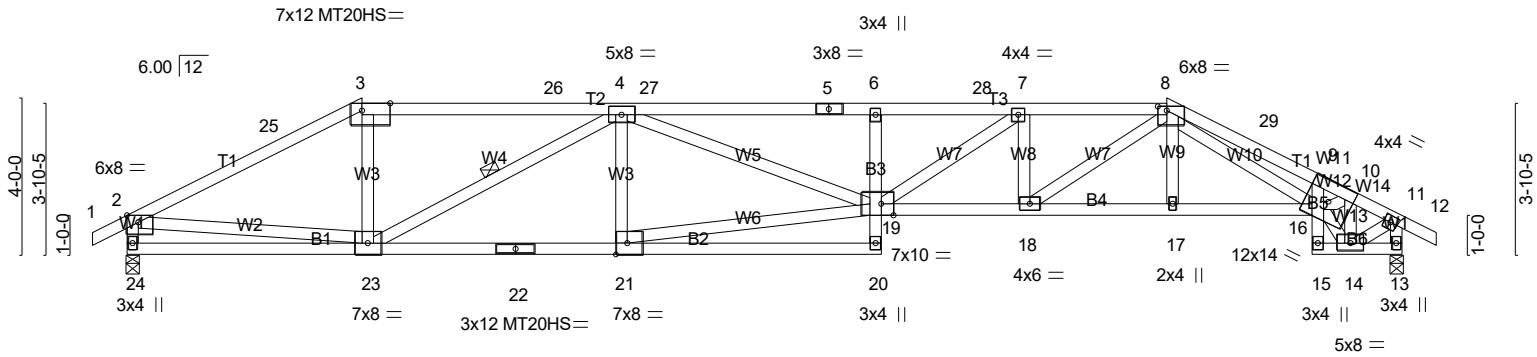

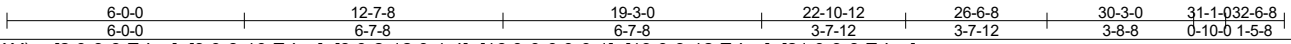

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-8-10,Edge], [8:0-2-12,0-1-4], [16:0-0-0,0-0-1], [19:0-3-12,Edge], [21:0-3-8,Edge]

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	0.94	Vert(LL)	-0.47	19	>820	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.74	18-19	>523	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.28	13	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 190 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
T2: 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
B3,B6: 2x4 SP No.2, B5: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
W6,W1: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 18-19,15-16.
WEBS 1 Row at midpt 4-23

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

REACTIONS. (lb/size) 24=1351/0-3-8 (min. 0-1-14), 13=1351/0-3-8 (min. 0-1-14)
Max Horz 24=45(LC 18)
Max Uplift 24=-98(LC 11), 13=-98(LC 10)
Max Grav 24=1583(LC 38), 13=1583(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-25=-2607/221, 3-25=-2533/232, 3-26=-2335/236, 4-26=-2339/236, 4-27=-5428/430, 5-27=-5428/430, 5-6=-5428/430, 6-28=-5504/430, 7-28=-5504/430, 7-8=-4668/381, 8-29=-3954/369, 9-29=-3973/360, 9-10=-3852/304, 10-11=-1421/125, 2-24=-1521/191, 11-13=-1495/165
BOT CHORD 23-24=-117/446, 22-23=-292/3993, 21-22=-292/3993, 20-21=-14/420, 6-19=-506/103, 18-19=-301/4668, 17-18=-196/3225, 16-17=-194/3232, 9-16=-255/110, 14-15=-27/300
WEBS 3-23=-10/773, 4-23=-1893/192, 4-21=-432/114, 19-21=-281/3616, 4-19=-126/1543, 2-23=-135/2101, 10-14=-1997/128, 11-14=-89/1300, 14-16=-69/1426, 10-16=-180/2382, 7-19=-107/1010, 8-18=-171/1765, 7-18=-918/136, 8-16=-109/839

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; 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, Exterior(2R) 3-11-2 to 10-9-10, Interior(1) 10-9-10 to 21-8-14, Exterior(2R) 21-8-14 to 28-7-6, Exterior(2E) 28-7-6 to 33-5-0 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 13.

6/13/2024

Continued on page 2

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.

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

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	SP01	Monopitch Structural Gable	2	1	Job Reference (optional) **# 49568**

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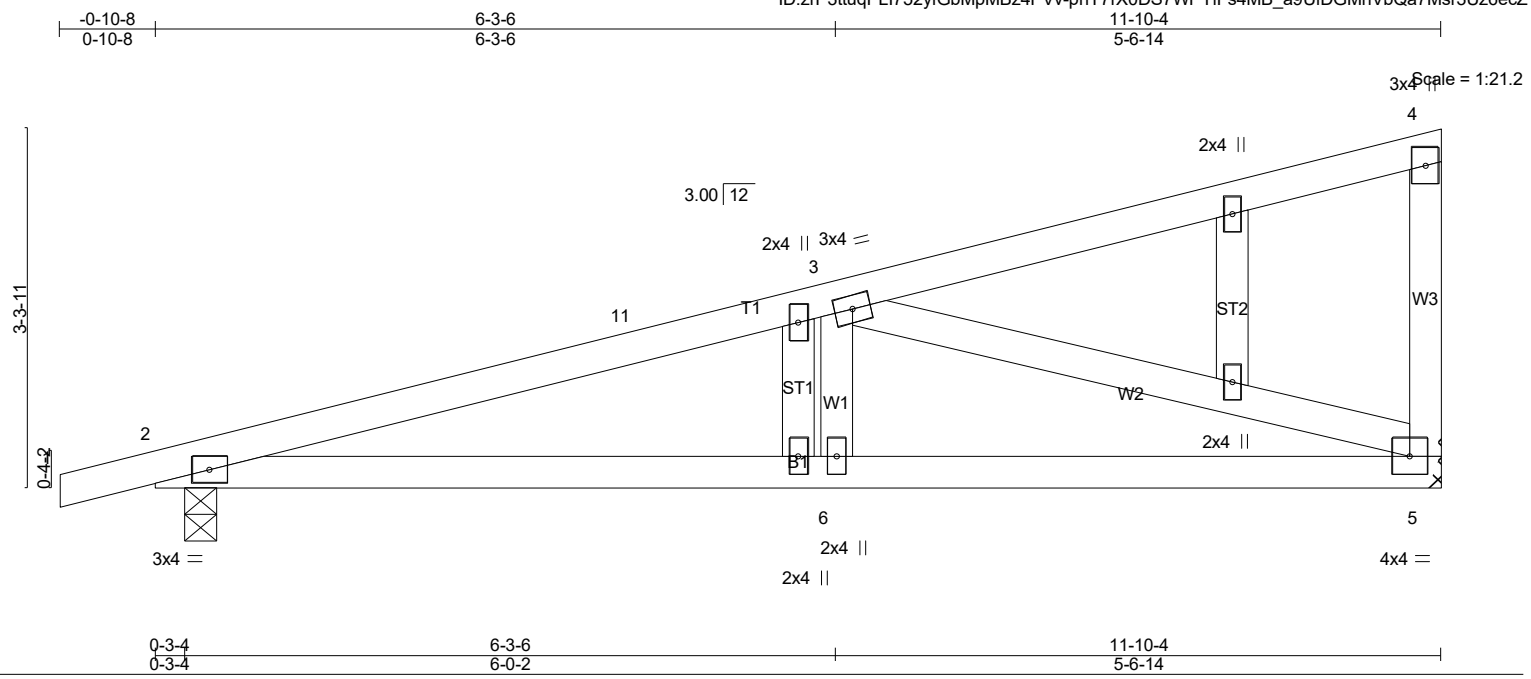

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.06	2-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.13	2-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 55 lb	FT = 20%
BCDL	10.0											

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 4-7-15 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) 5=460/Mechanical, 2=526/0-3-8 (min. 0-1-8)
Max Horz 2=98(LC 10)
Max Uplift5=-72(LC 14), 2=-82(LC 10)
Max Grav 5=577(LC 21), 2=580(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-11=-1259/121, 3-11=-1168/129
BOT CHORD 2-6=-192/1178, 5-6=-192/1178
WEBS 3-6=0/264, 3-5=-1193/195

NOTES- (11-14)
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) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 6-10-14, Exterior(2E) 6-10-14 to 11-8-8 zone;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) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 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.
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) 5, 2.
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.

6/13/2024

Continued on page 2

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LOAD CASE(S) Standard

6/13/2024

Job	Truss	Truss Type	Qty	Ply	LOT 0.0109 BLAKE POND | 101 FROST MEADOW WAY LILLINGTON, NC
24-5147-R01	SP02	Monopitch	18	1	Job Reference (optional) **# 49568**

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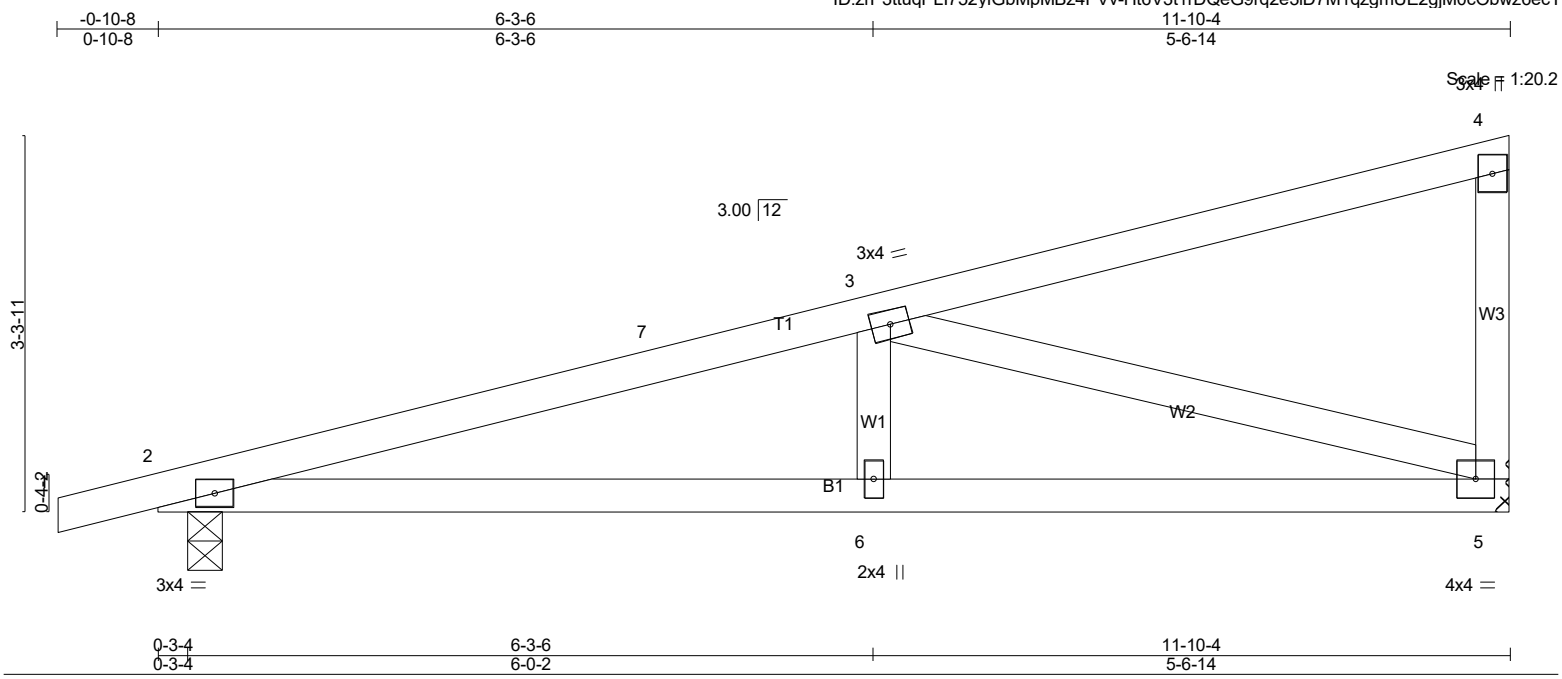

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.06	2-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.12	2-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 51 lb	FT = 20%
BCDL	10.0											

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 4-8-1 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=460/Mechanical, 2=526/0-3-8 (min. 0-1-8)
Max Horz 2=98(LC 10)
Max Uplift5=-72(LC 14), 2=-82(LC 10)
Max Grav 5=577(LC 21), 2=580(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-1260/121, 3-7=-1168/129
BOT CHORD 2-6=-192/1178, 5-6=-192/1178
WEBS 3-6=0/265, 3-5=-1193/195

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) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 6-10-14, Exterior(2E) 6-10-14 to 11-8-8 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) 5, 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 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

6/13/2024