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 #:   44031
JOB: 24-0138-R01
JOB NAME: LOT 30 PROVIDENCE CREEK
Wind Code: 37
Wind Speed: Vult= 120mph
Exposure Category: B
Mean Roof Height (feet): 35
These truss designs comply with IRC 2015 as well as IRC 2018.
30 Truss Design(s)

Trusses:
MR01, MR02, MR03, MRJ01, MRV01, MRV02, PB01, PB02, PB03, R01, R02, R04, R05, R05A, R06, R07, R07A, R08, R09, R10, R11, R12, R13, VT01, VT02, VT03, VT04, VT05, VT06, VT07
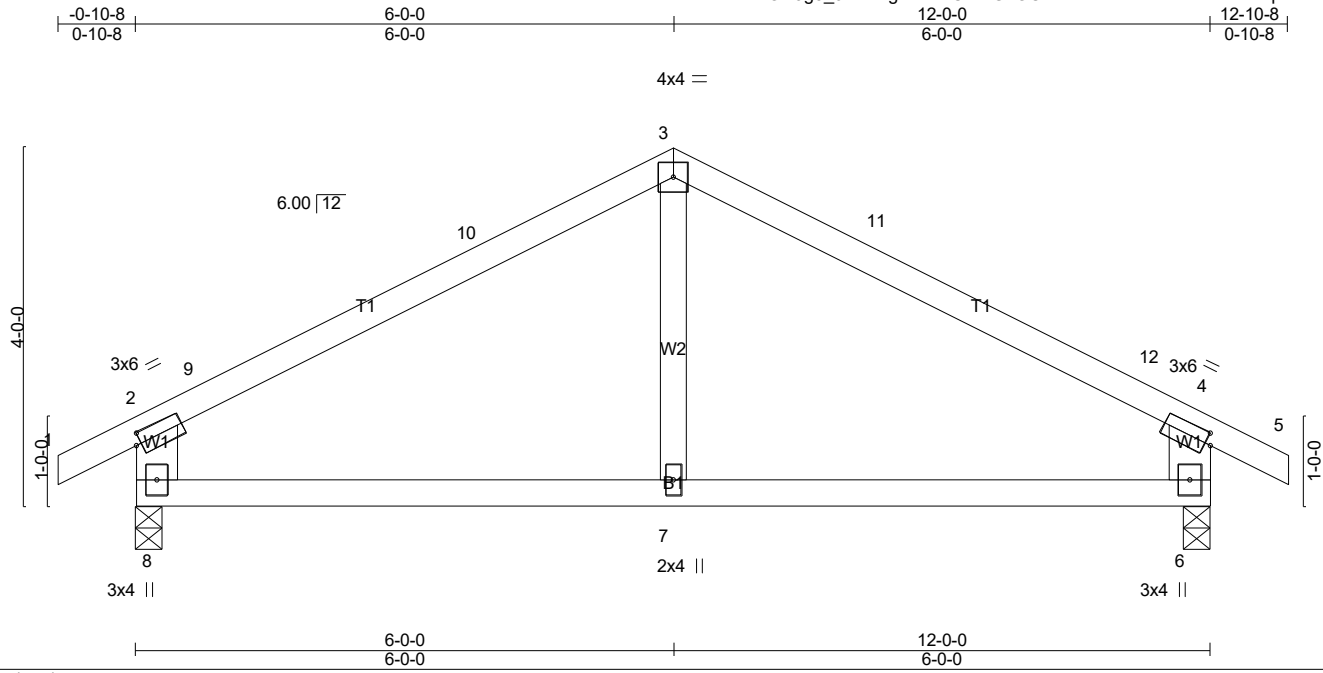
1/9/2024
Mark Morris

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	MR01	Common	3	1	**# 44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:17:54 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-eGnOCE7w1rmA7FH?Rwwc?esiZwqYAZB9XLgy3mzwiXh

-0-10-8 | 0-10-8 | 6-0-0 | 6-0-0 | 12-0-0 | 6-0-0 | 12-10-8 | 0-10-8

Scale = 1:25.7

4x4 =

6.00 ⌐12

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

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.06	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 49 lb	FT = 20%
BCDL	10.0											

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

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

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

REACTIONS. (lb/size) 8=528/0-3-8 (min. 0-1-8), 6=528/0-3-8 (min. 0-1-8)
Max Horz 8=-63(LC 12)
Max Uplift8=-76(LC 14), 6=-76(LC 15)
Max Grav 8=612(LC 21), 6=612(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-9=-568/167, 9-10=-496/179, 3-10=-424/191, 3-11=-424/191, 11-12=-496/179,
            4-12=-568/167, 2-8=-551/221, 4-6=-551/221
BOT CHORD   7-8=-43/393, 6-7=-43/393

NOTES-   (10-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable
   Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Exterior(2R) 3-11-2 to 8-0-14,
   Exterior(2E) 8-0-14 to 12-10-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown;
   Lumber DOL=1.60 plate grip DOL=1.60
3) 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 the 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum
   sheetrock be applied directly to the bottom chord.
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.

1/9/2024

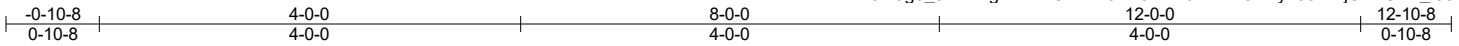| Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	MR01	Common	3	1	# *44031*
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:17:54 2024 Page 2
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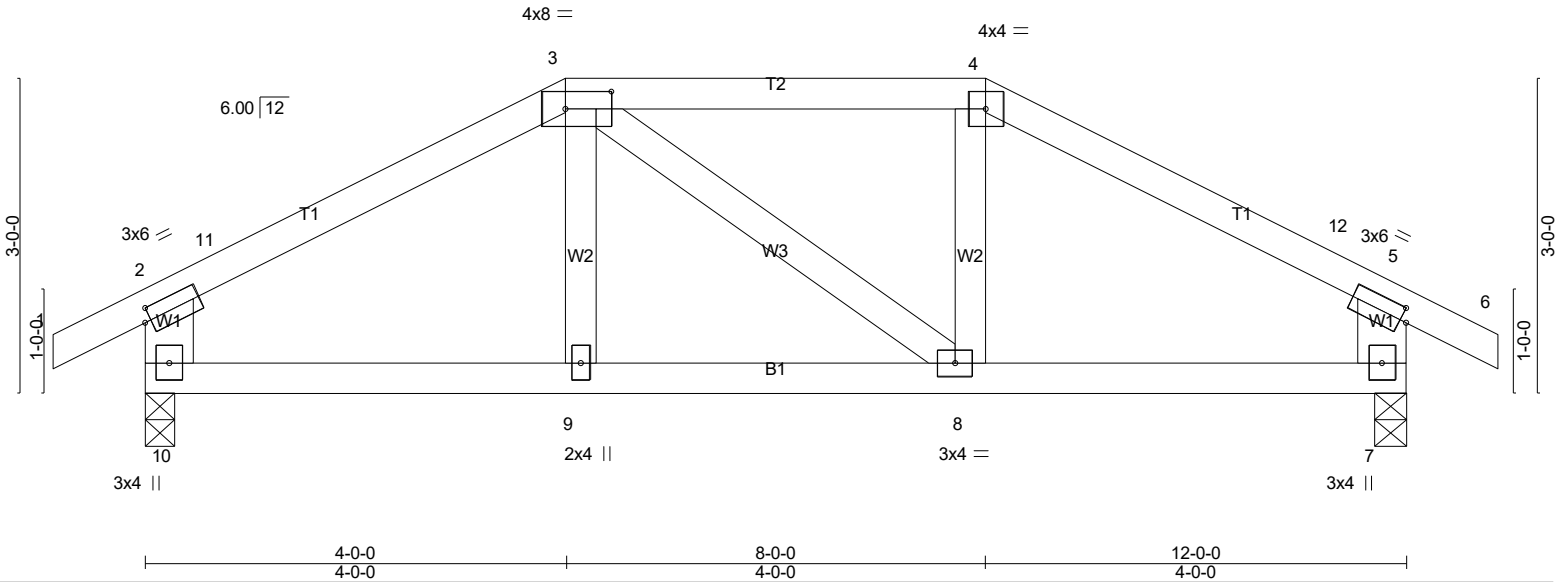
LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	MR02	Hip	1	1	**# 44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:17:56 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-afu9dw8AYS0uNZROZKy453x1kjUweUES_f937fzwiXf

Scale = 1:21.9

Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [3:0-5-4,0-2-0], [5:0-0-12,0-1-8]

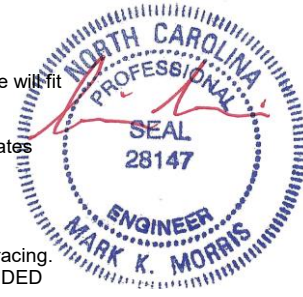| LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.07	8-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.11	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 57 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3 *Except*
            W1: 2x6 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-11-3 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) 10=528/0-3-8 (min. 0-1-8), 7=528/0-3-8 (min. 0-1-8)
    Max Horz 10=-52(LC 12)
    Max Uplift10=-63(LC 14), 7=-63(LC 15)
    Max Grav 10=673(LC 39), 7=673(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-11=-661/178, 3-11=-646/193, 3-4=-503/194, 4-12=-646/193, 5-12=-661/178,
            2-10=-601/200, 5-7=-601/200
BOT CHORD   9-10=-66/503, 8-9=-63/505, 7-8=-66/503

NOTES- (10-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 4-0-0, Exterior(2R) 4-0-0 to 8-0-0, Exterior(2E) 8-0-0 to 12-10-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
10) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
11) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
12) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
13) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

1/9/2024

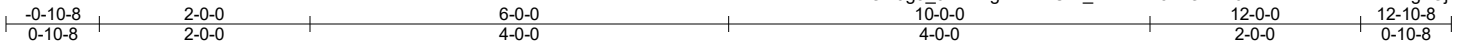| Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	MR02	Hip	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:17:56 2024 Page 2
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LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	MR03	Hip Girder	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:17:59 2024 Page 1
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Scale = 1:21.9

Plate Offsets (X,Y)-- [2:0-6-1,0-0-5], [4:0-5-4,0-2-0], [6:0-5-4,0-2-0], [8:0-6-1,0-0-5]

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	0.40	Vert(LL)	-0.04	11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.06	11	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 74 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, Right 2x6 SP No.2 -° 1-6-12

REACTIONS. (lb/size) 2=539/0-3-8 (min. 0-1-8), 8=540/0-3-8 (min. 0-1-8)
    Max Horz 2=21(LC 64)
    Max Uplift2=-102(LC 12), 8=-103(LC 13)
    Max Grav 2=617(LC 36), 8=617(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-865/149, 3-4=-839/154, 4-13=-1296/234, 13-14=-1295/234, 5-14=-1295/234,
           5-15=-1295/234, 15-16=-1295/234, 6-16=-1296/234, 6-7=-839/155, 7-8=-865/150
BOT CHORD 2-12=-123/691, 12-17=-121/696, 11-17=-121/696, 11-18=-109/696, 10-18=-109/696,
           8-10=-111/691
WEBS   4-11=-120/647, 5-11=-461/120, 6-11=-120/647

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

NOTES- (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=102, 8=103.
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).

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	MR03	Hip Girder	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:17:59 2024 Page 2
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-_EaHFxA3rNOTE19zETVnihZbdxawrnYugdOjkzzwiXc

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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
      Vert: 1-4=-60, 4-6=-60, 6-9=-60, 2-8=-20
  Concentrated Loads (lb)
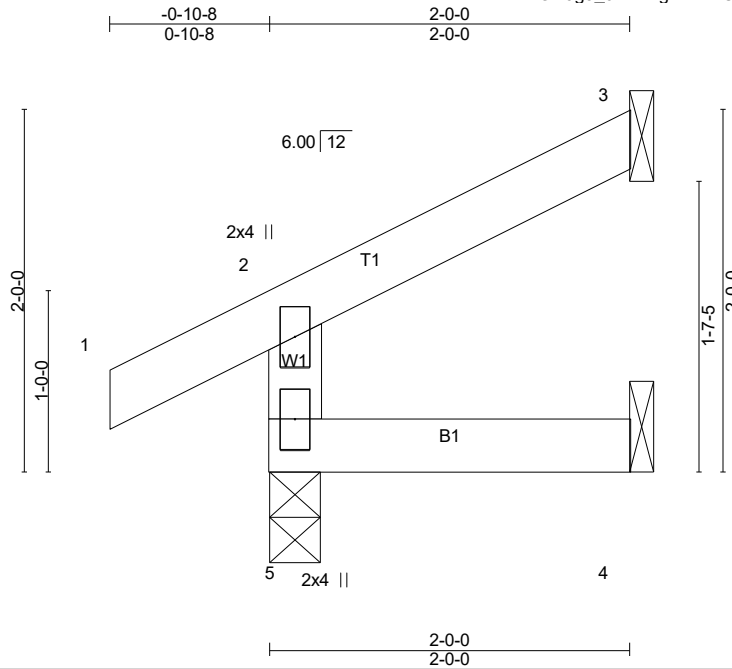   Vert: 4=-3(B) 6=-3(B) 12=0(B) 11=0(B) 5=-3(B) 10=0(B) 13=-3(B) 16=-3(B) 17=0(B) 18=0(B)

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	MRJ01	Jack-Open	5	1	# 44031
					Job Reference (optional)

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Scale = 1:12.7

6.00 ⟌12

2x4 ||

T1

2x4 ||

W1

B1

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	0.05	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.
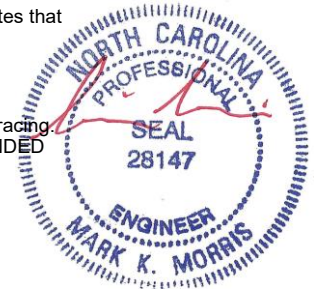BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

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 11)
Max Uplift5=-15(LC 14), 3=-31(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.
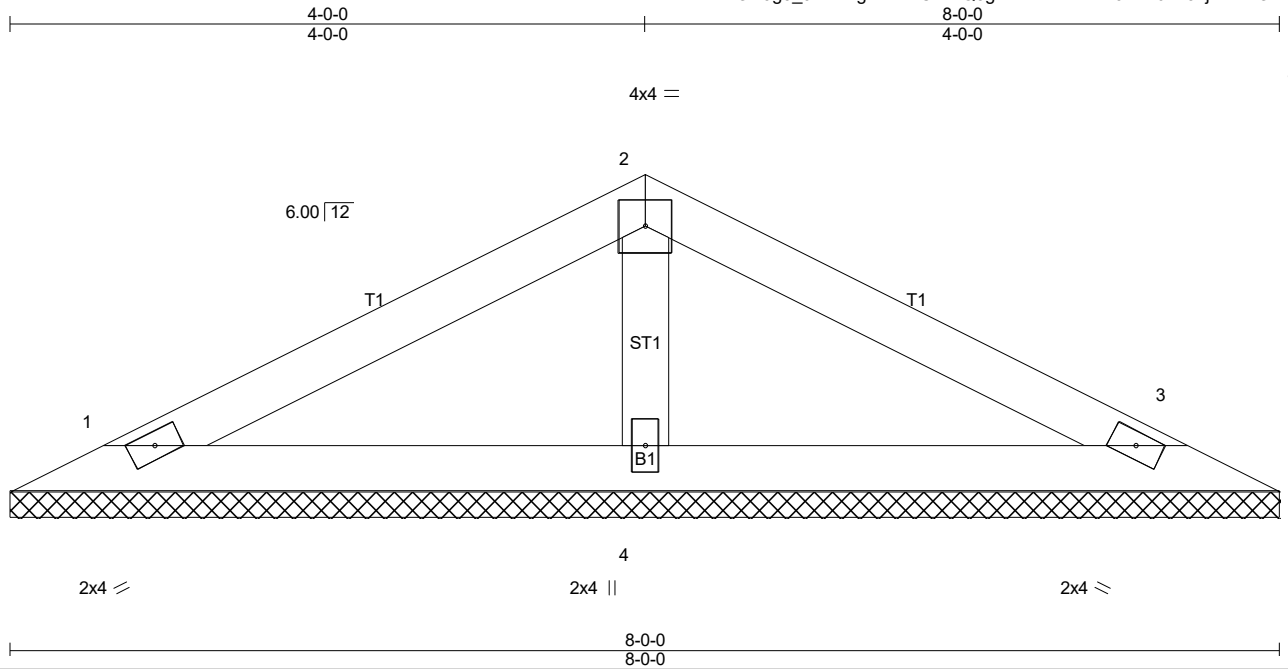
NOTES- (9-12)
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; End Jack Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	MRV01	Valley	1	1	**# 44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:00 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-SQ8gTHBhchWKrAk9oA10Fv5ojLwbaIO1vH7GGQzwiXb

4-0-0   8-0-0
4-0-0   4-0-0

Scale = 1:14.5

4x4 =

2

6.00 [12

T1   T1

2-0-0

ST1

1   B1   3

4

2x4 ∥   2x4 ∥   2x4 ∥

8-0-0
8-0-0

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	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 2x4 SP No.3
OTHERS   2x4 SP No.3

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

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

REACTIONS. (lb/size) 1=137/8-0-0 (min. 0-1-8), 3=137/8-0-0 (min. 0-1-8), 4=268/8-0-0 (min. 0-1-8)
Max Horz 1=25(LC 18)
Max Uplift1=-30(LC 14), 3=-35(LC 15), 4=-5(LC 14)
Max Grav 1=183(LC 20), 3=183(LC 21), 4=268(LC 1)

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

NOTES- (9-12)
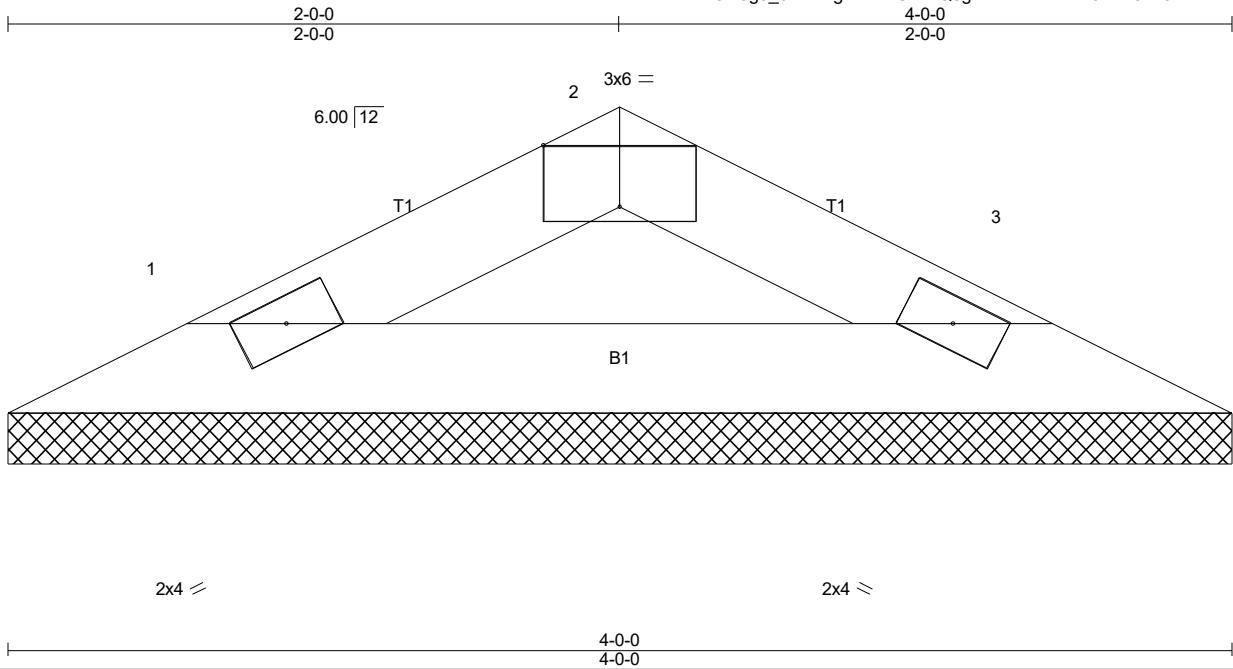1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 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

NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	MRV02	Valley	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:00 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-SQ8gTHBhchWKrAk9oA10Fv5sxLxDaIz1vH7GGQzwiXb

2-0-0
4-0-0
2-0-0
2-0-0

Scale = 1:7.5

3x6 =

6.00 12

1-0-0

T1 T1

1 2 3

B1

2x4 2x4

4-0-0
4-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 11 lb	FT = 20%
BCDL	10.0											

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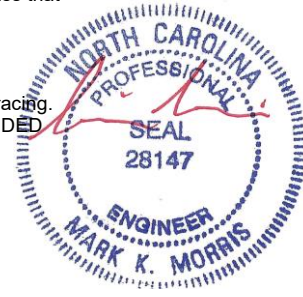TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3

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

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

REACTIONS. (lb/size) 1=111/4-0-0 (min. 0-1-8), 3=111/4-0-0 (min. 0-1-8)
Max Horz 1=10(LC 18)
Max Uplift1=-13(LC 14), 3=-13(LC 15)
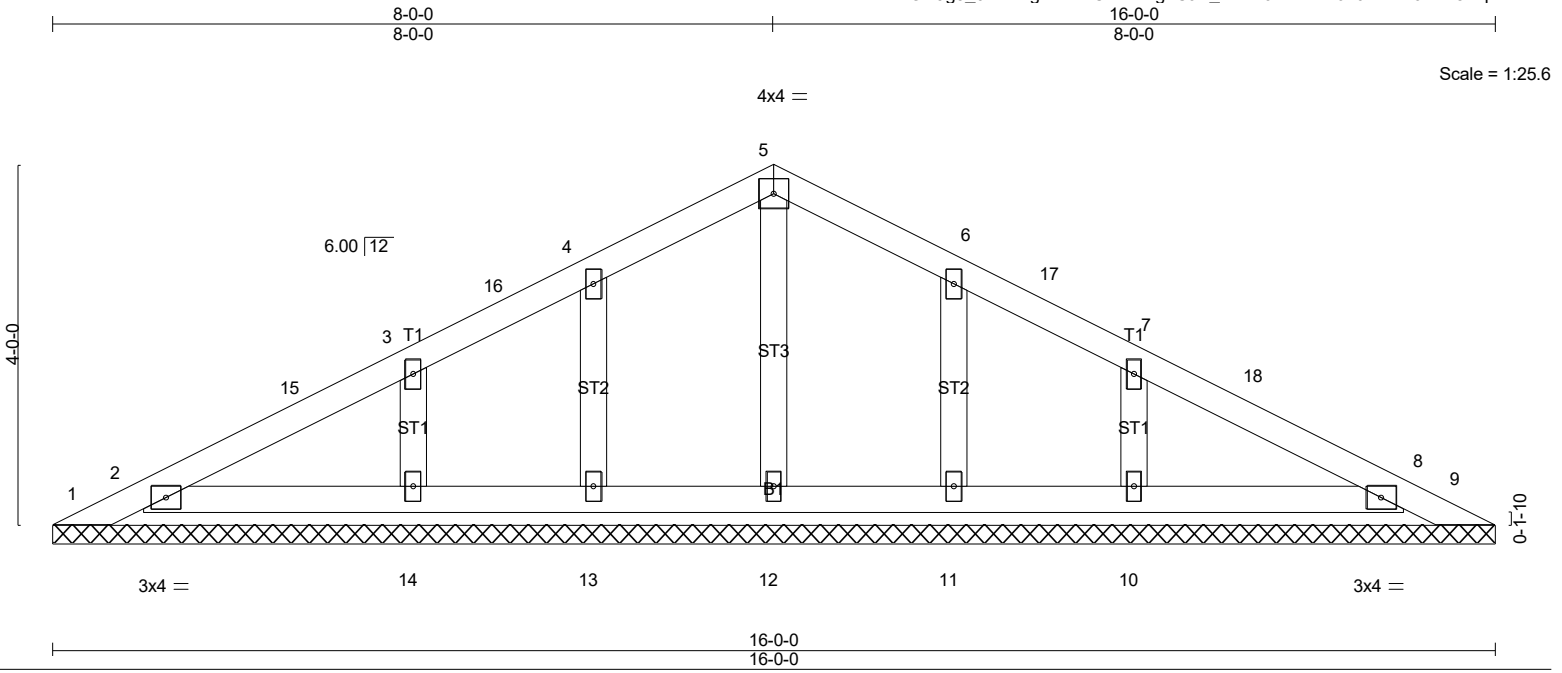Max Grav 1=119(LC 20), 3=119(LC 21)

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

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=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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

(Professional seal: NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS)

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	PB01	GABLE	2	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:01 2024 Page 1
ID:kHdPkcON9g3_0lfrDBIgKRzexCS-xdi2gdCJN_eATKJLLuYFo6e0bkHWJlWB8xtqoszwiXa

Scale = 1:25.6

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)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 63 lb	FT = 20%
BCDL	10.0											

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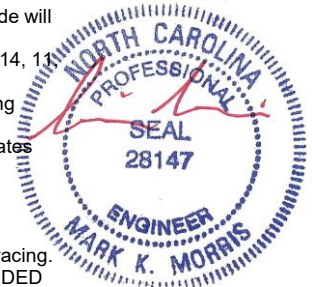BOT CHORD 2x4 SP No.3
OTHERS   2x4 SP No.3

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

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

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

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

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

1/9/2024

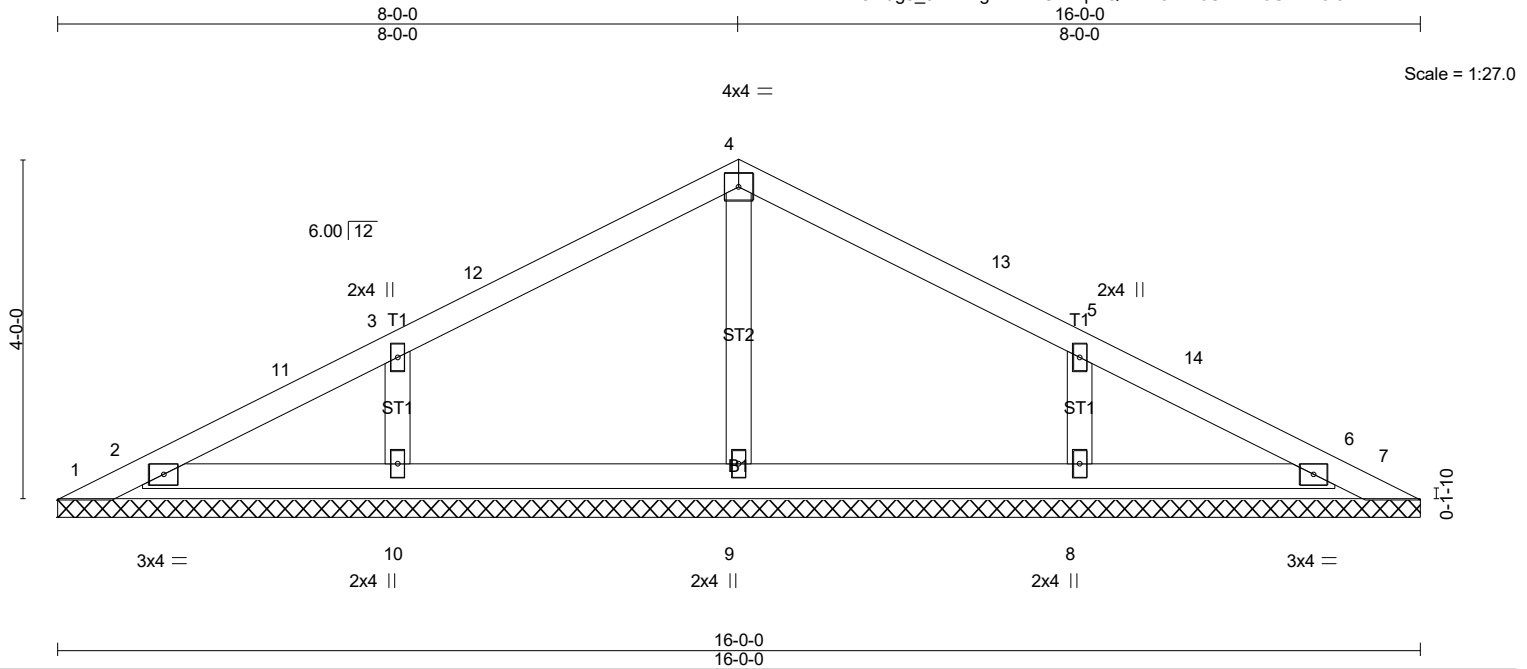| Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	PB01	GABLE	2	1	# *44031*
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:01 2024 Page 2
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-xdi2gdCJN_eATKJLLuYFo6e0bkHWJlWB8xtqoszwiXa

LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	PB02	GABLE	19	1	# 44031

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:02 2024 Page 1
ID:kHdPkcON9g3_0lfrDBlgKRzexCS-PpFQuzDx8lm15UuYvb3UKKB8t8b12BKKMbcNLlzwiXZ

8-0-0 | 16-0-0
8-0-0 | 8-0-0

Scale = 1:27.0

4x4 =

6.00 | 12

4-0-0

2x4 ||

0-1-10

3x4 =   10   9   8   3x4 =
2x4 || 2x4 || 2x4 ||

16-0-0
16-0-0

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	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 56 lb	FT = 20%
BCDL	10.0											

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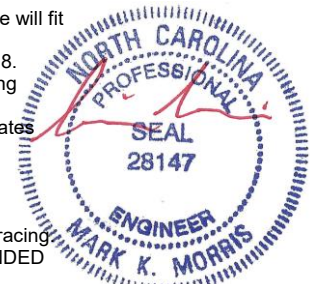OTHERS   2x4 SP No.3

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

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

REACTIONS. All bearings 16-0-0.
(lb) - Max Horz 1=-57(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6 except 9=293(LC 21), 10=436(LC 21), 8=436(LC 22)
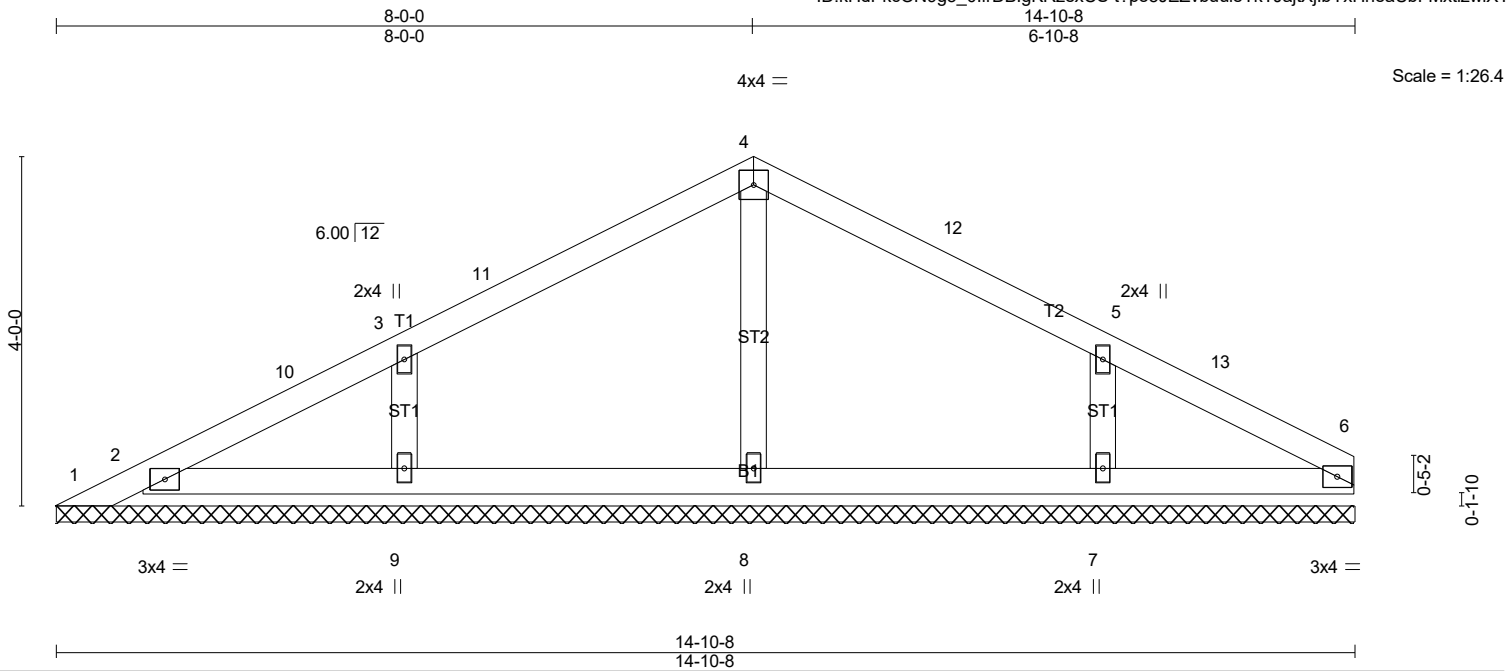
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   3-10=-363/165, 5-8=-363/165

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

LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	PB03	GABLE	5	1	**# 44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:03 2024 Page 1
ID:kHdPkcON9g3_0lfrDBIgKRzexCS-t?po5JEZvbuuieTkTJajtXjIbYxHneaUbFMxtIzwiXY

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	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 54 lb	FT = 20%
BCDL	10.0											

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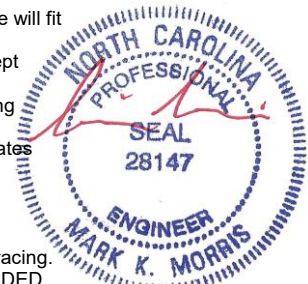BOT CHORD 2x4 SP No.3
OTHERS   2x4 SP No.3

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

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

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

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

NOTES-   (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 5-1-8, Exterior(2R) 5-1-8 to 10-0-14, Exterior(2E) 10-0-14 to 14-10-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 2, 9 except (jt=lb) 7=101.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
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.

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	PB03	GABLE	5	1	# *44031*
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:04 2024 Page 2
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LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R01	Piggyback Base Supported Gable	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:09 2024 Page 1
ID:kHdPkcON9g3_0lfrDBIgKRzexCS-i9B3MMIKVRf2QZwupZh76ozOPz17BICMzBpF5OzwiXS

Scale = 1:102.4

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

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

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   18-51, 17-52, 16-53, 15-54, 14-55, 13-56,
            12-57, 19-50, 20-48, 21-47, 22-46, 23-45,
            24-44

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

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

NOTES-   (14-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable
   Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 16-8-6,
   Corner(3R) 16-8-6 to 26-3-10, Exterior(2N) 26-3-10 to 32-8-6, Corner(3R) 32-8-6 to 42-3-10, Exterior(2N) 42-3-10 to 55-0-14, Corner(3E)
   55-0-14 to 59-10-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber
   DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough
   Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs
   non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will
    fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 51, 52, 53, 54, 56,
    57, 59, 60, 61, 62, 63, 64, 50, 48, 47, 45, 44, 42, 41, 40, 39, 38, 37 except (jt=lb) 65=127, 36=110.

Continued on Page 2

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R01	Piggyback Base Supported Gable	1	1	# 44031
					Job Reference (optional)

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14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.

15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.

17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R02	Piggyback Base	9	1	# 44031
					Job Reference (optional)

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Scale = 1:102.6

Plate Offsets (X,Y)--	[18:0-3-8,0-5-0]

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 0.71
BC 0.88
WB 0.91
Matrix-AS

DEFL. in (loc) l/defl L/d
Vert(LL) -0.28 25-27 >999 240
Vert(CT) -0.44 25-27 >998 180
Horz(CT) 0.05 18 n/a n/a

PLATES GRIP
MT20 244/190
MT20HS 187/143

Weight: 469 lb   FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
6-0-0 oc bracing: 20-22
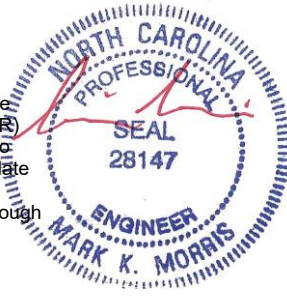WEBS 1 Row at midpt 6-25, 7-23, 10-18, 9-18
2 Rows at 1/3 pts 8-20

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

REACTIONS. (lb/size) 2=1339/0-3-8 (min. 0-1-13), 18=3037/0-3-8 (min. 0-2-14), 14=628/0-5-8 (min. 0-1-8)
Max Horz 2=167(LC 14)
Max Uplift2=-205(LC 14), 18=-7(LC 14), 14=-207(LC 15)
Max Grav 2=1551(LC 43), 18=4183(LC 43), 14=773(LC 41)

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

NOTES- (18-21)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable
Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R)
16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 55-0-14, Exterior(2E) 55-0-14 to
59-10-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
grip DOL=1.60
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.

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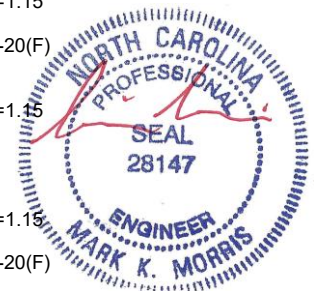| Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R02	Piggyback Base	9	1	# *44031*
					Job Reference (optional)

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NOTES-   (18-21)

8) All plates are 5x5 MT20 unless otherwise indicated.

9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

11) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 2=205, 14=207.

13) Load case(s) 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

14) MULTIPLE LOADCASES – This design is the composite result of multiple load cases.

15) User moving load cases exist: Review the load cases for details.

16) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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

18) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.

19) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

20) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.

21) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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 Except:

109) Reversal: 1st User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 23=-150 51=-150

110) Reversal: 2nd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 51=-150 52=-150

111) Reversal: 3rd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 52=-150 53=-150

112) Reversal: 4th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 53=-150 55=-150

113) Reversal: 5th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 18=-150 54=-150

114) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 23=-150 51=-150

115) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 23=-150 51=-150

116) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 23=-150 51=-150

117) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 23=-150 51=-150

118) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 23=-150 51=-150

119) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
  Uniform Loads (plf)
    Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
  Concentrated Loads (lb)
    Vert: 23=-150 51=-150

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R02	Piggyback Base	9	1		# *44031*
					Job Reference (optional)	

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:21 2024 Page 3
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LOAD CASE(S)

120) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
121) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
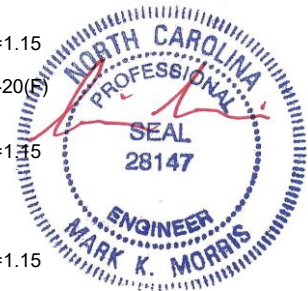 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
122) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
123) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
124) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
125) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
126) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
127) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
128) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
129) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
130) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
131) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
132) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
133) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
134) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
 Concentrated Loads (lb)
   Vert: 23=-150 51=-150
135) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
   Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
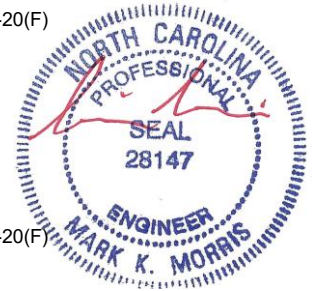
1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R02	Piggyback Base	9	1	# *44031*
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:21 2024 Page 4
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-LTvctTRsg7ALtPrBW5vxbKTG5owq?a?7k2juWizwiXG

LOAD CASE(S)

    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

136) Reversal: 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

137) Reversal: 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

138) 1st User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

139) 2nd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 51=-150 52=-150

140) 3rd User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 52=-150 53=-150

141) 4th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 53=-150 55=-150

142) 5th User Defined Moving Load - Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-60(F), 7-9=-60(F), 9-15=-60(F), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 18=-150 54=-150

143) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

144) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

145) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

146) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

147) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

148) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

149) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

150) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
    Concentrated Loads (lb)
        Vert: 23=-150 51=-150

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Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R02	Piggyback Base	9	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:21 2024 Page 5
ID:kHdPkcON9g3_0IfrDBlgKRzexCS-LTvctTRsg7ALtPrBW5vxbKTG5owq?a?7k2juWizwiXG

LOAD CASE(S)

151) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

152) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
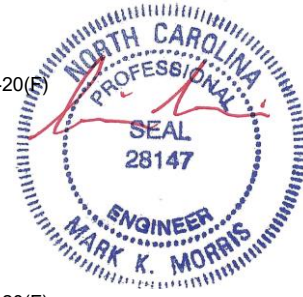Concentrated Loads (lb)
  Vert: 23=-150 51=-150

153) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

154) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

155) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

156) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

157) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

158) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

159) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

160) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

161) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

162) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

163) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

164) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

165) 7th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-7=-32(F=-20), 7-9=-101(F=-20), 9-15=-32(F=-20), 28-32=-20(F), 20-22=-20(F)
Concentrated Loads (lb)
  Vert: 23=-150 51=-150

166) 8th Unbal.1st User Defined Moving Load - Dead + Snow (balanced)-Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
  Vert: 1-36=-60(F=-20), 7-36=-101(F=-20), 7-9=-32(F=-20), 9-45=-101(F=-20), 15-45=-60(F=-20), 28-32=-20(F), 20-22=-20(F)

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R02	Piggyback Base	9	1	# *44031*
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:21 2024 Page 6
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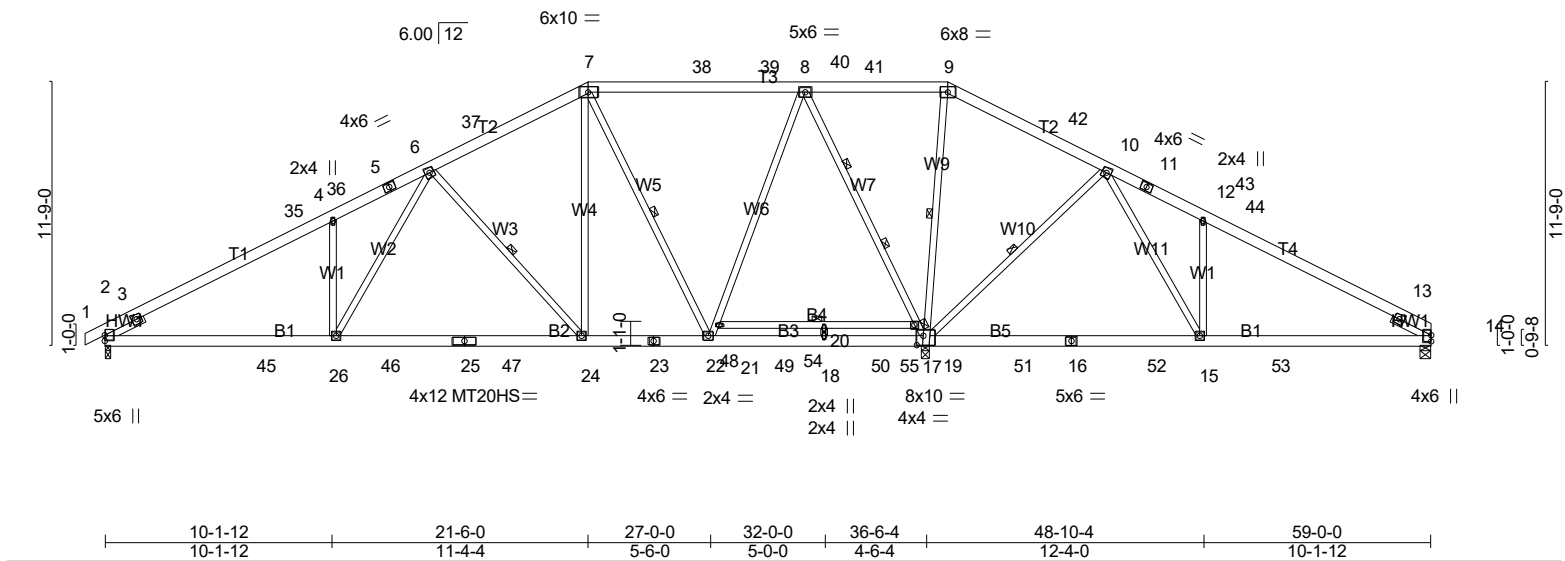**LOAD CASE(S)**
  Concentrated Loads (lb)
      Vert: 23=-150 51=-150

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R04	PIGGYBACK BASE	1	1	# 44031
					Job Reference (optional)

Scale = 1:102.5

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

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

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

CSI.
TC	0.71
BC	0.88
WB	0.91
Matrix-AS	

DEFL.
	in	(loc)	l/defl	L/d
Vert(LL)	-0.28	24-26	>999	240
Vert(CT)	-0.44	24-26	>998	180
Horz(CT)	0.05	17	n/a	n/a

PLATES GRIP
MT20	244/190
MT20HS	187/143
Weight: 467 lb	FT = 20%

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

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

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

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

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

NOTES- (14-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 54-2-6, Exterior(2E) 54-2-6 to 59-0-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 5x5 MT20 unless otherwise indicated.

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Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R04	PIGGYBACK BASE	1	1	# *44031*
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:25 2024 Page 2
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NOTES- (14-17)

9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

11) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 2=204, 14=188.

13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.

15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.

17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R05	PIGGYBACK BASE	4	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:28 2024 Page 1
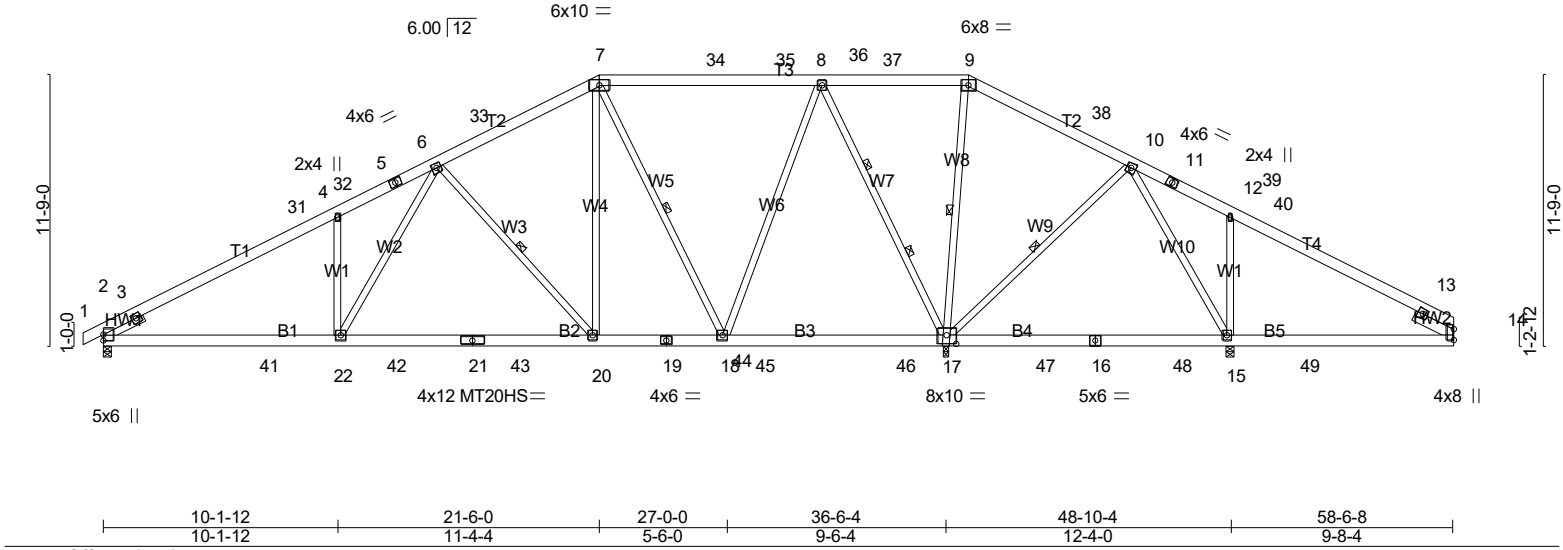ID:kHdPkcON9g3_0IfrDBIgKRzexCS-epqFLsXF0H2LCUtXR3XaOpGUddKb8k69LevlGozwiX9

-0-10-8 10-1-12 14-5-5 21-6-0 31-0-0 37-6-0 44-6-11 48-10-4 58-6-8
0-10-8 10-1-12 4-3-9 7-0-11 9-6-0 6-6-0 7-0-11 4-3-9 9-8-4

Scale = 1:99.9

	10-1-12	21-6-0	27-0-0	36-6-4	48-10-4	58-6-8
	10-1-12	11-4-4	5-6-0	9-6-4	12-4-0	9-8-4

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

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

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

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

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

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

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

NOTES-   (15-18)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 to 58-6-8 zone; end vertical left exposed; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 5x5 MT20 unless otherwise indicated.

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R05	PIGGYBACK BASE	4	1	# *44031*
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:29 2024 Page 2
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NOTES-   (15-18)

9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

11) Refer to girder(s) for truss to truss connections.

12) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 2=207, 17=180, 14=180.

14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.

16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.

18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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.
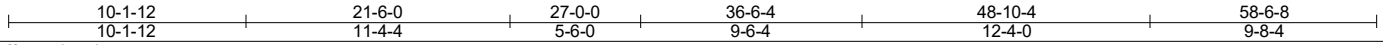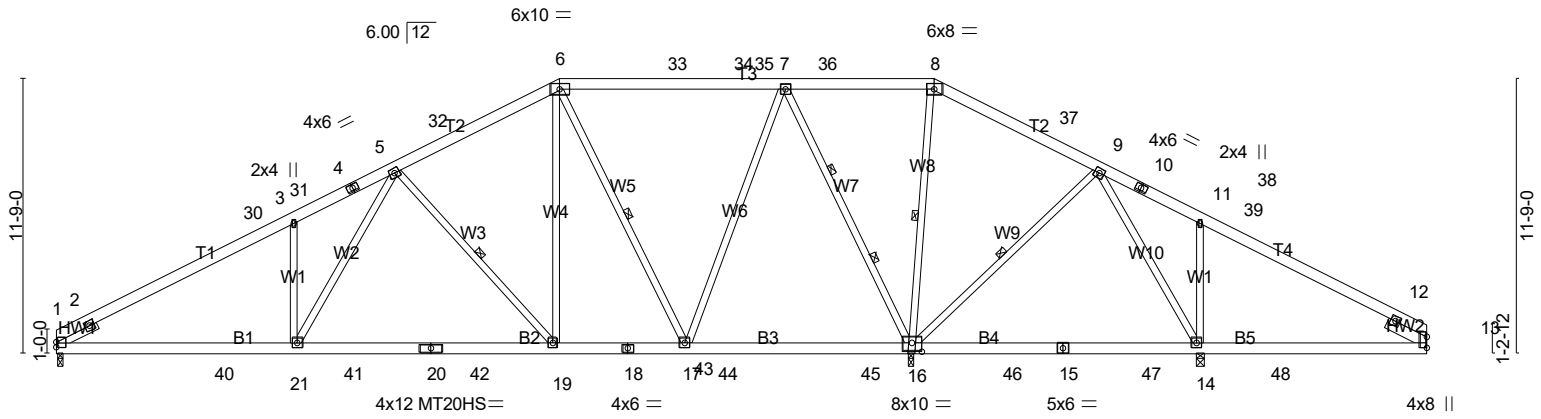
LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R05A	PIGGYBACK BASE	1	1	# 44031
					Job Reference (optional)

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Scale = 1:98.4

Plate Offsets (X,Y)-- [16:0-5-0,0-4-8]

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

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

CSI.
TC 0.70
BC 0.81
WB 0.95
Matrix-AS

DEFL.
	in	(loc)	l/defl	L/d
Vert(LL)	0.12	14-28	>993	240
Vert(CT)	-0.43	19-21	>999	180
Horz(CT)	0.05	16	n/a	n/a

PLATES | **GRIP**
MT20 | 244/190
MT20HS | 187/143

Weight: 450 lb   FT = 20%

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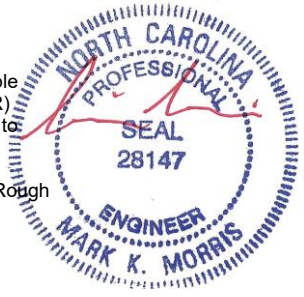SLIDER Left 2x4 SP No.3 -° 1-11-0, Right 2x6 SP No.2 -° 1-11-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-19, 6-17, 9-16, 8-16
2 Rows at 1/3 pts 7-16

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

REACTIONS. All bearings 0-3-8 except (jt=length) 13=Mechanical.
(lb) - Max Horz 1=165(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 14 except 1=-190(LC 14), 16=-180(LC 11), 13=-180(LC 10)
Max Grav All reactions 250 lb or less at joint(s) except 1=1548(LC 44), 16=3330(LC 44), 13=538(LC 42), 14=616(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-888/0, 2-30=-2588/336, 3-30=-2422/357, 3-31=-2529/433, 4-31=-2507/434, 4-5=-2390/451, 5-32=-1316/356, 6-32=-1183/378, 6-33=-639/345, 33-34=-639/345, 34-35=-639/345, 7-35=-639/345, 7-36=0/842, 8-36=0/842, 8-37=0/968, 9-37=0/793, 9-10=-379/585, 10-38=-493/568, 11-38=-508/568, 11-39=-317/471, 12-39=-517/446, 12-13=-197/452
BOT CHORD 1-40=-319/2210, 21-40=-319/2210, 21-41=-230/1749, 20-41=-230/1749, 20-42=-230/1749, 19-42=-230/1749, 18-19=-80/1056, 18-43=-80/1056, 17-43=-80/1056, 17-44=-58/337, 44-45=-58/337, 16-45=-58/337, 16-46=-310/255, 15-46=-310/255, 15-47=-310/255, 14-47=-310/255, 14-48=-346/377, 13-48=-346/377
WEBS 5-19=-1048/259, 6-19=-101/1176, 6-17=-1174/150, 7-17=-76/1466, 7-16=-2060/240, 9-16=-840/343, 8-16=-725/93, 5-21=-183/960, 9-14=-361/674, 11-14=-571/243, 3-21=-481/255

NOTES- (14-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-9-10, Interior(1) 4-9-10 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 to 58-6-8 zone; end vertical left exposed; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 5x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R05A	PIGGYBACK BASE	1	1	# *44031*
					Job Reference (optional)	

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ID:kHdPkcON9g3_0IfrDBIgKRzexCS-?nd8OZbOrpgeJFmVDc6l5szLMe1mp?LuUwdWx?zwiX4

NOTES-   (14-17)

9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

10) Refer to girder(s) for truss to truss connections.

11) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 1=190, 16=180, 13=180.

13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.

15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.

17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R06	PIGGYBACK BASE	5	1	**# 44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:35 2024 Page 1
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Scale = 1:75.4

Plate Offsets (X,Y)-- [5:0-6-0,0-2-8], [8:Edge,0-1-8], [14:0-2-8,0-1-12]

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	0.98	Vert(LL)	-0.21	11-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.34	11-13	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.07	8	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 256 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt   2-13, 4-11, 5-9, 6-9, 7-9
  2 Rows at 1/3 pts   7-8

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

REACTIONS. (lb/size) 8=1440/Mechanical, 15=1440/0-3-8 (min. 0-1-15)
  Max Horz 15=357(LC 14)
  Max Uplift8=-214(LC 11), 15=-152(LC 14)
  Max Grav 8=1910(LC 36), 15=1663(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2685/234, 2-16=-2371/188, 3-16=-2276/200, 3-4=-2163/217, 4-17=-1638/191,
  5-17=-1486/212, 5-18=-954/145, 6-18=-953/145, 6-7=-953/145, 7-8=-1716/275,
  1-15=-1593/182
BOT CHORD 14-15=-409/325, 13-14=-509/2330, 12-13=-369/2036, 12-19=-369/2036, 11-19=-369/2036,
  10-11=-240/1342, 10-20=-240/1342, 9-20=-240/1342
WEBS 2-13=-389/162, 4-13=-7/441, 4-11=-1094/252, 5-11=-108/1067, 5-9=-913/183,
  6-9=-878/214, 7-9=-269/1748, 1-14=-101/2082

NOTES- (10-13)
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 5-0-6, Interior(1) 5-0-6 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 31-5-2, Exterior(2E) 31-5-2 to 36-2-12 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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) All plates are MT20 plates unless otherwise indicated.
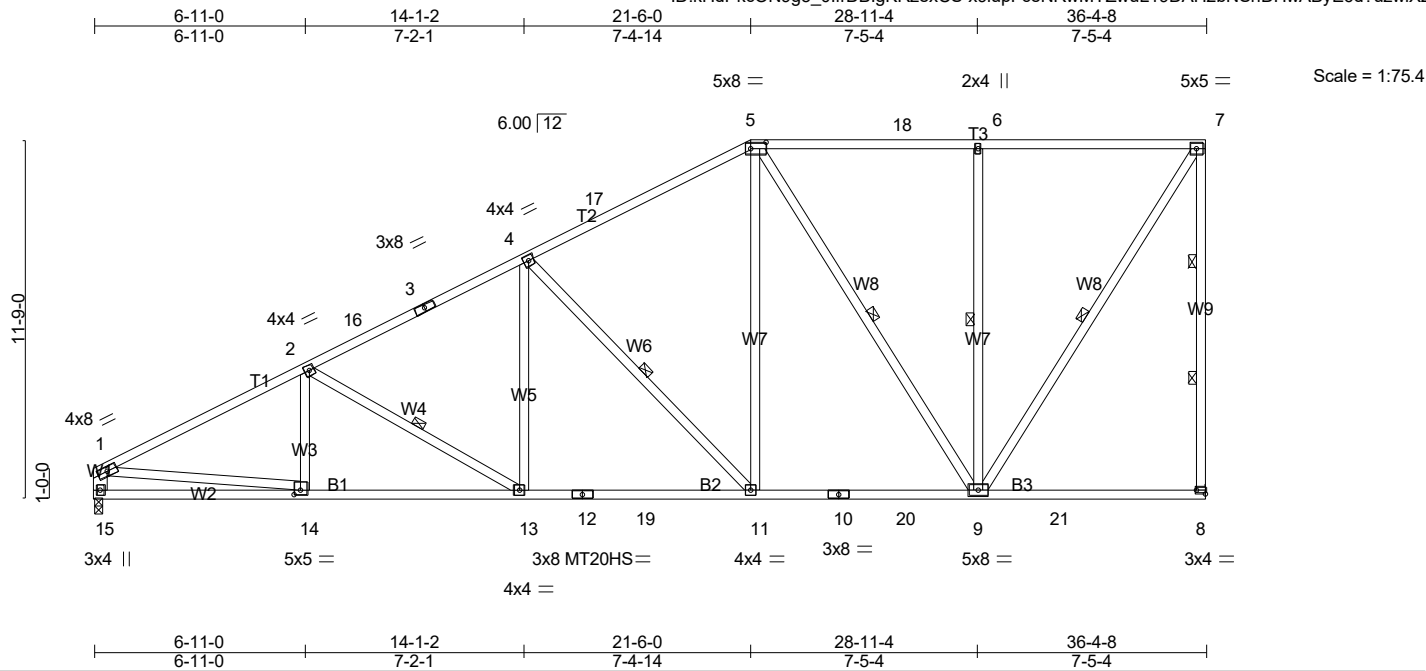6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) 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) except (jt=lb) 8=214, 15=152.
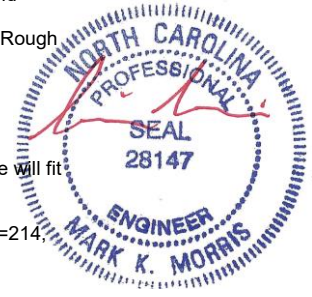
1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R06	PIGGYBACK BASE	5	1	**# 44031**
					Job Reference (optional)

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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

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R07	PIGGYBACK BASE	3	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:39 2024 Page 1
ID:kHdPkcON9g3_0lfrDBIgKRzexCS-px?Pedf9QfRn1ADfasDAK7DMn34XDiYntr4q8fzwiX_

Scale = 1:99.9

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)	-0.28	15-17	>941	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.42	20-22	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.04	17	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 452 lb	FT = 20%
BCDL	10.0											

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

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
           W5,W7: 2x4 SP No.1
SLIDER   Left 2x4 SP No.3 -° 1-11-0, Right 2x6 SP No.2 -° 1-11-0
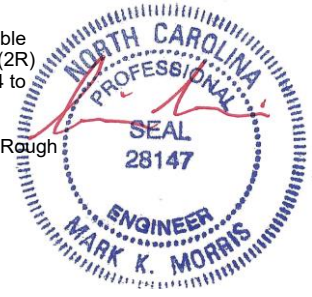
BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS   1 Row at midpt   6-20, 7-18, 10-17, 9-17
           2 Rows at 1/3 pts   8-17

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

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

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

NOTES- (14-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 to 58-6-8 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 5x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R07	PIGGYBACK BASE	3	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:39 2024 Page 2
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NOTES-   (14-17)

10) Refer to girder(s) for truss to truss connections.

11) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 2=217, 14=187.

13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

14) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.

15) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

16) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.

17) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R07A	PIGGYBACK BASE	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:42 2024 Page 1
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Scale = 1:98.4

Plate Offsets (X,Y)-- [16:0-5-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.28	14-16	>941	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.42	19-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.04	16	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-AS							Weight: 450 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-19, 6-17, 9-16, 8-16
2 Rows at 1/3 pts 7-16

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

REACTIONS. (lb/size) 1=1284/0-3-8 (min. 0-1-12), 16=2814/0-3-8 (min. 0-2-9), 13=585/Mechanical
Max Horz 1=165(LC 14)
Max Uplift1=-200(LC 14), 16=-83(LC 14), 13=-187(LC 15)
Max Grav 1=1476(LC 44), 16=3756(LC 44), 13=717(LC 42)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-838/0, 2-30=-2446/300, 3-30=-2280/321, 3-31=-2391/431, 4-31=-2368/432,
4-5=-2252/448, 5-32=-1203/318, 6-32=-1079/339, 6-33=-592/301, 33-34=-592/301,
34-35=-592/301, 7-35=-592/301, 7-36=0/1040, 8-36=0/1040, 8-37=0/1180, 9-37=0/1005,
9-10=-670/406, 10-38=-809/390, 11-38=-824/389, 11-39=-653/281, 12-39=-853/260
BOT CHORD 1-40=-336/2084, 21-40=-336/2084, 21-41=-249/1616, 20-41=-249/1616, 20-42=-249/1616,
19-42=-249/1616, 18-19=-96/983, 18-43=-96/983, 17-43=-96/983, 17-44=-250/314,
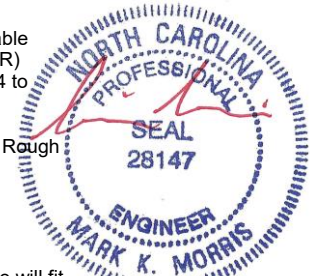44-45=-250/314, 16-45=-250/314, 16-46=-299/286, 15-46=-299/286, 15-47=-299/286,
14-47=-299/286, 14-48=-145/668, 13-48=-145/668
WEBS 5-19=-1052/259, 6-19=-100/1178, 6-17=-1253/139, 7-17=-66/1540, 7-16=-2099/254,
9-16=-1144/258, 8-16=-827/117, 5-21=-181/974, 9-14=-152/1136, 11-14=-537/239,
3-21=-489/254

NOTES- (13-16)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-9-10, Interior(1) 4-9-10 to 16-8-6, Exterior(2R) 16-8-6 to 26-3-10, Interior(1) 26-3-10 to 32-8-6, Exterior(2R) 32-8-6 to 42-3-10, Interior(1) 42-3-10 to 53-8-14, Exterior(2E) 53-8-14 to 58-6-8 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide adequate drainage to prevent water ponding.
6) All plates are 5x5 MT20 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.

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R07A	PIGGYBACK BASE	1	1	# *44031*
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:43 2024 Page 2
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NOTES-   (13-16)

10) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 1=200, 13=187.

12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R08	Piggyback Base Supported Gable	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:50 2024 Page 1
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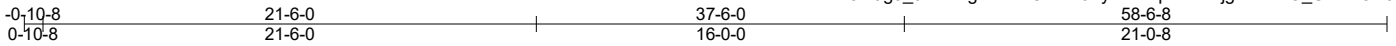
Scale = 1:100.3

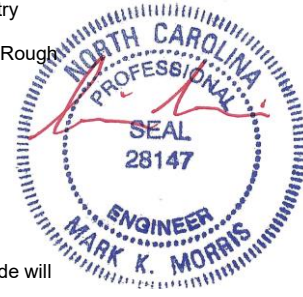Plate Offsets (X,Y)-- [14:0-4-0,0-3-8], [22:0-4-0,0-3-8]

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	0.06	Vert(LL)	-0.00	1	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	34	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-S							Weight: 598 lb	FT = 20%
BCDL	10.0											

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

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

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

NOTES-   (14-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable
   Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Exterior(2N) 3-11-2 to 16-8-6,
   Corner(3R) 16-8-6 to 26-3-10, Exterior(2N) 26-3-10 to 32-8-6, Corner(3R) 32-8-6 to 42-3-10, Exterior(2N) 42-3-10 to 53-6-0, Corner(3E)
   53-6-0 to 58-6-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber
   DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough
   Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs
   non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will
   fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 50, 51, 52, 53, 55,
   56, 58, 59, 60, 61, 62, 63, 49, 47, 46, 44, 43, 41, 40, 39, 38, 37, 36 except (jt=lb) 64=126, 35=119.

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R08	Piggyback Base Supported Gable	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:52 2024 Page 2
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-xRHKN3pIMf4x5Aj9r5yDMtFkTIiAmlrhsNj15PzwiWn

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

1/9/2024

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:53 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-PdribPqx7zCoiKILOpTSu4oksiuGVA3r51TadrzwiWm

Scale = 1:72.0

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	0.72	Vert(LL)	0.41	10-11	>281	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.42	10-11	>274	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	-0.01	7	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 152 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 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   1 Row at midpt   6-7, 5-8, 5-7

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

REACTIONS. (lb/size)   11=362/Mechanical, 7=466/Mechanical, 10=899/0-3-8 (min. 0-1-8)
Max Horz 11=371(LC 14)
Max Uplift11=-2(LC 11), 7=-180(LC 14), 10=-192(LC 14)
Max Grav 11=367(LC 20), 7=620(LC 5), 10=963(LC 5)

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

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

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R10	Jack-Closed	2	1	# **44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:54 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-tpP4olrZuGKfKUtXyW?hRILvc6CrEVw_KhC79HzwiWl

Scale = 1:72.0

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	0.72	Vert(LL)	0.40	10-11	>642	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.44	10-11	>582	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 152 lb	FT = 20%
BCDL	10.0											

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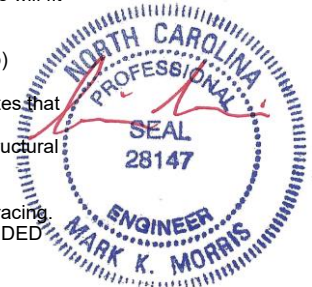WEBS   2x4 SP No.3

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

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

REACTIONS. (lb/size)   11=863/Mechanical, 7=863/Mechanical
Max Horz 11=371(LC 14)
Max Uplift11=-46(LC 14), 7=-265(LC 14)
Max Grav 11=887(LC 20), 7=1046(LC 5)

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

NOTES- (8-11)
1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; End Jack Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-10-4, Interior(1) 4-10-4 to 14-11-5, Exterior(2R) 14-11-5 to 21-8-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 7=265.
8) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
9) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
10) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
11) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.
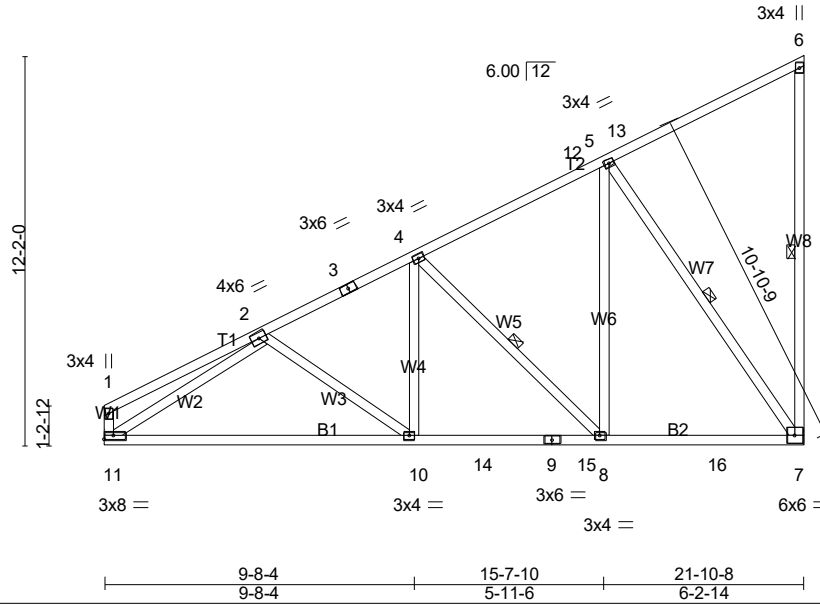
1/9/2024

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R11	Common Supported Gable	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:56 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-qCWqDRtpQuaNZn0w4x19WjQPZv3fidyHn?hEEAzwiWj

4x4 ≡

Scale = 1:29.2

7.00 [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	0.12	Vert(LL)	-0.00	9	n/r	180	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	9	n/r	80		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-R							Weight: 67 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 6-0-0 oc purlins, except end verticals.
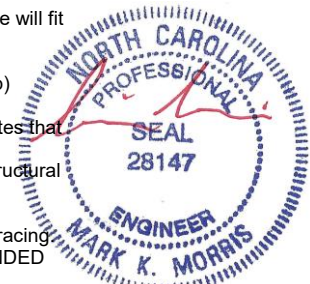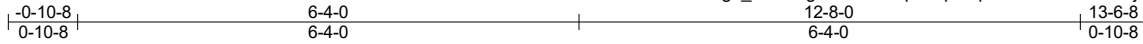BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.

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

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

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

NOTES-   (14-17)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 3-11-2, Corner(3R) 3-11-2 to 8-8-14, Corner(3E) 8-8-14 to 13-6-8 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R11	Common Supported Gable	1	1	# *44031*
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:56 2024 Page 2
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-qCWqDRtpQuaNZn0w4x19WjQPZv3fidyHn?hEEAzwiWj

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

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R12	Common Structural Gable	1	1	**# 44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:18:58 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-maebe6u3yVq5p5AIBM3db8VaJjfvAL6aEJALI3zwiWh

Scale: 3/16"=1'

7.00 ⌐12

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [5:0-4-0,0-5-11], [8:0-2-0,0-1-12]

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	0.81	Vert(LL)	0.09	10-11	>999	240	MT20	244/190
Snow (Pf) 20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.11	10-11	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.02	10	n/a	n/a		
BCLL 0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 271 lb FT = 20%
BCDL 10.0											

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 9-10-4 oc bracing.
WEBS   1 Row at midpt   5-14

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

REACTIONS. (lb/size)   14=1347/0-3-8 (min. 0-1-10), 10=680/0-3-0 (min. 0-1-8), 16=458/0-3-8 (min. 0-1-8)
Max Horz 16=-230(LC 12)
Max Uplift14=-136(LC 14), 10=-131(LC 15), 16=-77(LC 14)
Max Grav 14=1367(LC 3), 10=729(LC 22), 16=487(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-317/156, 5-46=-20/344, 5-47=-248/317, 6-47=-310/293, 6-7=-409/281, 7-8=-336/278,
8-10=-364/217, 2-16=-351/157
BOT CHORD   15-16=-107/373, 15-48=-107/373, 14-48=-107/373, 12-51=-320/655, 11-51=-320/655,
10-11=-320/655
WEBS   3-15=0/269, 3-14=-629/223, 5-14=-922/380, 5-12=-439/532, 7-12=-583/378, 7-11=-228/271,
7-10=-585/238

NOTES-   (12-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable
Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 10-1-6,
Exterior(2R) 10-1-6 to 19-8-10, Interior(1) 19-8-10 to 25-10-14, Exterior(2E) 25-10-14 to 30-8-8 zone; end vertical left and right exposed;
porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough
Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs
non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will
fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb)
14=136, 10=131.

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R12	Common Structural Gable	1	1		
					Job Reference (optional)	# 44031

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.
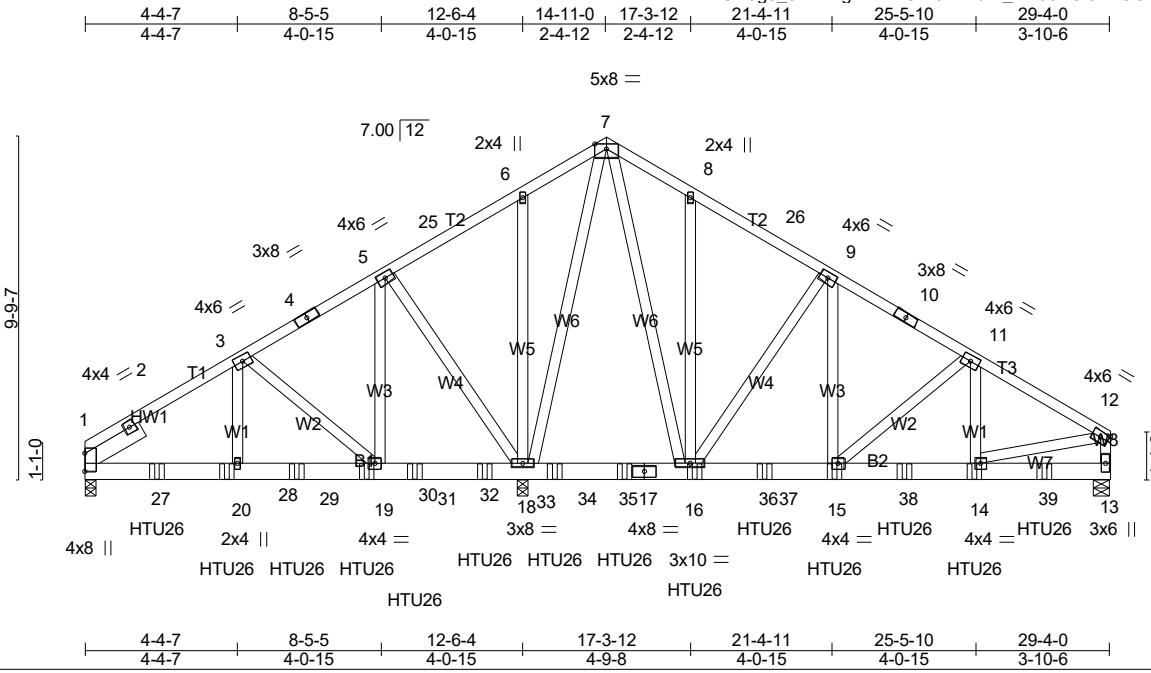
LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R13	Common Girder	1	**3**	**# 44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:19:05 2024 Page 1
ID:kHdPkcON9g3_0lfrDBIgKRzexCS-3xZE6W_Slfi58ACf5KhGOclwdX3fJc9cruND29zwiWa

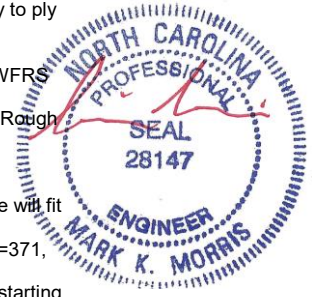Dimensions (top): 4-4-7 | 8-5-5 | 12-6-4 | 14-11-0 | 17-3-12 | 21-4-11 | 25-5-10 | 29-4-0
4-4-7 | 4-0-15 | 4-0-15 | 2-4-12 | 2-4-12 | 4-0-15 | 4-0-15 | 3-10-6

5x8 =

Scale = 1:65.9

7.00 [12

9-9-7
1-1-0
1-4-8

Dimensions (bottom): 4-4-7 | 8-5-5 | 12-6-4 | 17-3-12 | 21-4-11 | 25-5-10 | 29-4-0
4-4-7 | 4-0-15 | 4-0-15 | 4-9-8 | 4-0-15 | 4-0-15 | 3-10-6

HTU26 markings across bottom chord; 4x8 ||, 2x4 ||, 4x4 =, 3x8 =, 4x8 =, 3x10 =, 4x4 =, 4x4 =, 3x6 ||

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	0.23	Vert(LL)	-0.03	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.05	15-16	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.01	13	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-MSH							Weight: 716 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 -° 1-11-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-18.

REACTIONS. (lb/size) 1=1715/0-3-8 (min. 0-1-8), 18=6794/0-3-8 (min. 0-2-11), 13=1986/0-5-14 (min. 0-1-8)
Max Horz 1=212(LC 11)
Max Uplift1=-371(LC 12), 18=-1214(LC 12), 13=-598(LC 13)
Max Grav 1=1732(LC 18), 18=6794(LC 1), 13=2053(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-1041/215, 2-3=-1954/429, 3-4=-643/92, 4-5=-595/104, 5-25=-286/1155,
6-25=-268/1279, 6-7=-233/1205, 7-8=-498/236, 8-26=-427/163, 9-26=-507/151,
9-10=-1534/490, 10-11=-1636/479, 11-12=-2316/679, 12-13=-1759/519
BOT CHORD   1-27=-461/1630, 27-28=-461/1630, 20-28=-461/1630, 20-29=-461/1630, 29-30=-461/1630,
19-30=-461/1630, 19-31=-159/525, 31-32=-159/525, 32-33=-159/525, 33-38=-159/525,
18-34=-336/225, 34-35=-336/225, 17-35=-336/225, 16-17=-336/225, 16-36=-313/1367,
36-37=-313/1367, 15-37=-313/1367, 15-38=-555/1951, 14-38=-555/1951
WEBS   3-20=-382/1386, 3-19=-1422/476, 5-19=-563/2744, 5-18=-2628/622, 6-18=-372/135,
7-16=-685/2518, 8-16=-311/128, 9-16=-1698/628, 9-15=-573/1673, 11-15=-771/309,
11-14=-282/676, 12-14=-508/1845, 7-18=-2987/668

NOTES- (13-16)
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
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=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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 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) 1=371, 18=1214, 13=598.
10) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 11-4-8 oc max. starting at 2-0-12 from the left end to 27-5-4 to connect truss(es) R07 (1 ply 2x6 SP), R07A (1 ply 2x6 SP), R05A (1 ply 2x6 SP), R05 (1 ply 2x6 SP) to front face of bottom chord.

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	R13	Common Girder	1	**3**	Job Reference (optional) **# 44031**

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:19:05 2024 Page 2
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-3xZE6W_SIfi58ACf5KhGOcIwdX3fJc9cruND29zwiWa

NOTES- (13-16)

11) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 9-5-4 from the left end to 17-5-4 to connect truss(es) R10 (1 ply 2x4 SP), R09 (1 ply 2x4 SP) to front face of bottom chord.

12) Fill all nail holes where hanger is in contact with lumber.

13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.

14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.

15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.

16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT 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)
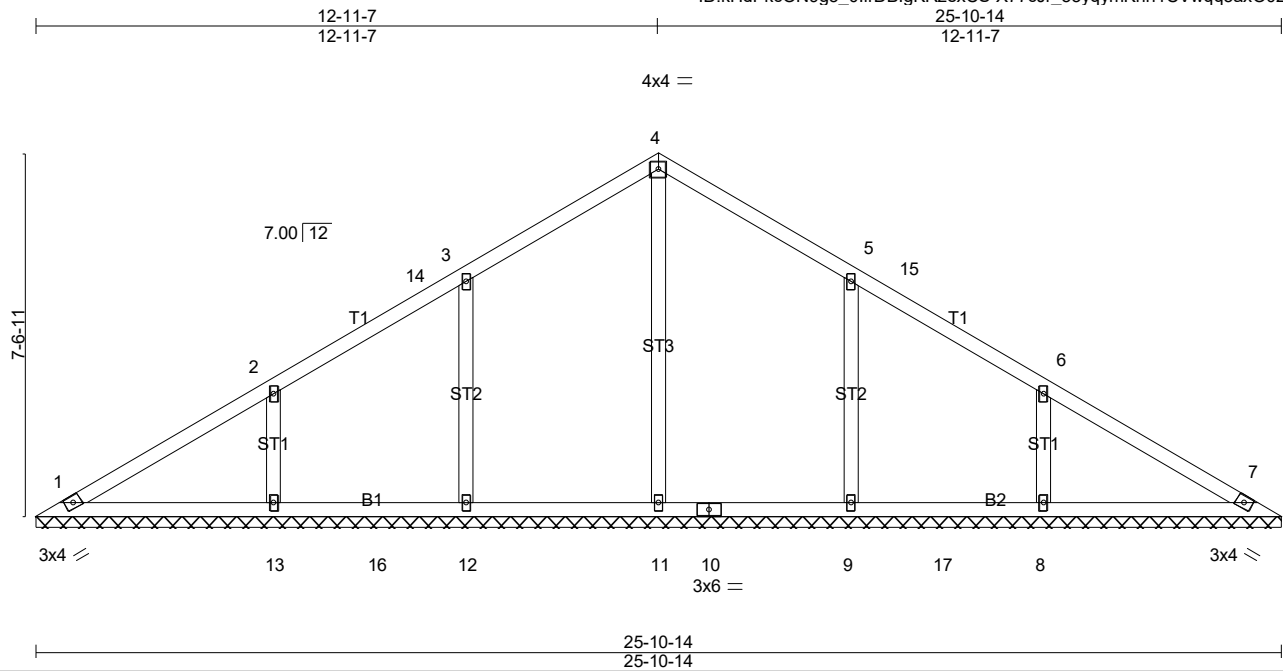   Vert: 1-7=-60, 7-12=-60, 13-21=-20
   Concentrated Loads (lb)
        Vert: 16=-347(F) 15=-518(F) 14=-518(F) 27=-699(F) 28=-699(F) 29=-699(F) 30=-697(F) 31=-867(F) 33=-867(F) 34=-347(F) 35=-347(F) 36=-518(F) 38=-518(F) 39=-518(F)

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	VT01	Valley	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:19:06 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-X77cJr_53yqymKnrf1CVwqq3axO251l4Y6mabzwiWZ

12-11-7
12-11-7
25-10-14
12-11-7

4x4 ═

Scale: 1/4"=1'

7.00 ⌐12

7-6-11

25-10-14
25-10-14

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 113 lb	FT = 20%
BCDL	10.0											

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

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

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

REACTIONS.   All bearings 25-10-14.
   (lb) - Max Horz 1=-159(LC 12)
        Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=-109(LC 14), 13=-124(LC 14), 9=-109(LC 15), 8=-124(LC 15)
        Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=456(LC 26), 12=525(LC 5), 13=404(LC 23), 9=525(LC 6), 8=404(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   3-12=-361/151, 2-13=-282/157, 5-9=-361/151, 6-8=-283/157

NOTES- (10-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 8-1-13, Exterior(2R) 8-1-13 to 17-9-0, Interior(1) 17-9-0 to 20-6-13, Exterior(2E) 20-6-13 to 25-4-6 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 12=109, 13=124, 9=109, 8=124.
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

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	VT02	Valley	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:19:08 2024 Page 1
ID:kHdPkcON9g3_0lfrDBIgKRzexCS-TWFNkX0Lba5g?dxDnSFz?FwPvl4pW0Q2YsbtfTzwiWX

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 94 lb	FT = 20%
BCDL	10.0											

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

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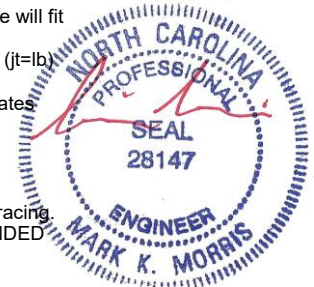BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS.   All bearings 22-5-11.
(lb) - Max Horz 1=137(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 8 except 11=-117(LC 14), 9=-117(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=457(LC 23), 11=473(LC 5), 12=293(LC 1), 9=473(LC 6), 8=293(LC 1)

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

NOTES-   (10-13)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 6-5-4, Exterior(2R) 6-5-4 to 16-0-7, Interior(1) 16-0-7 to 17-1-10, Exterior(2E) 17-1-10 to 21-11-4 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 8 except (jt=lb) 11=117, 9=117.
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

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	VT03	Valley	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:19:09 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-xiplxt1zMtDXdnWQKAmCYSSZH9SqFUQBmWLQBwzwiWW

Scale = 1:35.2

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH								
BCDL	10.0										Weight: 75 lb	FT = 20%

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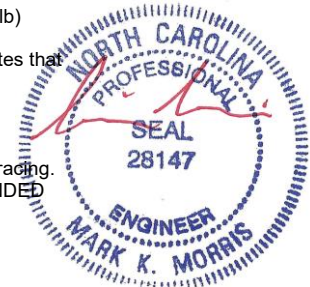BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3

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

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

REACTIONS.   All bearings 19-0-9.
    (lb) - Max Horz 1=115(LC 13)
        Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-147(LC 14), 6=-147(LC 15)
        Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=386(LC 5), 8=549(LC 20), 6=549(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
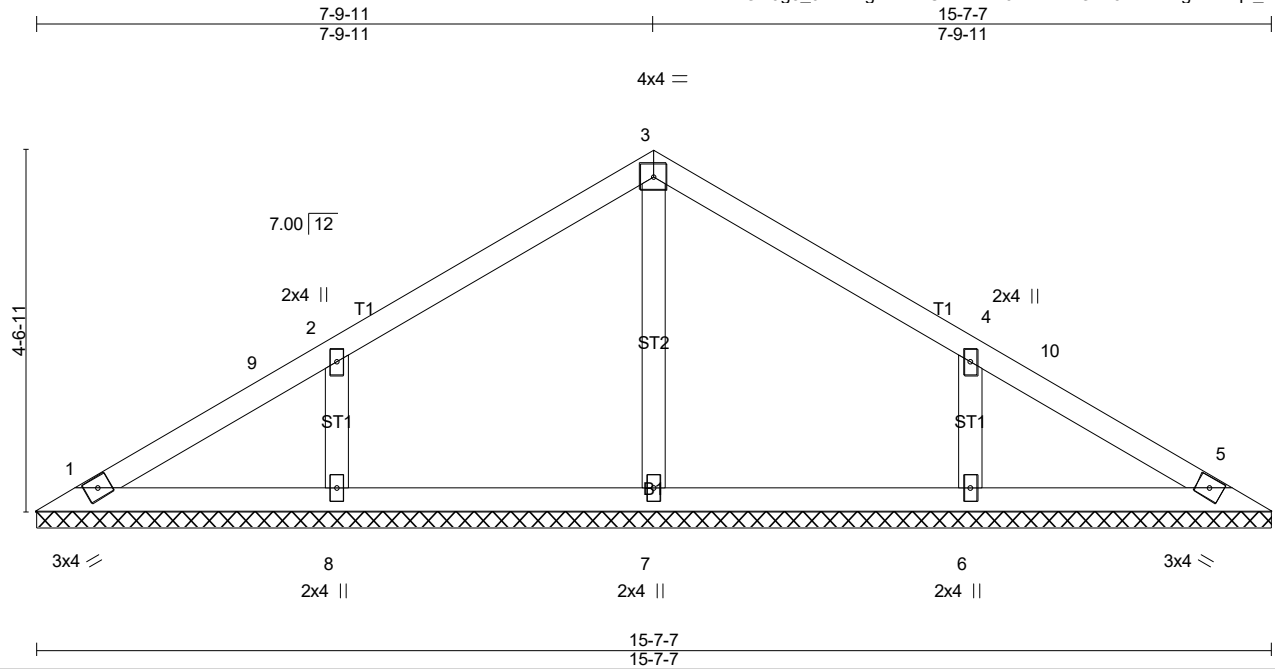WEBS   2-8=-427/182, 4-6=-427/182

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=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-6-5, Exterior(2R) 5-6-5 to 13-6-5, Exterior(2E) 13-6-5 to 18-6-2 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=147, 6=147.
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

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	VT04	Valley	1	1	**# 44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:19:10 2024 Page 1
ID:kHdPkcON9g3_0lfrDBIgKRzexCS-PuM79D1b7BLOFx5cutHR4g?lWYq7_x5L?A4zkMzwiWV

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	0.28
BC	0.19
WB	0.08
Matrix-SH	

DEFL.

	in	(loc)	l/defl	L/d
Vert(LL)	n/a	-	n/a	999
Vert(CT)	n/a	-	n/a	999
Horz(CT)	0.00	5	n/a	n/a

PLATES | **GRIP**
MT20 | 244/190

Weight: 59 lb   FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3
OTHERS   2x4 SP No.3
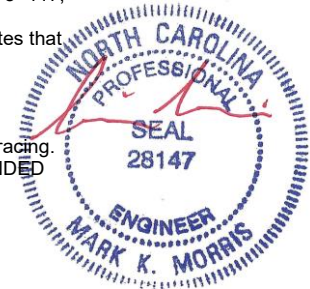
BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. All bearings 15-7-7.
  (lb) - Max Horz 1=93(LC 13)
    Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-117(LC 14), 6=-117(LC 15)
    Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=282(LC 21), 8=456(LC 20), 6=456(LC 21)
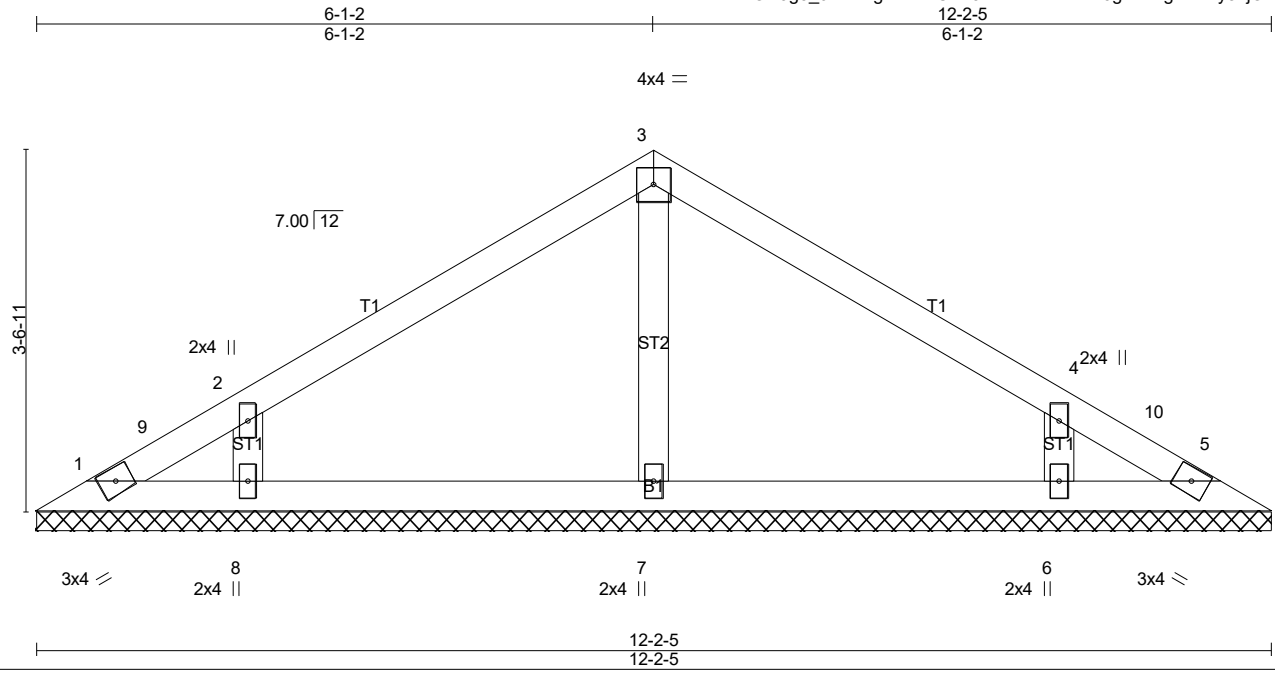
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-8=-373/150, 4-6=-373/150

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=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 10-3-6, Exterior(2E) 10-3-6 to 15-0-15 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=117, 6=117.
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

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	VT05	GABLE	1	1	**# 44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:19:11 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-t5wVMZ2DuVTFt5goSbogdtYwIy82jOPUEqqXGozwiWU

Scale = 1:22.7

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 44 lb	FT = 20%
BCDL	10.0											

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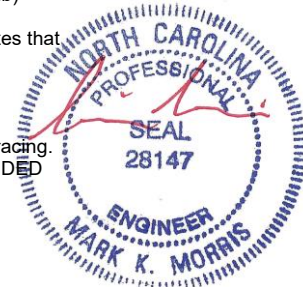OTHERS   2x4 SP No.3

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

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

REACTIONS.   All bearings 12-2-5.
(lb) - Max Horz 1=71(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-104(LC 14), 6=-104(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=291(LC 21), 8=425(LC 20), 6=425(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-8=-374/143, 4-6=-374/143

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=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 6-10-3, Exterior(2E) 6-10-3 to 11-7-13 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=104, 6=104.
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.
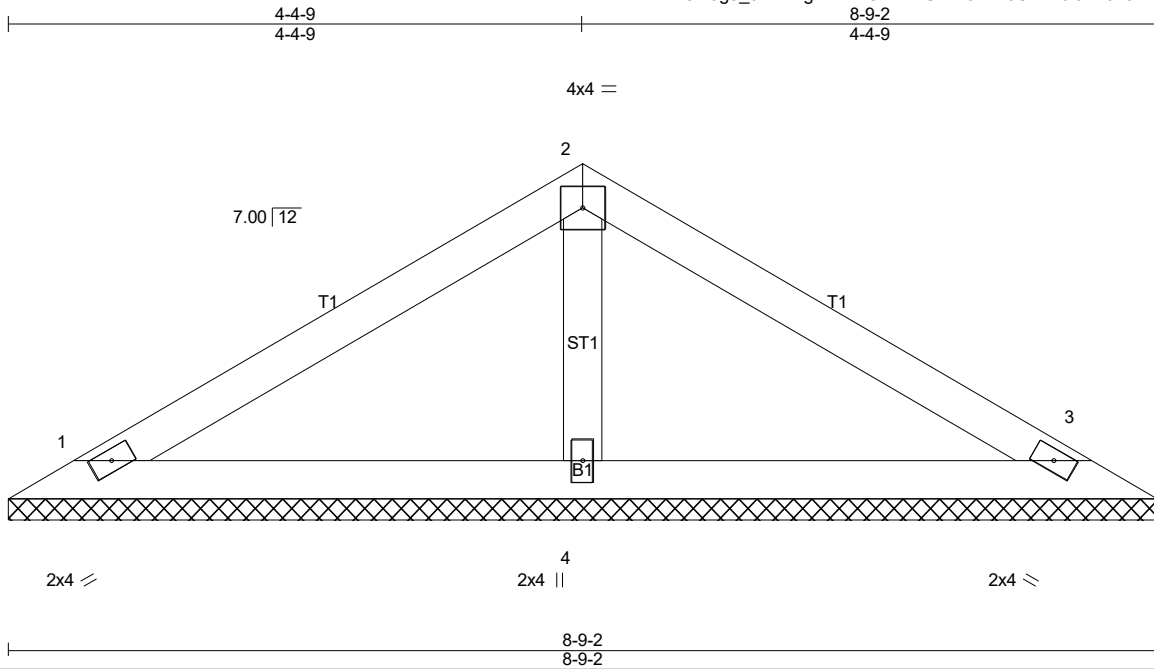
LOAD CASE(S) Standard

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK | 65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	VT06	Valley	1	1	# 44031
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:19:12 2024 Page 1
ID:kHdPkcON9g3_0IfrDBIgKRzexCS-MHUuav3rfob6UFF?0IJvA543fMUZSs6eSUZ4oFzwiWT

4-4-9
4-4-9

8-9-2
4-4-9

Scale = 1:17.6

4x4 =

7.00 [12

2

T1   T1

2-6-11

ST1

1   3

B1

4
2x4   2x4 || 2x4

8-9-2
8-9-2

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	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 29 lb	FT = 20%
BCDL	10.0											

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

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

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

REACTIONS. (lb/size) 1=160/8-9-2 (min. 0-1-8), 3=160/8-9-2 (min. 0-1-8), 4=294/8-9-2 (min. 0-1-8)
Max Horz 1=-49(LC 10)
Max Uplift1=-35(LC 14), 3=-42(LC 15), 4=-3(LC 14)
Max Grav 1=222(LC 20), 3=222(LC 21), 4=301(LC 20)

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

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=35ft; Cat. II; Exp B; Enclosed; Gable
   Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left and right exposed;C-C for
   members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough
   Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit
   between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 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.
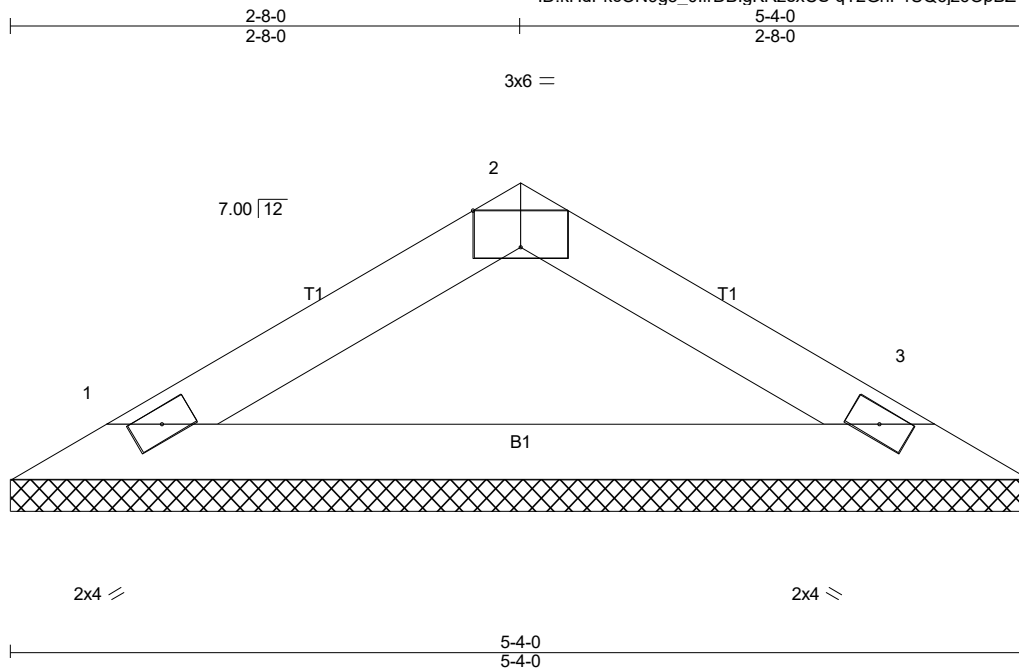
LOAD CASE(S) Standard

NORTH CAROLINA
PROFESSIONAL
SEAL
28147
ENGINEER
MARK K. MORRIS

1/9/2024

Job	Truss	Truss Type	Qty	Ply	LOT 30 PROVIDENCE CREEK	65 COTTONSEED LANE FUQUAY-VARINA, NC
24-0138-R01	VT07	Valley	1	1	# **44031**
					Job Reference (optional)

Run: 8.430 s Feb 12 2021 Print: 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Jan 10 17:19:13 2024 Page 1
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2-8-0   5-4-0
2-8-0   2-8-0

3x6 =

Scale: 1"=1'

7.00 ⌐12

1-6-11

T1   T1

2

1   3

B1

2x4 ∥   2x4 ∖

5-4-0
5-4-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-P							Weight: 15 lb	FT = 20%
BCDL	10.0											

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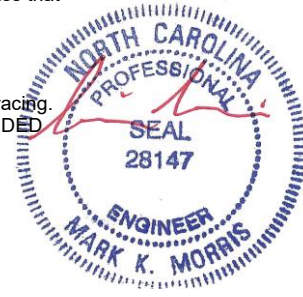TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (lb/size) 1=170/5-4-0 (min. 0-1-8), 3=170/5-4-0 (min. 0-1-8)
Max Horz 1=-27(LC 10)
Max Uplift1=-20(LC 14), 3=-20(LC 15)
Max Grav 1=193(LC 20), 3=193(LC 21)

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

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=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.
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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

[Engineer's seal: NORTH CAROLINA PROFESSIONAL SEAL 28147 ENGINEER MARK K. MORRIS]

1/9/2024