

1  
5-3

### TRUSS BRACING DETAILS

SCALE: 1/4" = 1'-0"

#### TRUSS BRACING NOTES:

- IF TRUSS DOES NOT APPEAR ON THIS TRUSS BRACING SHEET, NO ADDITIONAL LATERAL BRACING IS REQUIRED.
- 2X4 SPF#2 LATERAL BRACES SHALL BE NAILED TO MINIMUM (3) TRUSS MEMBERS WITH MINIMUM (2) 10D NAILS. PROVISIONS MUST BE MADE AT ENDS OR SPECIFIED INTERVALS TO RESTRAIN OR ANCHOR LATERAL BRACING.
- WEB "T" BRACE, DETAIL 3(VRF-1c) IS REQUIRED WHERE LATERAL BRACING IS NOT CONTINUOUS ACROSS THREE (3) OR MORE TRUSSES AND MAY BE USED IN LIEU OF 2X4 LATERAL BRACING.
- DIAGONAL BRACING REQUIRED WHEN LATERAL BRACING IS REQUIRED (4(RF-1c))
- STUDDED GABLE BRACING DETAIL (1(VRF-1c)) TO BE UTILIZED FOR TRUSSES 6'-9" IN HEIGHT OR GREATER.
- PARTIALLY SHEATHED GABLES, SEE (5(VRF-1c)) FOR "L" BRACING WHEN REQUIRED.
- LATERAL BRACING CAN BE APPLIED TO EITHER SIDE OF THE WEB MEMBER IDENTIFIED IN THE DRAWING.
- SHEATHING (OSB OR GYPSUM) REPLACES LATERAL AND DIAGONAL TRUSS BRACING.

SHEET NO.

**S-3**

22

MODEL  
**GRAND BAHAMA**

DRAWING TITLE  
TRUSS BRACING

OPTION DESCRIPTION

SET NO. 6B-H00

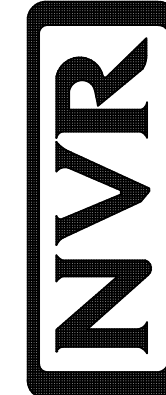
VERSION 01

RELEASE NO. ----

DRAWN BY

DATE:

OPTION



NVR, Inc., Suite 100  
Frederick, MD 21703

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DIV-COMM-LOT-UNIT

**RLH-VK-0102**

COM-Lot

KIPLING VILLAGE - 0102

STREET ADDRESS

188 SOUTH BREEZE WAY

CITY

STATE

NC

ZIP

27526

APT. NO.

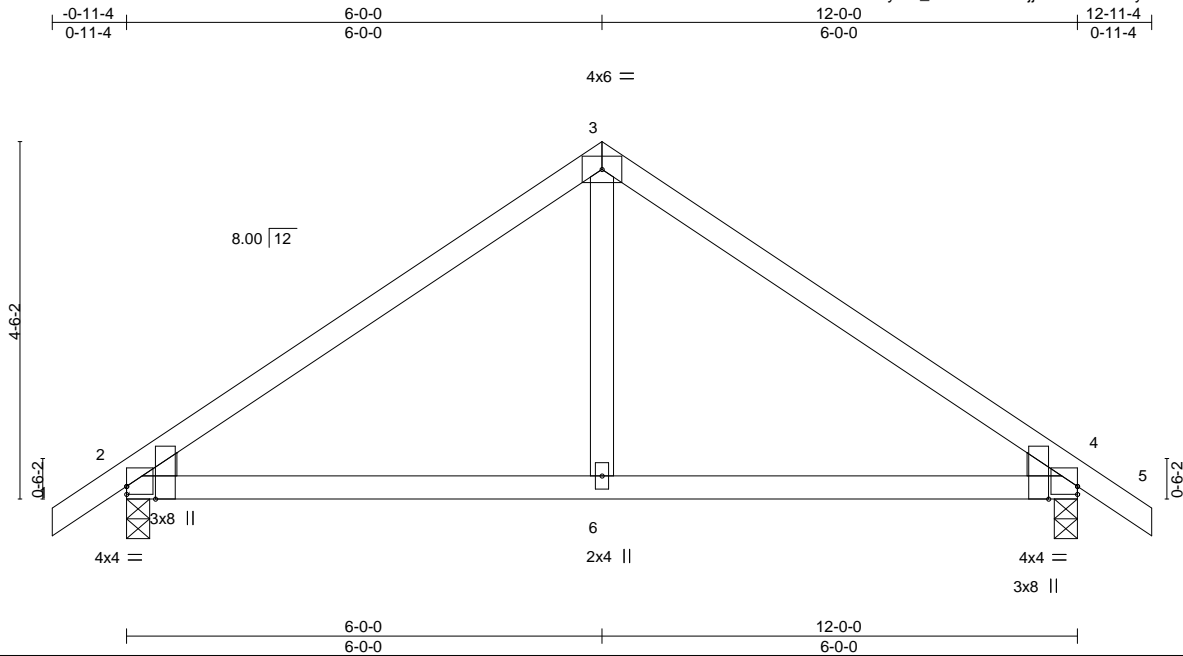
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27526

Job ORDERS	Truss SE-14544	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49147390
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:24 2021 Page 1  
ID:?RrLVUNcBotMPeFP6cfGVKyElz\_-drnYGGGrXdjijPOJLLzFf6lUyAJmzsf3dn5?sstyBF8z



Scale = 1:29.1

Plate Offsets (X, Y)--	[2:0-0-0,0-1-3], [2:0-1-15,Edge], [4:0-0-0,0-1-3], [4:0-1-15,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSL.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.03 2-6 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.06 2-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.03 2-6 >999 240	Weight: 50 lb	FT = 5%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3 or 2x4 SPF Stud  
 WEDGE

Left: 2x4 SP or SPF No.3 or Stud, Right: 2x4 SP or SPF No.3 or Stud

**REACTIONS.**

(size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=118(LC 9)  
 Max Uplift 2=-79(LC 10), 4=-79(LC 11)  
 Max Grav 2=533(LC 1), 4=533(LC 1)

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

TOP CHORD 2-3=-558/86, 3-4=-558/86  
 BOT CHORD 2-6=-1/377, 4-6=-1/377  
 WEBS 3-6=0/286

**NOTES-** (6-8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 2 and 79 lb uplift at joint 4.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
- Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

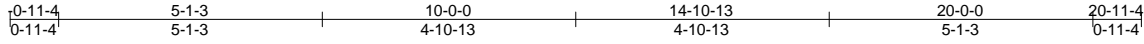


818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-14545	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49147391
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:25 2021 Page 1  
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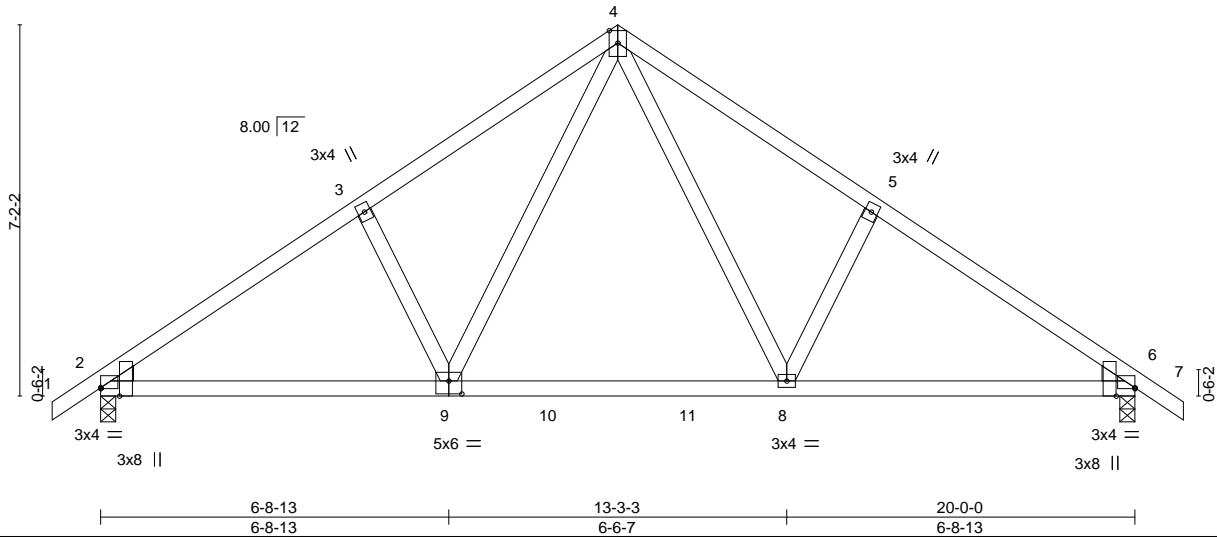


Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [2:0-1-15,Edge], [6:0-1-15,Edge], [6:0-0-0,0-0-3], [9:0-3-0,0-3-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.33	Vert(LL) -0.08	8-9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.12	6-8	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.18	Horz(CT) 0.02	6	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.03	2-9	>999	240		
							Weight: 103 lb	FT = 5%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 WEBS 2x4 SP No.3 or 2x4 SPF Stud  
 WEDGE

Left: 2x4 SP or SPF No.3 or Stud, Right: 2x4 SP or SPF No.3 or Stud

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-2-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-185(LC 8)  
 Max Uplift 2=-117(LC 10), 6=-117(LC 11)  
 Max Grav 2=853(LC 1), 6=853(LC 1)

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

TOP CHORD 2-3=-1113/140, 3-4=-979/207, 4-5=-979/207, 5-6=-1113/140  
 BOT CHORD 2-9=-145/940, 8-9=-2/616, 6-8=-38/842  
 WEBS 3-9=-270/210, 4-9=-122/482, 4-8=-123/482, 5-8=-270/210

**NOTES-** (6-8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 2 and 117 lb uplift at joint 6.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
- Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-14546	Truss Type COMN	Qty 1	Ply 2	11_Southeast-Girder-Int	I49147402
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:58 2021 Page 1

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5x6 ||

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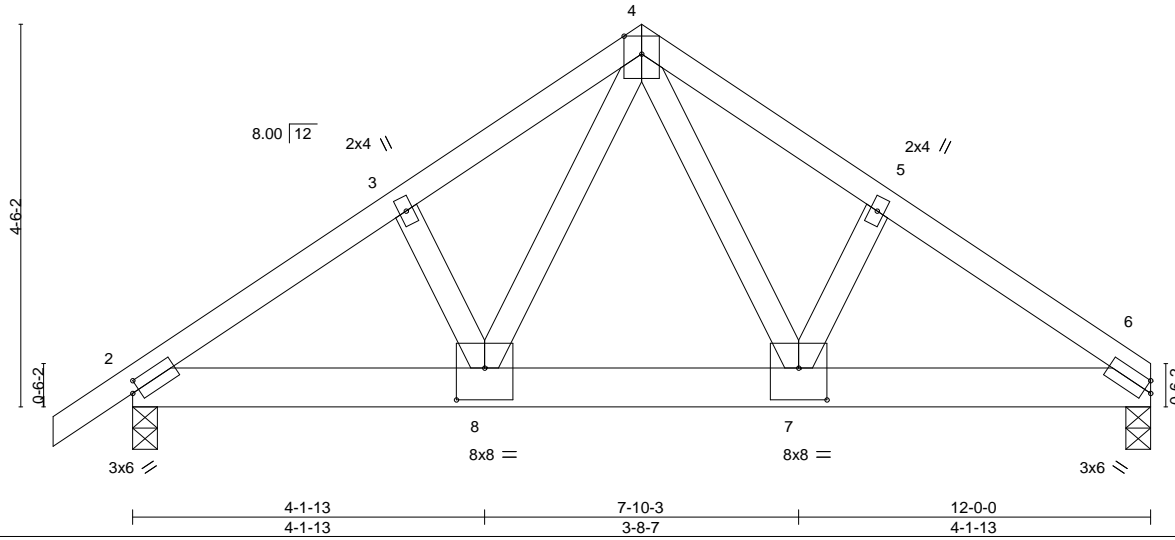


Plate Offsets (X,Y)--	[2:0-1-0,0-1-8], [7:0-4-0,0-4-8], [8:0-4-0,0-4-8]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.05	7-8	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.09	7-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.69	Horz(CT)	0.02	6	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S	Wind(LL)	0.03	7-8	>999		
								Weight: 140 lb	FT = 5%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=91(LC 7)  
 Max Uplift 2=-201(LC 8), 6=-189(LC 9)  
 Max Grav 2=4787(LC 15), 6=4722(LC 16)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5667/237, 3-4=-5565/268, 4-5=-5576/271, 5-6=-5682/239  
 BOT CHORD 2-8=-195/4614, 7-8=-102/3296, 6-7=-162/4562  
 WEBS 4-8=-159/3286, 4-7=-163/3309

- NOTES-** (9-11)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=201, 6=189.
  - Girder carries tie-in span(s): 38-0-0 from 0-0-0 to 12-0-0
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

**LOAD CASE(S)** Standard



January 12, 2022

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932



Job ORDERS	Truss SE-14546	Truss Type COMN	Qty 1	Ply <b>2</b>	11_Southeast-Girder-Int Job Reference (optional)	I49147402
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:58 2021 Page 2  
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**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 2-6=-734(B=-714), 1-4=-60, 4-6=-60

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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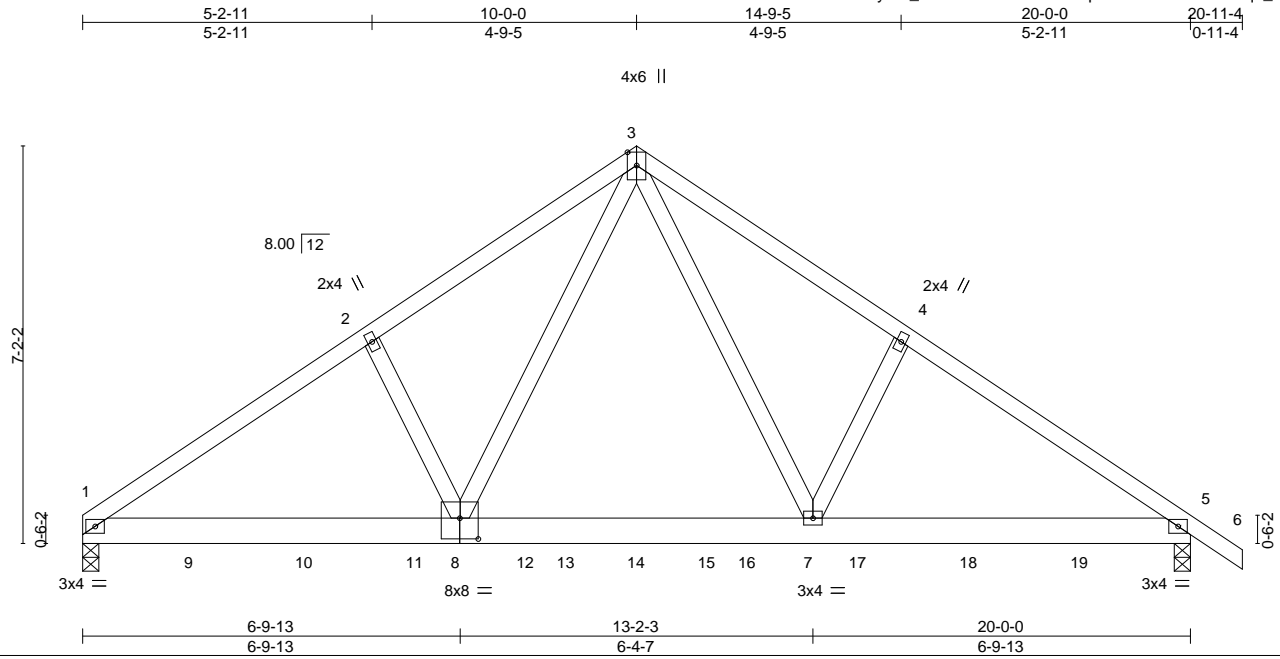


818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-14547	Truss Type COMN	Qty 1	Ply 2	11_Southeast-Girder-Int Job Reference (optional)	I49147403
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:59 2021 Page 1  
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Scale = 1:41.6

LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	-0.04	1-8	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.08	1-8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.25	Horz(CT)	0.02	5	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S	Wind(LL)	0.03	1-8	>999	Weight: 233 lb	FT = 5%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 or 2x4 SPF Stud

**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.

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
Max Horz 1=-145(LC 4)  
Max Uplift 1=-39(LC 8), 5=-51(LC 9)  
Max Grav 1=1678(LC 1), 5=1746(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-2319/78, 2-3=-2200/132, 3-4=-2194/130, 4-5=-2314/77  
BOT CHORD 1-8=-67/1913, 7-8=0/1292, 5-7=-3/1845  
WEBS 3-8=-78/1216, 3-7=-77/1207

**NOTES-** (9-11)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 198 lb down and 9 lb up at 2-0-0, 198 lb down and 9 lb up at 4-0-0, 198 lb down and 9 lb up at 6-0-0, 198 lb down and 9 lb up at 8-0-0, 198 lb down and 9 lb up at 10-0-0, 198 lb down and 9 lb up at 12-0-0, 198 lb down and 9 lb up at 14-0-0, and 198 lb down and 9 lb up at 16-0-0, and 198 lb down and 9 lb up at 18-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
- Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

**LOAD CASE(S) Standard**

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818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-14547	Truss Type COMN	Qty 1	Ply <b>2</b>	11_Southeast-Girder-Int Job Reference (optional)	I49147403
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:59 2021 Page 2  
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**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-5=-20, 1-3=-60, 3-6=-60

Concentrated Loads (lb)

Vert: 9=-198(F) 10=-198(F) 11=-198(F) 12=-198(F) 14=-198(F) 16=-198(F) 17=-198(F) 18=-198(F) 19=-198(F)

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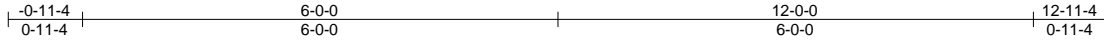


818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-14549	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149147393
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:28 2021 Page 1  
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4x6 =

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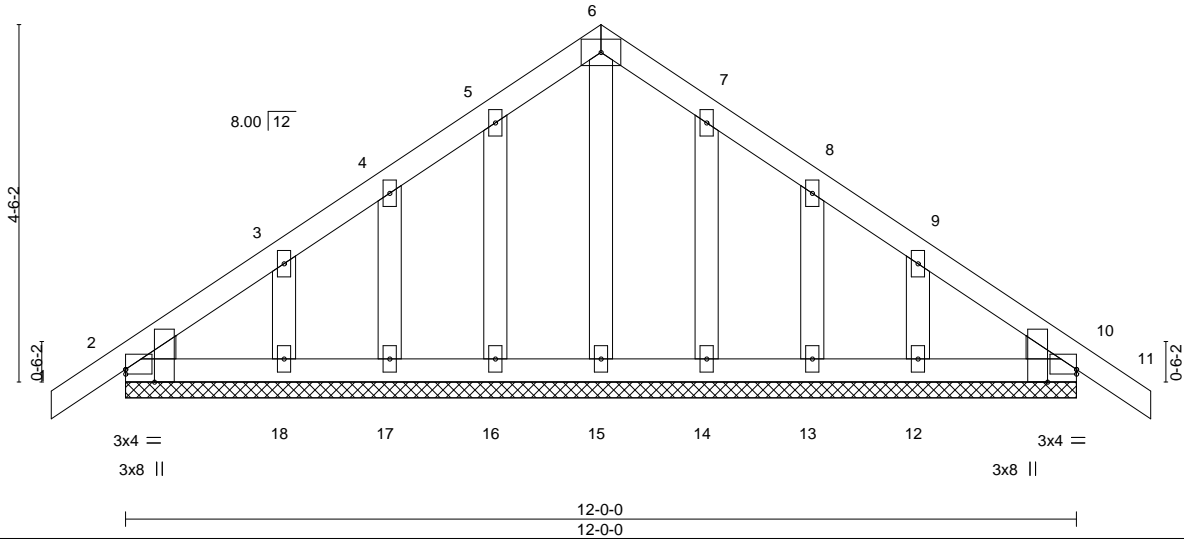


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [2:0-1-15,Edge], [10:0-0-0,0-0-11], [10:0-1-15,Edge]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.00	10	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00	11	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00	10	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S					Weight: 70 lb	FT = 5%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 OTHERS 2x4 SP No.3 or 2x4 SPF Stud  
 WEDGE

Left: 2x4 SP or SPF No.3 or Stud, Right: 2x4 SP or SPF No.3 or Stud

**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.

**REACTIONS.**

All bearings 12-0-0.  
 (lb) - Max Horz 2=118(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12  
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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

**NOTES-** (10-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 18, 14, 13, 12.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
- Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



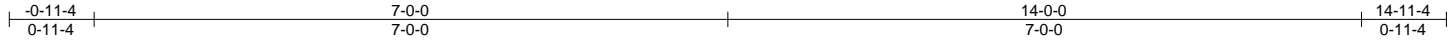
818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-18423	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194674
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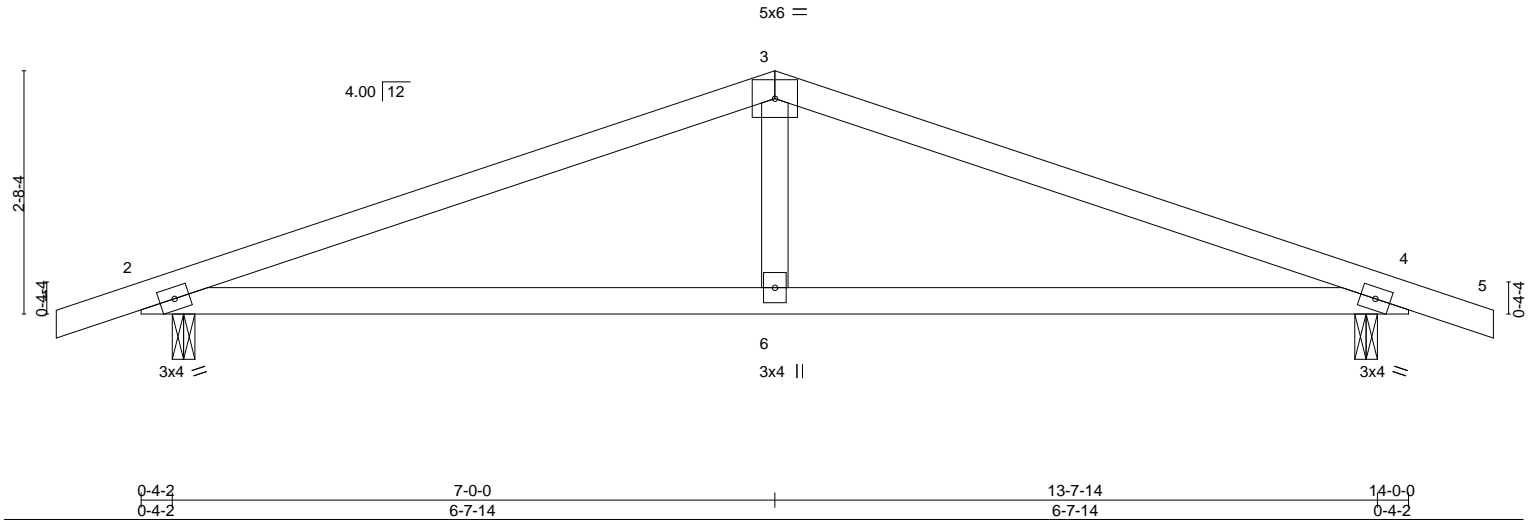
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:38:34 2021 Page 1

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Scale = 1:25.5



LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL) -0.06	4-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.57	Vert(CT) -0.14	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.02	4	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.05	2-6	>999	240	Weight: 49 lb	FT = 5%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-5-6 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	

**REACTIONS.** (size) 2=0-3-0, 4=0-3-0  
 Max Horz 2=-45(LC 15)  
 Max Uplift 2=-129(LC 6), 4=-129(LC 7)  
 Max Grav 2=614(LC 1), 4=614(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1021/122, 3-4=-1021/122  
 BOT CHORD 2-6=-65/903, 4-6=-65/903  
 WEBS 3-6=0/332

- NOTES-** (6-8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 2 and 129 lb uplift at joint 4.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



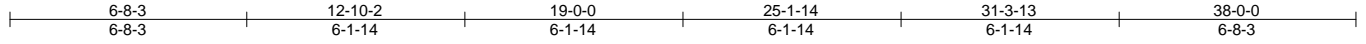
January 12, 2022

Job ORDERS	Truss SE-18424	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194675
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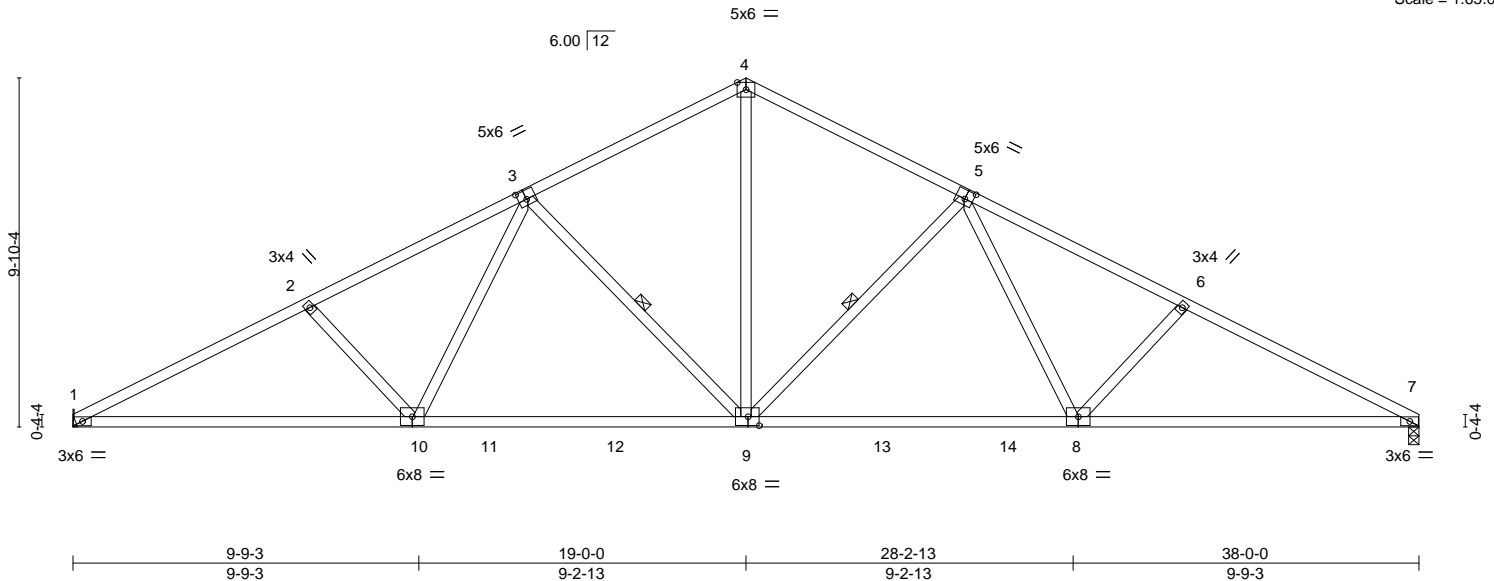
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:38:35 2021 Page 1

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Scale = 1:65.0



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSL.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.96	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.94	Vert(LL) -0.26 9-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.52	Vert(CT) -0.50 1-10 >900 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.12 7 n/a n/a	Weight: 193 lb	FT = 5%
	Code IBC2021/TP12014		Wind(LL) 0.12 9 >999 240		

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2D *Except*	TOP CHORD Structural wood sheathing directly applied.
3-4,4-5: 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
BOT CHORD 2x4 SP No.2D *Except*	WEBS 1 Row at midpt 3-9, 5-9
7-8,1-10: 2x4 SP No.1	
WEBS 2x4 SP No.3 or 2x4 SPF Stud	

**REACTIONS.** (size) 7=0-3-8, 1=Mechanical  
 Max Horz 1=164(LC 10)  
 Max Uplift 7=195(LC 11), 1=196(LC 10)  
 Max Grav 7=1512(LC 1), 1=1512(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-2850/387, 2-3=-2587/356, 3-4=-1785/289, 4-5=-1793/290, 5-6=-2578/356, 6-7=-2830/383  
 BOT CHORD 1-10=-431/2487, 9-10=-247/2001, 8-9=-103/1995, 7-8=-263/2463  
 WEBS 2-10=-370/234, 3-10=-56/569, 3-9=-709/267, 4-9=-128/1209, 5-9=-697/266, 5-8=-57/557, 6-8=-353/230

- NOTES-** (7-9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 195 lb uplift at joint 7 and 196 lb uplift at joint 1.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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**ENGINEERING BY**  
**TRENCO**  
 A MITek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

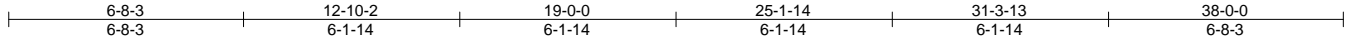


Job ORDERS	Truss SE-18425	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194676
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:38:36 2021 Page 1

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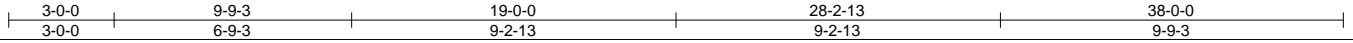
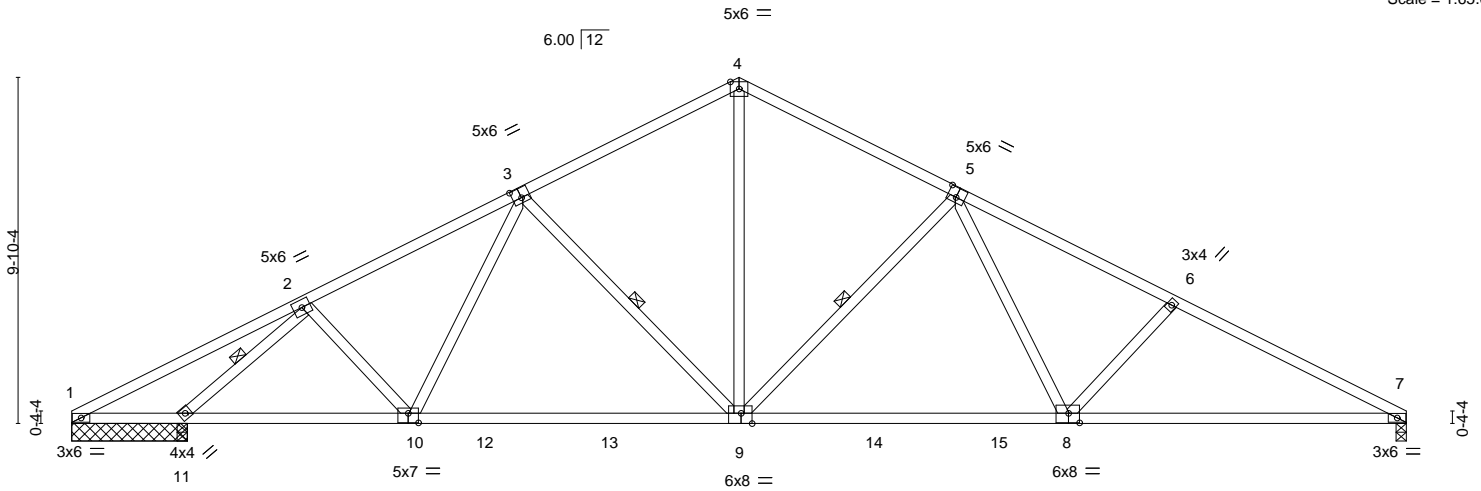


Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [8:0-3-12,0-3-4], [9:0-3-12,Edge], [10:0-3-8,0-3-4]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.95	Vert(LL)	-0.24	8-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.47	7-8	>882		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.09	7	n/a		
BCDL 10.0	Code IBC2021/TP12014		Matrix-S	Wind(LL)	0.10	7-8	>999		
								Weight: 200 lb	FT = 5%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 7-8: 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 3-9, 5-9, 2-11

**REACTIONS.** All bearings 3-3-8 except (jt=length) 7=0-3-8.  
 (lb) - Max Horz 1=164(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) except 7=190(LC 11), 1=169(LC 26), 11=221(LC 10)  
 Max Grav All reactions 250 lb or less at joint(s) 1 except 7=1370(LC 1), 11=1786(LC 1), 11=1786(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-137/703, 2-3=-1660/250, 3-4=-1477/277, 4-5=-1483/254, 5-6=-2268/345,  
 6-7=-2522/373  
 BOT CHORD 1-11=-542/189, 10-11=-265/1183, 9-10=-181/1447, 8-9=-72/1717, 7-8=-254/2190  
 WEBS 2-10=0/385, 3-9=-372/222, 4-9=-116/945, 5-9=-696/267, 5-8=-59/554, 6-8=-357/230,  
 2-11=-2370/370

- NOTES-** (6-8)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 7, 169 lb uplift at joint 1 and 221 lb uplift at joint 11.
  - 6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - 8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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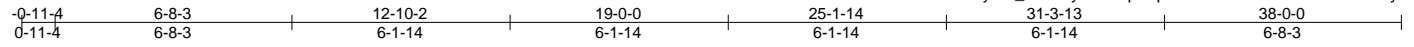
818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18426	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194677
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:38:37 2021 Page 1

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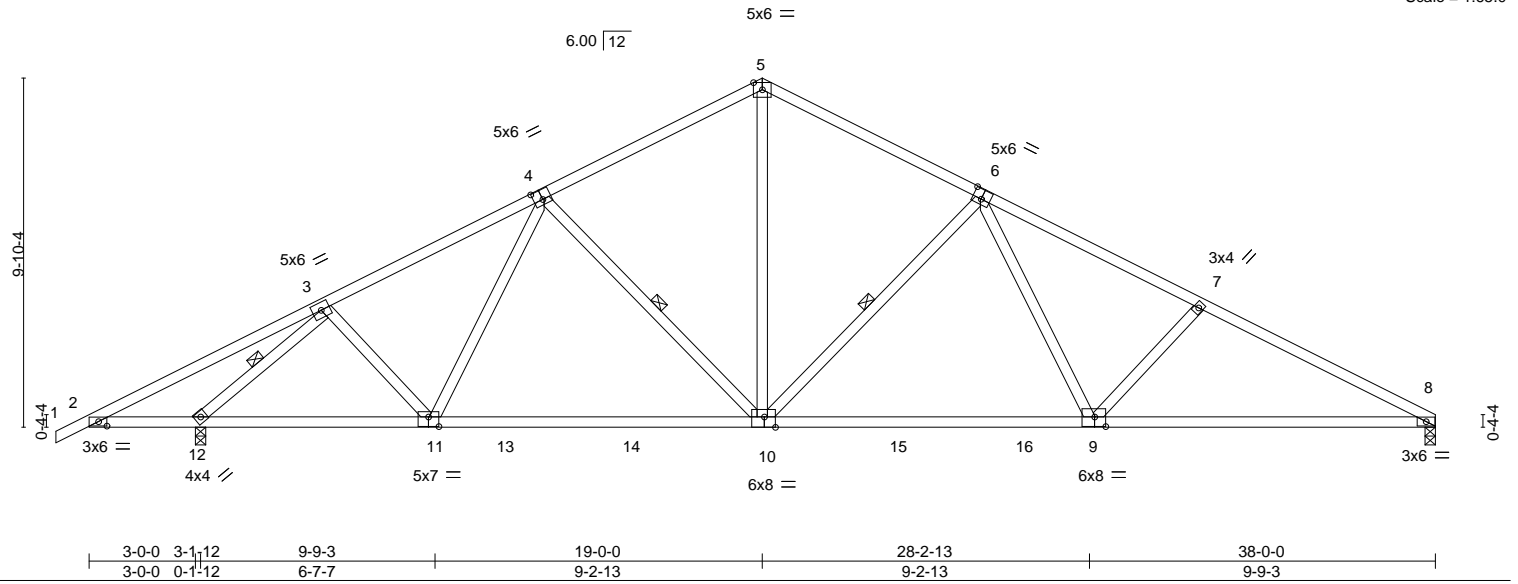


Plate Offsets (X,Y)--	[2:0-2-13,0-1-8], [4:0-3-0,0-3-4], [6:0-3-0,0-3-4], [9:0-3-12,0-3-4], [10:0-3-12,Edge], [11:0-3-8,0-3-4]
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LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.96	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 1.00	Vert(LL) -0.24 9-10 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.57	Vert(CT) -0.48 8-9 >881 240		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Horz(CT) 0.09 8 n/a n/a		
			Wind(LL) 0.10 8-9 >999 240	Weight: 201 lb	FT = 5%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 8-9: 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 4-10, 6-10, 3-12

**REACTIONS.** (size) 8=0-3-8, 12=0-3-8  
 Max Horz 12=178(LC 14)  
 Max Uplift 8=188(LC 11), 12=236(LC 10)  
 Max Grav 8=1380(LC 1), 12=1705(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-159/534, 3-4=-1718/242, 4-5=-1498/274, 5-6=-1504/251, 6-7=-2289/342,  
 7-8=-2543/369  
 BOT CHORD 2-12=-393/204, 11-12=-254/1281, 10-11=-178/1485, 9-10=-69/1736, 8-9=-251/2208  
 WEBS 3-11=0/330, 4-10=-378/219, 5-10=-113/968, 6-10=-696/267, 6-9=-59/553, 7-9=-356/230,  
 3-12=-2258/381

- NOTES-** (6-8)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 8 and 236 lb uplift at joint 12.
  - 6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - 8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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**ENGINEERING BY**  
**TRENCO**  
 A MITek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-18453- <b>Cond1</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194686
Job Reference (optional)						

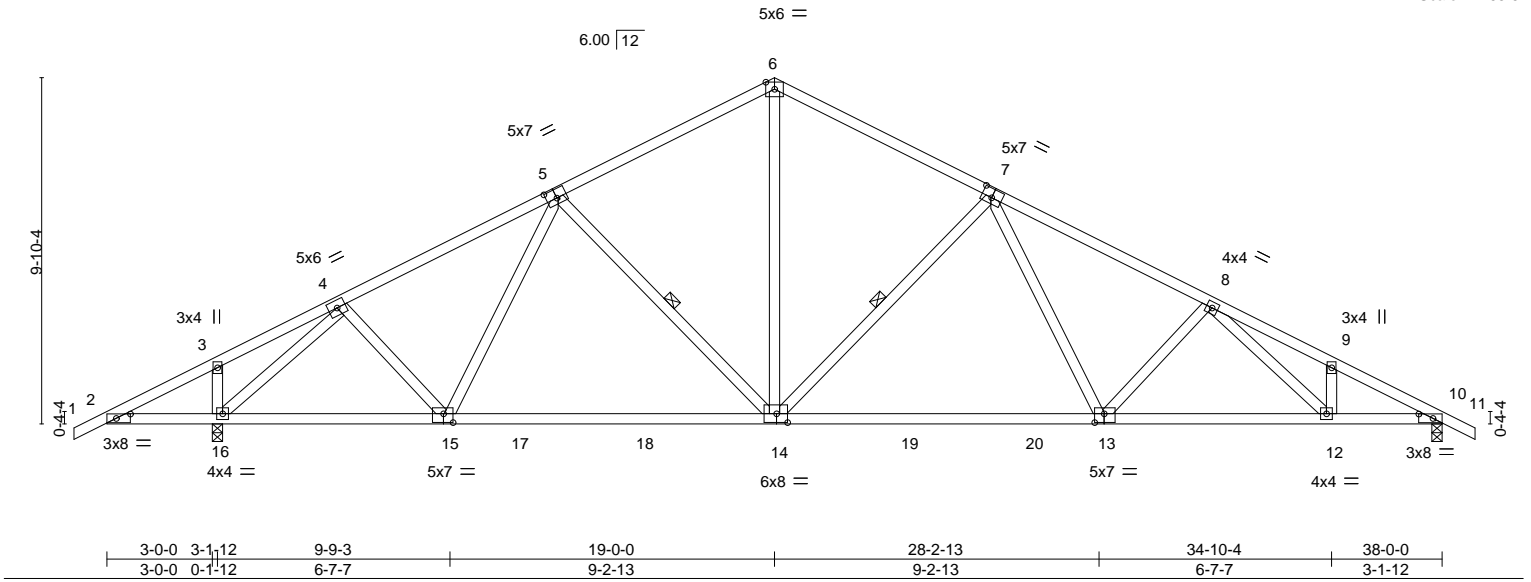
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:38:46 2021 Page 1

ID: ?RrLVUNcBotMPeFP6cfGVkyElz\_-PIQ5rEZ6fyBdCtbaUPcWd70cPLvpW89WTLFT0yAar7

0-11-4	3-1-12	6-8-3	12-10-2	19-0-0	25-1-14	31-3-13	34-10-4	38-0-0	38-11-4
0-11-4	3-1-12	3-6-7	6-1-14	6-1-14	6-1-14	6-1-14	3-6-7	3-1-12	0-11-4

Scale = 1:65.6



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSL.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.52	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.94	Vert(LL) -0.20 13-14 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.99	Vert(CT) -0.40 13-14 >999 240		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Horz(CT) 0.08 10 n/a n/a		
			Wind(LL) 0.09 13 >999 240	Weight: 213 lb	FT = 5%

<b>LUMBER-</b>	<b>BRACING-</b>	[MCT]
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-4-11 oc purlins.	
BOT CHORD 2x4 SP No.2D *Except	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.	
10-13: 2x4 SP 2250F 1.9E or 2x4 SPF 2100F 1.8E	WEBS 1 Row at midpt 5-14, 7-14	
2-15: 2x4 SP No.2 or 2x4 SPF No.2		
WEBS 2x4 SP No.3 or 2x4 SPF Stud		

<b>REACTIONS.</b>	(size) 10=0-3-8, 16=0-3-8
	Max Horz 16=171(LC 10)
	Max Uplift 10=212(LC 11), 16=237(LC 10)
	Max Grav 10=1437(LC 1), 16=1712(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-111/370, 3-4=-55/371, 4-5=-1644/226, 5-6=-1481/271, 6-7=-1486/249, 7-8=-2237/335, 8-9=-2565/393, 9-10=-2643/335
BOT CHORD	2-16=-285/136, 15-16=-218/1188, 14-15=-169/1455, 13-14=-60/1715, 12-13=-210/2167, 10-12=-239/2280
WEBS	4-15=0/393, 5-14=-362/222, 6-14=-115/960, 7-14=-691/274, 7-13=-50/514, 8-13=-355/194, 4-16=-2001/255

- NOTES-** (6-8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=212, 16=237.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ENGINEERING BY**  
**TRENCO**  
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818 Soundside Road  
 Edenton, NC 27932

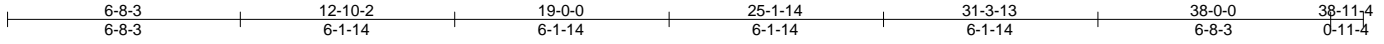


Job ORDERS	Truss SE-18454	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194687
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 20:38:48 2021 Page 1

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Scale = 1:66.2

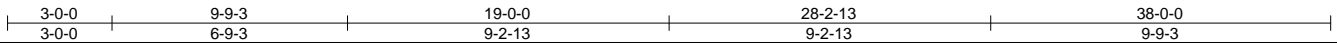
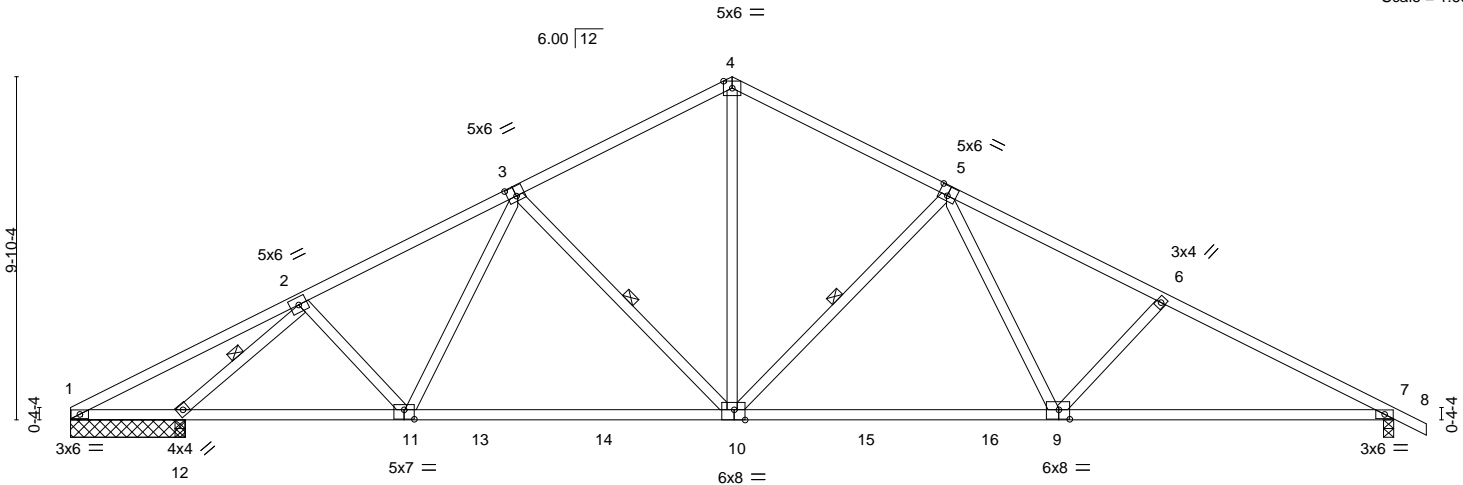


Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [9:0-3-12,0-3-4], [10:0-3-12,Edge], [11:0-3-8,0-3-4]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	-0.24	9-10	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.45	7-9	>920		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.09	7	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S	Wind(LL)	0.10	7-9	>999		
								Weight: 201 lb	FT = 5%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
 7-9: 2x4 SP No.2D  
 WEBS 2x4 SP No.3 or 2x4 SPF Stud

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
 WEBS 1 Row at midpt 3-10, 5-10, 2-12

**REACTIONS.**

All bearings 3-3-8 except (jt=length) 7=0-3-8.  
 (lb) - Max Horz 1=178(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) except 7=-214(LC 11), 1=-168(LC 26), 12=-219(LC 10)  
 Max Grav All reactions 250 lb or less at joint(s) 1 except 7=1436(LC 1), 12=1785(LC 1), 12=1785(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-133/701, 2-3=-1658/251, 3-4=-1475/277, 4-5=-1481/254, 5-6=-2261/343,  
 6-7=-2513/368  
 BOT CHORD 1-12=-540/196, 11-12=-259/1183, 10-11=-175/1446, 9-10=-62/1714, 7-9=-233/2179  
 WEBS 2-11=0/385, 3-10=-372/222, 4-10=-116/944, 5-10=-694/267, 5-9=-56/552, 6-9=-350/224,  
 2-12=-2367/367

**NOTES-** (6-8)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 214 lb uplift at joint 7, 168 lb uplift at joint 1 and 219 lb uplift at joint 12.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
- Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932



Job ORDERS	Truss SE-18455- <b>Cond1</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194688
Job Reference (optional)						

NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 20:38:51 2021 Page 1

ID:?RrLVUNcBotMPeFP6cfGVKyElz\_-IGD\_uydFUCaUjzmZN1?ndhqsRQ4hUuwugl208EyAar2  
 25-1-14 31-3-13 38-0-0 38-11-4  
 6-1-14 6-1-14 6-8-3 0-11-4

Scale = 1:65.0

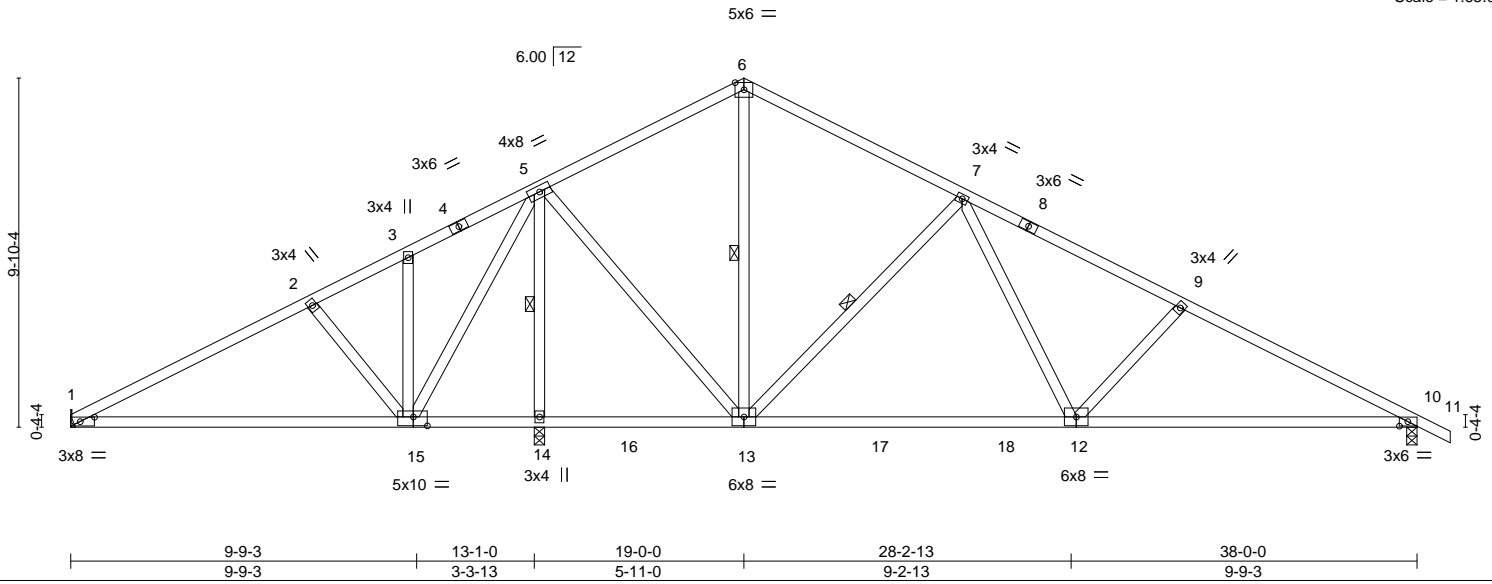


Plate Offsets (X,Y)--	[1:0-4-13,0-1-8], [10:0-2-13,0-1-8], [15:0-4-12,0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSL.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.24 1-15 >654 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.51 1-15 >311 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.57	Horz(CT) 0.02 10 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.07 10-12 >999 240		
				Weight: 210 lb	FT = 5%

<b>LUMBER-</b>	<b>BRACING-</b>	[MCT]
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-14 oc purlins.	
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 10-12: 2x4 SP No.1, 12-13: 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.	
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 6-13, 7-13, 5-14	

**REACTIONS.** (size) 10=0-3-8, 1=Mechanical, 14=0-3-8  
 Max Horz 1=178(LC 11)  
 Max Uplift 10=178(LC 11), 1=43(LC 10), 14=234(LC 10)  
 Max Grav 10=936(LC 1), 1=379(LC 23), 14=1842(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-359/138, 5-6=-360/200, 6-7=-366/176, 7-9=-1176/263, 9-10=-1432/289  
 BOT CHORD 1-15=-122/270, 14-15=-398/234, 13-14=-398/234, 12-13=0/732, 10-12=-163/1220  
 WEBS 2-15=-385/222, 5-15=-115/591, 5-13=-58/984, 7-13=-710/266, 7-12=-53/581,  
 9-12=-364/226, 5-14=-1800/253

- NOTES-** (7-9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 10, 43 lb uplift at joint 1 and 234 lb uplift at joint 14.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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**ENGINEERING BY**  
**TRENCO**  
 A MITEK Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

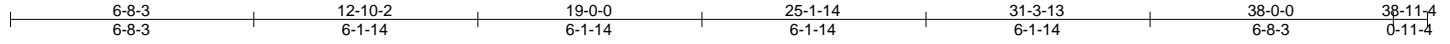


Job ORDERS	Truss SE-18455- <b>Cond2</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49194688
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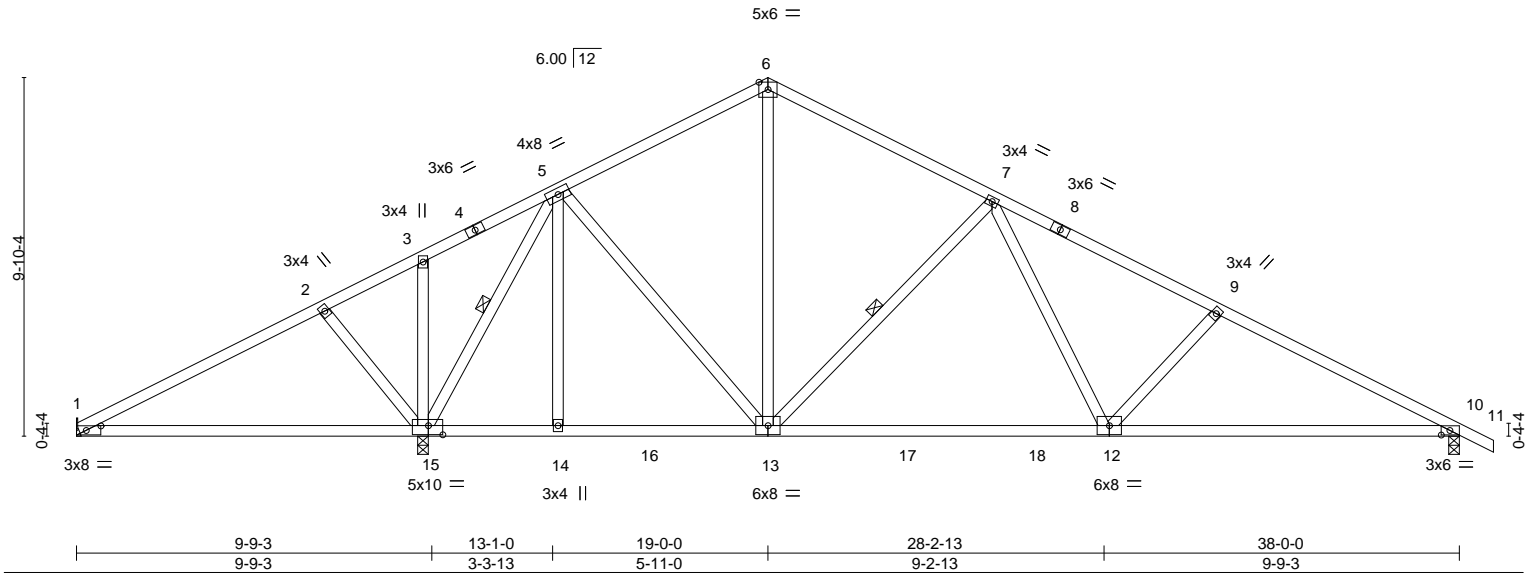
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:38:51 2021 Page 1

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Scale = 1:63.3



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSL.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.70	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) -0.23 1-15 >501 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.53	Vert(CT) -0.47 1-15 >243 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 10 n/a n/a		
	Code IBC2021/TP12014		Wind(LL) 0.08 10-12 >999 240	Weight: 210 lb	FT = 5%

<b>LUMBER-</b>	<b>BRACING-</b>	[MCT]
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins.	
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 10-12: 2x4 SP No.1, 12-13: 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-15.	
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 5-15, 7-13	

**REACTIONS.** (size) 15=0-3-8, 10=0-3-8, 1=Mechanical  
 Max Horz 1=178(LC 11)  
 Max Uplift 15=250(LC 10), 10=192(LC 11), 1=26(LC 24)  
 Max Grav 15=1863(LC 1), 10=1104(LC 1), 1=205(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-59/377, 2-3=-76/524, 3-5=-41/602, 5-6=-731/229, 6-7=-740/206, 7-9=-1542/292,  
 9-10=-1796/318  
 BOT CHORD 1-15=-301/192, 14-15=0/307, 13-14=0/307, 12-13=-14/1062, 10-12=-189/1543  
 WEBS 2-15=-378/221, 5-15=-1472/162, 5-13=-24/559, 6-13=-74/330, 7-13=-705/265,  
 7-12=-52/575, 9-12=-358/225

- NOTES-** (7-9)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 250 lb uplift at joint 15, 192 lb uplift at joint 10 and 26 lb uplift at joint 1.
  - 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - 8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - 9) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

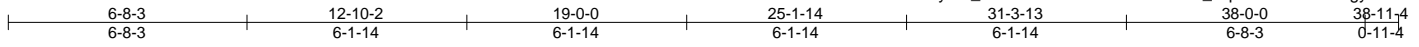
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job ORDERS	Truss SE-18455- <b>Cond3</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194688
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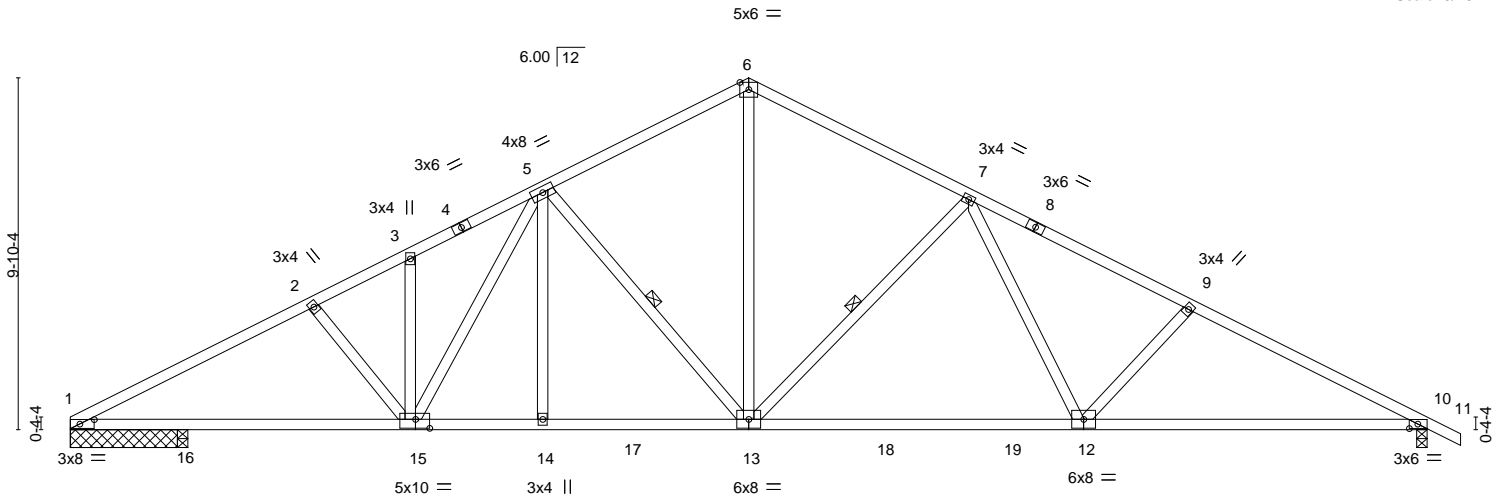
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8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 20:38:52 2021 Page 1

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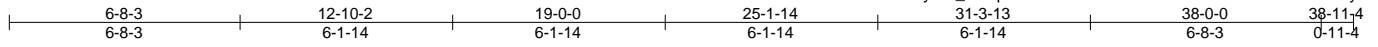
Scale: 3/16"=1'



Job ORDERS	Truss SE-18456	Truss Type COMN	Qty 1	Ply 1	Plates added	155156609
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NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Tue Nov 8 10:21:37 2022 Page 1  
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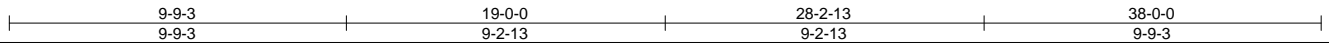
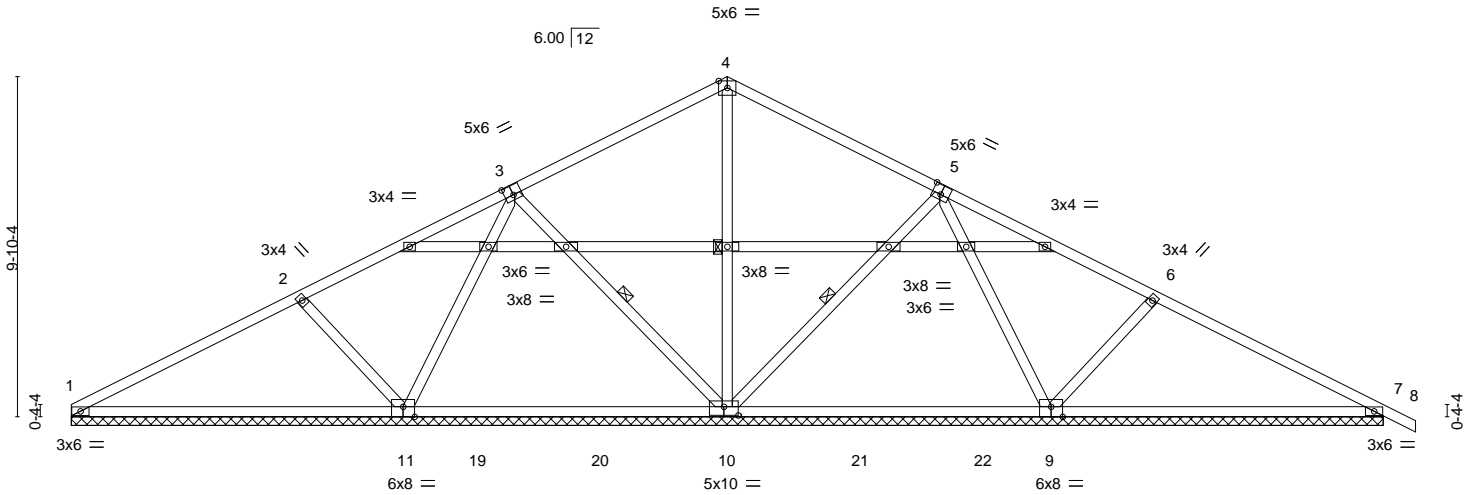


Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [9:0-4-0,Edge], [10:0-5-0,0-3-0], [11:0-4-0,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.59	Vert(LL)	0.03	8	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	0.07	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S						
								Weight: 221 lb	FT = 5%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
WEBS 2x4 SP No.3 or 2x4 SPF Stud

**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, Except:  
6-0-0 oc bracing: 10-11.  
WEBS 1 Row at midpt 3-10, 4-10, 5-10

**REACTIONS.** All bearings 38-0-0.  
(lb) - Max Horz 1=178(LC 15)  
Max Uplift All uplift 100 lb or less at joint(s) 10, 7, 1 except 11=175(LC 10), 9=158(LC 11)  
Max Grav All reactions 250 lb or less at joint(s) except 11=834(LC 23), 10=764(LC 23), 9=837(LC 24), 7=380(LC 24), 1=320(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-11=402/239, 3-11=359/131, 4-10=386/50, 5-9=364/116, 6-9=397/233

- NOTES-** (7-9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7, 1 except (jt=lb) 11=175, 9=158.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



November 9, 2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



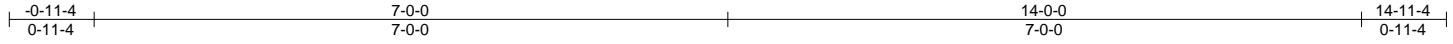
818 Soundside Road  
Edenton, NC 27932



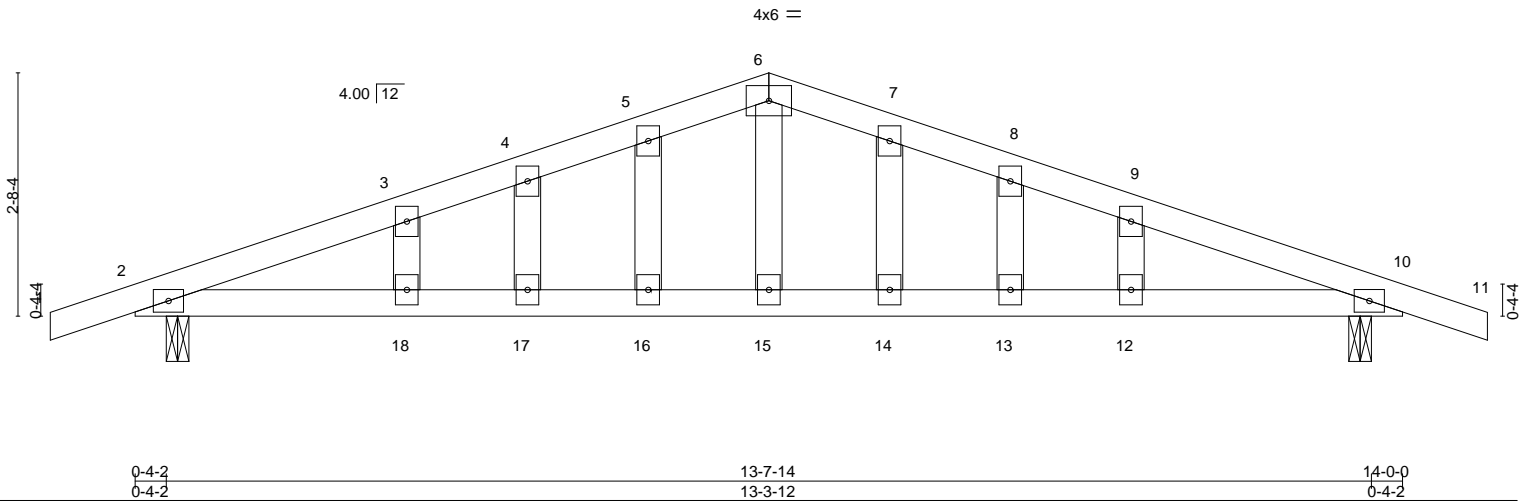
Job ORDERS	Truss SE-18591	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194693
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:45:06 2021 Page 1  
ID:TfhWPze26pZ0d7TmAocjK4zu5rq-GPNlbAATAQqGCbwerlDkKms\_cb4Era55vbOMp?yAalB



Scale = 1:25.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.72	Vert(LL) -0.10 12-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Vert(CT) -0.17 12-13 >975 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 10 n/a n/a		
	Code IBC2021/TPI2014		Wind(LL) 0.09 17-18 >999 240	Weight: 60 lb	FT = 5%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 OTHERS 2x4 SP No.3 or 2x4 SPF Stud

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-3-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-0, 10=0-3-0  
 Max Horz 2=-45(LC 15)  
 Max Uplift 2=-129(LC 6), 10=-129(LC 7)  
 Max Grav 2=614(LC 1), 10=614(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1039/115, 3-4=-989/132, 4-5=-970/141, 5-6=-967/155, 6-7=-967/155,  
 7-8=-969/140, 8-9=-989/132, 9-10=-1039/115  
 BOT CHORD 2-18=-82/933, 17-18=-82/933, 16-17=-82/933, 15-16=-82/933, 14-15=-82/933,  
 13-14=-82/933, 12-13=-82/933, 10-12=-82/933  
 WEBS 6-15=-43/375

- NOTES-** (9-11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 2 and 129 lb uplift at joint 10.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

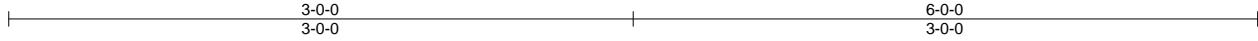


818 Soundside Road  
 Edenton, NC 27932

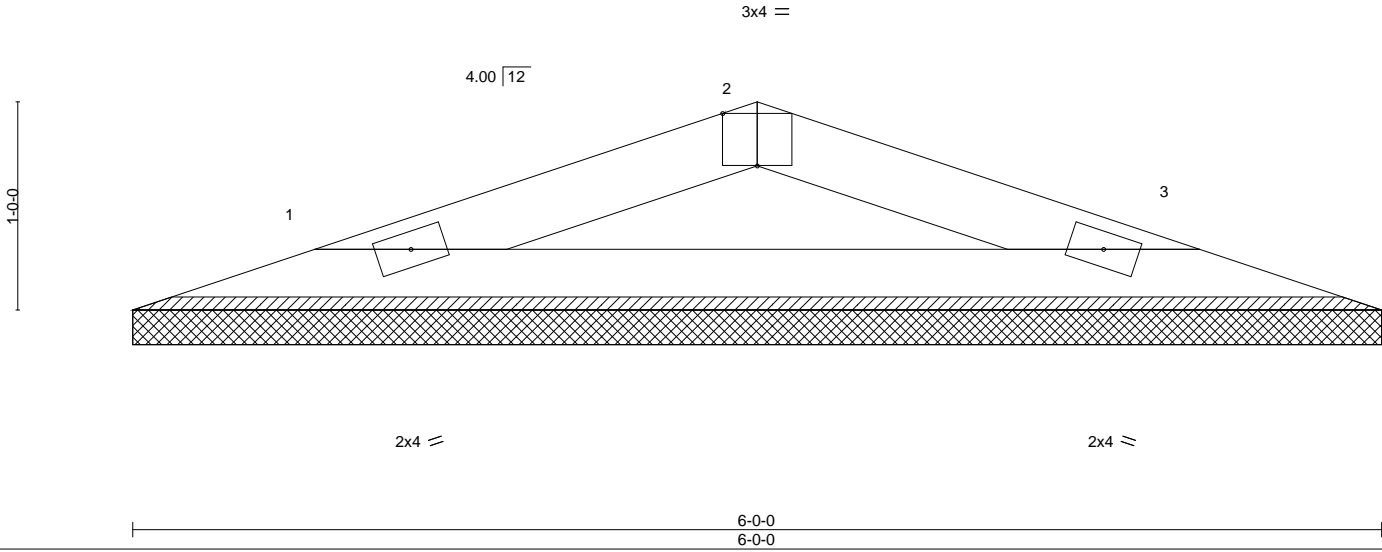
Job	Truss	Truss Type	Qty	Ply	02_Valley	147779321
ORDERS	VT-95510	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 05:29:14 2021 Page 1  
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Scale = 1:11.1



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	30.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144	
(Roof Snow=30.0)		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 IBC2021/TPI2014		Matrix-P									
BCDL	10.0										Weight: 16 lb	FT = 5%	

**LUMBER-**  
TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud

**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.

**REACTIONS.** (size) 1=6-0-0, 3=6-0-0  
Max Horz 1=-16(LC 13)  
Max Uplift 1=-51(LC 8), 3=-51(LC 9)  
Max Grav 1=224(LC 18), 3=224(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-287/114, 2-3=-287/114  
BOT CHORD 1-3=-93/252

**NOTES-** (7-8)

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever 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; Pf=30.0 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) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- 8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.



September 16, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



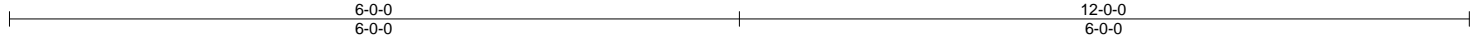
818 Soundside Road  
Edenton, NC 27932



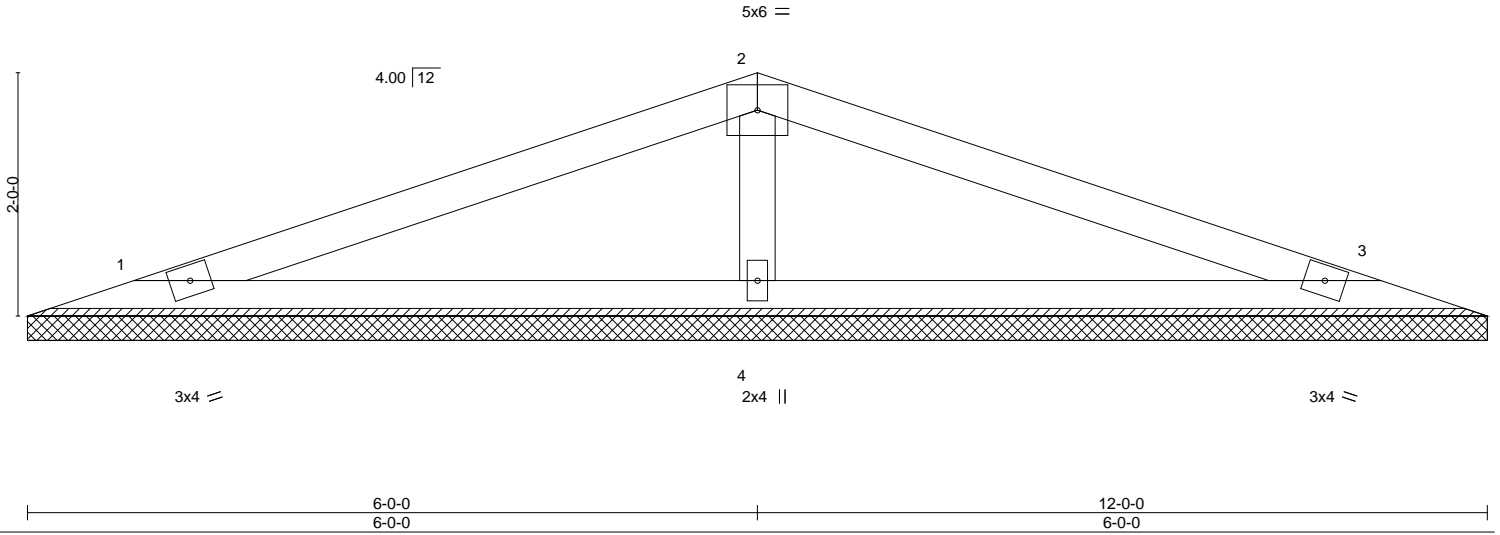
Job	Truss	Truss Type	Qty	Ply	02_Valley	147779322
ORDERS	VT-95511	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 05:29:15 2021 Page 1  
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Scale = 1:18.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.71 BC 0.43 WB 0.10 Matrix-S	Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	-	n/a	999	MT20	197/144
TCDL 10.0	Rep Stress Incr YES			3	n/a	n/a		
BCLL 0.0	Code IBC2021/TPI2014						Weight: 36 lb	FT = 5%
BCDL 10.0								

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud  
WEBS 2x4 SP No.3 or 2x4 SPF Stud

**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.

**REACTIONS.**

(size) 1=12-0-0, 3=12-0-0, 4=12-0-0  
Max Horz 1=-39(LC 13)  
Max Uplift 1=-71(LC 8), 3=-76(LC 13), 4=-105(LC 8)  
Max Grav 1=310(LC 18), 3=310(LC 19), 4=580(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-4=-426/162

**NOTES-** (7-8)

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever 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; Pf=30.0 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) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3 except (jt=lb) 4=105.
- 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- 8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.



September 16, 2021

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



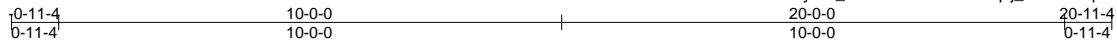
818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-19192	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194932
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 22:01:31 2021 Page 1

ID: ?RrLVUNcBotMPeFP6cfGVKyElz\_-XUw3txfUO9UinDxqxj\_wefGdmg6YdFKzDQYSDkyAZdY



4x6 =

Scale = 1:45.8

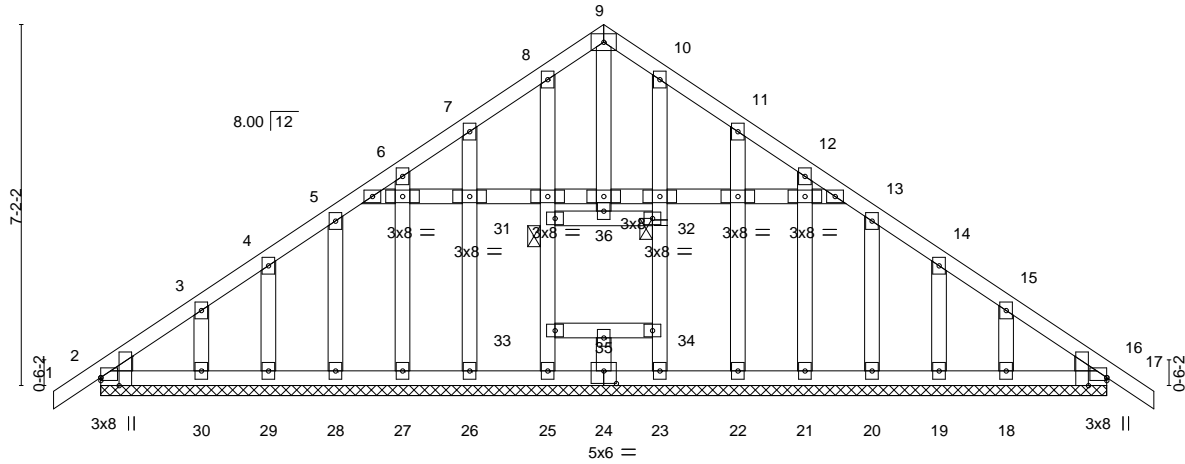


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [2:0-1-15,Edge], [16:0-0-0,0-0-11], [16:0-1-15,Edge], [24:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(LL) -0.00 16 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Vert(CT) -0.00 17 n/r 120		
BCDL 10.0	Code IBC2021/TP12014	Matrix-S	Horz(CT) 0.01 16 n/a n/a		
				Weight: 157 lb	FT = 5%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
WEBS 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
31-32,33-34,24-35,9-36: 2x4 SP No.3 or 2x4 SPF Stud  
OTHERS 2x4 SP No.3 or 2x4 SPF Stud  
WEDGE  
Left: 2x4 SP or SPF No.3 or Stud , Right: 2x4 SP or SPF No.3 or Stud

**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.  
JOINTS 1 Brace at Jt(s): 31, 32

**REACTIONS.** All bearings 20-0-0.  
(lb) - Max Horz 2=185(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 29, 30, 22, 21, 20, 19, 18  
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 25, 23, 26, 27, 28, 29, 30, 22, 21, 20, 19, 18, 24

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

- NOTES-** (10-12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28, 29, 30, 22, 21, 20, 19, 18.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

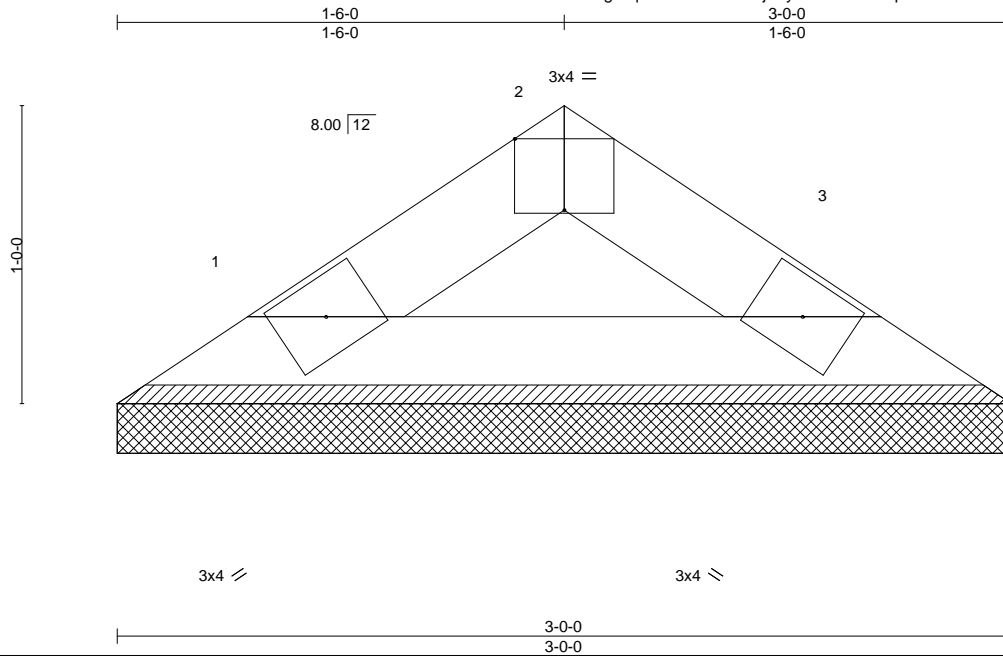


January 12, 2022

Job ORDERS	Truss VT-00861	Truss Type VCOM	Qty 1	Ply 1	02_Valley	154705066
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NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:37 2022 Page 1  
ID:lwgfHqLuldM7W6Kxo5rjJByUXn-tlOUVwpW5nlQcYixzK5McV9S1Qbd2s7Y0umzOByTqEK



Scale = 1:7.7

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL	30.0	Plate Grip DOL	2-0-0	TC	0.08	in	(loc)	l/defl	L/d	MT20	197/144
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.08	Vert(LL)	n/a	-	n/a		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Vert(CT)	n/a	-	n/a		
BCLL	0.0	Code IBC2021/TPI2014		Matrix-P		Horz(CT)	0.00	3	n/a		
BCDL	10.0									Weight: 8 lb	FT = 5%

**LUMBER-**  
TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud

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

**REACTIONS.** (size) 1=3-0-0, 3=3-0-0  
Max Horz 1=23(LC 11)  
Max Uplift 1=-22(LC 12), 3=-22(LC 13)  
Max Grav 1=108(LC 18), 3=108(LC 19)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; cantilever 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; Pf=30.0 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) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



October 13, 2022

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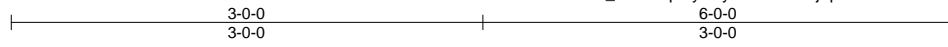
818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss VT-00862	Truss Type VCOM	Qty 1	Ply 1	02_Valley	154705067
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NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:38 2022 Page 1

ID:D6E1UAMWWxU\_8Gv8MpMysOyUXxm-LVatjFp8s4tHDiH7X2cb9ihYkpqYnJNiFYVWwdyTqEJ



3x4 =

Scale = 1:14.7

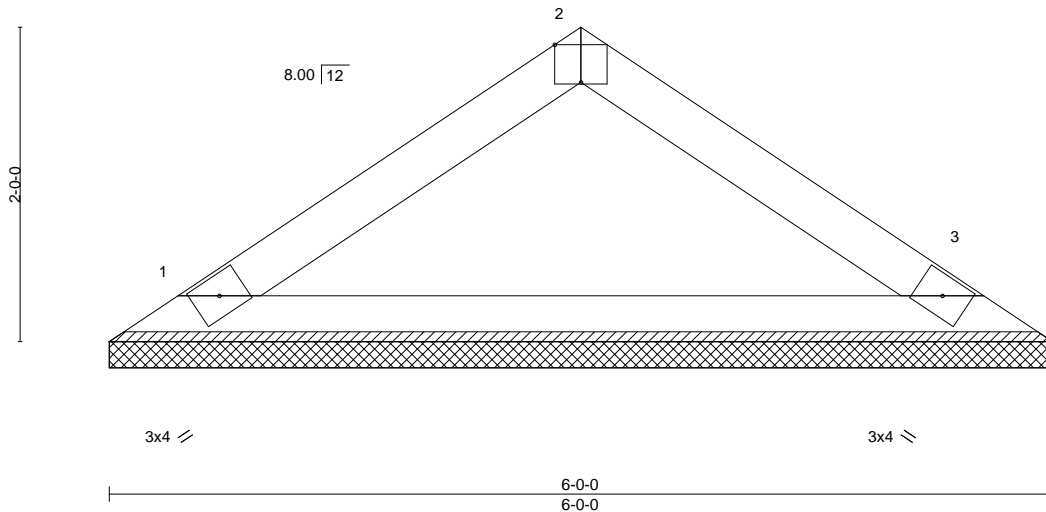


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.41 BC 0.55 WB 0.00 Matrix-P	Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00	- - 3	n/a n/a n/a	999 999 n/a	MT20	197/144
TCDL 10.0	Rep Stress Incr YES Code IBC2021/TPI2014						Weight: 18 lb	FT = 5%
BCLL 0.0								
BCDL 10.0								

**LUMBER-**  
TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud

**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.

**REACTIONS.** (size) 1=6-0-0, 3=6-0-0  
Max Horz 1=58(LC 9)  
Max Uplift 1=-54(LC 12), 3=-54(LC 13)  
Max Grav 1=292(LC 18), 3=292(LC 19)

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

- NOTES-** (7)
- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; cantilever 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; Pf=30.0 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) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



October 13, 2022

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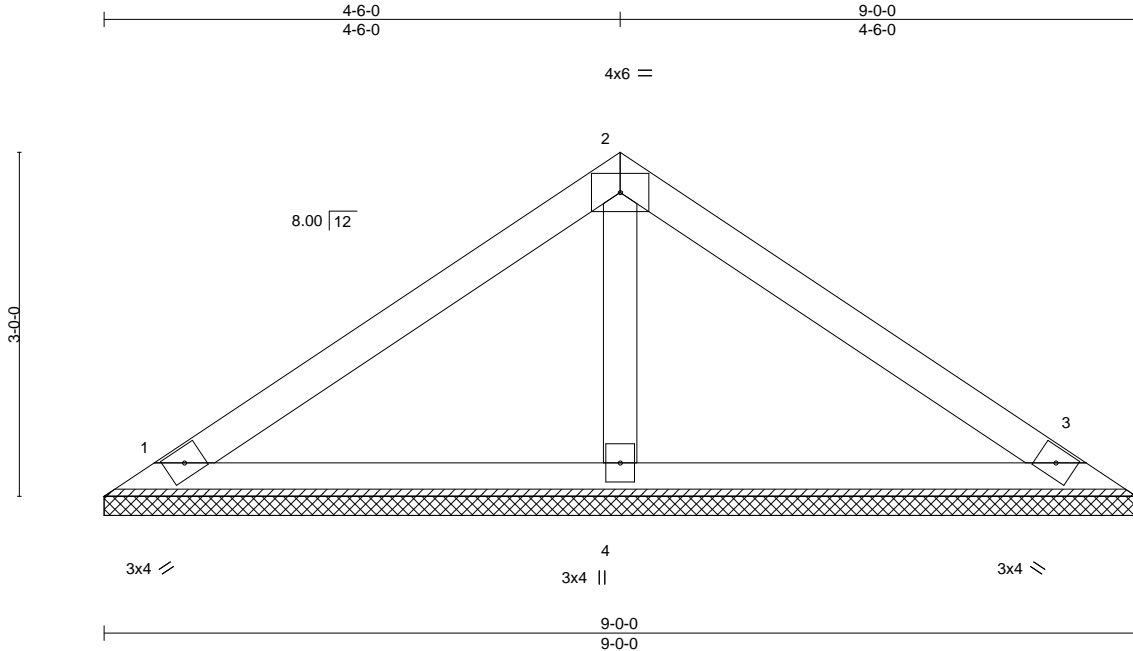


818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss VT-00863	Truss Type VCOM	Qty 1	Ply 1	02_Valley	154705068
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NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:39 2022 Page 1  
ID:hJoPIVN8HEcrmQUKwWtBOcyUXxl-ph8FwbqmdO?8rsrK5I7rhwEfiDE1WlarUCF3T3yTqEI



Scale = 1:20.1

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IBC2021/TPI2014	TC 0.65 BC 0.28 WB 0.07 Matrix-S	in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	MT20	197/144
TCDL 10.0				Weight: 31 lb	FT = 5%
BCLL 0.0					
BCDL 10.0					

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud  
OTHERS 2x4 SP No.3 or 2x4 SPF Stud

**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.

**REACTIONS.** (size) 1=9-0-0, 3=9-0-0, 4=9-0-0  
Max Horz 1=-92(LC 8)  
Max Uplift 1=-73(LC 12), 3=-86(LC 13), 4=-27(LC 12)  
Max Grav 1=312(LC 18), 3=312(LC 19), 4=364(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-4=-264/218

- NOTES-** (7)
- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; cantilever 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; Pf=30.0 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) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.



October 13, 2022

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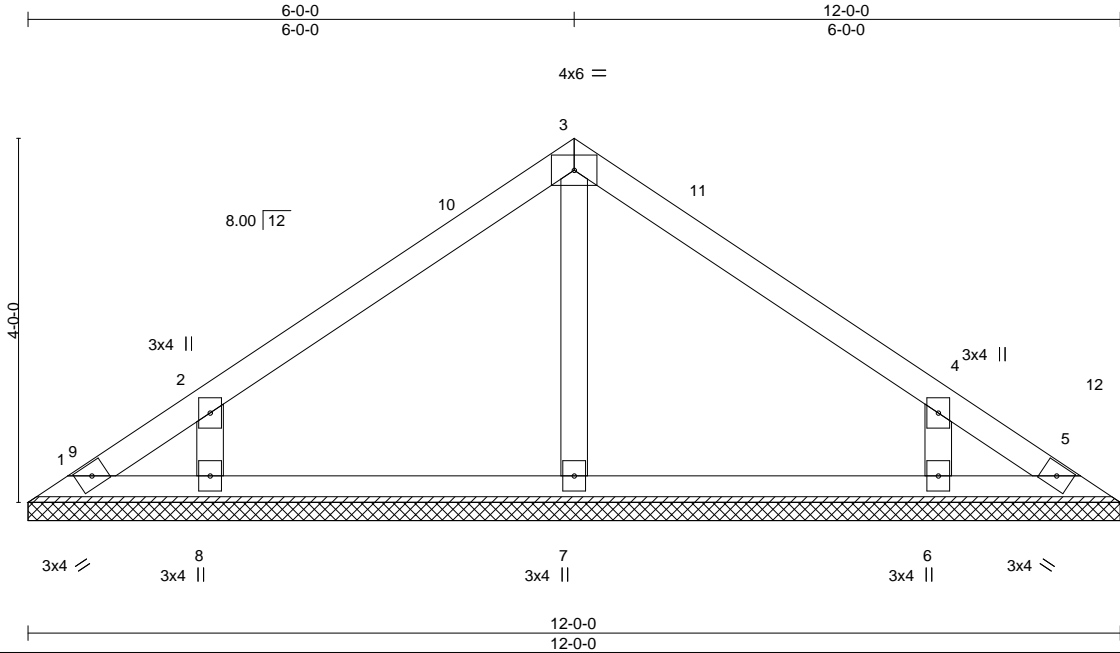
818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss VT-00864	Truss Type VCOM	Qty 1	Ply 1	02_Valley	154705069
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NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:40 2022 Page 1

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Scale = 1:25.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IBC2021/TPI2014	TC 0.64 BC 0.21 WB 0.13 Matrix-S	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	MT20	197/144
TCDL 10.0				Weight: 45 lb	FT = 5%
BCLL 0.0					
BCDL 10.0					

**LUMBER-**  
TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud  
OTHERS 2x4 SP No.3 or 2x4 SPF Stud

**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.

**REACTIONS.** All bearings 12-0-0.  
(lb) - Max Horz 1=-127(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-210(LC 12), 6=-209(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=341(LC 19), 8=561(LC 18), 6=561(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-7=-255/83, 2-8=-507/413, 4-6=-507/413

- NOTES-** (7)
- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-5-12 to 4-10-8, Corner(3R) 4-10-8 to 7-1-8, Corner(3E) 7-1-8 to 11-6-4 zone; cantilever 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; Pf=30.0 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) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) 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=210, 6=209.



October 13, 2022

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY  
**TRENCO**  
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818 Soundside Road  
Edenton, NC 27932



Job ORDERS	Truss VT-00865	Truss Type VCOM	Qty 1	Ply 1	02_Valley	154705070
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NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:41 2022 Page 1  
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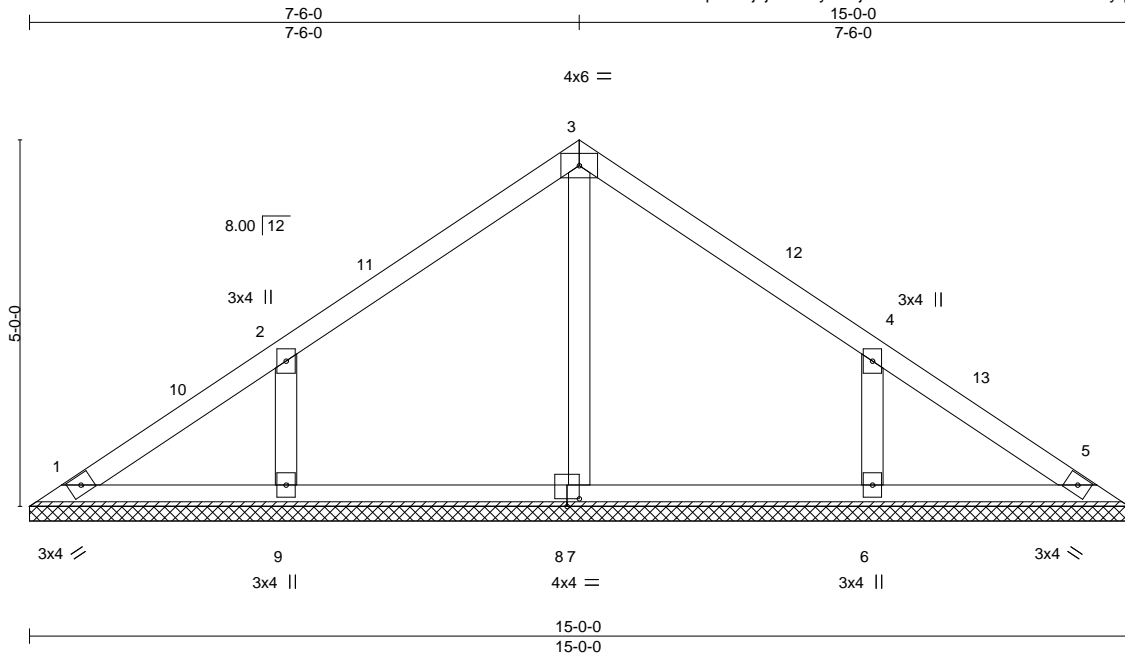


Plate Offsets (X,Y)-- [8:0-2-0,0-1-4]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.65 BC 0.19 WB 0.12 Matrix-S	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	MT20	197/144
TCDL 10.0	Rep Stress Incr YES			Weight: 59 lb	FT = 5%
BCLL 0.0	Code IBC2021/TPI2014				
BCDL 10.0					

**LUMBER-**  
TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud  
OTHERS 2x4 SP No.3 or 2x4 SPF Stud

**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.

**REACTIONS.** All bearings 15-0-0.  
(lb) - Max Horz 1=-161(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-230(LC 12), 6=-230(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=334(LC 18), 9=592(LC 18), 6=592(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-7=-254/22, 2-9=-512/383, 4-6=-512/383

- NOTES-** (7)
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-5-12 to 4-10-8, Corner(3R) 4-10-8 to 10-1-8, Corner(3E) 10-1-8 to 14-6-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=230, 6=230.



October 13, 2022

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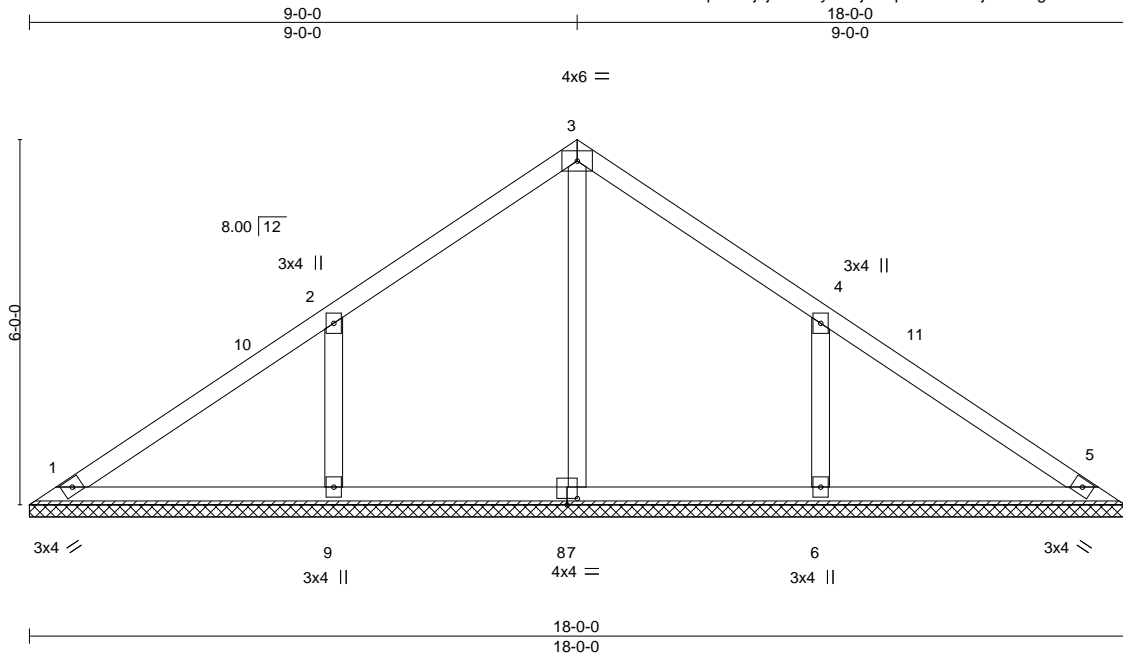
818 Soundside Road  
Edenton, NC 27932



Job ORDERS	Truss VT-00866	Truss Type VCOM	Qty 1	Ply 1	02_Valley	154705071
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NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:42 2022 Page 1  
ID:dhwA6BPOpssY?jdj1xvfT1yUXxj-DGpNZdsfwJNjiKaumtgYJYs8ERGlj5tHAATk4OyTqEF



Scale = 1:37.9

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.82 BC 0.28 WB 0.16 Matrix-S	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	MT20	197/144
TCDL 10.0	Rep Stress Incr YES				
BCLL 0.0	Code IBC2021/TPI2014				
BCDL 10.0				Weight: 74 lb	FT = 5%

**LUMBER-**  
TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud  
OTHERS 2x4 SP No.3 or 2x4 SPF Stud

**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.

**REACTIONS.** All bearings 18-0-0.  
(lb) - Max Horz 1=195(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=281(LC 12), 6=281(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=300(LC 18), 9=686(LC 18), 6=686(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-9=-576/406, 4-6=-576/406

- NOTES-** (7)
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-5-12 to 5-0-0, Corner(3R) 5-0-0 to 13-0-0, Corner(3E) 13-0-0 to 17-6-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=281, 6=281.



October 13, 2022

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Edenton, NC 27932