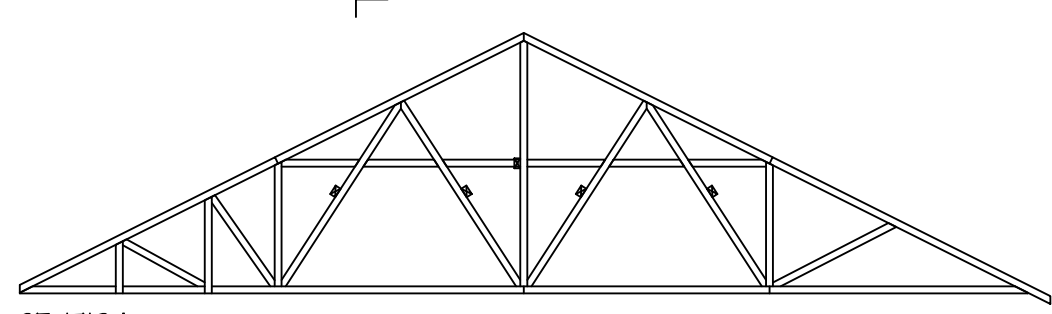
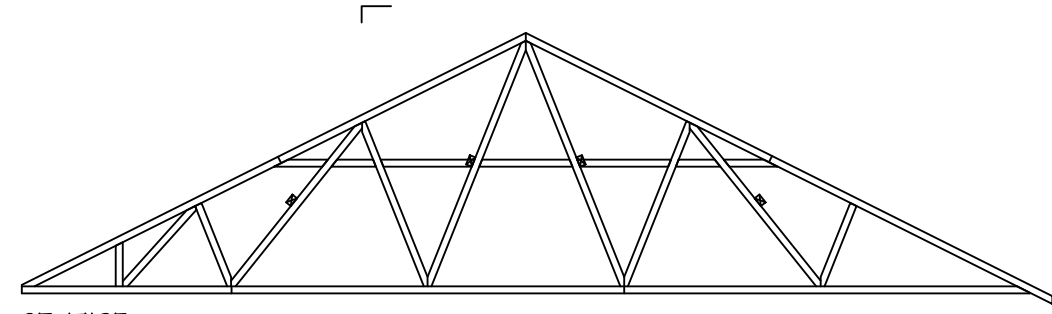


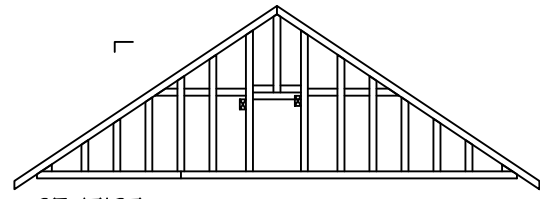
SE-17122



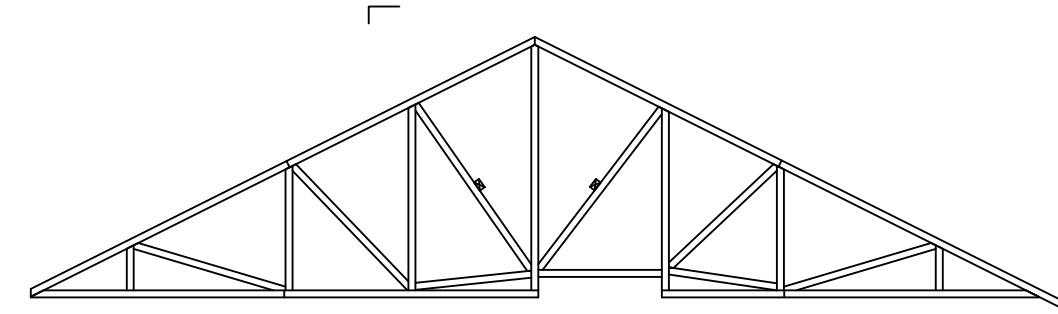
SE-17124



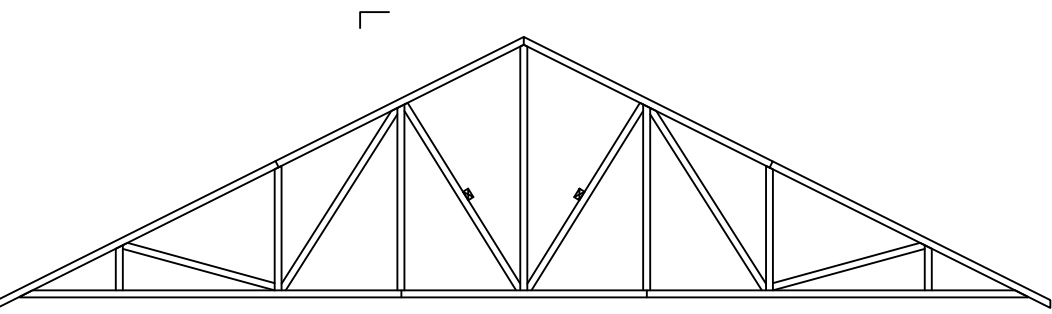
SE-17125



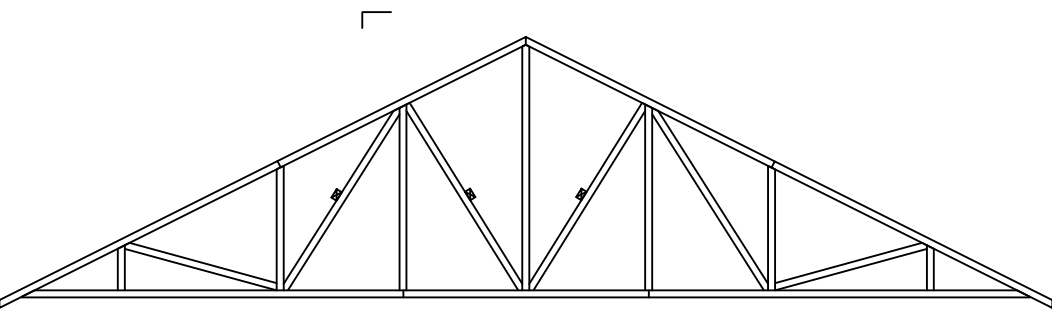
SE-17127



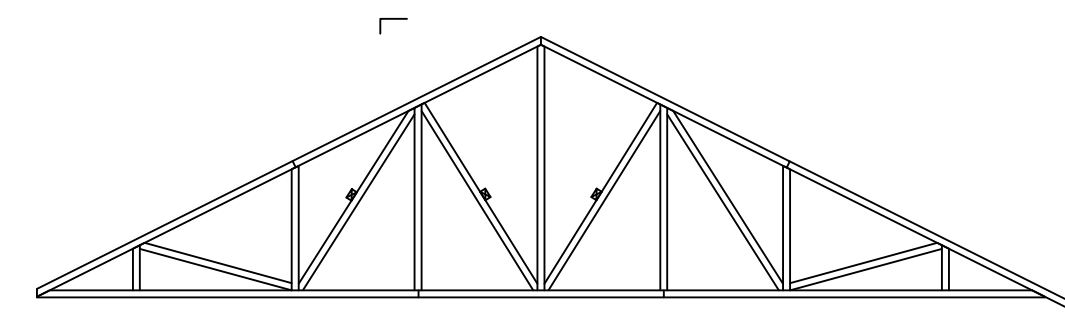
SE-18665



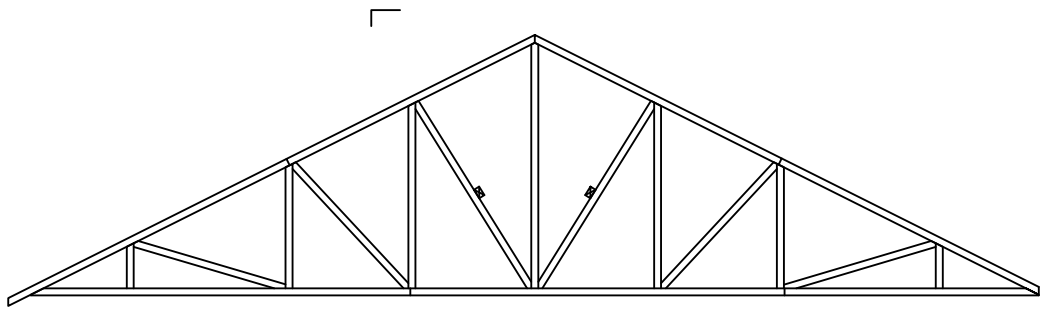
SE-20632



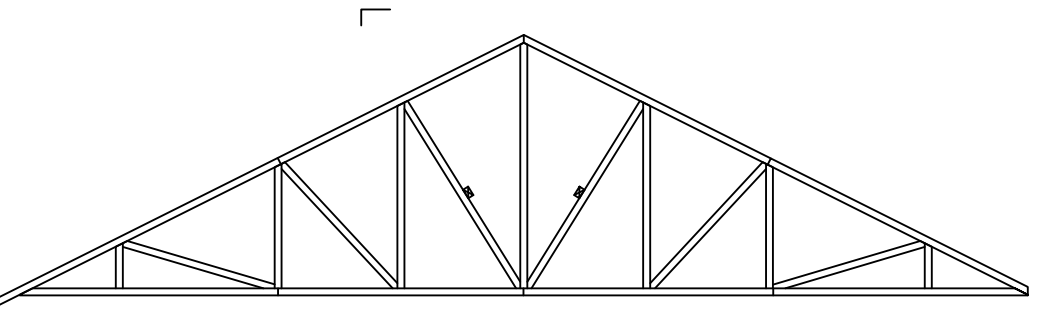
SE-20633



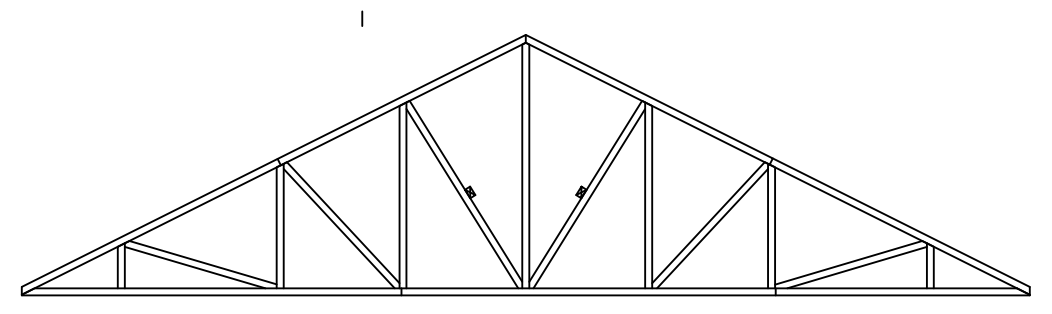
SE-20635



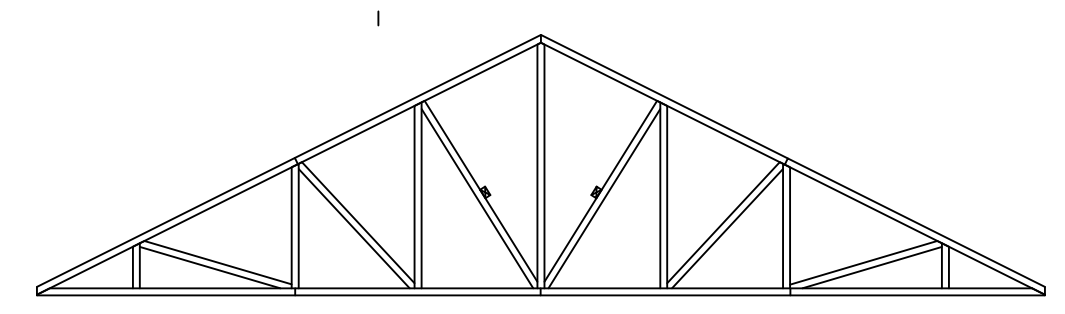
SE-20636



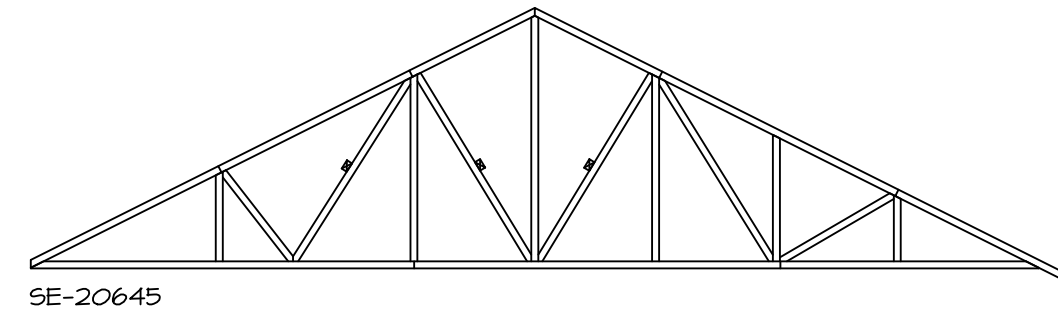
SE-20637



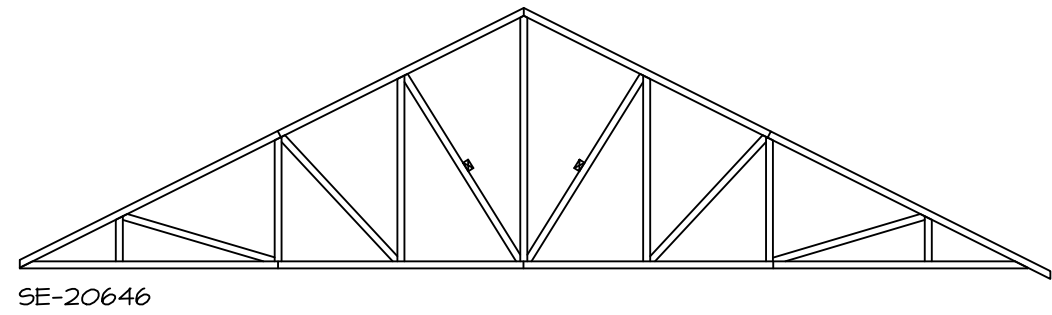
SE-20638



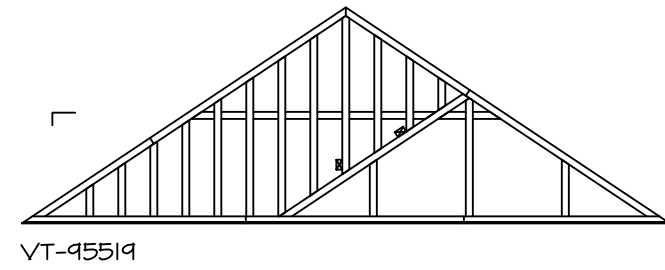
SE-20644



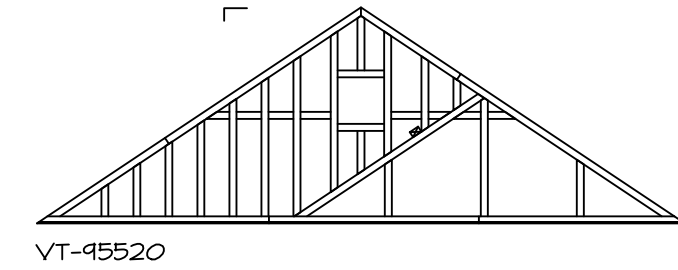
SE-20645



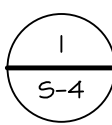
SE-20646



VT-45514



VT-45520



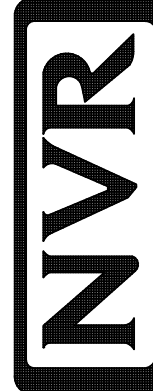
## TRUSS BRACING DETAILS

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 SPT#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 "I" BRACE, DETAIL **3/RF-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/RF-1c**) TO BE UTILIZED FOR TRUSSES 6'-4" IN HEIGHT OR GREATER.
- PARTIALLY SHEATHED GABLES, SEE (**5/RF-1c**) FOR "L" BRACING WHEN REQUIRED.
- LATERAL BRACING CAN BE APPLIED TO EITHER SIDE OF THE WEB MEMBER IDENTIFIED IN THE DRAWINGS.
- SHEATHING (OSB OR GYPSUM) REPLACES LATERAL AND DIAGONAL TRUSS BRACING.

© NVR, Inc., expressly reserves its copyright and other property rights in these plans. These plans are not to be reproduced, stored in a retrieval system, or transmitted in any form or manner whatsoever, nor are they to be used for any purpose other than that first obtaining the expressed written consent of NVR, Inc.



NVR, Inc., Suite 100  
5285 Westview Drive  
Frederick, MD 21703

SET NO. 60M00  
VERSION 01  
RELEASE NO. ----  
DRAWN BY BN  
DATE: 2/02/20  
OPTION

MODEL  
**GRAND CAYMAN**  
DRAWING TITLE  
TRUSS BRACING DETAILS

SHEET NO.  
**S-4**

21

DIV-COMM-LOT-UNIT  
**RLH-VK-0111**

COMM-LOT  
KIPLING VILLAGE - 0111  
STREET ADDRESS  
20 SAINTSBURY DRIVE  
CITY  
FUGUAY VARINA  
STATE  
NC  
APT. NO.  
----  
ZIP  
27526



Job	Truss	Truss Type	Qty	Ply	10_Southeast	I49147380
ORDERS	SE-14530	COMN	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:09 2021 Page 1  
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-ZyR6O84R30qr65gSzJU8?aMQWGCeErSLQKGtZrEYBF9C

0-11-4 5-1-1 10-0-0 14-10-15 20-0-0 20-11-4  
0-11-4 5-1-1 4-10-15 4-10-15 5-1-1 0-11-4

4x6 ||

Scale = 1:44.6

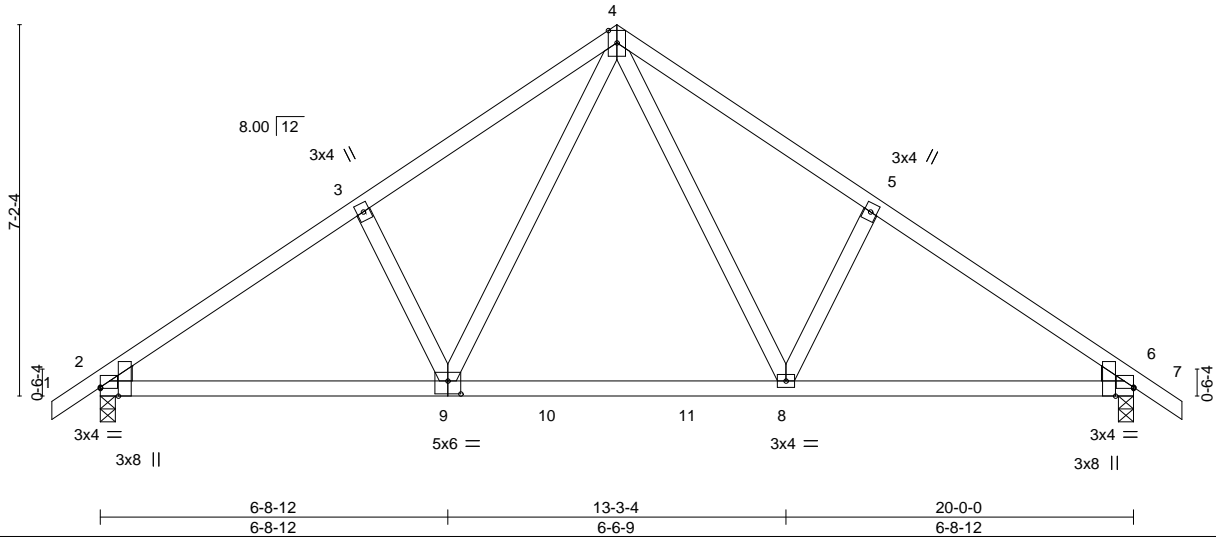


Plate Offsets (X,Y)-- [2:0-0-0,0-0-4], [2:0-2-1,Edge], [6:0-2-1,Edge], [6:0-0-0,0-0-4], [9:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
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

#### REACTIONS.

(size) 2=0-3-8, 6=0-3-8  
Max Horz 2=185(LC 8)  
Max Uplift 2=116(LC 10), 6=116(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=-1111/140, 3-4=-977/207, 4-5=-977/207, 5-6=-1111/140  
BOT CHORD 2-9=-145/938, 8-9=-2/615, 6-8=-38/840  
WEBS 3-9=-269/210, 4-9=-122/481, 4-8=-122/481, 5-8=-269/210

#### 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 100 lb uplift at joint(s) except (jt=lb) 2=116, 6=116.
- 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

**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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	NC_VT-95002	I59511688
ORDERS	VT-95002	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Jul 13 10:35:19 2023 Page 1

ID:Na07x\_qDLMc?dzdmB8gxPuyIbLG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

12-0-0

12-0-0

24-0-0

12-0-0

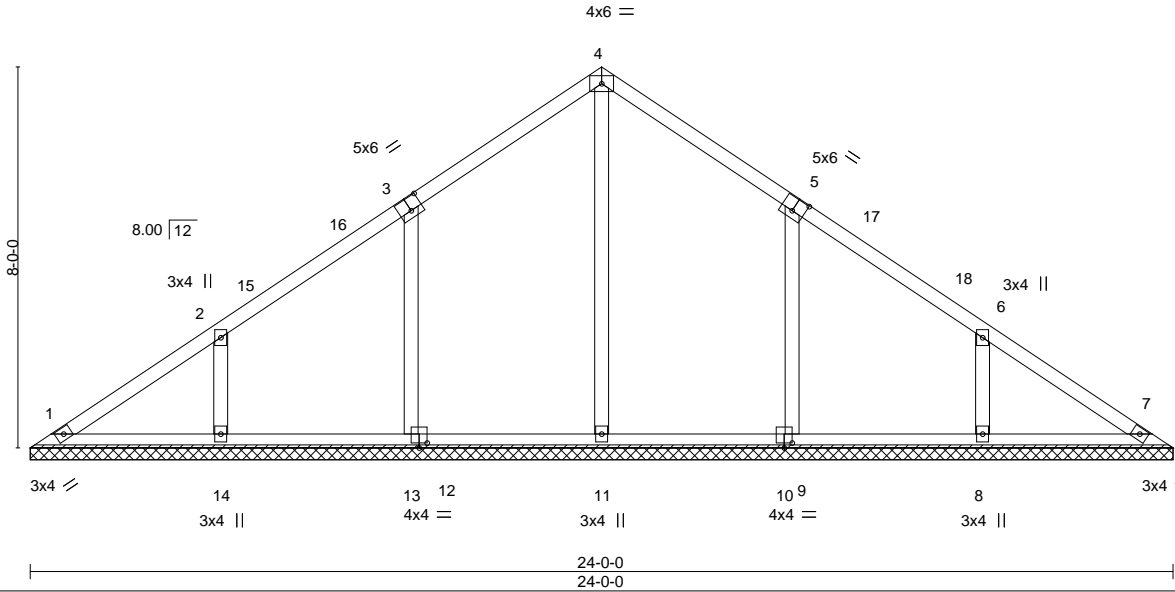


Plate Offsets (X,Y)--		[3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [10:0-2-0,0-1-4], [12:0-2-0,0-1-4]			
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.31	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 7 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014			Weight: 108 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 6-0-0 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.
OTHERS 2x4 SP No.3 or 2x4 SPF Stud	

**REACTIONS.** All bearings 24-0-0.

(lb) - Max Horz 1=-264(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 13=-229(LC 12), 14=-216(LC 12), 9=-228(LC 13), 8=-217(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=338(LC 18), 13=589(LC 18), 14=433(LC 21), 9=589(LC 19), 8=433(LC 22)

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

**WEBS** 4-11=-256/0, 3-13=-512/279, 2-14=-340/278, 5-9=-512/278, 6-8=-340/278

- 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, Exterior(2N) 4-10-8 to 7-7-5, Corner(3R) 7-7-5 to 16-4-11, Exterior(2N) 16-4-11 to 19-1-8, Corner(3E) 19-1-8 to 23-6-4 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 except (jt=lb) 13=229, 14=216, 9=228, 8=217.



July 13,2023



Job ORDERS	Truss SE-17122	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49171046
---------------	-------------------	--------------------	----------	----------	--------------	-----------

NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:01:55 2021 Page 1

ID:5lb56nez?NGp7jN5pS3vTuyrxGa-a9lNS?Kr380S94h3wDLRuiqU38uca1hA50?qaDyAujA

0-11-4	5-7-12	10-9-3	15-10-9	21-0-0	26-1-7	31-2-13	36-4-4	42-0-0	42-11-4
0-11-4	5-7-12	5-1-7	5-1-7	5-1-7	5-1-7	5-1-7	5-1-7	5-7-12	0-11-4

Scale = 1:72.2

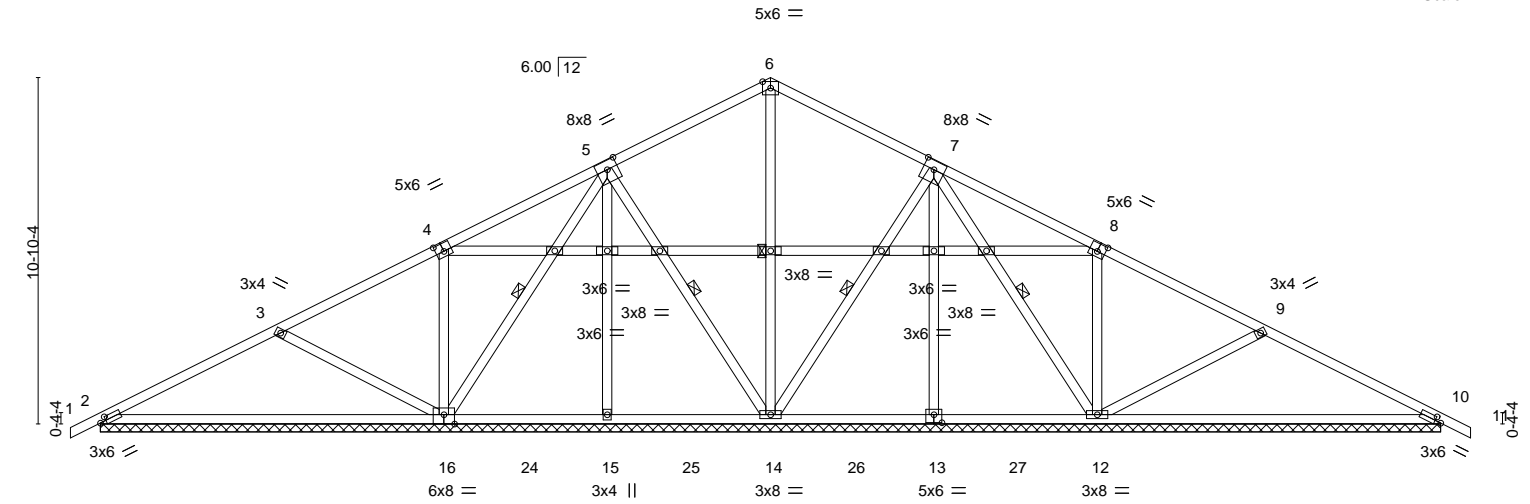


Plate Offsets (X,Y)--		[2:0-2-5,0-1-8], [4:0-3-0,0-3-0], [5:0-4-0,0-3-4], [7:0-4-0,0-3-4], [8:0-3-0,0-3-0], [10:0-2-5,0-1-8], [13:0-3-0,0-3-0], [16:0-4-0,Edge]	
<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.44	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.93	Vert(LL) 0.02 11 n/r 120
BCLL 0.0 *	Rep Stress Incr YES	WB 0.30	Vert(CT) 0.06 11 n/r 120
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Horz(CT) 0.01 10 n/a n/a
		<b>PLATES</b>	<b>GRIP</b>
		MT20	197/144
		Weight: 288 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 2-2-0 oc bracing.  
WEBS 1 Row at midpt 5-16, 5-14, 6-14, 7-14, 7-12

#### REACTIONS.

All bearings 42-0-0.

(lb) - Max Horz 2=188(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 10, 15, 13 except 16=214(LC 10), 12=217(LC 11)

Max Grav All reactions 250 lb or less at joint(s) except 2=400(LC 23), 16=867(LC 23), 14=527(LC 1), 12=867(LC 24), 10=400(LC 24), 15=330(LC 17), 13=323(LC 26)

#### FORCES.

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

TOP CHORD 2-3=-317/114, 4-5=-21/251, 9-10=-317/83

BOT CHORD 2-16=-109/281

WEBS 3-16=-413/228, 4-16=-280/183, 6-14=-333/8, 8-12=-280/182, 9-12=-413/227

#### NOTES-

(7-10)

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) Gable requires continuous bottom chord bearing.

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 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 10, 15, 13 except (jt=lb) 16=214, 12=217.

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.

10) Framing and bracing of the gable end frame shall be provided by the building designer.



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-17124	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49171048
---------------	-------------------	--------------------	----------	----------	--------------	-----------

NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:01:58 2021 Page 1

ID:5lb56nez?NGp7jN5pS3vTuyrxGa-?kRV40NkM3O10XPecLu8VKS?QLuXnOUcn\_EVBYYAj7

5-7-12	10-9-3	15-10-9	21-0-0	26-1-7	31-2-13	36-4-4	42-0-0	42-11-4
5-7-12	5-1-7	5-1-7	5-1-7	5-1-7	5-1-7	5-1-7	5-7-12	0-11-4

Scale = 1:72.3

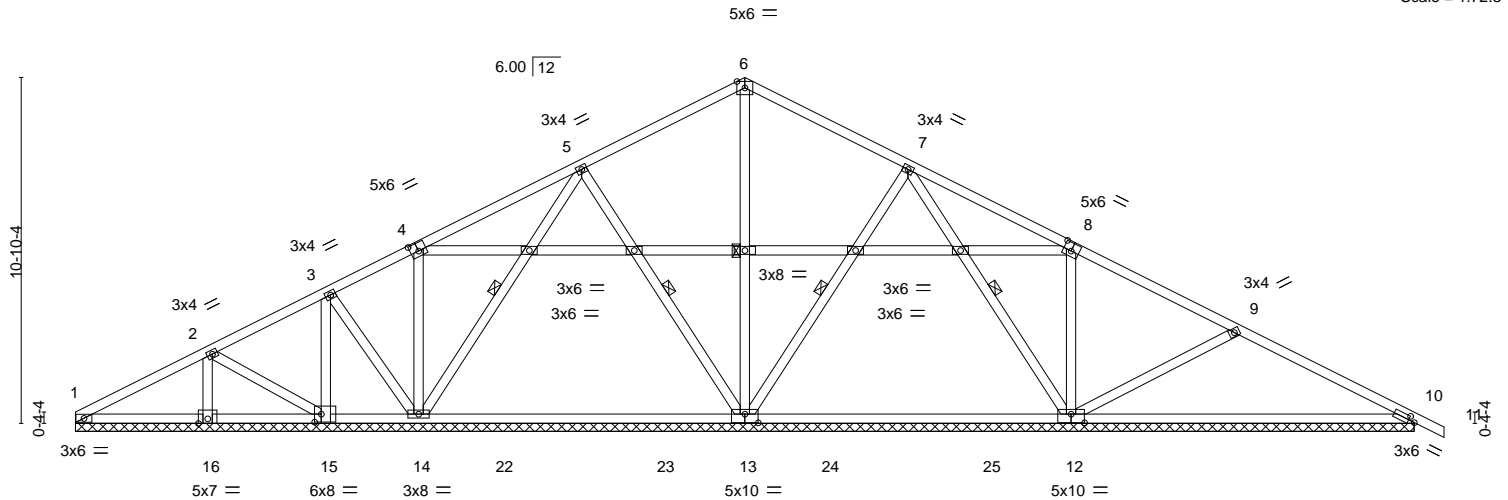


Plate Offsets (X,Y)--		[4:0-3-0,0-3-0], [8:0-3-0,0-3-0], [10:0-2-5,0-1-8], [12:0-5-0,0-3-4], [13:0-5-0,0-3-4], [15:0-2-8,0-3-0]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.43
TCDL 10.0	Lumber DOL	1.15	BC 0.98
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30
BCDL 10.0	Code	IBC2021/TPI2014	Matrix-S
		<b>DEFL.</b>	<b>PLATES</b>
		in (loc) l/defl L/d	MT20
		Vert(LL) 0.01 11 n/r 120	GRIP 197/144
		Vert(CT) 0.06 11 n/r 120	
		Horz(CT) 0.01 10 n/a n/a	
		Weight: 277 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 2-2-0 oc bracing.  
WEBS 1 Row at midpt 5-14, 5-13, 6-13, 7-13, 7-12

#### REACTIONS.

All bearings 42-0-0.

(lb) - Max Horz 1=195(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 1, 16, 13, 10, 15 except 14=145(LC 10), 12=227(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 1, 15 except 16=348(LC 23), 14=651(LC 25), 13=898(LC 2), 12=960(LC 24), 10=400(LC 24)

#### FORCES.

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

TOP CHORD 9-10=321/82

WEBS 6-13=314/0, 7-12=296/77, 8-12=291/189, 9-12=408/227, 2-16=252/104

#### NOTES-

(8-11)

- 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
- 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.
- Bearing at joint(s) 16, 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 16, 13, 10, 15 except (jt=lb) 14=145, 12=227.
- 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.
- Framing and bracing of the gable end frame shall be provided by the building designer.



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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-17126	COMN	1	1	

I49171050

Job Reference (optional)

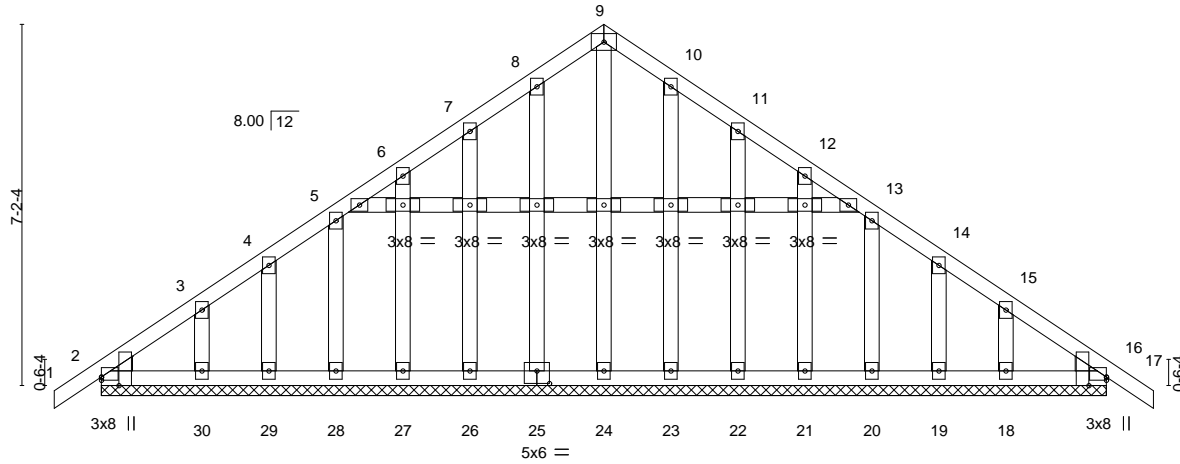
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:02:01 2021 Page 1  
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-PJ6ej2Pcf\_mct?8CHUSr7z4cQZ94\_oy3TyS9otyAuj4

0-11-4 10-0-0 20-0-0 20-11-4  
0-11-4 10-0-0 10-0-0 0-11-4

4x6 =

Scale = 1:45.9



20-0-0

20-0-0

Plate Offsets (X,Y)-- [2:0-0-0,0-0-12], [2:0-2-1,Edge], [16:0-0-0,0-0-12], [16:0-2-1,Edge], [25:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.00	16	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00	17	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT) 0.00	16	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S					Weight: 156 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  
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 20-0-0.

(lb) - Max Horz 2=185(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18

Max Grav All reactions 250 lb or less at joint(s) 2, 16, 24, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.**NOTES-** (10-13)

- 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 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, 16, 25, 26, 27, 28, 29, 30, 23, 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.
- Framing and bracing of the gable end frame shall be provided by the building designer.



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/TPI Quality Criteria, DSB-89 and BCSI Building Component

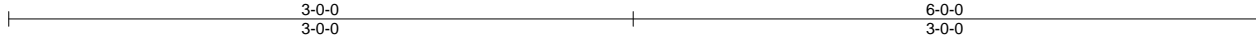
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley
ORDERS	VT-95517	VCOM	1	1	147779328

NVR, Frederick, MD - 21703,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 05:29:22 2021 Page 1  
ID:Na07x\_qDLMc?dzdmB8gxPuyIbLG-a9ylmomwE5uiA8jcEptQ1kCjt6Mg\_VTqNKDbklygS1x



Scale = 1:11.1

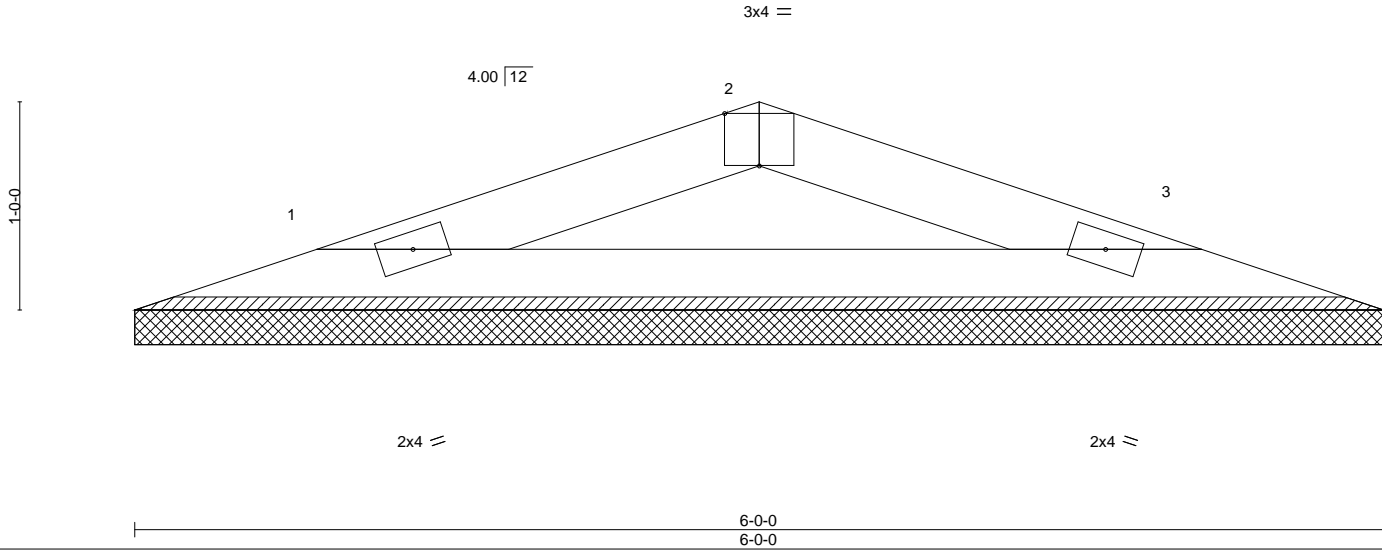


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	197/144
(Roof Snow=30.0)	Lumber DOL	1.15	BC 0.38	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCLL 0.0	Code 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

#### 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) TCDL: 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.**

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

**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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

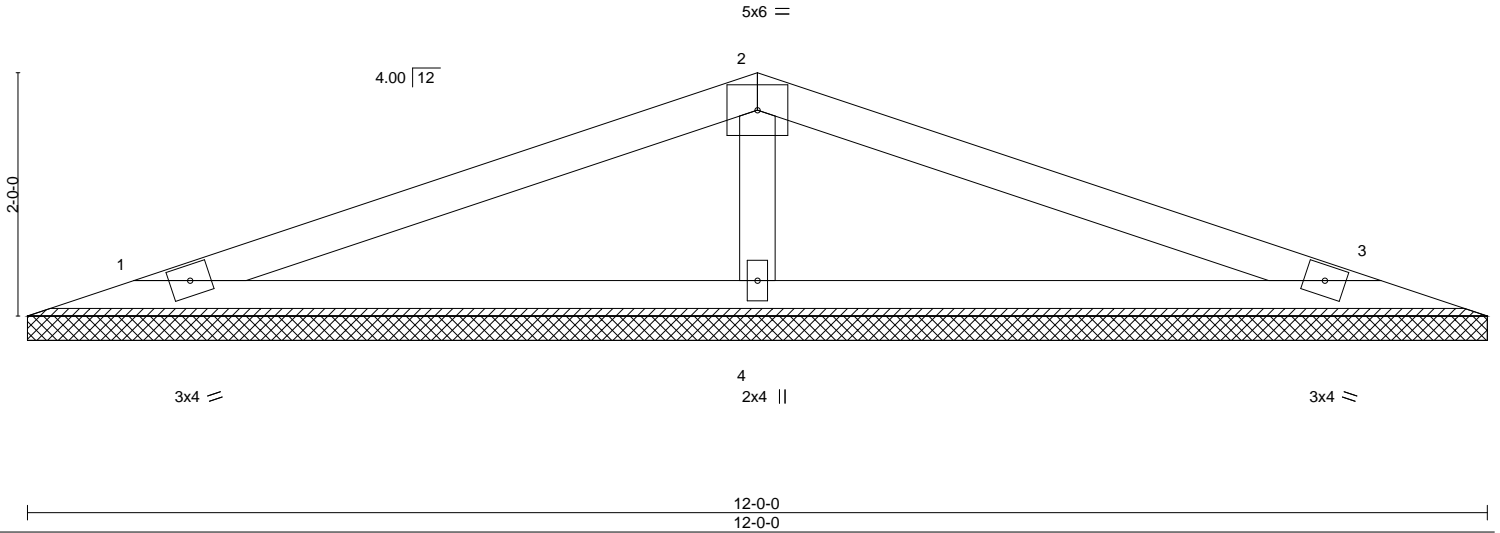
Job	Truss	Truss Type	Qty	Ply	02_Valley	I47779329
ORDERS	VT-95518	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 05:29:23 2021 Page 1  
ID:Na07x\_qDLMc?dzdmB8gxPuyIbLG-2LVg\_8nY?O1ZollpoWofZxIMyWiDjxDzc\_y9GlygS1w

6-0-0	6-0-0	12-0-0	6-0-0
6-0-0	6-0-0	12-0-0	6-0-0

Scale = 1:18.9



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

#### 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=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

**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

**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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932







Job	Truss	Truss Type	Qty	Ply	02_Valley
ORDERS	VT-95521	VCOM	1	1	Job Reference (optional)

I47779332

NVR, Frederick, MD - 21703,

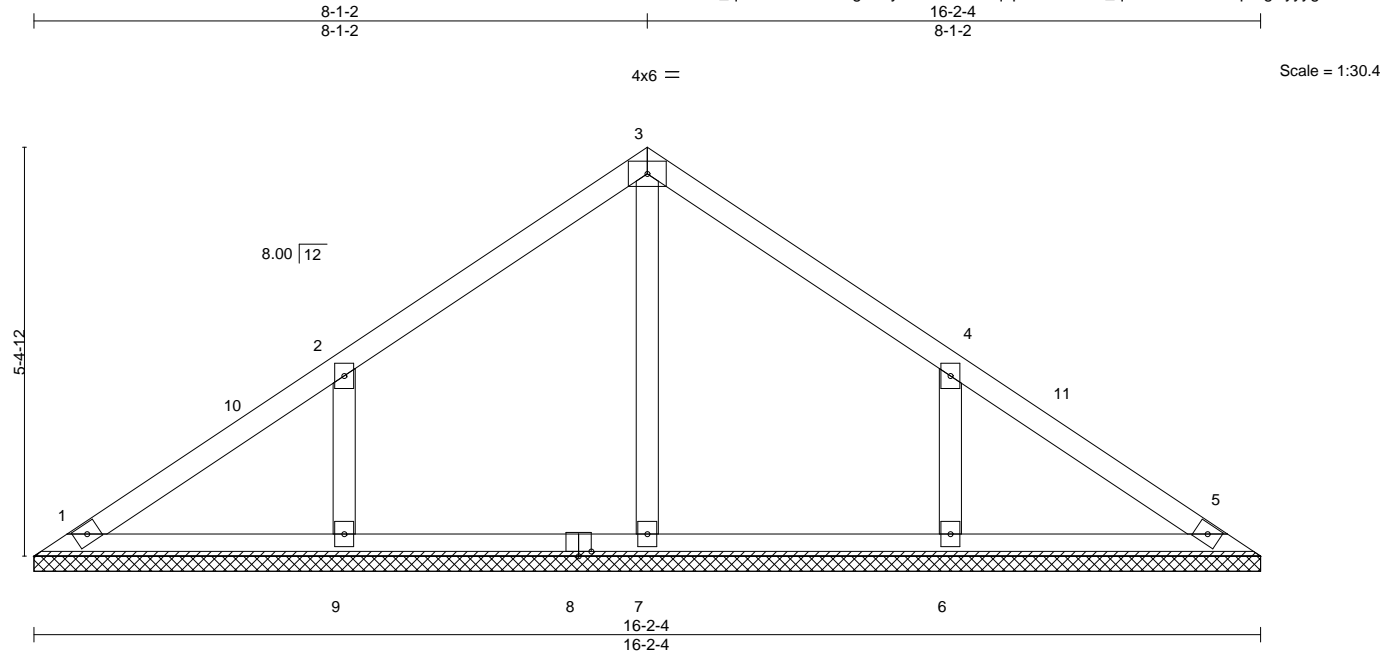
8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 05:29:28 2021 Page 1  
ID:Na07x\_qDLMc?dzdmB8gxPuyIbLG-PJJZ1rqhpxfsu3Amb3\_qG?SDuXSxOBqilGgwygygS1r

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.15	TC 0.70	Vert(LL)	n/a	-	n/a	MT20	197/144
(Roof Snow=30.0)	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.00	5	n/a		
BCLL 0.0	Code IBC2021/TPI2014		Matrix-S						
BCDL 10.0								Weight: 65 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 16-2-4.

(lb) - Max Horz 1=172(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=243(LC 12), 6=242(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=324(LC 18), 9=625(LC 18), 6=625(LC 19)

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

WEBS 2-9=-533/285, 4-6=-533/285

**NOTES-** (8-9)

- 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) All plates are 3x4 MT20 unless otherwise indicated.
- 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) 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=243, 6=242.
- 8) 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.
- 9) 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.**

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

ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-18663	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49194707
---------------	-------------------	--------------------	----------	----------	--------------	-----------

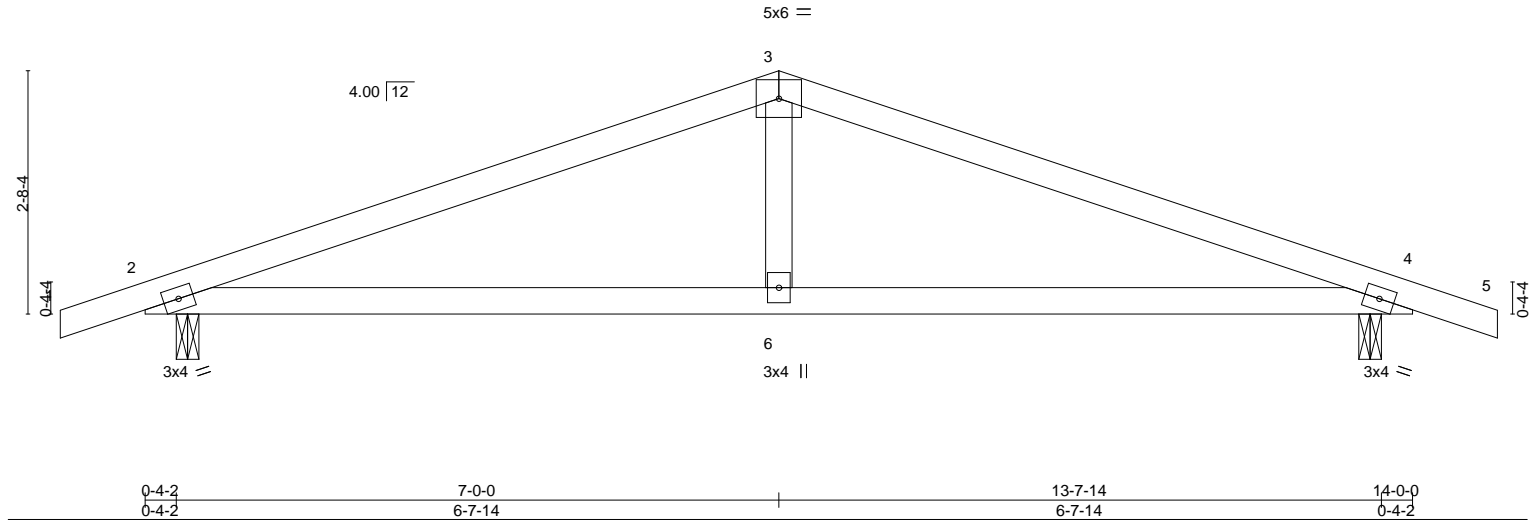
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Dec 9 21:29:29 2021 Page 1

ID:5lb56nez?NGp7jN5pS3vTuyrxGa-ojoTVIOt1dKQBr?RL3VCILf?r30Wlzp3FOzmm8yAa5a

-0-11-4 0-11-4	7-0-0 7-0-0	14-0-0 7-0-0	14-11-4 0-11-4
-------------------	----------------	-----------------	-------------------

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-

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 3-5-6 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### 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 100 lb uplift at joint(s) except (jt=lb) 2=129, 4=129.
- 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

**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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

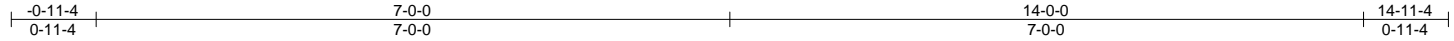
818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18664	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49194708
Job Reference (optional)						

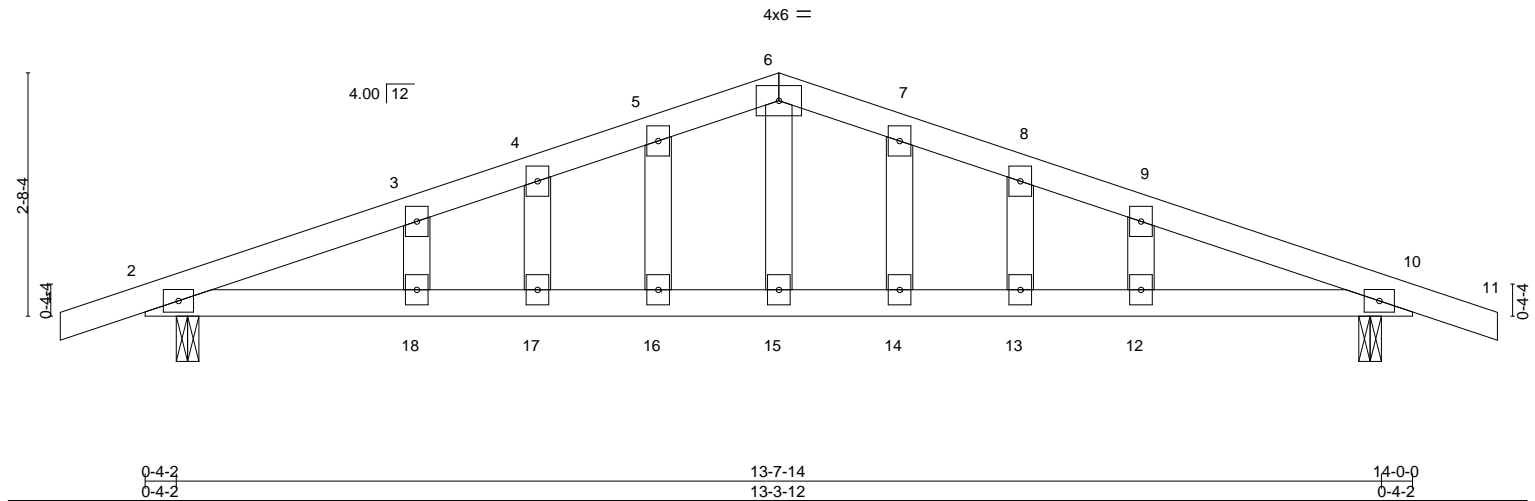
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Dec 9 21:29:30 2021 Page 1

ID:5lb56nez?NGp7jN5pS3vTuyrxGa-GwLri5PVoxSHp?advn0RIYCFJTIU1QbDU2jJlayAa5Z



Scale = 1:25.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.10 12-13 >999 360	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.17 12-13 >975 240				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.02 10 n/a n/a				
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		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=-970/140, 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 100 lb uplift at joint(s) except (jt=lb) 2=129, 10=129.
- 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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18665	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I53690301
Job Reference (optional)						

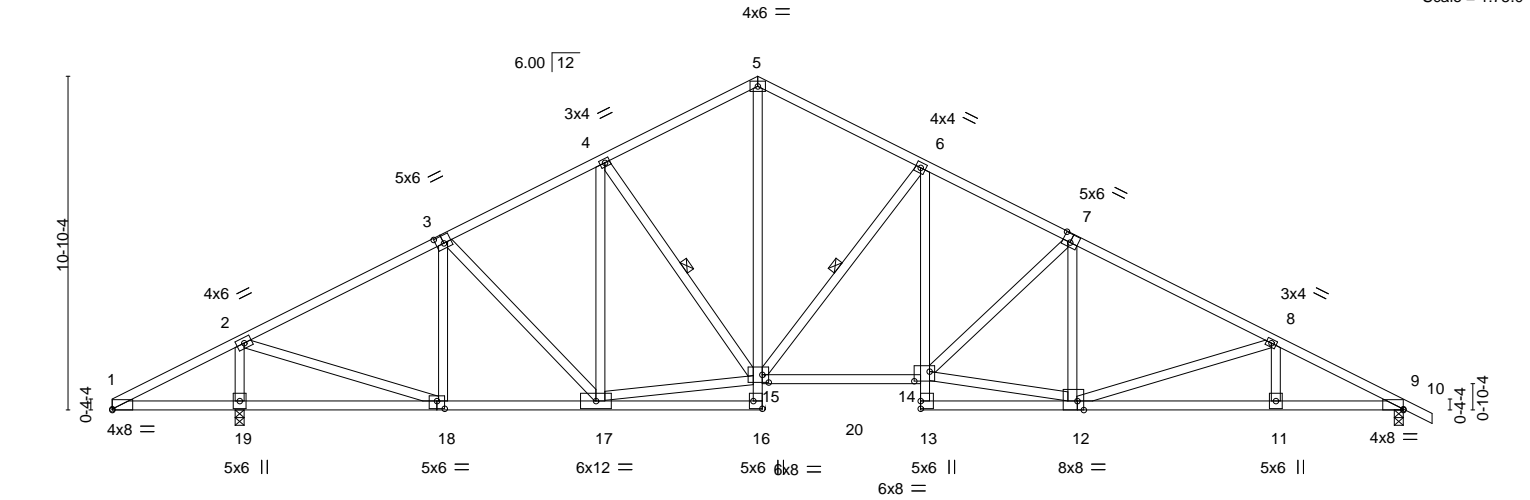
NVR, Frederick, MD - 21703,

8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:28 2022 Page 1

ID:5lb56nez?NGp7jN5pS3vTuyxGa-ZVw1epS8okxzm3VirJqzJXX5z2Q?XskqJgtAaDynHAj

4-1-12	10-9-3	15-10-9	21-0-0	26-5-5	31-2-13	37-10-4	42-0-0	42-11-4
4-1-12	6-7-7	5-1-7	5-1-7	5-5-5	4-9-8	6-7-7	4-1-12	0-11-4

Scale = 1:75.0



4-0-0	4-1-12	10-9-3	15-10-9	21-0-0	26-5-5	31-2-13	37-10-4	42-0-0
4-0-0	0-1-12	6-7-7	5-1-7	5-1-7	5-5-5	4-9-8	6-7-7	4-1-12
Plate Offsets (X,Y)-- [1:0-0-0,0-0-5], [3:0-3-0,0-3-0], [7:0-3-0,0-3-4], [9:0-0-0,0-0-5], [12:0-2-8,Edge], [14:0-6-0,0-3-12], [15:0-2-8,0-3-0], [16:Edge,0-3-8], [18:0-3-0,0-3-0]								

LOADING (psf)	SPACING	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.65	Vert(LL) -0.15	14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.34	14-15	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.92	Horz(CT) 0.12	9	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.13	14	>999	240	Weight: 272 lb	FT = 5%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
1-18,12-13: 2x4 SP No.3 or 2x4 SPF Stud	6-0-0 oc bracing: 1-19,18-19.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 6-15, 4-15

REACTIONS.	(size)
19=0-3-8, 9=0-3-8	
Max Horz 19=195(LC 15)	
Max Uplift 19=242(LC 10), 9=232(LC 11)	
Max Grav 19=1856(LC 1), 9=1555(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-51/288, 2-3=-1713/223, 3-4=-1734/264, 4-5=-1646/302, 5-6=-1671/285, 6-7=-2276/338, 7-8=-2468/349, 8-9=-2951/407
BOT CHORD	17-18=-207/1448, 11-12=-304/2571, 9-11=-304/2571, 14-15=-56/1980
WEBS	5-15=-151/1113, 6-14=-87/699, 8-12=-478/181, 3-18=-413/105, 2-18=-105/1717, 2-19=-1718/312, 6-15=-911/257, 12-14=-134/2139, 7-14=-272/167, 15-17=-133/1472

- 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) 19=242, 9=232.
  - 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.



August 17,2022

**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

ENGINEERING BY  
**TRENCO**  
A MITEK Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	I53690302
ORDERS	SE-20632	COMN	1	1	Job Reference (optional)	

8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:29 2022 Page 1

Scale = 1:70.9

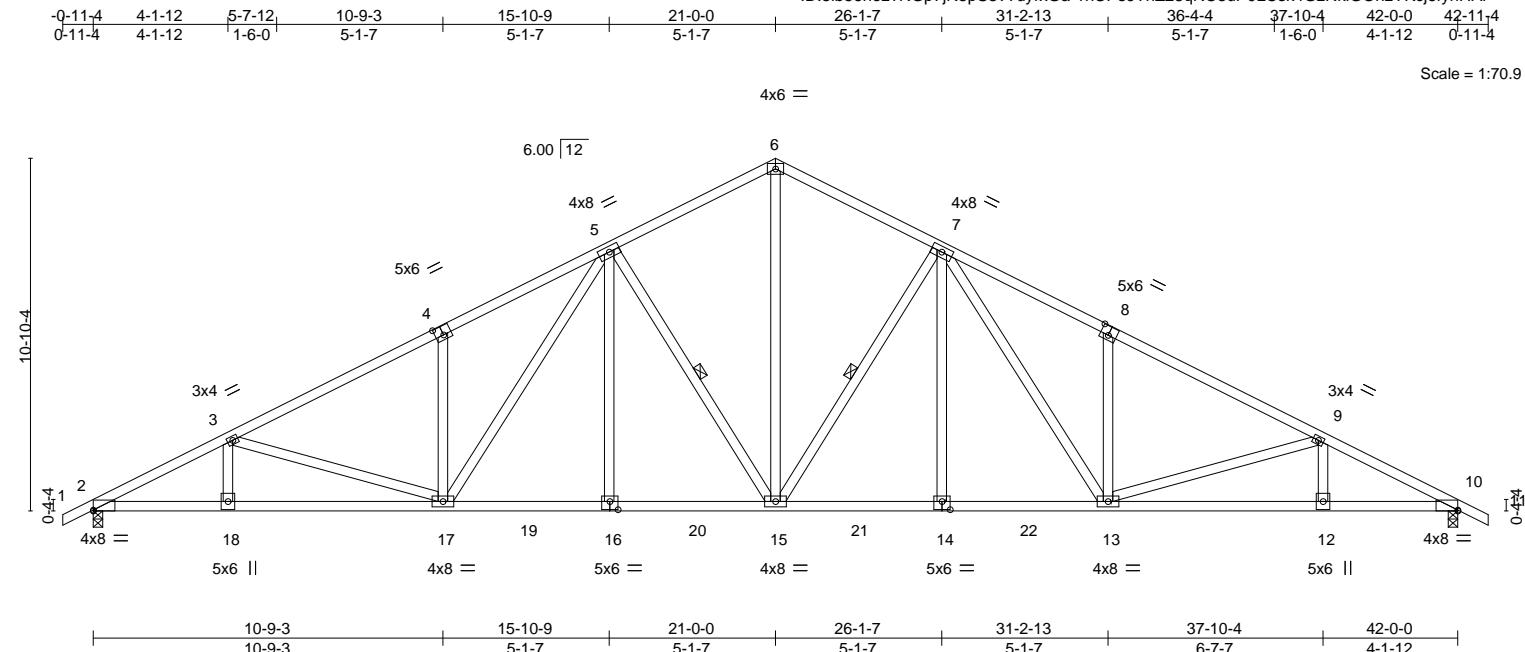


Plate Offsets (X,Y)-- [2:0-0-0,0-0-5], [4:0-3-0,0-3-4], [8:0-3-0,0-3-4], [10:0-0-0,0-0-5], [14:0-3-0,0-3-0], [16:0-3-0,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.21	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.43	14-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	-0.17	2	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.17	14	>999	240	Weight: 269 lb	FT = 5%

TOP CHORD	Structural wood sheathing directly applied or 2-4-15 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-3-12 oc bracing: 12-13 8-3-6 oc bracing: 10-12.
WEBS	1 Row at midpt 5-15, 7-15

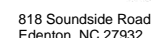
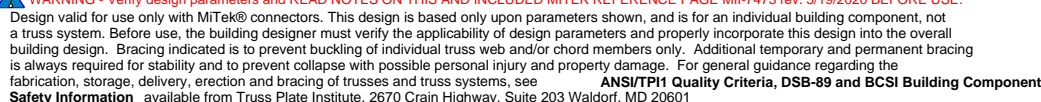
(size) 10=0-3-8, 2=0-3-8  
 Max Horz 10=188(LC 10)  
 Max Uplift 10=-239(LC 11), 2=-239(LC 10)  
 Max Grav 10=1733(LC 1), 2=1733(LC 1)

TOP CHORD 2-3=-3329/422, 3-4=-2851/366, 4-5=-2838/493, 5-6=-1946/329, 6-7=-1946/329,  
7-8=-2837/493, 8-9=-2852/367, 9-10=-3329/419

BOT CHORD 2-18=-316/2905, 7-18=-316/2905, 16-17=-87/2104, 15-16=-87/2104, 14-15=-203/2104,  
13-14=-203/2105, 12-13=-502/2904, 10-12=-502/2904

WEBS 3-17=-473/176, 4-17=-370/226, 5-17=-244/762, 5-15=-781/253, 6-15=-183/1441,  
7-15=-780/253, 7-13=-244/759, 8-13=-369/226, 9-13=-471/173, 5-16=0/265, 7-14=0/265

- 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 100 lb uplift at joint(s) except (jt=lb) 10=239, 2=239.
- 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.





Job	Truss	Truss Type	Qty	Ply	10_Southeast	I61259435
ORDERS	SE-20635	COMN	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

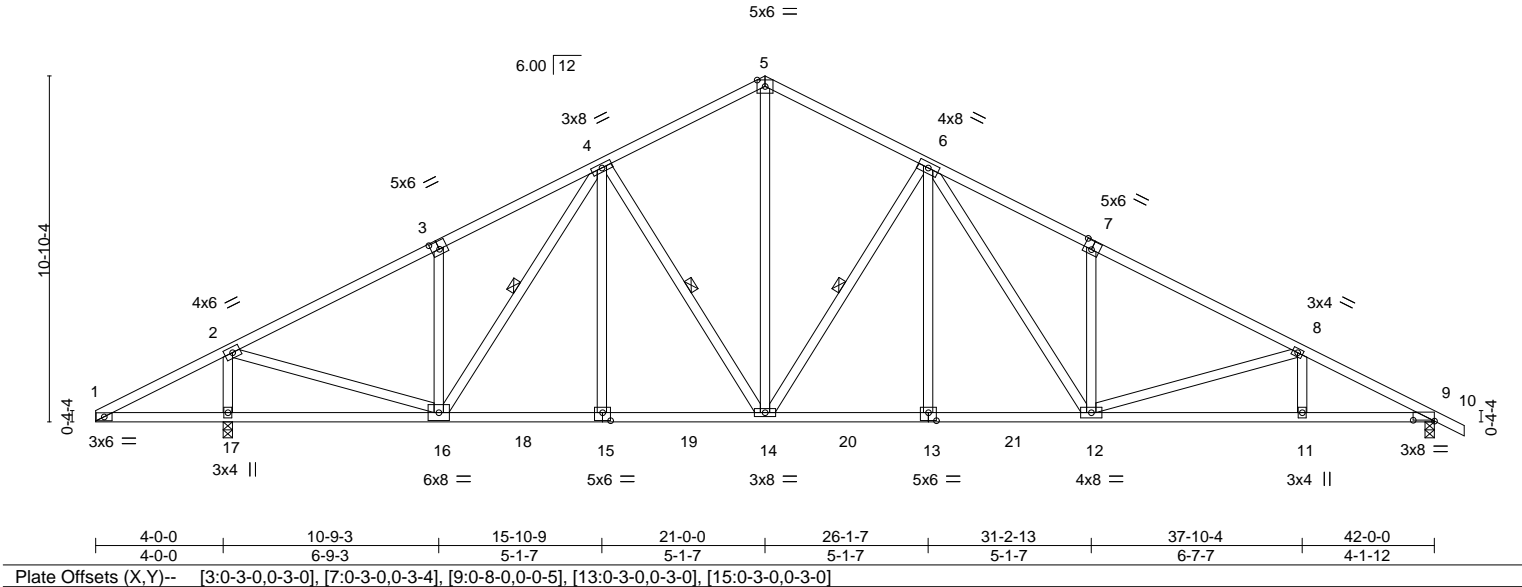
8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Oct 6 12:34:26 2023 Page 1

ID:5lb56nez?NGp7jN5pS3vTuyrxGa-aSKSrcvU1XdIKE4p1e4zOwjAlEq9FTRq8Nf2lwyW7vR

4-1-12 5-7-12 10-9-3 15-10-9 21-0-0 26-1-7 31-2-13 36-4-4 37-10-4 42-0-0 42-11-4

4-1-12 1-6-0 5-1-7 5-1-7 5-1-7 5-1-7 5-1-7 5-1-7 1-6-0 4-1-12 0-11-4

Scale = 1:72.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.15 12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.77	Vert(CT)	-0.30 11-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.74	Horz(CT)	-0.10 17	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S	Wind(LL)	0.13 12	>999	240	Weight: 267 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 2-10-4 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	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 4-16, 4-14, 6-14

**REACTIONS.** (size) 9=0-3-8, 17=0-3-8  
Max Horz 9=195(LC 15)  
Max Uplift 9=231(LC 11), 17=241(LC 10)  
Max Grav 9=1556(LC 1), 17=1857(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-51/286, 2-3=-1733/221, 3-4=-1716/347, 4-5=-1566/310, 5-6=-1566/290,  
6-7=-2449/474, 7-8=-2464/348, 8-9=-2955/401  
BOT CHORD 15-16=-67/1547, 14-15=-67/1547, 13-14=-193/1769, 12-13=-193/1769, 11-12=-493/2574,  
9-11=-493/2574  
WEBS 2-16=-101/1724, 3-16=-354/224, 4-14=-417/200, 5-14=-166/1104, 6-14=-783/253,  
6-12=-245/762, 7-12=-368/226, 8-12=-482/173, 2-17=-1718/309, 4-15=0/268,  
6-13=0/265

- 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) 9=231, 17=241.
  - 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.



October 10,2023



Job ORDERS	Truss SE-20636	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I53690306
---------------	-------------------	--------------------	----------	----------	--------------	-----------

NVR, Frederick, MD - 21703,

8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:34 2022 Page 1

ID:5lb56nez?NGp7jN5pS3vTuyrxGa-OfHlvsXvNai7U\_yrCaxNZon7?STExbTjhckUosynHAD

0-11-4	4-1-12	10-9-3	15-10-9	21-0-0	26-1-7	31-2-13	37-10-4	42-0-0
0-11-4	4-1-12	6-7-7	5-1-7	5-1-7	5-1-7	5-1-7	6-7-7	4-1-12

Scale = 1:70.4

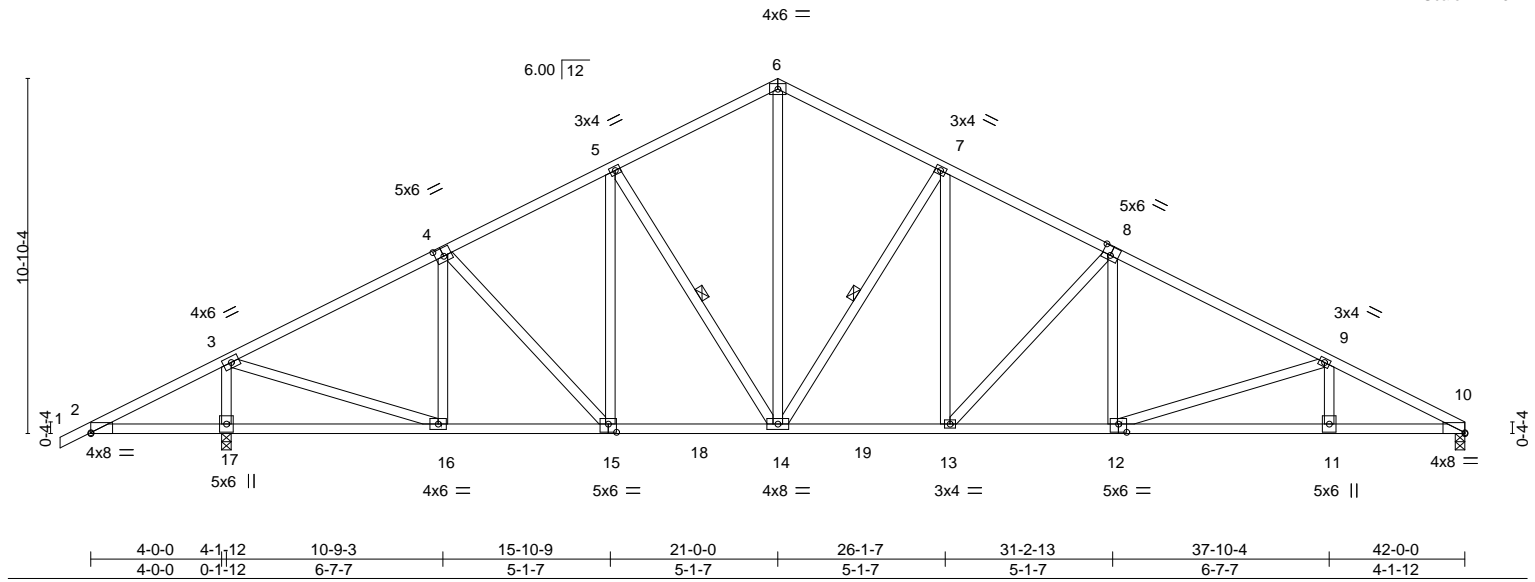


Plate Offsets (X,Y)--		[2:0-0-0,0-0-5], [4:0-3-0,0-3-0], [8:0-3-0,0-3-4], [10:0-0-0,0-0-5], [12:0-3-0,0-3-0], [15:0-3-0,0-3-0]	
<b>LOADING</b> (psf)	<b>SPACING</b>	2-0-0	<b>CSL</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.62
TCDL 10.0	Lumber DOL 1.15		BC 0.77
BCLL 0.0 *	Rep Stress Incr YES		WB 0.78
BCDL 10.0	Code IBC2021/TP12014		Matrix-S
<b>DEFL.</b>	in (loc)	l/defl	L/d
Vert(LL) -0.14	13	>999	360
Vert(CT) -0.29	11-12	>999	240
Horz(CT) 0.10	10	n/a	n/a
Wind(LL) 0.12	12-13	>999	240
<b>PLATES</b>	<b>GRIP</b>		
MT20	197/144		
Weight: 261 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

#### REACTIONS.

(size) 17=0-3-8, 10=0-3-8  
Max Horz 17=195(LC 10)  
Max Uplift 17=264(LC 10), 10=206(LC 11)  
Max Grav 17=1921(LC 1), 10=1483(LC 1)

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

TOP CHORD 2-3=-101/422, 3-4=-1672/205, 4-5=-1711/257, 5-6=-1522/309, 6-7=-1521/289,  
7-8=-1976/327, 8-9=-2454/349, 9-10=-2946/410  
BOT CHORD 2-17=-308/127, 16-17=-308/205, 15-16=-198/1411, 14-15=-127/1464, 13-14=-45/1700,  
12-13=-147/2118, 11-12=-321/2579, 10-11=-321/2579  
WEBS 6-14=-164/1005, 7-14=-757/253, 7-13=-86/535, 8-13=-610/198, 8-12=0/363,  
9-12=-498/183, 5-14=-374/193, 4-16=-439/116, 3-16=-137/1806, 3-17=-1783/334

#### 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) 17=264, 10=206.
- 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.



August 17,2022

**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/TP1 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**  
A MITEK Affiliate

818 Soundside Road  
Edenton, NC 27932



Job ORDERS	Truss SE-20638	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I53690308
---------------	-------------------	--------------------	----------	----------	--------------	-----------

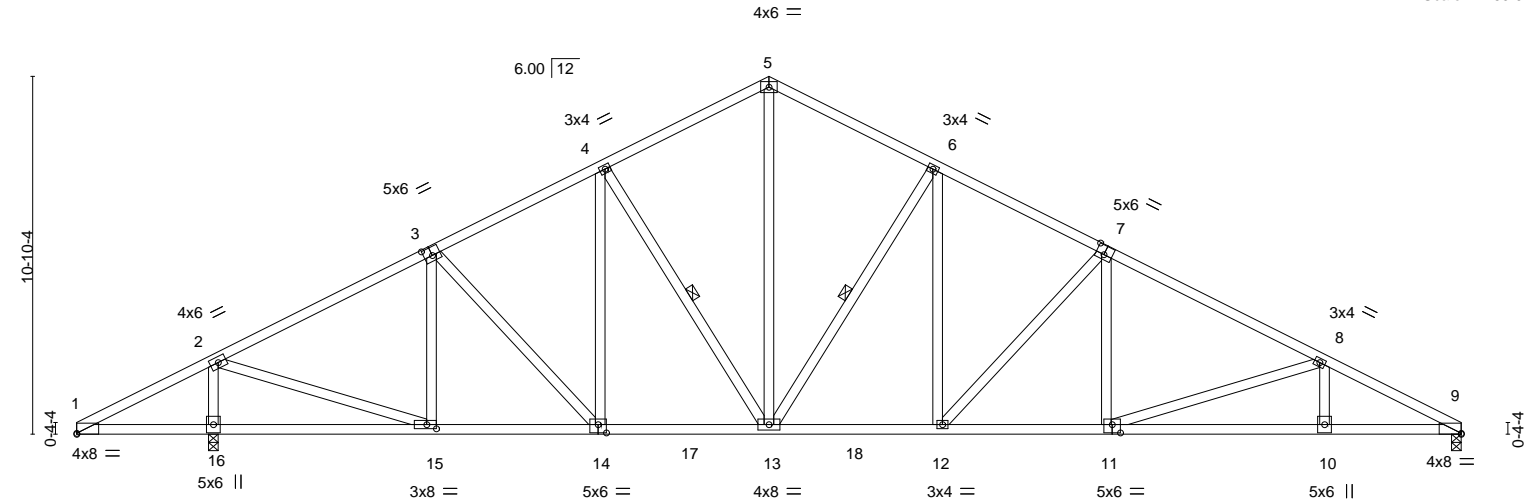
NVR, Frederick, MD - 21703,

8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:37 2022 Page 1

ID:5lb56nez?NGp7jN5pS3vTuyrxGa-oEzQXuZogV4iLRhQtIU5BQPeCgUu8zo9OaY8OBynHAa

4-1-12	10-9-3	15-10-9	21-0-0	26-1-7	31-2-13	37-10-4	42-0-0
4-1-12	6-7-7	5-1-7	5-1-7	5-1-7	5-1-7	6-7-7	4-1-12

Scale = 1:69.9



4-0-0		4-1-12		10-9-3		15-10-9		21-0-0		26-1-7		31-2-13		37-10-4		42-0-0	
4-0-0		0-1-12		6-7-7		5-1-7		5-1-7		5-1-7		5-1-7		6-7-7		4-1-12	
Plate Offsets (X,Y)-- [1:0-0-0,0-0-5], [3:0-3-0,0-3-0], [7:0-3-0,0-3-4], [9:0-0-0,0-0-5], [11:0-3-0,0-3-0], [14:0-3-0,0-3-0], [15:0-3-8,0-1-8]																	
LOADING (psf)		SPACING- 2-0-0				CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP			
TCLL	20.0	Plate Grip DOL 1.15				TC	0.62	Vert(LL)	-0.14	12	>999	360	MT20	197/144			
TCDL	10.0	Lumber DOL 1.15				BC	0.77	Vert(CT)	-0.30	10-11	>999	240					
BCLL	0.0 *	Rep Stress Incr YES				WB	0.74	Horz(CT)	0.10	9	n/a	n/a					
BCDL	10.0	Code IBC2021/TPI2014				Matrix-S		Wind(LL)	0.12	11-12	>999	240	Weight: 260 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

#### REACTIONS.

(size) 16=0-3-8, 9=0-3-8  
Max Horz 16=181(LC 14)  
Max Uplift 16=241(LC 10), 9=207(LC 11)  
Max Grav 16=1858(LC 1), 9=1490(LC 1)

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

TOP CHORD 1-2=-51/287, 2-3=-1716/222, 3-4=-1736/264, 4-5=-1537/311, 5-6=-1536/291,  
6-7=-1991/329, 7-8=-2469/350, 8-9=-2960/411  
BOT CHORD 14-15=-213/1451, 13-14=-136/1487, 12-13=-50/1714, 11-12=-148/2131, 10-11=-322/2592,  
9-10=-322/2592  
WEBS 5-13=-165/1017, 6-13=-757/253, 6-12=-86/535, 7-12=-610/198, 7-11=0/363,  
8-11=-498/183, 4-13=-390/199, 3-15=-412/106, 2-15=-104/1719, 2-16=-1719/311

#### 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) 16=241, 9=207.
- 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.



August 17,2022

**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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-20645	COMN	1	1	I53690310

NVR, X

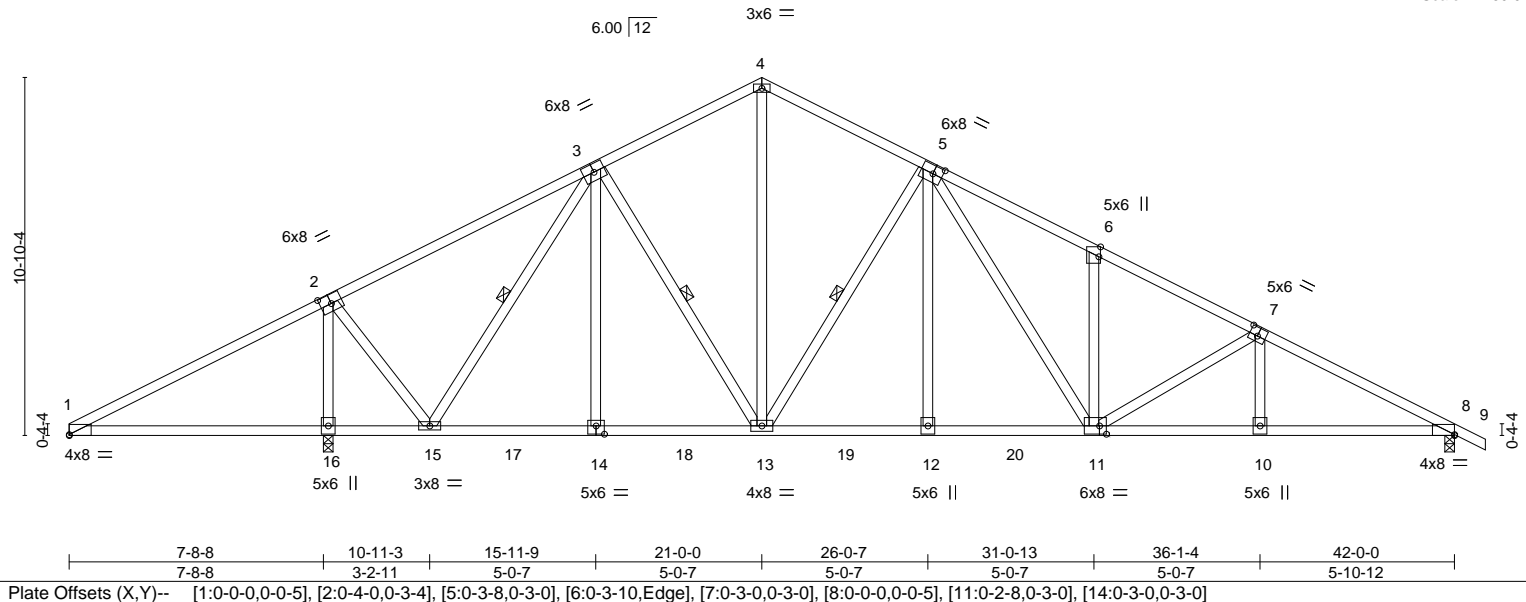
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-Qvi\_W6?l?d2wAUyflXFd\_m0sKRtb7vJ019hISZynCYy

8.530 s Mar 11 2022 MiTek Industries, Inc. Tue Aug 16 17:22:57 2022 Page 1

Job Reference (optional)

5-10-12	10-11-3	15-11-9	21-0-0	26-0-7	31-0-13	36-1-4	42-0-0	42-11-4
5-10-12	5-0-7	5-0-7	5-0-7	5-0-7	5-0-7	5-0-7	5-10-12	0-11-4

Scale = 1:69.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.95	Vert(LL)	-0.11 11-12	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-0.22 11-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.07 8	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S	Wind(LL)	0.10 11	>999	240	Weight: 259 lb	FT = 5%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
1-2,2-3: 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	6-0-0 oc bracing: 1-16,15-16.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 3-15, 3-13, 5-13

**REACTIONS.** (size) 8=0-3-8, 16=0-3-8  
Max Horz 16=-195(LC 15)  
Max Uplift 8=-221(LC 11), 16=-267(LC 10)  
Max Grav 8=1353(LC 1), 16=2060(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-112/667, 2-3=-512/176, 3-4=-1139/291, 4-5=-1132/270, 5-6=-1975/439,  
6-7=-1981/334, 7-8=-2427/364  
BOT CHORD 1-16=-482/151, 15-16=-471/216, 15-17=-51/986, 14-17=-51/986, 14-18=-50/989,  
13-18=-50/989, 13-19=0/1375, 12-19=0/1375, 12-20=0/1375, 11-20=0/1375,  
10-11=-238/2088, 8-10=-238/2088  
WEBS 3-15=-1097/70, 4-13=-157/739, 5-13=-791/256, 5-11=-232/722, 6-11=-282/175,  
7-11=-462/161, 3-14=0/277, 5-12=0/270, 2-16=-1875/338, 2-15=-35/1233

- 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 221 lb uplift at joint 8 and 267 lb uplift at joint 16.
  - 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

August 17,2022

**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

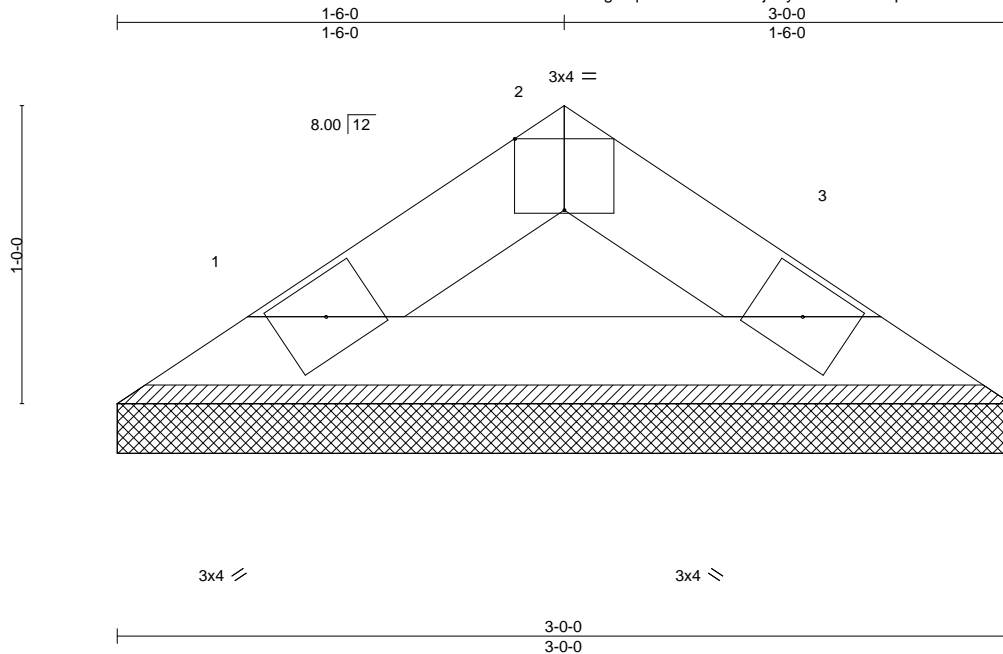
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss VT-00861	Truss Type VCOM	Qty 1	Ply 1	02_Valley	154705066
---------------	-------------------	--------------------	----------	----------	-----------	-----------

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:37 2022 Page 1  
ID:lwgtHqLudM7W6Kxo5rjJByUXxn-tl0UVwpW5nlQcYixzK5McV9S1Qbd2s7Y0umzOByTqEK



Scale = 1:7.7

Plate Offsets (X,Y)-- [2:0-2-0,Edge]							
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc) l/defl L/d
TCLL 30.0		Plate Grip DOL	1.15	TC 0.08		Vert(LL)	n/a - n/a 999
(Roof Snow=30.0)		Lumber DOL	1.15	BC 0.08		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							
						<b>PLATES</b>	<b>GRIP</b>
						MT20	197/144
						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

**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

**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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

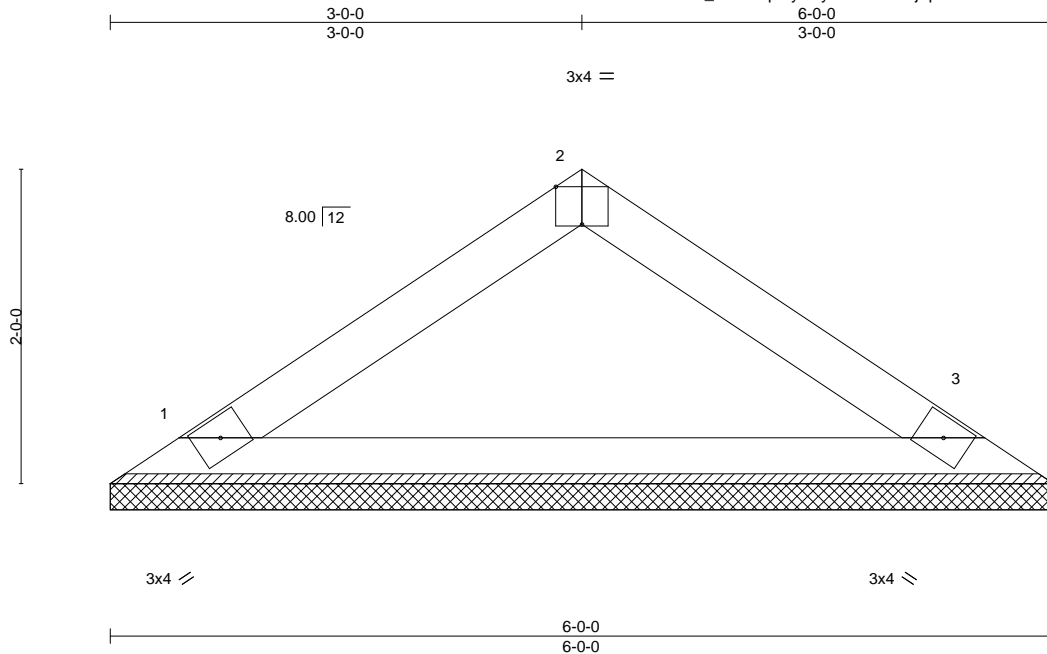
818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	02_Valley	154705067
ORDERS	VT-00862	VCOM	1	1	Job Reference (optional)	

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-LVatjFp8s4tHdH7X2cb9ihYkpqYnJNiFYVWwdyTqEJ



Scale = 1:14.7

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

**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

**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**

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

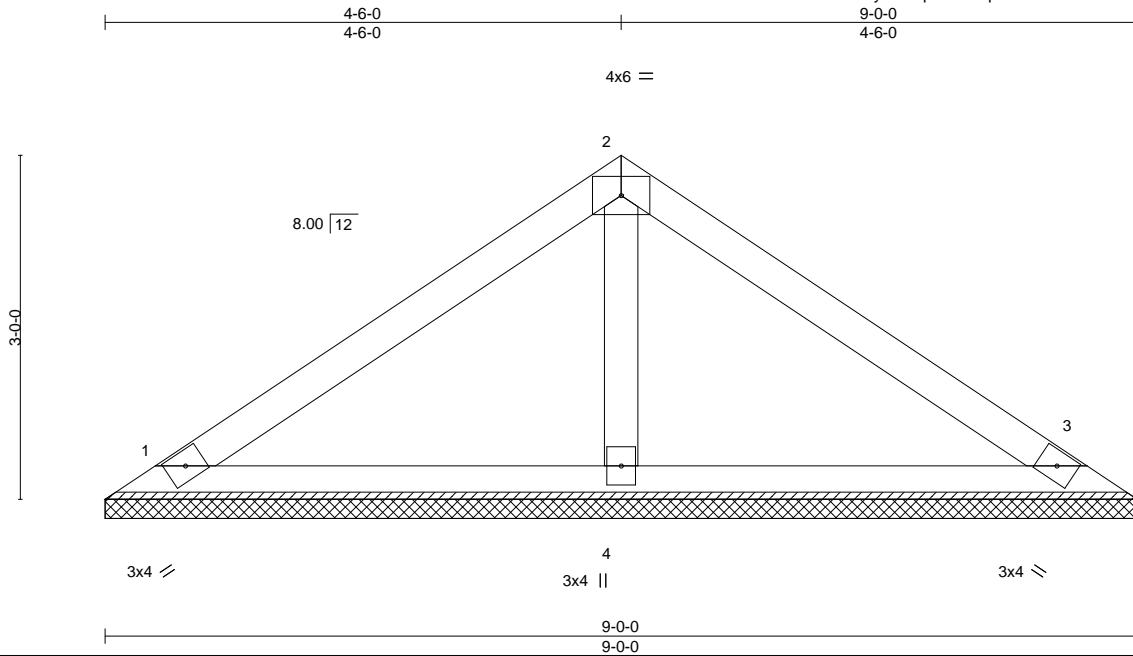
818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	02_Valley	154705068
ORDERS	VT-00863	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:39 2022 Page 1  
ID:hJoPiVn8HEcmQUKwWtBOcyUXxl-ph8FwbqmdO?8rsrK5i7rhwEfiDE1WlarUCF3T3yTqEI



Scale = 1:20.1

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

#### 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

**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

**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

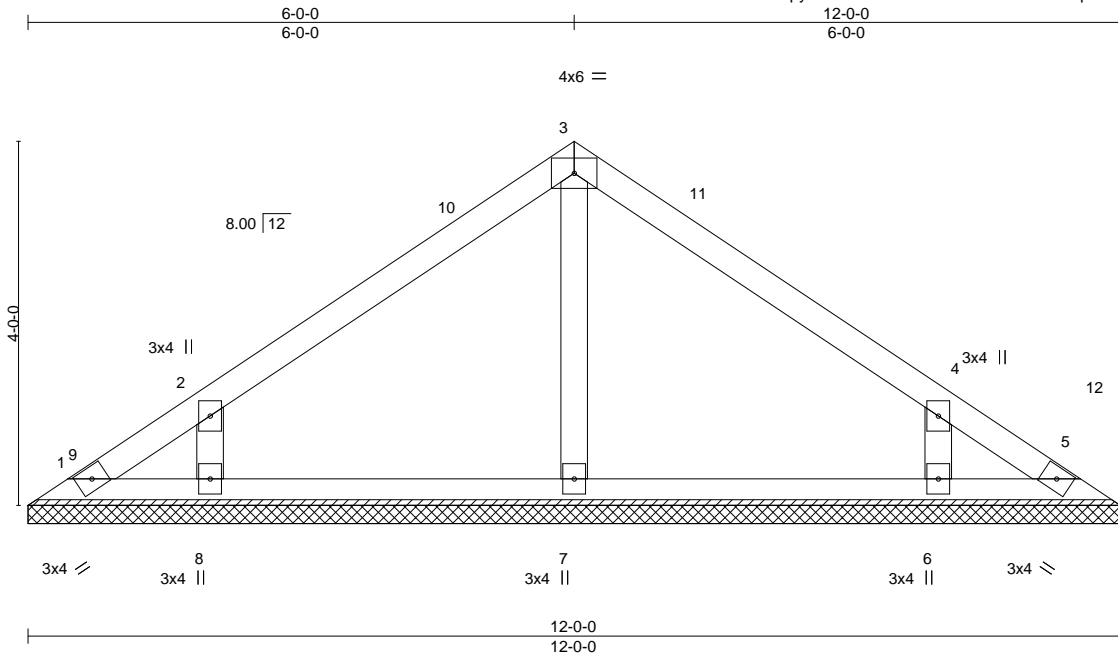
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	154705069
ORDERS	VT-00864	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:40 2022 Page 1  
ID:9VMovrOm2YkhOZ3WUEOQxpyUXxk-Hthd8xrPOi7?T0QWeTe4E7nqadbLFCu?is\_d?WyTqEH



Scale = 1:25.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	5	n/a	n/a		
BCLL 0.0	Code IBC2021/TPI2014		Matrix-S						Weight: 45 lb	FT = 5%
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

**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

**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

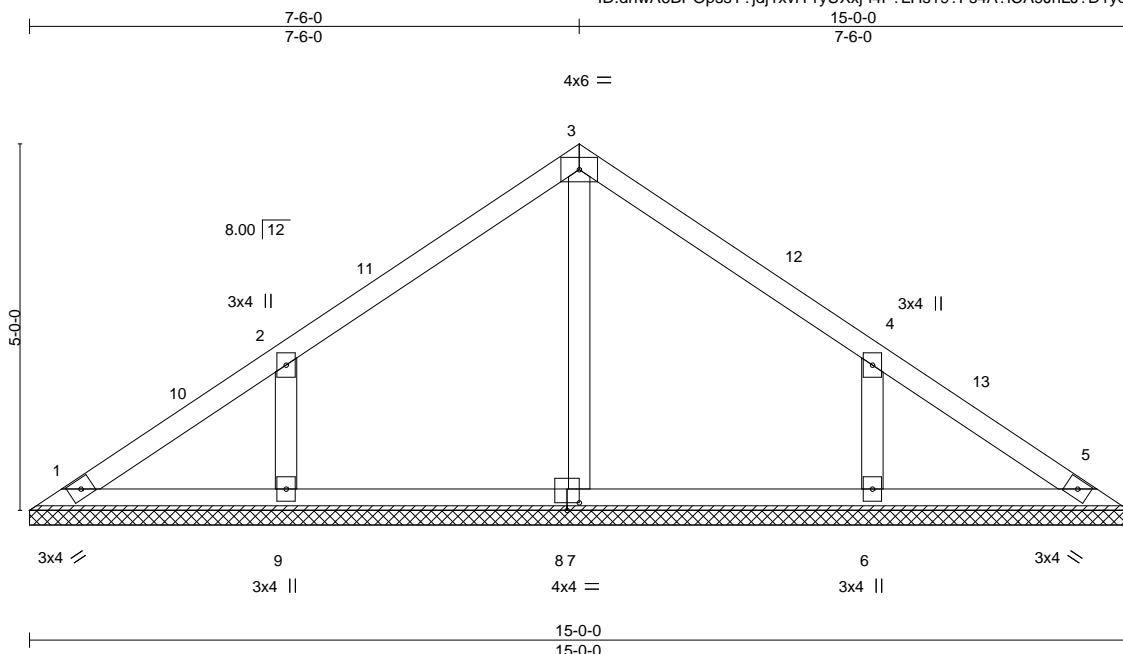
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	154705070
ORDERS	VT-00865	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:41 2022 Page 1  
ID:dhwA6BPOpssY?jdj1xvfT1yUXxj-l4F?LHs19?Fs4A?iCA9JnLJ?D1yq\_fD8xWkAXyyTqEG



Scale = 1:31.4

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	2-0-0	TC 0.65	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15	BC 0.19	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014			Weight: 59 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 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-

- 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

**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

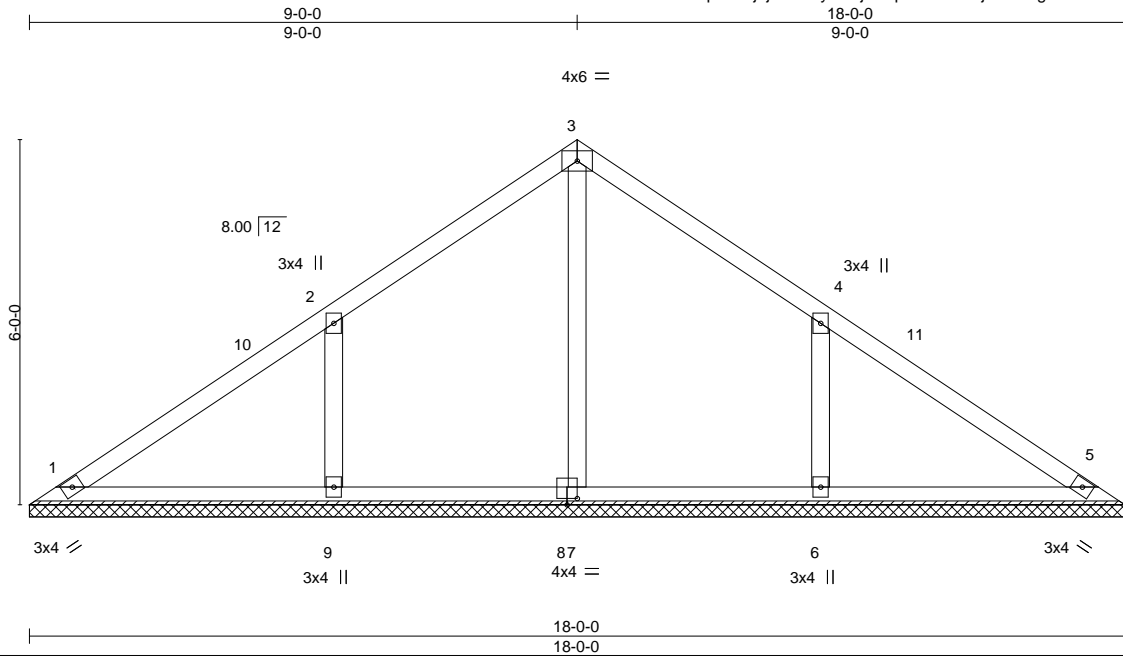
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	154705071
ORDERS	VT-00866	VCOM	1	1	Job Reference (optional)	

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-DGpNZdsfwJNjiKaumtgYJYs8ERGIj5tHAATk4OyTqEF



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>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0	2-0-0	TC 0.82	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15	BC 0.28	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Horz(CT)	0.00	5	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IBC2021/TPI2014							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-

- 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

**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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932