

**TRUSS BRACING DETAILS**

SCALE: 1/8" = 1'-0"

**TRUSS BRACING NOTES**

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

SHEET NO. <b>S-4</b>	DRAWING TITLE TRUSS BRACING DETAILS	DRAWN BY ARS	DATE:	OPTION	DRAWING NO. ---	DRAWN BY ARS	DATE:	OPTION	DRAWING NO. ---
22									

NVR

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

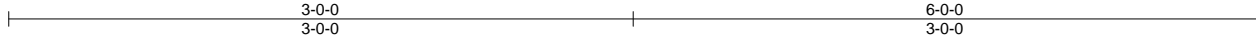
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DIV-COMM-LOT-UNIT	RLH-VK-0007	COM-LOT	KIPPLING VILLAGE - 0007	STREET ADDRESS	APT. NO.	CITY	STATE	NC	ZIP	27526
					149 SOUTH BREEZE WAY					
					FUGUAY-VARINA					

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

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

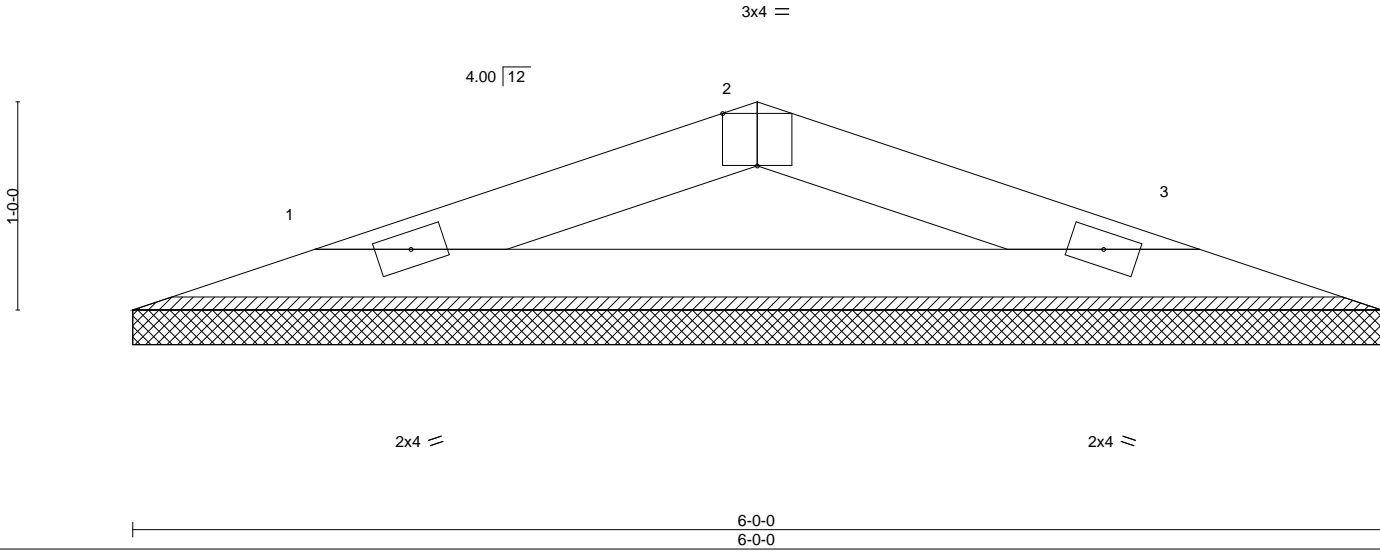


Plate Offsets (X,Y)-- [2:0-2:0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-P					Weight: 16 lb	FT = 5%

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

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

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

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

**NOTES-** (7-8)

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- 8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.



September 16,2021

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

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

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

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

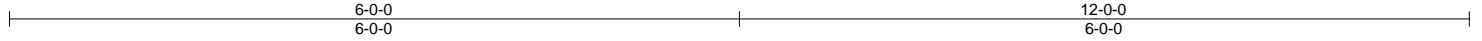


818 Soundside Road  
Edenton, NC 27932

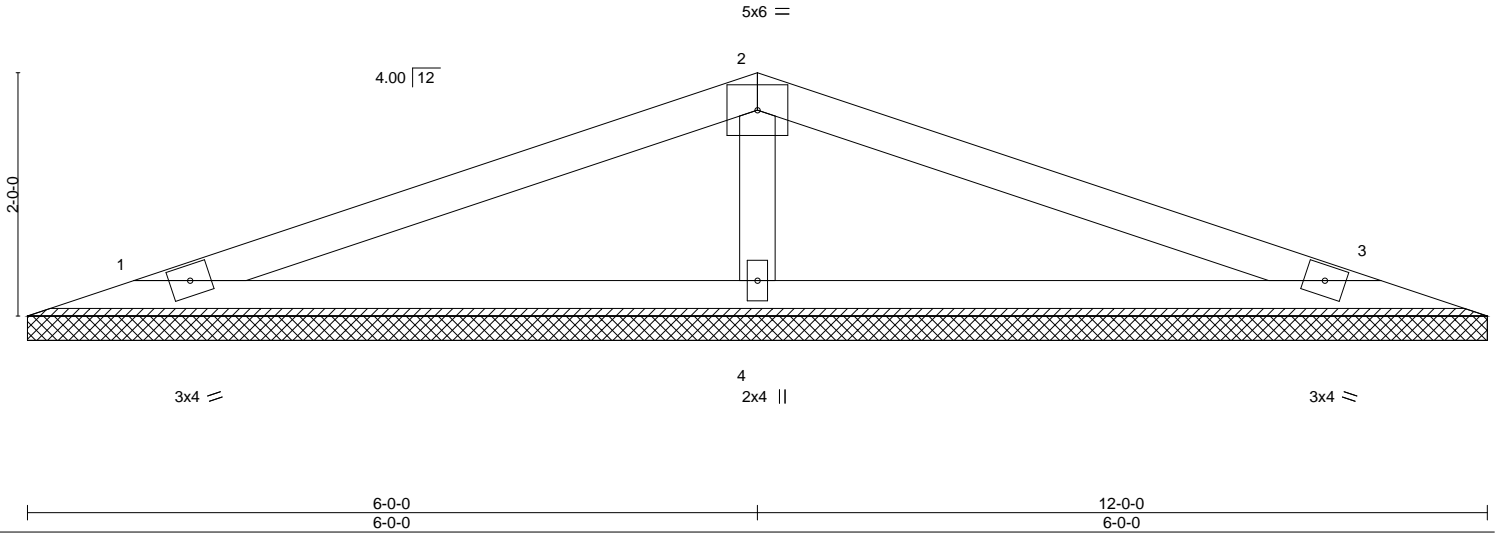
Job	Truss	Truss Type	Qty	Ply	02_Valley	147779322
ORDERS	VT-95511	VCOM	1	1	Job Reference (optional)	

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



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

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

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

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

**NOTES-** (7-8)

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3 except (jt=lb) 4=105.
- 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- 8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.



September 16, 2021

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

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



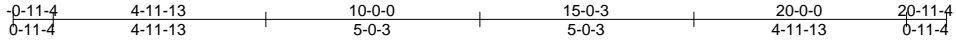
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	11_Southeast-Girder-Int	149194730
ORDERS	SE-18617- <b>Cond1</b>	COMN	1	<b>2</b>	Job Reference (optional)	

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4x6 =

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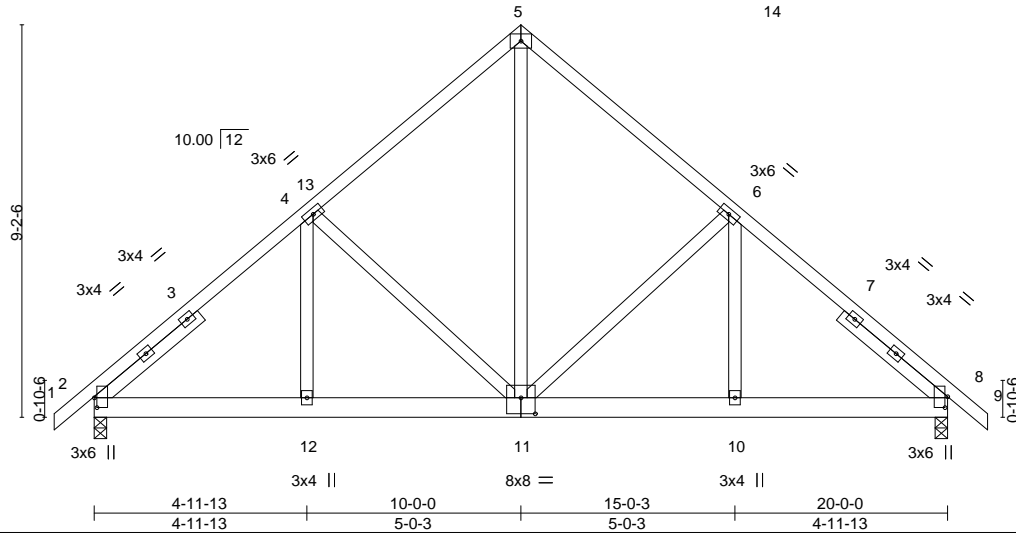


Plate Offsets (X,Y)-- [2:0-2-12,0-0-12], [8:0-3-1,0-0-12], [11:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0	TC 0.44	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) -0.02 10-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.21	Vert(CT) -0.04 10-11 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.01 8 n/a n/a		
	Code IBC2021/TPI2014		Wind(LL) 0.01 11 >999 240	Weight: 287 lb	FT = 5%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 or 2x4 SPF Stud  
SLIDER Left 2x4 SP or SPF No.3 or Stud 3-2-0,  
Right 2x4 SP or SPF No.3 or Stud 3-2-0

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

[MCT]

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=-232(LC 8)  
Max Uplift 2=-165(LC 10), 8=-165(LC 11)  
Max Grav 2=1529(LC 17), 8=1529(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1786/197, 4-5=-1278/239, 5-6=-1278/239, 6-8=-1786/197  
BOT CHORD 2-12=-177/1247, 11-12=-177/1247, 10-11=-72/1247, 8-10=-72/1247  
WEBS 4-12=0/314, 5-11=-173/971, 6-10=0/314, 4-11=-584/224, 6-11=-584/224

**NOTES-** (10-12)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; 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.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 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=165, 8=165.
- 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

Continued on page 2.

**LOAD CASE(S)** Standard

**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-18617- <b>Cond1</b>	Truss Type COMN	Qty 1	Ply <b>2</b>	11_Southeast-Girder-Int Job Reference (optional)	I49194730
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8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 21:30:28 2021 Page 2  
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**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 2-8=-60(B=-40), 1-5=-80, 5-9=-80

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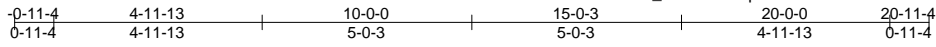
ENGINEERING BY  
**TRENCO**  
A MITek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18617- <b>Cond2</b>	Truss Type COMN	Qty 1	Ply <b>2</b>	11_Southeast-Girder-Int Job Reference (optional)	149194730
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8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Dec 9 21:30:28 2021 Page 1  
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4x6 =

Scale = 1:55.1

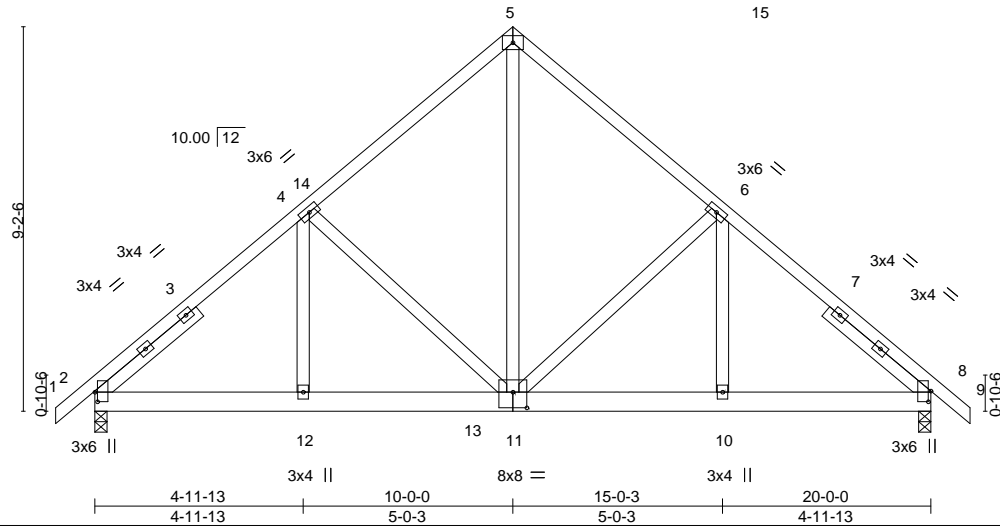


Plate Offsets (X,Y)-- [2:0-2-12,0-0-12], [8:0-3-1,0-0-12], [11:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.45 BC 0.20 WB 0.22 Matrix-S	in (loc) l/defl L/d Vert(LL) -0.02 10-11 >999 360 Vert(CT) -0.04 10-11 >999 240 Horz(CT) 0.01 8 n/a n/a Wind(LL) 0.01 11 >999 240	MT20	197/144
TCDL 10.0	Rep Stress Incr NO			Weight: 287 lb	FT = 5%
BCLL 0.0 *	Code IBC2021/TPI2014				
BCDL 10.0					

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 or 2x4 SPF Stud  
SLIDER Left 2x4 SP or SPF No.3 or Stud 3-2-0,  
Right 2x4 SP or SPF No.3 or Stud 3-2-0

**BRACING-** [MCT]  
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) 2=0-3-8, 8=0-3-8  
Max Horz 2=-232(LC 8)  
Max Uplift 2=-170(LC 10), 8=-178(LC 11)  
Max Grav 2=1559(LC 17), 8=1609(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1831/204, 4-5=-1324/246, 5-6=-1324/246, 6-8=-1875/210  
BOT CHORD 2-12=-182/1279, 11-12=-182/1279, 10-11=-82/1311, 8-10=-82/1311  
WEBS 4-12=0/311, 5-11=-182/1028, 6-10=0/346, 4-11=-579/223, 6-11=-622/230

- NOTES-** (10-12)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; 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.
  - This truss has been designed for greater of min roof live load of 14.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
  - 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=170, 8=178.
  - 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.

Continued on page 2

**LOAD CASE(S)** Standard

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**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18617- <b>Cond2</b>	Truss Type COMN	Qty 1	Ply <b>2</b>	11_Southeast-Girder-Int Job Reference (optional)	I49194730
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8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 21:30:29 2021 Page 2  
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**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 2-13=-60(B=40), 8-13=-70(B=50), 1-5=-80, 5-9=-80

**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



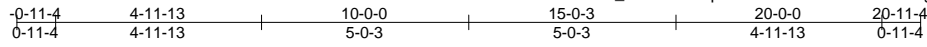
818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18617- <b>Cond3</b>	Truss Type COMN	Qty 1	Ply <b>2</b>	11_Southeast-Girder-Int Job Reference (optional)	149194730
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NVR, Frederick, MD - 21703,

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

ID:JkAtAdo3eV1PB\_YPPXGKuzpt0s-2GQ95G7Wv3uvO3bzsgaHB\_8JbFZJM5Gu2kVxtgyAa4e



4x6 =

Scale = 1:55.8

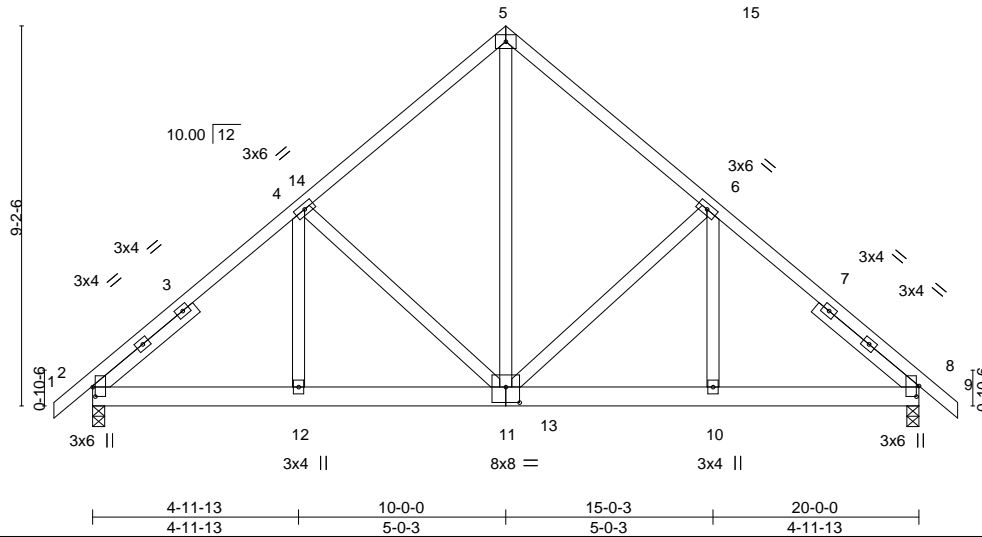


Plate Offsets (X,Y)-- [2:0-2-12,0-0-12], [8:0-3-1,0-0-12], [11:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.45 BC 0.20 WB 0.22 Matrix-S	in (loc) l/defl L/d Vert(LL) -0.02 11-12 >999 360 Vert(CT) -0.04 11-12 >999 240 Horz(CT) 0.01 8 n/a n/a Wind(LL) 0.01 11 >999 240	MT20	197/144
TCDL 10.0	Rep Stress Incr NO			Weight: 287 lb	FT = 5%
BCLL 0.0 *	Code IBC2021/TPI2014				
BCDL 10.0					

LUMBER-	BRACING-	[MCT]
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 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS 2x4 SP No.3 or 2x4 SPF Stud		
SLIDER Left 2x4 SP or SPF No.3 or Stud 3-2-0, Right 2x4 SP or SPF No.3 or Stud 3-2-0		

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=232(LC 9)  
 Max Uplift 2=-178(LC 10), 8=-170(LC 11)  
 Max Grav 2=1609(LC 17), 8=1559(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1875/211, 4-5=-1324/246, 5-6=-1324/246, 6-8=-1831/203  
 BOT CHORD 2-12=-187/1311, 11-12=-187/1311, 10-11=-77/1279, 8-10=-77/1279  
 WEBS 4-12=0/346, 5-11=-182/1028, 6-10=0/311, 4-11=-622/229, 6-11=-579/224

- NOTES-** (10-12)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; 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.
  - This truss has been designed for greater of min roof live load of 14.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
  - 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=178, 8=170.
  - 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.

Continued on page 2

**LOAD CASE(S)** Standard

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

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818 Soundside Road  
Edenton, NC 27932



Job ORDERS	Truss SE-18617- <b>Cond3</b>	Truss Type COMN	Qty 1	Ply <b>2</b>	11_Southeast-Girder-Int Job Reference (optional)	I49194730
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8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 21:30:29 2021 Page 2  
ID:IJkAtAdo3eV1PB\_YPPXGKuzpt0s-2GQ95G7Wv3uvO3bzsgaHB\_8JbFZJM5Gu2kVxtgyAa4e

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 2-13=-70(B=-50), 8-13=-60(B=-40), 1-5=-80, 5-9=-80

**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-18618	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194695
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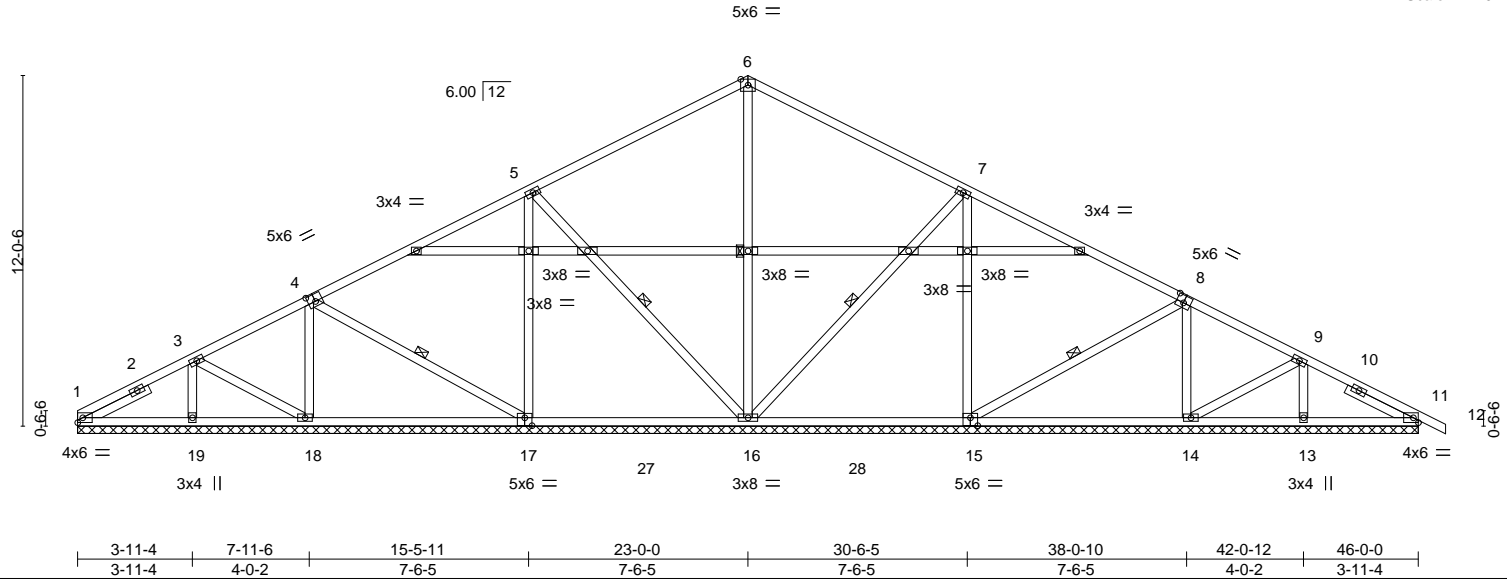
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 21:29:04 2021 Page 1

ID:JkAtAdo3eV1PB\_YPPXGKuzpt0s-1vn0FC5BwyBzh?beNJYLE37kG\_Wzxa5OV0QxO5yAa5z

3-11-4	7-11-6	15-5-11	23-0-0	30-6-5	38-0-10	42-0-12	46-0-0	46-11-4
3-11-4	4-0-2	7-6-5	7-6-5	7-6-5	7-6-5	4-0-2	3-11-4	0-11-4

Scale = 1:79.1



LOADING (psf)	SPACING-	CSL	DEFL.	VERT (LL)	VERT (CT)	HORZ (CT)	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.75	in (loc) l/defl L/d	0.00 12 n/r 120	0.00 12 n/r 120	0.01 11 n/a n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.42						
BCLL 0.0 *	Rep Stress Incr YES	WB 0.49						
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S						
Weight: 313 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  
SLIDER Left 2x4 SP or SPF No.3 or Stud 2-6-0, Right 2x4 SP or SPF No.3 or Stud 2-6-0

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 6-16, 7-16, 8-15, 5-16, 4-17

**REACTIONS.** All bearings 46-0-0.  
(lb) - Max Horz 1=209(LC 15)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 14, 13, 19, 11 except 16=116(LC 10), 17=107(LC 10), 18=105(LC 10)  
Max Grav All reactions 250 lb or less at joint(s) 1 except 16=749(LC 1), 15=565(LC 26), 14=471(LC 1), 13=269(LC 24), 17=567(LC 25), 18=471(LC 1), 19=271(LC 23), 11=257(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 6-16=411/49, 7-15=369/132, 8-14=345/122, 5-17=370/159, 4-18=344/150

- 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
  - All plates are 3x6 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 14, 13, 19, 11 except (jt=lb) 16=116, 17=107, 18=105.
  - 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

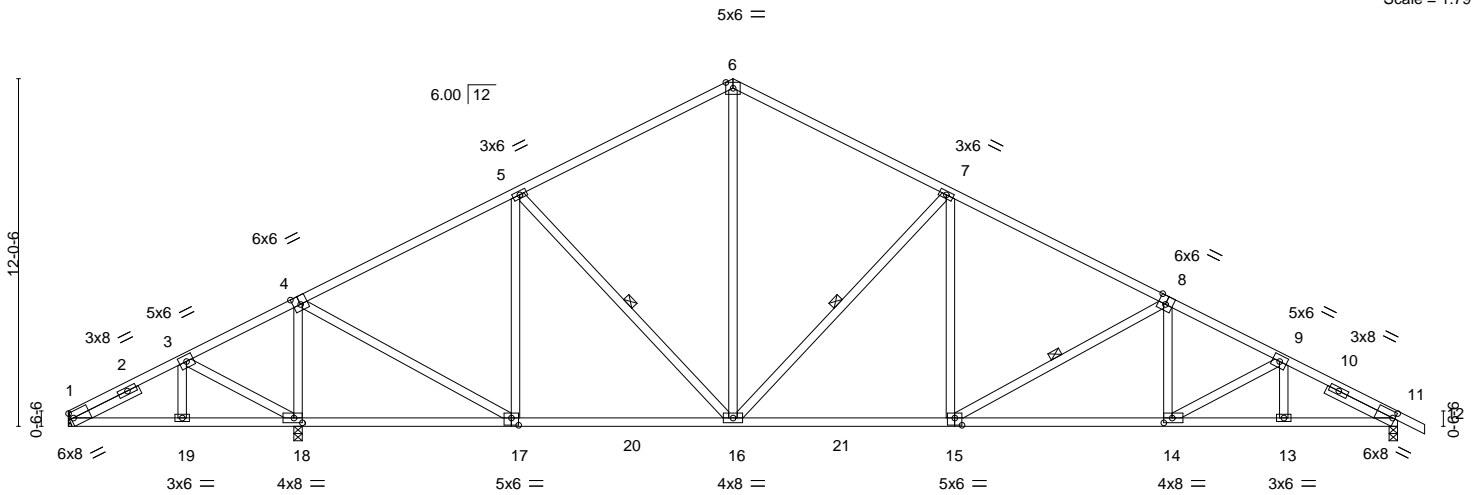
Job ORDERS	Truss SE-18619- <b>Cond1</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	150924401
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Mar 22 15:22:13 2022 Page 1  
ID:JkAtAdo3eV1PB\_YPXGKuzpt0s-x6qJ40\_Suhp\_c5QXS9JfBvRGvzJ4fKXUV?E\_ypzYLI8

3-11-4	7-11-6	15-5-11	23-0-0	30-6-5	38-0-10	42-0-12	46-0-0	46-11-4
3-11-4	4-0-2	7-6-5	7-6-5	7-6-5	7-6-5	4-0-2	3-11-4	0-11-4

Scale = 1:79.7



3-11-4	7-9-10	7-11-6	15-5-11	23-0-0	30-6-5	38-0-10	42-0-12	46-0-0
3-11-4	3-10-6	0-1-12	7-6-5	7-6-5	7-6-5	7-6-5	4-0-2	3-11-4

Plate Offsets (X,Y)-- [1:Edge,0-2-10], [4:0-3-0,Edge], [8:0-3-0,Edge], [11:0-1-0,0-2-10], [14:0-3-8,0-2-0], [15:0-3-0,0-3-0], [17:0-3-0,0-3-0], [18:0-3-8,0-2-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.75	Vert(LL) -0.15	15-16	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.69	Vert(CT) -0.28	15-16	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.88	Horz(CT) 0.07	11	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.10	14-15	>999	240		
							Weight: 280 lb	FT = 5%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2D  
WEBS 2x4 SP No.3 or 2x4 SPF Stud  
SLIDER Left 2x4 SP or SPF No.3 or Stud 2-6-0,  
Right 2x4 SP or SPF No.3 or Stud 2-6-0

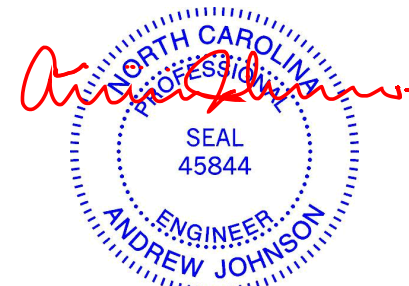
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-2-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 7-16, 8-15, 5-16

[MCT]

**REACTIONS.** (size) 1=Mechanical, 18=0-3-8, 11=0-3-8  
Max Horz 1=209(LC 11)  
Max Uplift 1=120(LC 26), 18=303(LC 10), 11=243(LC 11)  
Max Grav 1=98(LC 23), 18=2218(LC 1), 11=1516(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-89/392, 3-4=-111/663, 4-5=-1151/224, 5-6=-1301/321, 6-7=-1301/292,  
7-8=-1951/341, 8-9=-2442/393, 9-11=-2597/388  
BOT CHORD 1-19=-323/207, 18-19=-323/207, 17-18=-530/220, 16-17=-82/972, 15-16=-42/1661,  
14-15=-218/2171, 13-14=-270/2193, 11-13=-270/2193  
WEBS 6-16=-130/712, 7-16=-883/299, 7-15=-5/528, 8-15=-589/201, 8-14=0/268, 5-16=-32/299,  
5-17=-673/146, 4-17=-105/1682, 4-18=-1927/324, 3-18=-325/109

- NOTES-** (7-9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 1, 303 lb uplift at joint 18 and 243 lb uplift at joint 11.
  - 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.



March 23, 2022

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

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818 Soundside Road  
Edenton, NC 27932

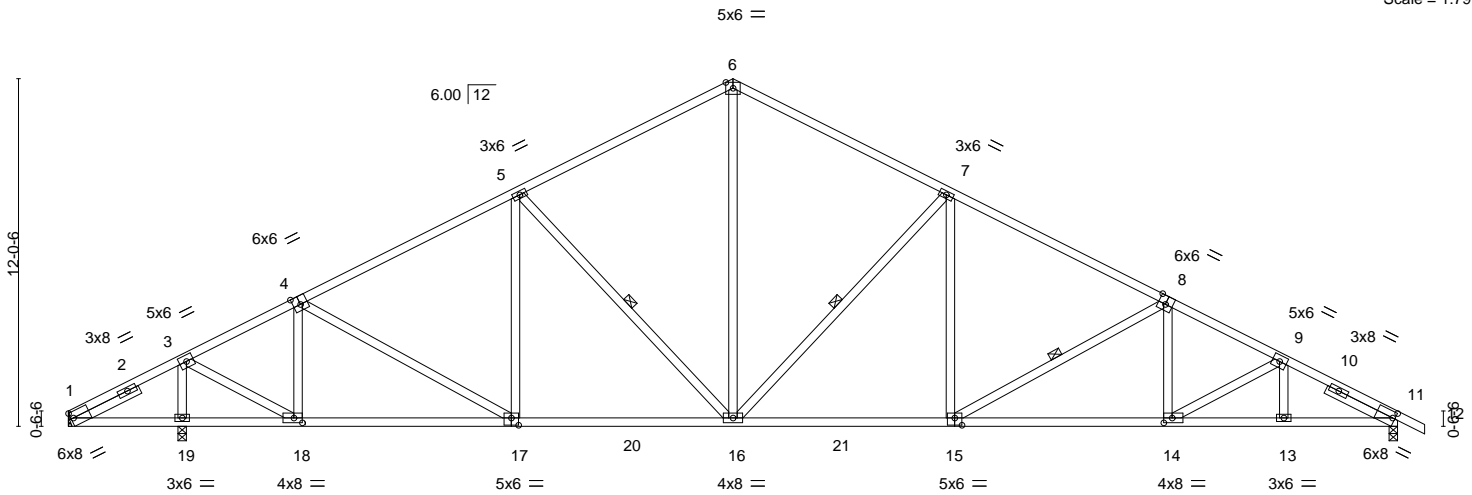
Job ORDERS	Truss SE-18619- <b>Cond2</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	150924401
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Mar 22 15:22:14 2022 Page 1  
ID:JkAtAdo3eV1PB\_YPXGKuzpt0s-QIOhIM\_5f?xrDF?k?sqk7\_RTMeLOmodkfzXUGzYLI7

3-11-4	7-11-6	15-5-11	23-0-0	30-6-5	38-0-10	42-0-12	46-0-0	46-11-4
3-11-4	4-0-2	7-6-5	7-6-5	7-6-5	7-6-5	4-0-2	3-11-4	0-11-4

Scale = 1:79.7



3-11-4	7-9-10	7-11-6	15-5-11	23-0-0	30-6-5	38-0-10	42-0-12	46-0-0
3-11-4	3-10-6	0-1-12	7-6-5	7-6-5	7-6-5	7-6-5	4-0-2	3-11-4

Plate Offsets (X,Y)-- [1:Edge,0-2-10], [4:0-3-0,Edge], [8:0-3-0,Edge], [11:0-1-0,0-2-10], [14:0-3-8,0-2-0], [15:0-3-0,0-3-0], [17:0-3-0,0-3-0], [18:0-3-8,0-2-0]

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) -0.18	15-16	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.35	15-16	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.95	Horz(CT) 0.09	11	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.12	15	>999	240		

Weight: 280 lb FT = 5%

LUMBER-	BRACING-	[MCT]
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-11-14 oc purlins.	
BOT CHORD 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:	
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 6-0-0 oc bracing: 1-19,18-19.	
SLIDER Left 2x4 SP or SPF No.3 or Stud 2-6-0, Right 2x4 SP or SPF No.3 or Stud 2-6-0		

**REACTIONS.** (size) 1=Mechanical, 19=0-3-8, 11=0-3-8  
 Max Horz 1=-209(LC 11)  
 Max Uplift 1=-402(LC 17), 19=-340(LC 10), 11=-253(LC 11)  
 Max Grav 1=75(LC 10), 19=2429(LC 1), 11=1692(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-205/1075, 3-4=-1216/170, 4-5=-1904/265, 5-6=-1685/342, 6-7=-1685/313, 7-8=-2330/362, 8-9=-2807/413, 9-11=-2941/407  
 BOT CHORD 1-19=-883/196, 18-19=-883/196, 17-18=-199/1051, 16-17=-171/1621, 15-16=-60/2000, 14-15=-236/2499, 13-14=-286/2489, 11-13=-286/2489  
 WEBS 6-16=-148/1042, 7-16=-878/299, 7-15=-5/523, 8-15=-581/201, 8-14=0/255, 5-16=-421/223, 4-17=-9/687, 4-18=-951/195, 3-18=-243/2199, 3-19=-2316/370

- NOTES-** (7-9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 402 lb uplift at joint 1, 340 lb uplift at joint 19 and 253 lb uplift at joint 11.
  - 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.

**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 ORDERS	Truss SE-18619- <b>Cond3</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	150924401
Job Reference (optional)						

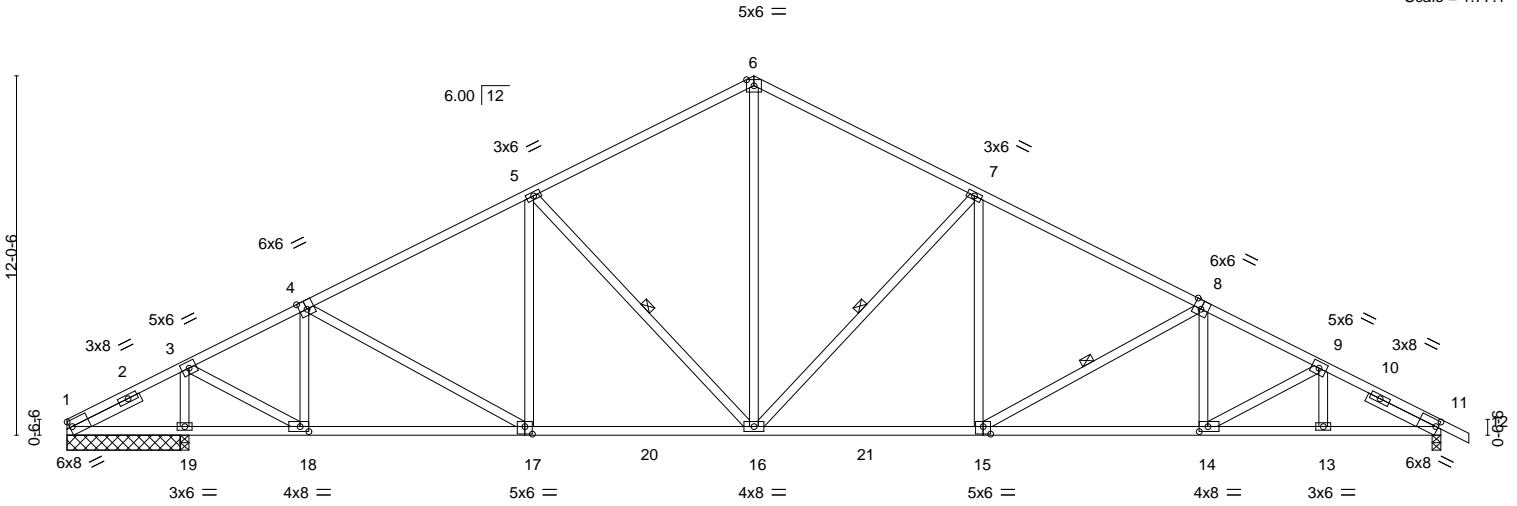
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Mar 22 15:22:14 2022 Page 1

ID:JkAtAdo3eV1PB\_YPPXGKuzpt0s-QIOhIM\_5f?xrDF?k?squk7\_RTMeLOmldkzfXUGzYLI7

3-11-4	7-11-6	15-5-11	23-0-0	30-6-5	38-0-10	42-0-12	46-0-0	46-11-4
3-11-4	4-0-2	7-6-5	7-6-5	7-6-5	7-6-5	4-0-2	3-11-4	0-11-4

Scale = 1:77.1



3-11-4	7-9-10	7-11-6	15-5-11	23-0-0	30-6-5	38-0-10	42-0-12	46-0-0
3-11-4	3-10-6	0-1-12	7-6-5	7-6-5	7-6-5	7-6-5	4-0-2	3-11-4
Plate Offsets (X,Y)-- [1:Edge,0-2-10], [4:0-3-0,Edge], [8:0-3-0,Edge], [11:0-1-0,0-2-10], [14:0-3-8,0-2-0], [15:0-3-0,0-3-0], [17:0-3-0,0-3-0], [18:0-3-8,0-2-0]								

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL) -0.18 15-16 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.35 15-16 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.95	Horz(CT) 0.09 11 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.12 15 >999 240	Weight: 280 lb	FT = 5%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-1-0 oc purlins.
BOT CHORD 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3 or 2x4 SPF Stud	6-0-0 oc bracing: 1-19,18-19.
SLIDER Left 2x4 SP or SPF No.3 or Stud 2-6-0, Right 2x4 SP or SPF No.3 or Stud 2-6-0	WEBS 1 Row at midpt 7-16, 8-15, 5-16

[MCT]

**REACTIONS.** All bearings 3-9-8 except (jt=length) 11=0-3-8.  
 (lb) - Max Horz 1=209(LC 15)  
 Max Uplift All uplift 100 lb or less at joint(s) except 1=397(LC 17), 19=342(LC 10), 11=253(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 1 except 19=2429(LC 1), 19=2429(LC 1), 11=1691(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-210/1085, 3-4=-1210/170, 4-5=-1902/265, 5-6=-1684/341, 6-7=-1684/313,  
 7-8=-2329/362, 8-9=-2806/413, 9-11=-2940/407  
 BOT CHORD 1-19=-895/196, 18-19=-895/196, 17-18=-197/1046, 16-17=-171/1619, 15-16=-60/1999,  
 14-15=-235/2498, 13-14=-286/2488, 11-13=-286/2488  
 WEBS 6-16=-148/1041, 7-16=-878/299, 7-15=-5/523, 8-15=-581/201, 8-14=0/255,  
 5-16=-419/222, 4-17=-9/689, 4-18=-955/196, 3-18=-246/2207, 3-19=-2317/373

- NOTES-** (6-8)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 397 lb uplift at joint 1, 342 lb uplift at joint 19 and 253 lb uplift at joint 11.
  - 6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - 8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

**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



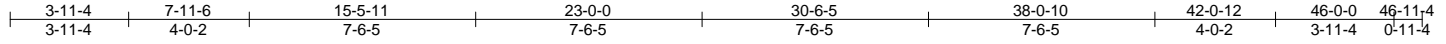
818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18619- <b>Cond4</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	150924401
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Tue Mar 22 15:22:14 2022 Page 1

ID:JkAtAdo3eV1PB\_YPPXGKuzpt0s-QIOhIM\_5f?xrDF?k?squk7\_OhMdFor3dkfzXUGzYLI7



5x6 =

Scale = 1:76.6

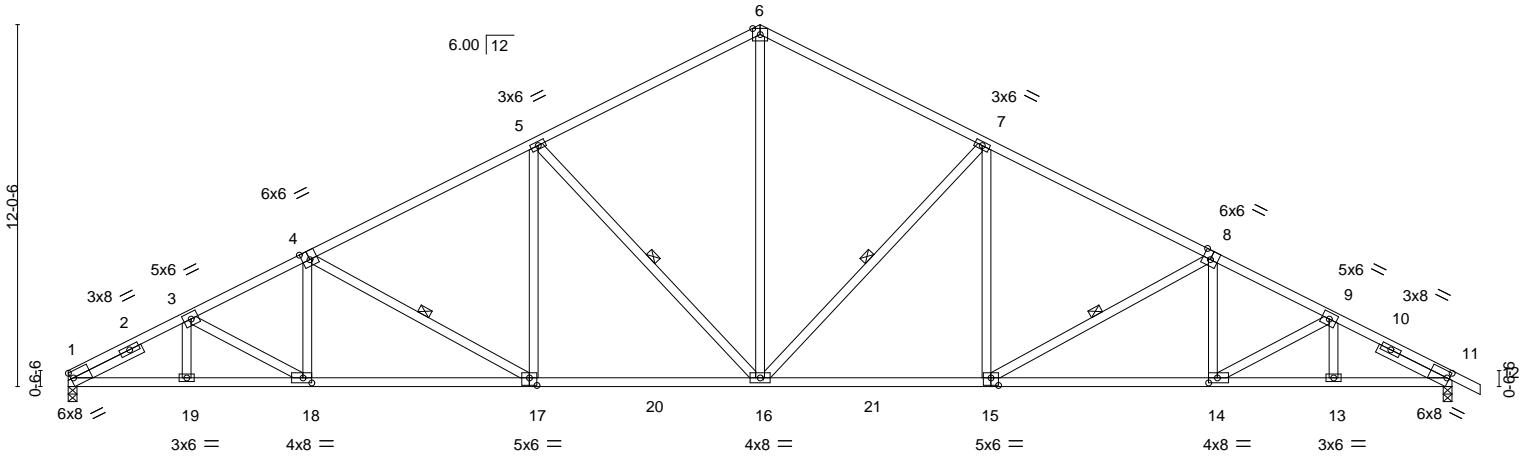


Plate Offsets (X,Y)--	[1:Edge,0-2-10], [4:0-3-0,Edge], [8:0-3-0,Edge], [11:0-1-0,0-2-10], [14:0-3-8,0-2-0], [15:0-3-0,0-3-0], [17:0-3-0,0-3-0], [18:0-3-8,0-2-0]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.94	Vert(LL) -0.24	16-17	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.48	16-17	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.61	Horz(CT) 0.18	11	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.18	16-17	>999	240	Weight: 280 lb	FT = 5%

LUMBER-	BRACING-	[MCT]
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.	
BOT CHORD 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 8-9-6 oc bracing.	
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 7-16, 8-15, 5-16, 4-17	
SLIDER Left 2x4 SP or SPF No.3 or Stud 2-6-0, Right 2x4 SP or SPF No.3 or Stud 2-6-0		

**REACTIONS.** (size) 1=0-3-8, 11=0-3-8  
 Max Horz 1=-209(LC 15)  
 Max Uplift 1=-235(LC 10), 11=-259(LC 11)  
 Max Grav 1=1828(LC 1), 11=1894(LC 1)

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

TOP CHORD	1-3=-3348/424, 3-4=-3232/430, 4-5=-2767/377, 5-6=-2126/356, 6-7=-2126/356, 7-8=-2765/376, 8-9=-3226/427, 9-11=-3334/420
BOT CHORD	1-19=-508/2844, 18-19=-508/2844, 17-18=-456/2881, 16-17=-279/2391, 15-16=-105/2389, 14-15=-248/2876, 13-14=-298/2829, 11-13=-298/2829
WEBS	6-16=-162/1416, 7-16=-872/299, 7-15=-4/517, 8-15=-571/200, 5-16=-874/299, 5-17=-5/518, 4-17=-576/202

- NOTES-** (6-8)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 235 lb uplift at joint 1 and 259 lb uplift at joint 11.
  - 6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - 8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

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

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818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18620- <b>Cond1</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194697
Job Reference (optional)						

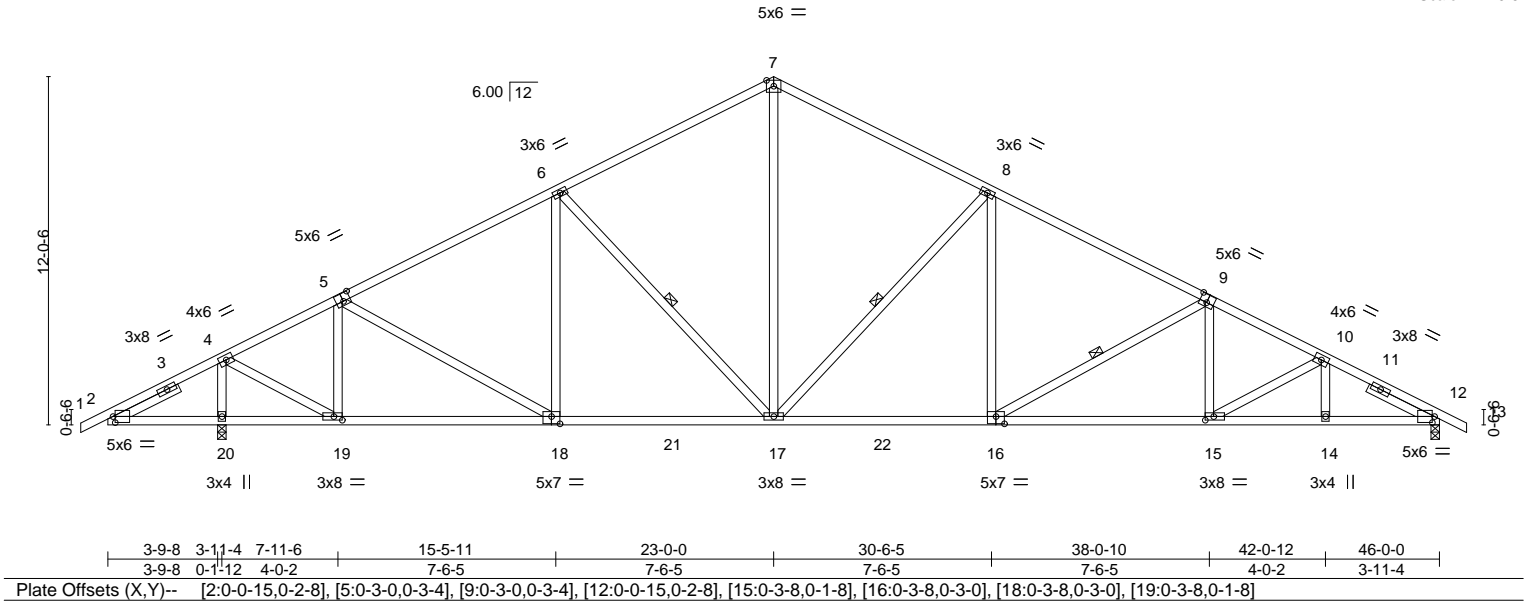
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Dec 9 21:29:14 2021 Page 1

ID:JkAtAdo3eV1PB\_YPPXGKuzpt0s-krOoLdDTZORyUXMzZqkheAXQL0piH1UspZrTkWyAa5p

0-11-4	3-11-4	7-11-6	15-5-11	23-0-0	30-6-5	38-0-10	42-0-12	46-0-0	46-11-4
0-11-4	3-11-4	4-0-2	7-6-5	7-6-5	7-6-5	7-6-5	4-0-2	3-11-4	0-11-4

Scale = 1:79.6



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.20 16-17	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.38 16-17	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.12 12	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S	Wind(LL)	0.13 16	>999	240	Weight: 282 lb	FT = 5%

<b>LUMBER-</b>	<b>BRACING-</b>	[MCT]
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.	
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:	
WEBS 2x4 SP No.3 or 2x4 SPF Stud	6-0-0 oc bracing: 2-20,19-20.	
SLIDER Left 2x4 SP or SPF No.3 or Stud 2-6-0, Right 2x4 SP or SPF No.3 or Stud 2-6-0	WEBS 1 Row at midpt 8-17, 9-16, 6-17	

**REACTIONS.** (size) 20=0-3-8, 12=0-3-8  
 Max Horz 20=-205(LC 15)  
 Max Uplift 20=-282(LC 10), 12=-251(LC 11)  
 Max Grav 20=2068(LC 1), 12=1722(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-105/443, 4-5=-1516/192, 5-6=-2032/276, 6-7=-1750/337, 7-8=-1750/309,  
 8-9=-2394/357, 9-10=-2869/409, 10-12=-3000/403  
 BOT CHORD 2-20=-337/135, 19-20=-337/235, 18-19=-241/1341, 17-18=-189/1735, 16-17=-59/2058,  
 15-16=-232/2554, 14-15=-283/2539, 12-14=-283/2539  
 WEBS 7-17=-144/1104, 8-17=-877/299, 8-16=-5/522, 9-16=-578/201, 9-15=0/252,  
 6-17=-465/235, 5-18=-22/498, 5-19=-794/171, 4-19=-194/1885, 4-20=-1971/314

- 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 282 lb uplift at joint 20 and 251 lb uplift at joint 12.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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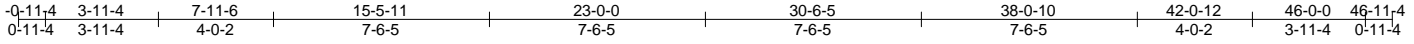
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-18620- <b>Cond2</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194697
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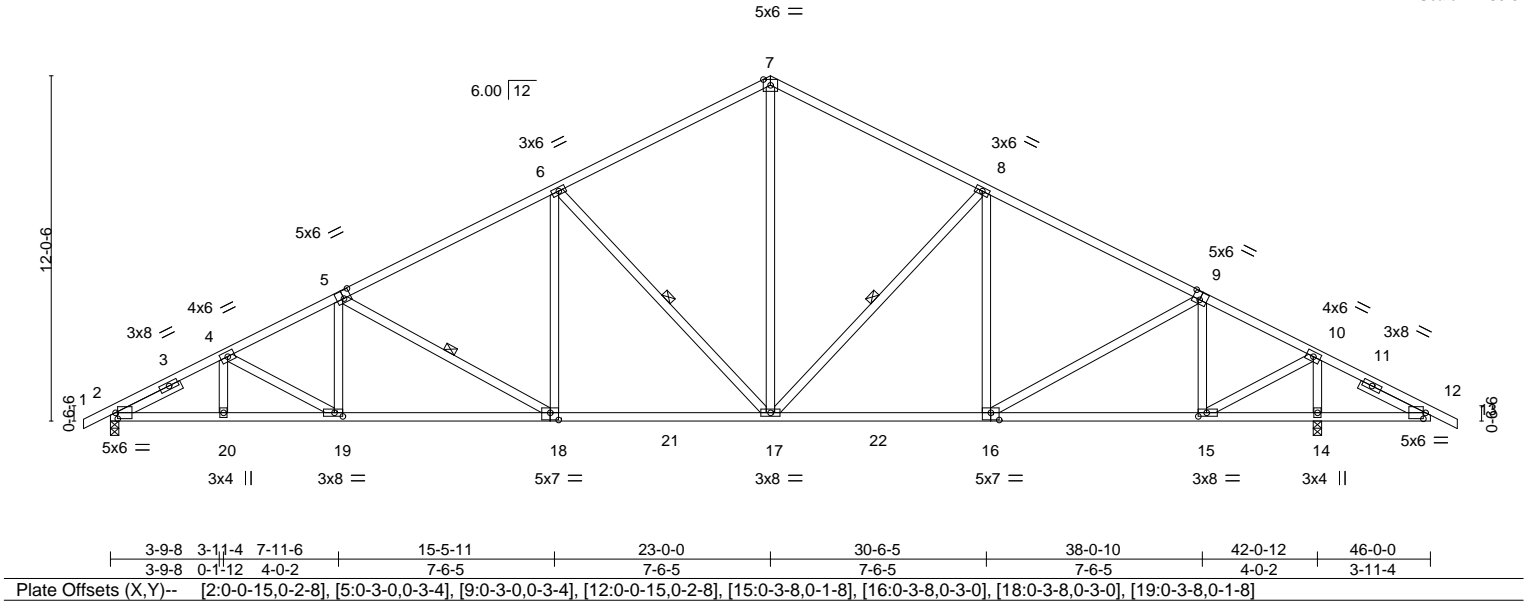
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 21:29:14 2021 Page 1

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Scale = 1:80.3



LOADING (psf)	SPACING-	CSL.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.78	Vert(LL) -0.20 17-18 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.85	Vert(CT) -0.38 17-18 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.81	Horz(CT) 0.12 14 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.14 18 >999 240	Weight: 282 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  
 SLIDER Left 2x4 SP or SPF No.3 or Stud 2-6-0, Right 2x4 SP or SPF No.3 or Stud 2-6-0

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 8-17, 6-17, 5-18

**REACTIONS.** (size) 2=0-3-8, 14=0-3-8  
 Max Horz 2=-205(LC 15)  
 Max Uplift 2=-251(LC 10), 14=-282(LC 11)  
 Max Grav 2=1722(LC 1), 14=2068(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2999/401, 4-5=-2870/409, 5-6=-2395/357, 6-7=-1750/309, 7-8=-1750/337, 8-9=-2031/276, 9-10=-1515/192, 10-12=-104/443  
 BOT CHORD 2-20=-486/2539, 19-20=-486/2539, 18-19=-437/2557, 17-18=-262/2058, 16-17=-71/1735, 15-16=-53/1323, 14-15=-337/134, 12-14=-337/134  
 WEBS 7-17=-145/1104, 8-17=-465/235, 9-16=-21/494, 9-15=-793/170, 10-15=-192/1883, 10-14=-1971/314, 6-17=-877/299, 6-18=-4/522, 5-18=-580/201, 5-19=0/252

- NOTES-** (6-8)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 251 lb uplift at joint 2 and 282 lb uplift at joint 14.
  - 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.

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**ENGINEERING BY**  
**TRENCO**  
 A MITek Affiliate

818 Soundside Road  
 Edenton, NC 27932

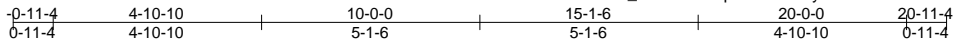


Job ORDERS	Truss SE-18621	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194698
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 21:29:15 2021 Page 1

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4x6 =

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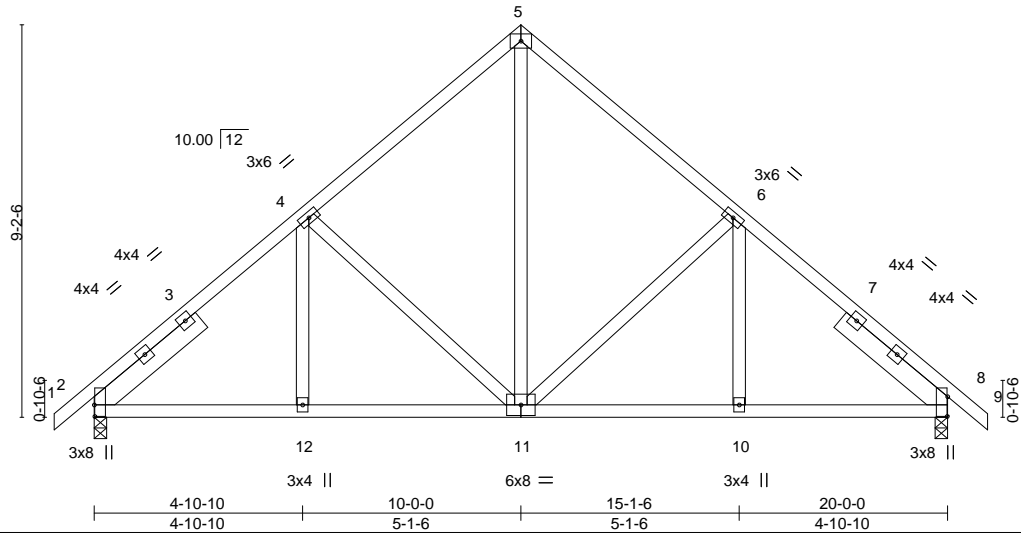


Plate Offsets (X,Y)-- [2:0-3-4,0-0-2], [8:0-5-9,0-0-2]

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) -0.02	10-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.06	10-11	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.31	Horz(CT) 0.03	8	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.02	11	>999	240		
							Weight: 133 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  
 WEBS 2x4 SP No.3 or 2x4 SPF Stud  
 SLIDER Left 2x6 SP No.2 3-2-8, Right 2x6 SP No.2 3-2-8

**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) 2=0-3-8, 8=0-3-8  
 Max Horz 2=-232(LC 8)  
 Max Uplift 2=-102(LC 10), 8=-102(LC 11)  
 Max Grav 2=856(LC 1), 8=856(LC 1)

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

TOP CHORD 2-4=-983/123, 4-5=-702/192, 5-6=-702/192, 6-8=-982/122  
 BOT CHORD 2-12=-125/736, 11-12=-125/736, 10-11=-19/664, 8-10=-19/664  
 WEBS 5-11=-112/482, 4-11=-323/201, 6-11=-324/202

**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 102 lb uplift at joint 2 and 102 lb uplift at joint 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.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
- Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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

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

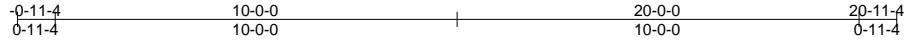


818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-18622	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194699
Job Reference (optional)						

NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 21:29:17 2021 Page 1  
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4x6 =

Scale = 1:57.3

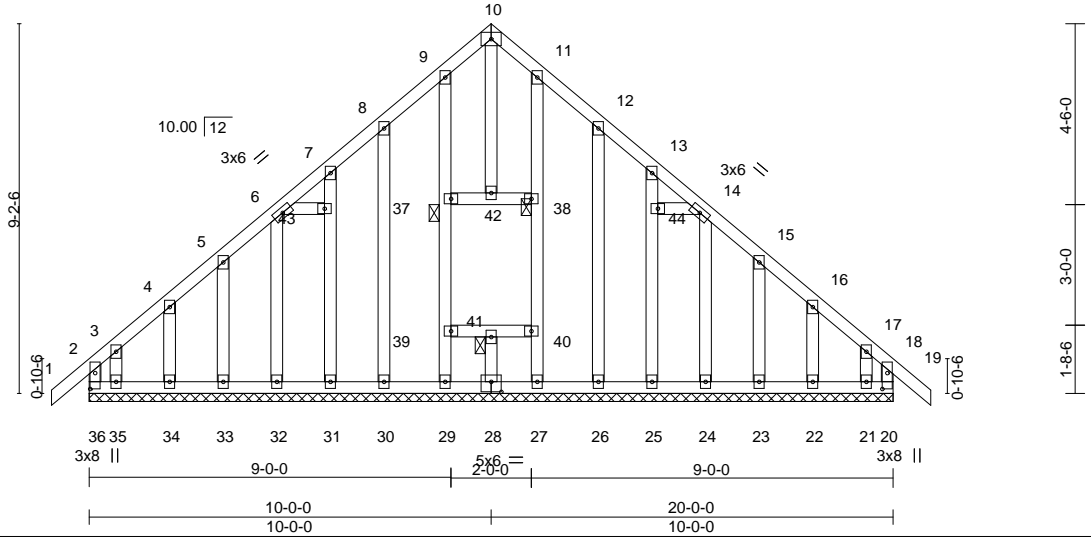


Plate Offsets (X,Y)-- [20:0-4-12,0-1-8], [28:0-3-0,0-3-0], [36:0-4-12,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.00	19	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.00	19	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.01	20	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S						
								Weight: 178 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  
WEBS 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, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 37, 38, 41

**REACTIONS.** All bearings 20-0-0.  
(lb) - Max Horz 36=-232(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 30, 31, 32, 33, 34, 26, 25, 24, 23, 22 except 36=-201(LC 8), 20=-134(LC 9), 35=-304(LC 10), 21=-275(LC 11)  
Max Grav All reactions 250 lb or less at joint(s) 29, 27, 30, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 28 except 36=380(LC 10), 20=335(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-309/194, 17-18=-274/142

- NOTES-** (11-13)
- 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.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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) 30, 31, 32, 33, 34, 26, 25, 24, 23, 22 except (jt=lb) 36=201, 20=134, 35=304, 21=275.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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

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



818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18623	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194700
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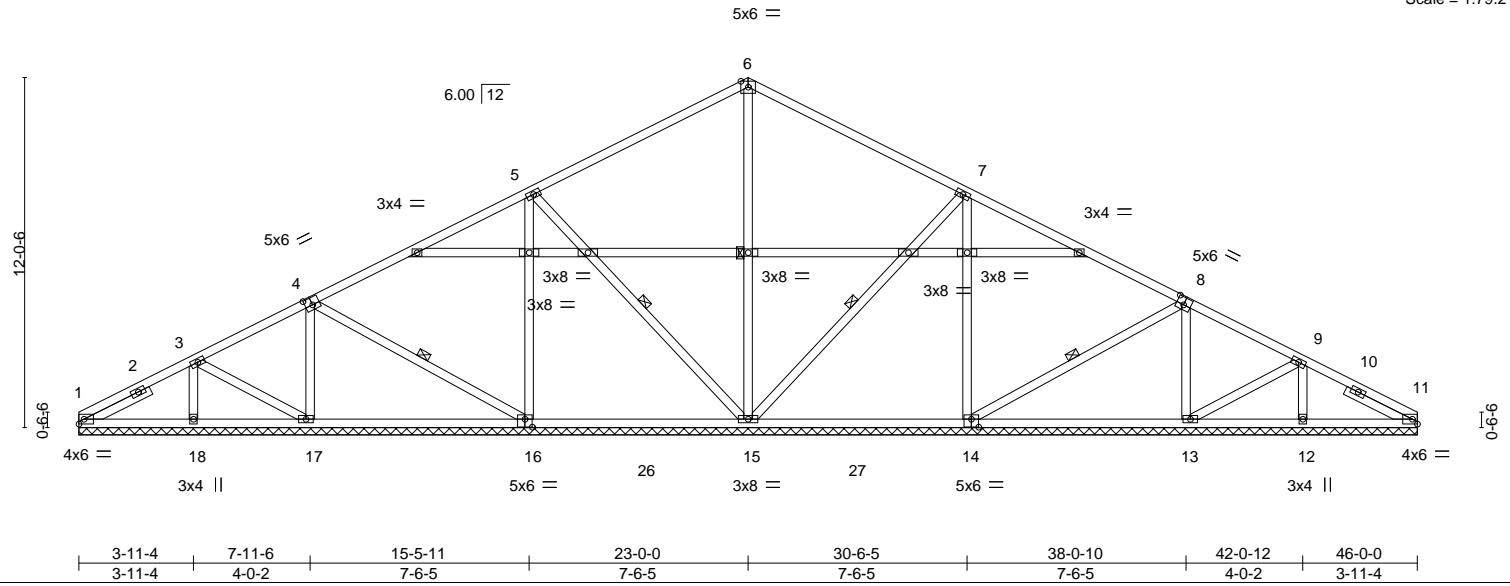
NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 21:29:19 2021 Page 1

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3-11-4	7-11-6	15-5-11	23-0-0	30-6-5	38-0-10	42-0-12	46-0-0
3-11-4	4-0-2	7-6-5	7-6-5	7-6-5	7-6-5	4-0-2	3-11-4

Scale = 1:79.2



LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.75	Vert(LL) n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.41	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.48	Horz(CT) 0.01	11	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S					Weight: 312 lb	FT = 5%

LUMBER-	BRACING-
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.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 6-15, 7-15, 8-14, 5-15, 4-16
SLIDER Left 2x4 SP or SPF No.3 or Stud 2-6-0, Right 2x4 SP or SPF No.3 or Stud 2-6-0	

**REACTIONS.** All bearings 46-0-0.  
 (lb) - Max Horz 1=201(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 13, 12, 18, 11 except 16=106(LC 10), 15=118(LC 10), 17=105(LC 10)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 11 except 16=562(LC 25), 15=744(LC 1), 14=562(LC 26), 13=476(LC 1), 12=271(LC 24), 17=476(LC 1), 18=271(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 6-15=412/50, 7-14=369/134, 8-13=346/124, 5-16=369/160, 4-17=346/152

- 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
  - All plates are 3x6 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 14, 13, 12, 18, 11 except (jt=lb) 16=106, 15=118, 17=105.
  - 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

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**ENGINEERING BY**  
**TRENCO**  
 A MITek Affiliate

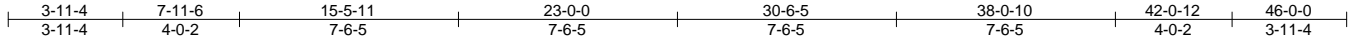
818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-18624	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194701
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 21:29:20 2021 Page 1

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Scale = 1:79.2

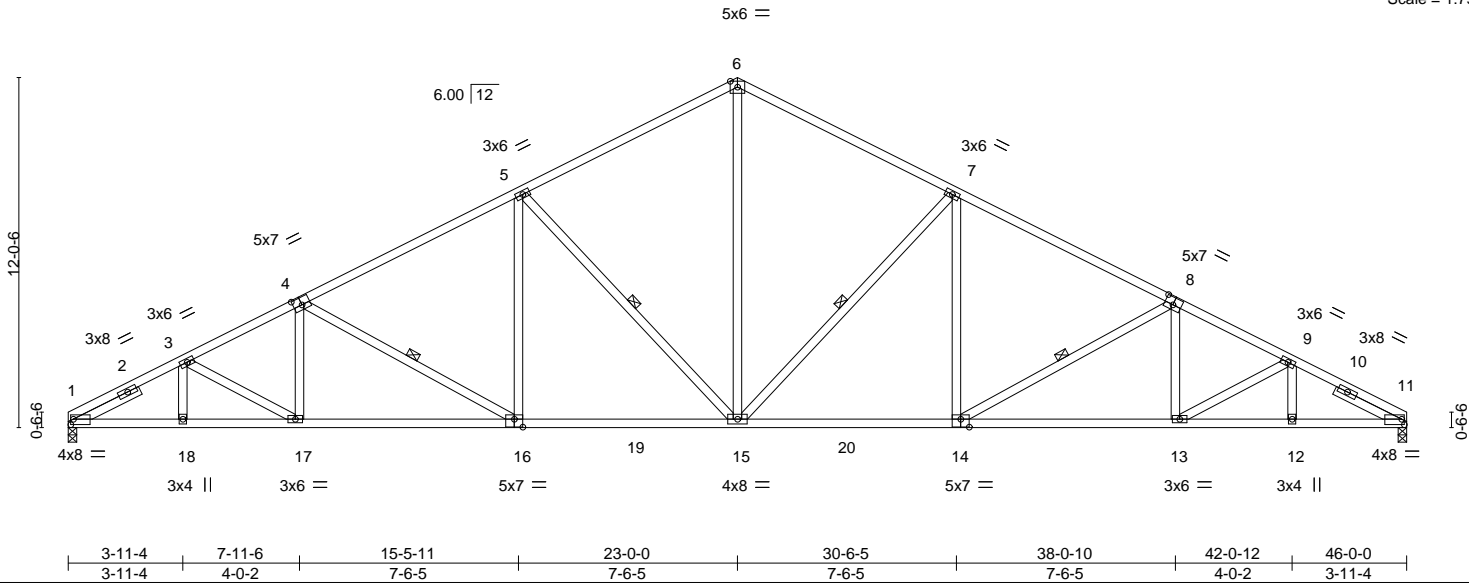


Plate Offsets (X, Y)--	[1:0-1-1,0-2-4], [4:0-3-8,0-3-0], [8:0-3-8,0-3-0], [11:0-1-1,0-2-4], [14:0-3-8,0-3-4], [16:0-3-8,0-3-4]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.94	Vert(LL)	-0.26	14-15	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.52	14-15	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.61	Horz(CT)	0.20	11	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S	Wind(LL)	0.19	15-16	>999	Weight: 279 lb	FT = 5%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 8-2-5 oc bracing.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 7-15, 8-14, 5-15, 4-16
SLIDER Left 2x4 SP or SPF No.3 or Stud 2-6-0, Right 2x4 SP or SPF No.3 or Stud 2-6-0	

**REACTIONS.** (size) 1=0-3-8, 11=0-3-8  
 Max Horz 1=-201(LC 15)  
 Max Uplift 1=-235(LC 10), 11=-235(LC 11)  
 Max Grav 1=1828(LC 1), 11=1828(LC 1)

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

TOP CHORD	1-3=-3350/424, 3-4=-3234/430, 4-5=-2769/377, 5-6=-2127/357, 6-7=-2127/357, 7-8=-2769/377, 8-9=-3233/430, 9-11=-3351/425
BOT CHORD	1-18=-512/2845, 17-18=-512/2845, 16-17=-460/2883, 15-16=-284/2392, 14-15=-109/2392, 13-14=-259/2882, 12-13=-312/2846, 11-12=-312/2846
WEBS	6-15=-162/1417, 7-15=-874/299, 7-14=-5/518, 8-14=-575/202, 5-15=-874/299, 5-16=-5/518, 4-16=-576/202

- 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) 1=235, 11=235.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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 Edenton, NC 27932

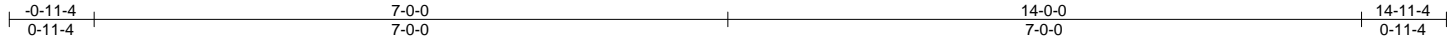
Job ORDERS	Truss SE-18625	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194702
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NVR, Frederick, MD - 21703,

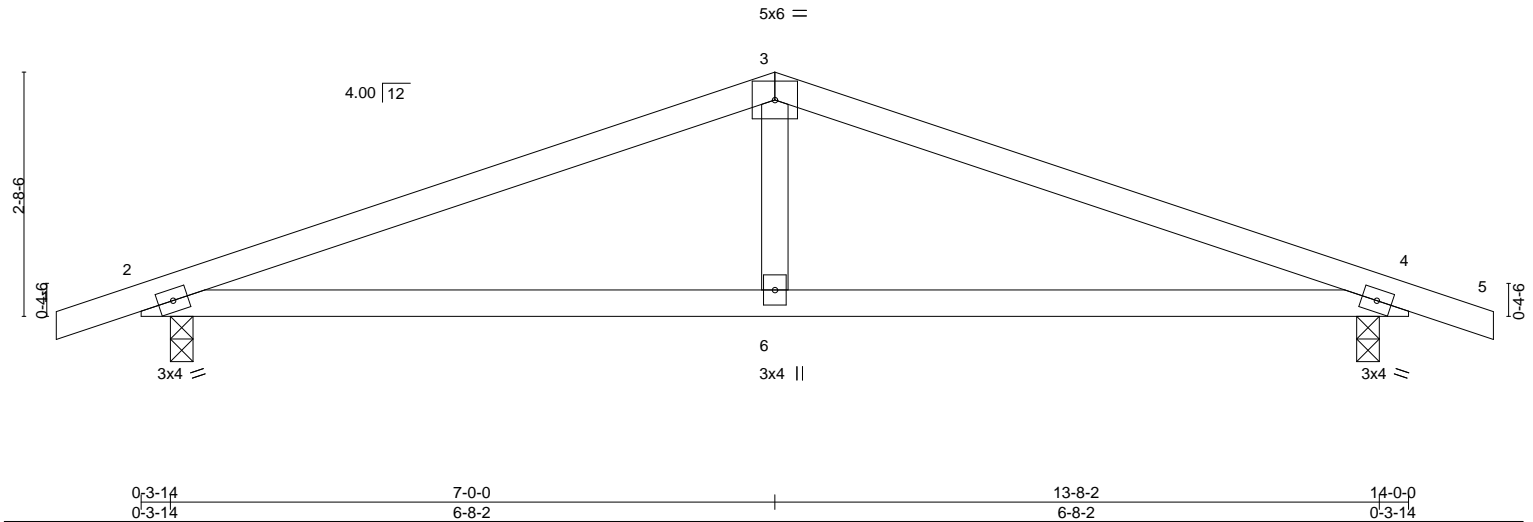
8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 21:29:21 2021 Page 1

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Job Reference (optional)



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	2-6	>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 11)  
 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=-1018/122, 3-4=-1018/121  
 BOT CHORD 2-6=-65/899, 4-6=-65/899  
 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

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

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



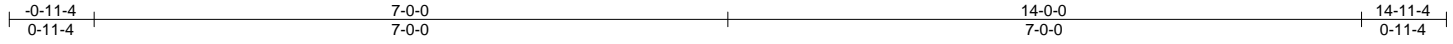
818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-18626	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194703
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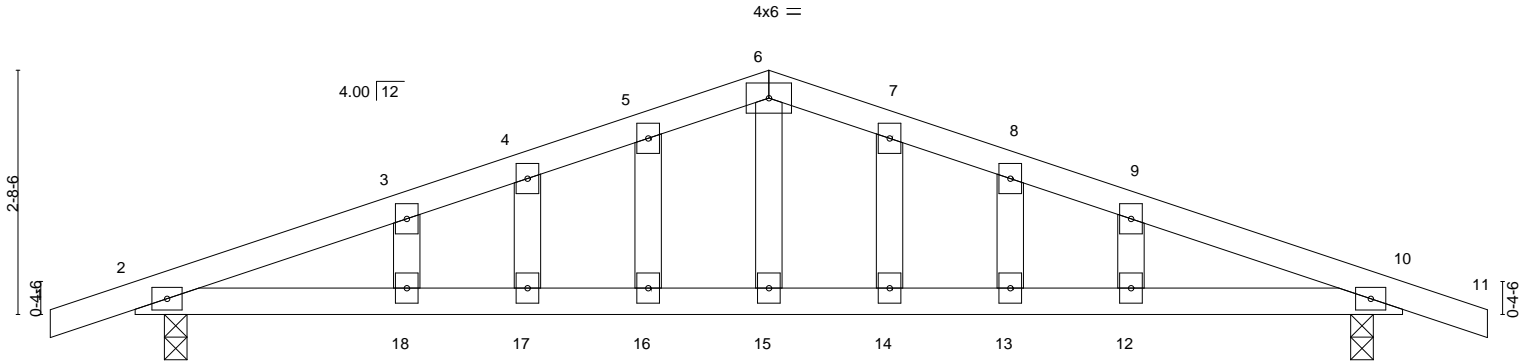
NVR, Frederick, MD - 21703,

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ID:JkAtAdo3eV1PB\_YPPXGKuzpt0s-VNsp1MJUgUSPsmz5R5tZzstpLEaE9oW1epnu02yAa5h



Scale = 1:25.5



0-3-14 0-3-14	7-0-0 6-8-2	13-8-2 6-8-2	14-0-0 0-3-14
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.65	Vert(LL) -0.11	12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.74	Vert(CT) -0.18	12-13	>916	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.02	10	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.10	17-18	>999	240	Weight: 60 lb	FT = 5%

**LUMBER-**  
TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
WEBS 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 4-5-11 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=-1034/115, 3-4=-985/132, 4-5=-967/141, 5-6=-965/155, 6-7=-965/155,  
7-8=-967/140, 8-9=-985/132, 9-10=-1034/114  
BOT CHORD 2-18=-81/928, 17-18=-81/928, 16-17=-81/928, 15-16=-81/928, 14-15=-81/928,  
13-14=-81/928, 12-13=-81/928, 10-12=-81/928  
WEBS 6-15=-46/390

- 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

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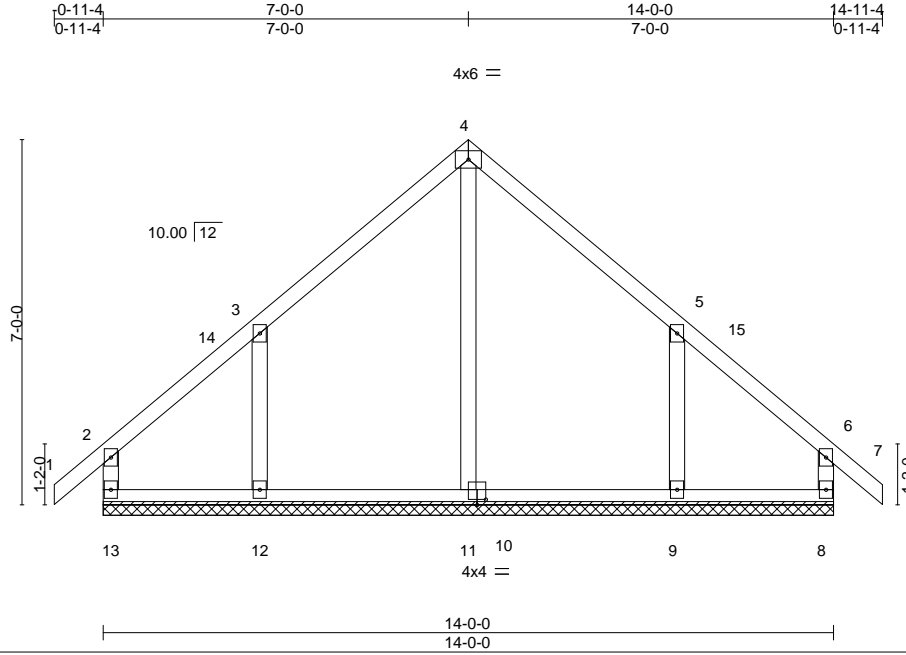
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	147779325
ORDERS	VT-95514	VCOM	1	1	Job Reference (optional)	

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Scale = 1:44.2

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15	TC 0.68	Vert(LL)	-0.00	6	n/r	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT)	0.00	6	n/r		
BCLL 0.0	Rep Stress Incr YES	WB 0.30	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-R					Weight: 73 lb	FT = 5%

**LUMBER-**  
 TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
 BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud  
 WEBS 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, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 14-0-0.  
 (lb) - Max Horz 13=-224(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) except 13=-124(LC 13), 12=-305(LC 12), 9=-301(LC 13), 8=-115(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 13, 8 except 11=409(LC 20), 12=555(LC 19), 9=555(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-200/264, 4-5=-200/255  
 WEBS 4-11=-325/27, 3-12=-487/328, 5-9=-487/326

- NOTES-** (9-10)
- 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) This truss has been designed for greater of min roof live load of 14.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
  - 5) All plates are 3x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 13, 305 lb uplift at joint 12, 301 lb uplift at joint 9 and 115 lb uplift at joint 8.
  - 9) 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.
  - 10) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.



September 16,2021

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	147779326
ORDERS	VT-95515	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

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ID:k1\_gl8vEn3N?lqk4KcCp\_5yUXze-9aG98mj2xAW8Jh\_2ZgKjP5ahRvLVn3TNhM\_x8\_ygS2\_

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0-11-4 7-0-0 7-0-1 0-11-4

4x6 =

Scale = 1:50.1

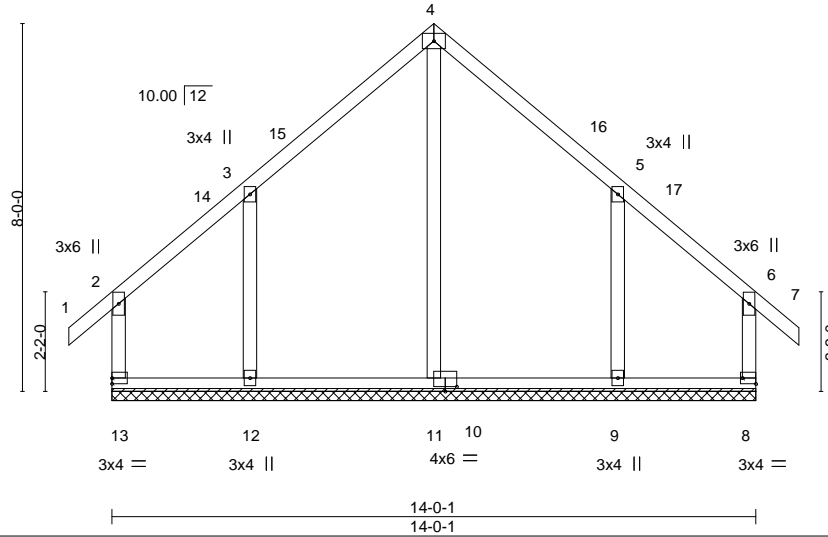


Plate Offsets (X,Y)-- [8:Edge,0-1-8], [10:0-3-0,0-1-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15	TC 0.68	Vert(LL)	0.00	6	n/r	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.41	Vert(CT)	-0.00	6	n/r		
BCLL 0.0	Rep Stress Incr YES	WB 0.40	Horz(CT)	-0.00	8	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-R					Weight: 81 lb	FT = 5%

**LUMBER-**

TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
 BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud  
 WEBS 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, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.**

All bearings 14-0-1.  
 (lb) - Max Horz 13=-320(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) except 13=-171(LC 8), 12=-312(LC 12), 8=-165(LC 9), 9=-312(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 13=281(LC 23), 11=415(LC 20), 12=557(LC 19), 8=277(LC 22), 9=557(LC 20)

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

TOP CHORD 3-4=-241/409, 4-5=-241/409  
 WEBS 4-11=-332/79, 3-12=-486/332, 5-9=-486/332

**NOTES-** (8-9)

- 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(2E) 1-7-15 to 4-7-15, Interior(1) 4-7-15 to 6-7-3, Exterior(2R) 6-7-3 to 12-7-3, Interior(1) 12-7-3 to 14-6-8, Exterior(2E) 14-6-8 to 17-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; 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.
- This truss has been designed for greater of min roof live load of 14.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 171 lb uplift at joint 13, 312 lb uplift at joint 12, 165 lb uplift at joint 8 and 312 lb uplift at joint 9.
- 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.



September 16, 2021

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818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	02_Valley	147779327
ORDERS	VT-95516	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

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

4x6 =

Scale = 1:54.5

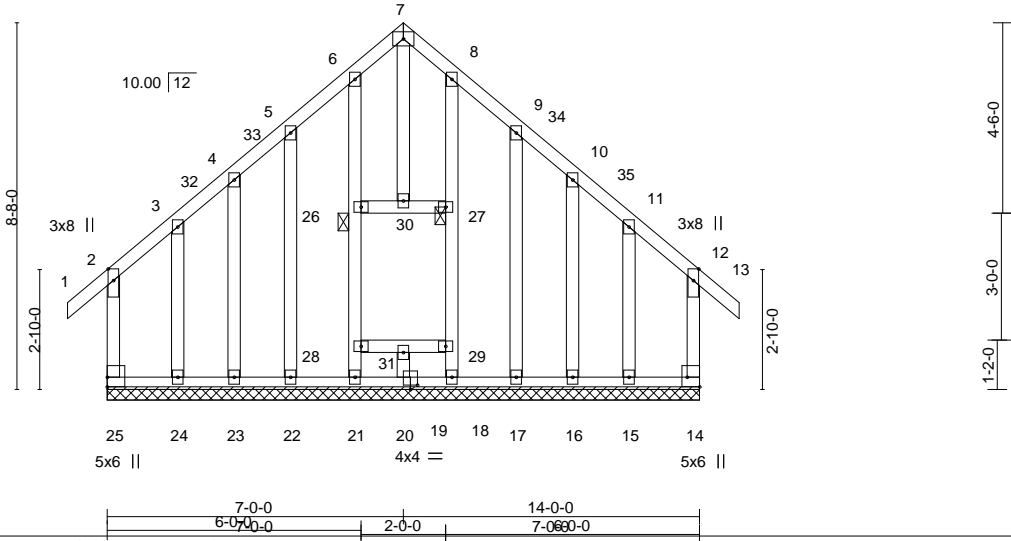


Plate Offsets (X,Y)-- [14:Edge,0-3-8], [19:0-2-0,0-1-4], [25:Edge,0-0-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IBC2021/TPI2014	TC 0.67 BC 0.57 WB 0.48 Matrix-S	in (loc) l/defl L/d Vert(LL) 0.00 12 n/r 120 Vert(CT) -0.00 12 n/r 120 Horz(CT) -0.00 14 n/a n/a	MT20	197/144
TCDL 10.0				Weight: 136 lb	FT = 5%
BCLL 0.0					
BCDL 10.0					

**LUMBER-**  
TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud  
BOT CHORD 2x4 SP No.3 or 2x4 SPF Stud  
WEBS 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, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing,  
JOINTS 1 Brace at Jt(s): 26, 27

**REACTIONS.** All bearings 14-0-0.  
(lb) - Max Horz 25=-353(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 23, 16 except 25=-361(LC 8), 22=-141(LC 12), 14=-354(LC 9), 24=-412(LC 9), 17=-141(LC 13), 15=-405(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 22, 23, 17, 16, 20 except 25=410(LC 23), 21=265(LC 19), 18=265(LC 20), 14=404(LC 22), 24=497(LC 10), 15=490(LC 11)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-4=-130/260, 4-5=-170/329, 5-6=-241/454, 6-7=-222/405, 7-8=-222/405, 8-9=-241/454, 9-10=-170/329, 10-11=-130/260, 2-25=-279/238, 12-14=-275/238  
WEBS 7-30=-289/137

- NOTES-** (9-10)
- 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(2E) 2-5-9 to 5-5-9, Interior(1) 5-5-9 to 7-4-13, Exterior(2R) 7-4-13 to 13-4-13, Interior(1) 13-4-13 to 15-4-1, Exterior(2E) 15-4-1 to 18-4-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; 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.
  - This truss has been designed for greater of min roof live load of 14.0 psf or 1.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - 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) 23, 16 except (jt=lb) 25=361, 22=141, 14=354, 24=412, 17=141, 15=405.
  - 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.



September 16, 2021

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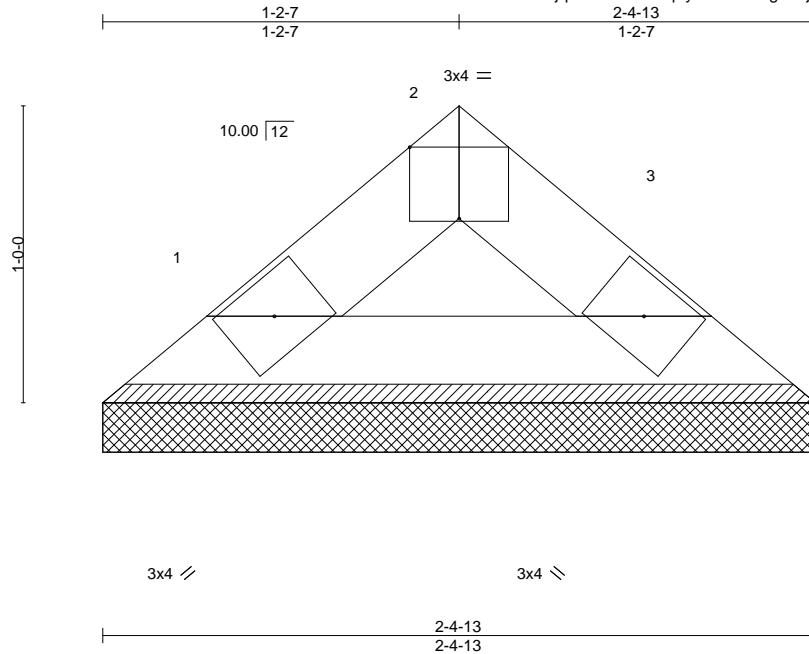
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	I62714984
ORDERS	VT-01061	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

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Scale = 1:7.8

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	<b>PLATES</b>	<b>GRIP</b>	
TCLL 30.0		Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0		Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0		Code IBC2021/TPI2014		Matrix-P								
BCDL 10.0											Weight: 7 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 2-4-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-4-13, 3=2-4-13  
Max Horz 1=23(LC 9)  
Max Uplift 1=-16(LC 12), 3=-16(LC 13)  
Max Grav 1=85(LC 18), 3=85(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; TC DL=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.



December 27, 2023

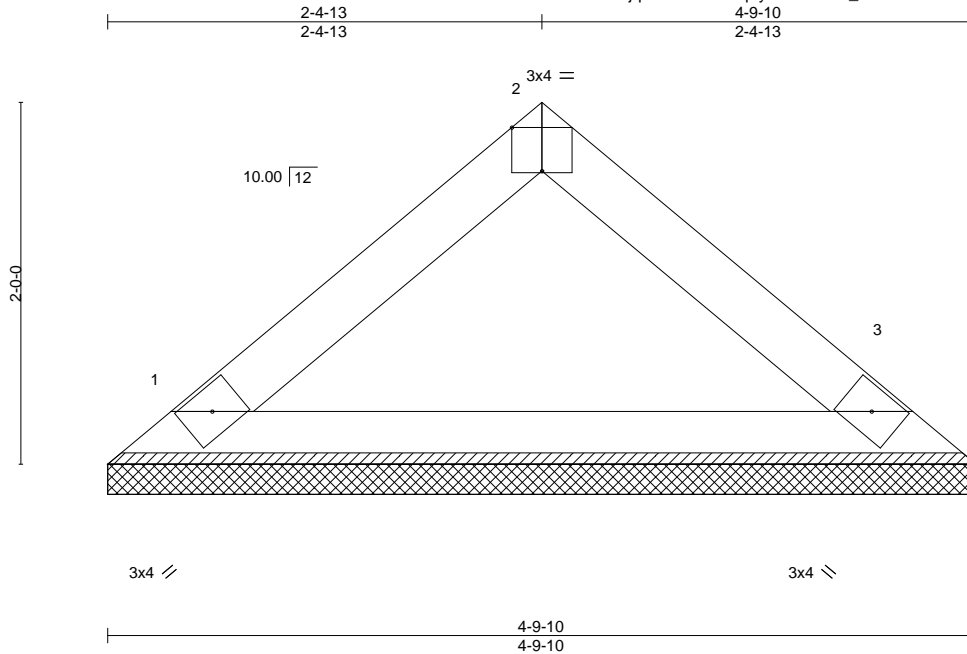
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	 818 Soundside Road Edenton, NC 27932
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Job	Truss	Truss Type	Qty	Ply	02_Valley	162714985
ORDERS	VT-01062	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Dec 22 08:12:51 2023 Page 1

ID:rGk9TmskjsaGCQI5m7tqFyUXzi-hMk3\_07LNObtdXbwVEXNCNYfS8DDofpqZgPi4Dy6TYQ



Scale = 1:12.7

Plate Offsets (X,Y)-- [2:0-2-0,Edge]									
<b>LOADING</b> (psf)	<b>SPACING-</b>		<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	Plate Grip DOL 1.15	2-0-0	TC 0.31	Vert(LL) n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.33	Vert(CT) n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES		WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-P					Weight: 15 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 4-9-10 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-9-10, 3=4-9-10  
Max Horz 1=57(LC 9)  
Max Uplift 1=-40(LC 12), 3=-40(LC 13)  
Max Grav 1=232(LC 18), 3=232(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; TC DL=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.



December 27, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	162714986
ORDERS	VT-01063	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

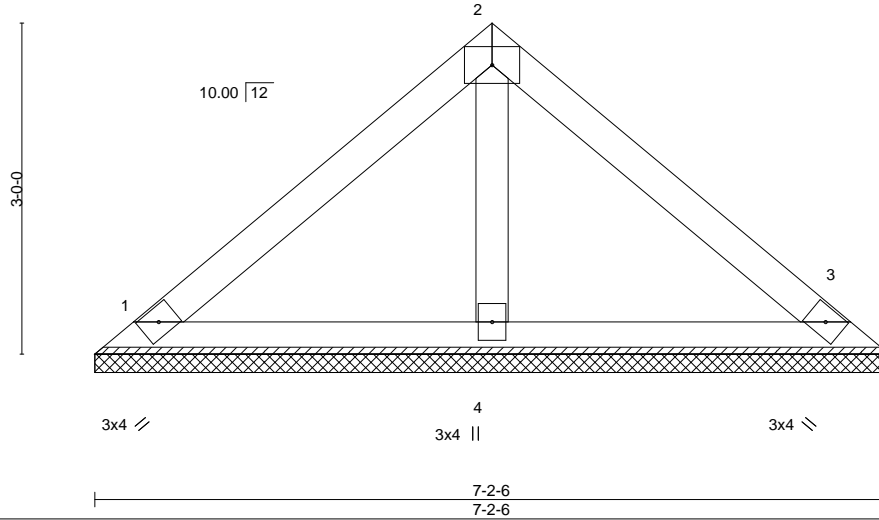
8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Dec 22 08:12:51 2023 Page 1

ID:neswtSu\_FS7HVWahDBALvgyUXzg-hMk3\_07LNObdXbwVEXNcNYZf8Ggof1qZgPi4Dy6TYQ



4x6 =

Scale = 1:20.9



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15	TC 0.68	Vert(LL) n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-P					Weight: 27 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.** (size) 1=7-2-6, 3=7-2-6, 4=7-2-6  
Max Horz 1=-92(LC 8)  
Max Uplift 1=-58(LC 13), 3=-69(LC 13), 4=-13(LC 12)  
Max Grav 1=257(LC 18), 3=257(LC 19), 4=271(LC 18)

**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, 4.



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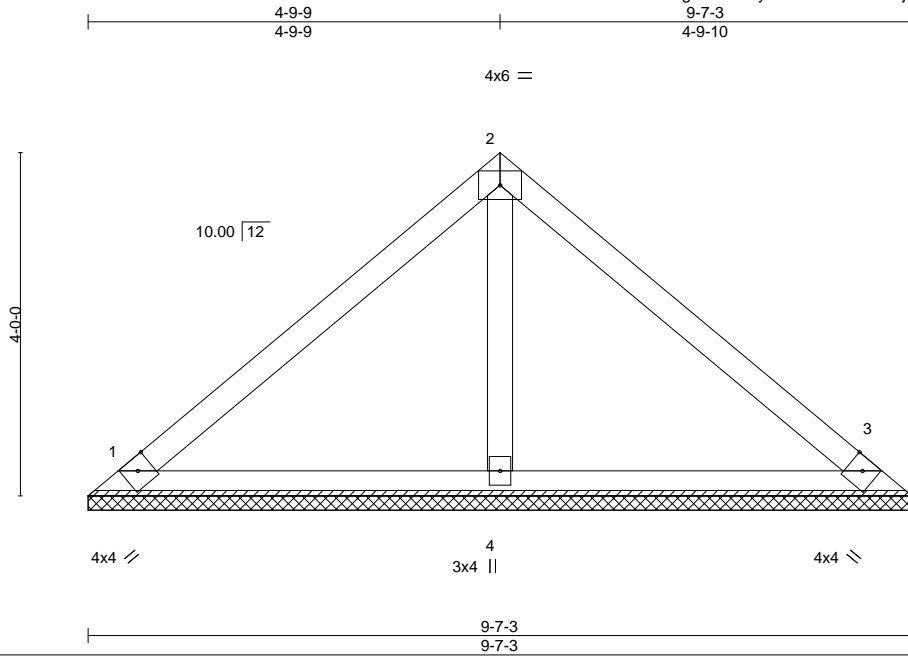


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	162714987
ORDERS	VT-01064	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Dec 22 08:12:52 2023 Page 1  
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Scale = 1:26.8

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.39	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber DOL 1.15	WB 0.09	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a	Weight: 36 lb	FT = 5%
	Code IBC2021/TPI2014				

<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.3 or 2x4 SPF Stud	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3 or 2x4 SPF Stud	

**REACTIONS.** (size) 1=9-7-3, 3=9-7-3, 4=9-7-3  
 Max Horz 1=-126(LC 8)  
 Max Uplift 1=-65(LC 13), 3=-81(LC 13), 4=-49(LC 12)  
 Max Grav 1=355(LC 18), 3=355(LC 19), 4=421(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-276/155, 2-3=-276/155  
 WEBS 2-4=-282/207

- 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.



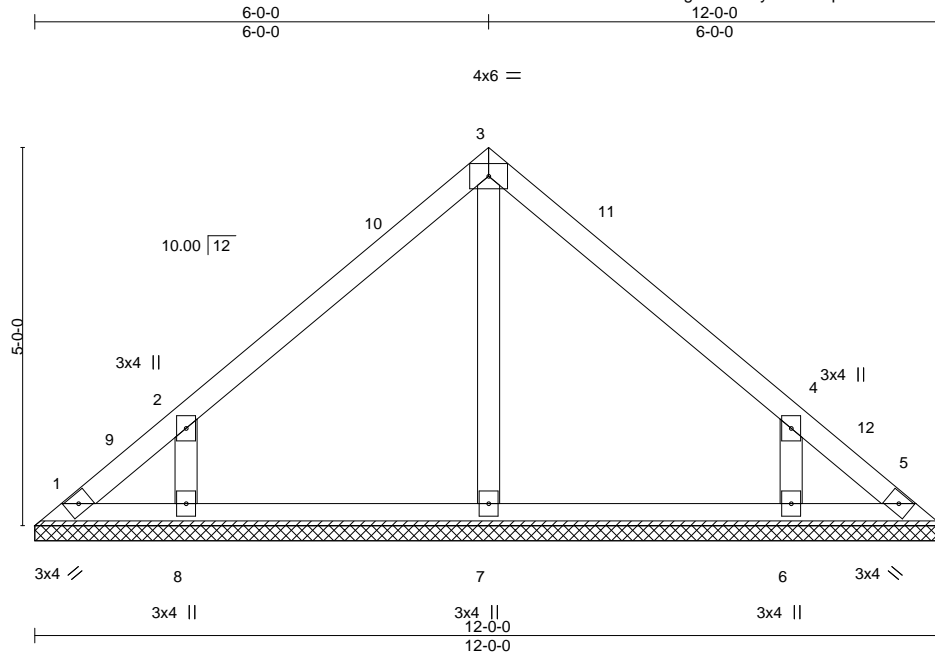
December 27, 2023

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p>	<p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	02_Valley	162714988
ORDERS	VT-01065	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Dec 22 08:12:53 2023 Page 1  
 ID:GrQl5ouc0lF87g9tnuhaStyUXzf-dlspP48bv?rbsrlcfarHoev8xwdGXx71zup95y6TYO



Scale = 1:30.5

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IBC2021/TPJ2014	TC 0.68 BC 0.21 WB 0.15 Matrix-S	in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 5 n/a n/a	MT20	197/144
TCDL 10.0				Weight: 49 lb	FT = 5%
BCLL 0.0					
BCDL 10.0					

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

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

**REACTIONS.** All bearings 12-0-0.  
 (lb) - Max Horz 1=161(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=259(LC 12), 6=259(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=321(LC 19), 8=566(LC 18), 6=566(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-263/193, 3-4=-263/193  
 WEBS 2-8=-514/488, 4-6=-514/488

- 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) 0-4-13 to 4-9-9, Corner(3R) 4-9-9 to 7-2-7, Corner(3E) 7-2-7 to 11-7-3 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=259, 6=259.



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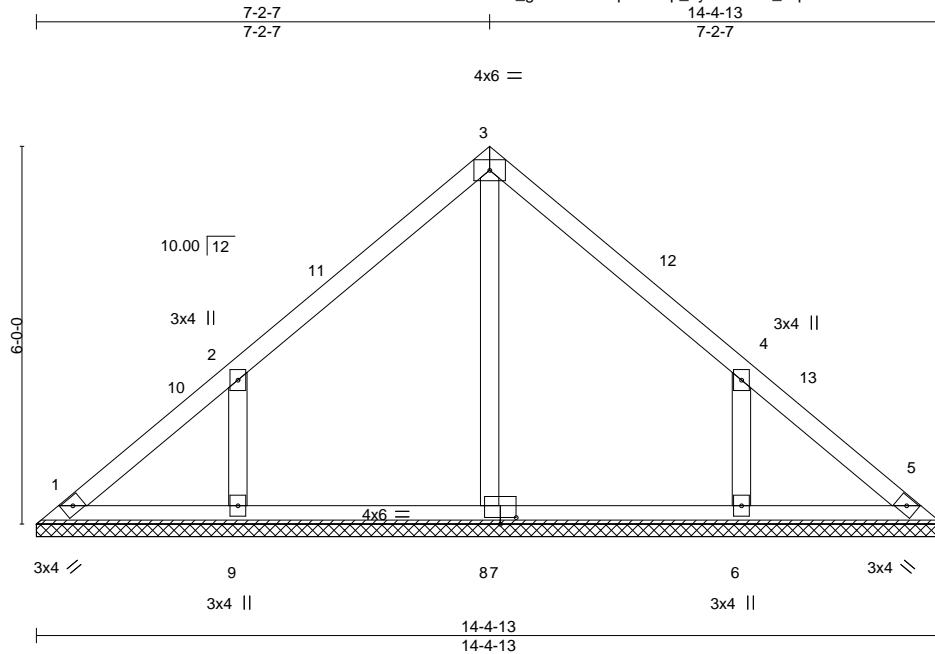
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	162714989
ORDERS	VT-01066	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Dec 22 08:12:55 2023 Page 1

ID:k1\_gI8vEn3N?lqk4KcCp\_5yUXze-Z7\_ZqmAsRc5J59vhk4cJNDJfElcHkRKQUHNwD\_y6TYM



Scale = 1:36.6

Plate Offsets (X,Y)-- [7:0-3-0,0-1-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15	TC 0.68	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(LL) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.16	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Horz(CT) 0.00 5 n/a n/a	Weight: 62 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 14-4-13.  
(lb) - Max Horz 1=-195(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-279(LC 12), 6=-279(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=319(LC 18), 9=577(LC 18), 6=577(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-261/218, 3-4=-261/218  
WEBS 2-9=-503/459, 4-6=-503/459

- 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) 0-4-13 to 4-9-9, Corner(3R) 4-9-9 to 9-7-4, Corner(3E) 9-7-4 to 14-0-0 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) 9=279, 6=279.



December 27, 2023

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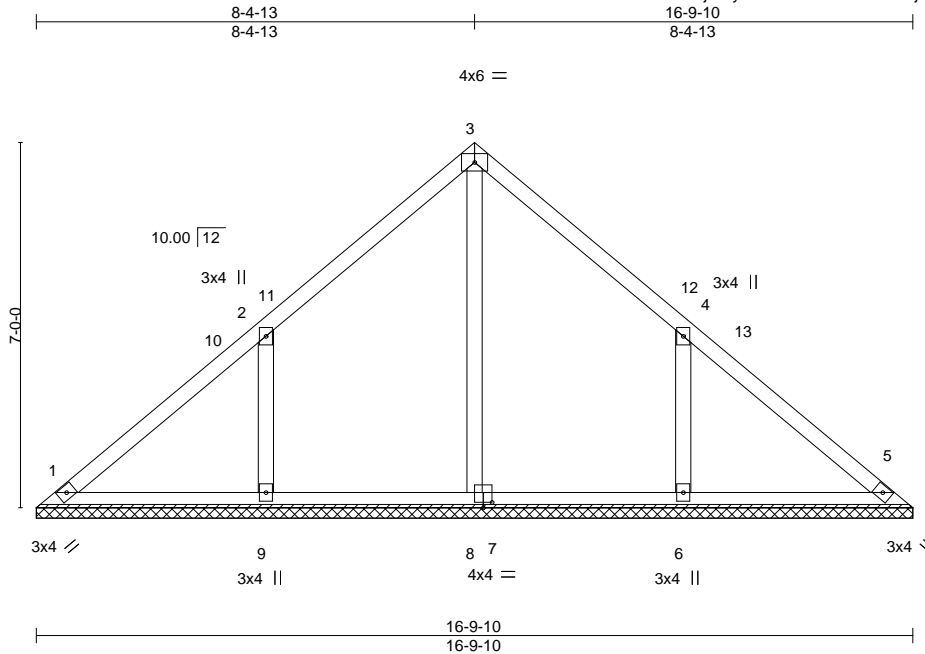
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	162714990
ORDERS	VT-01067	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Dec 22 08:12:56 2023 Page 1  
ID:CDY2WTwtYNVsMzJGUj2XlyUXzd-1KYx16BUCwD9jIUtn7YvRGPX9y\_TtoZjx6TIQy6TYL



Scale = 1:44.2

Plate Offsets (X,Y)-- [7:0-2-0,0-1-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15	TC 0.73	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.23	Vert(LL) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.21	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Horz(CT) 0.01 5 n/a n/a	Weight: 75 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 16-9-10.  
(lb) - Max Horz 1=229(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-326(LC 12), 6=-326(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=299(LC 19), 9=641(LC 18), 6=641(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-262/242, 3-4=-262/242  
WEBS 2-9=-543/474, 4-6=-543/474

- 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) 0-4-13 to 4-9-9, Corner(3R) 4-9-9 to 12-0-1, Corner(3E) 12-0-1 to 16-4-13 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) 9=326, 6=326.



December 27, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



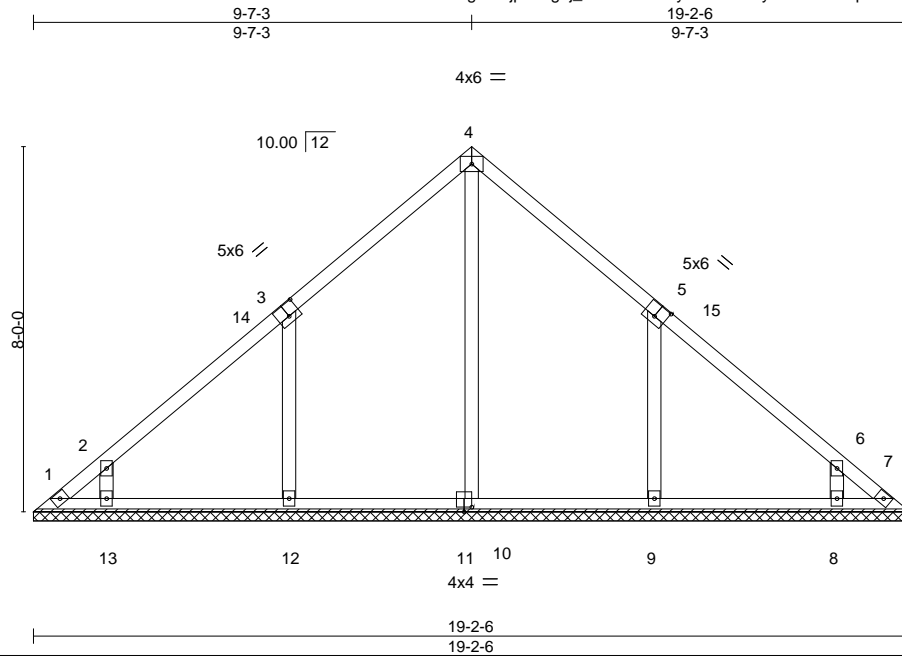
818 Soundside Road  
Edenton, NC 27932



Job ORDERS	Truss VT-01068	Truss Type VCOM	Qty 1	Ply 1	02_Valley	157754444
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NVR, Frederick, MD - 21703,

8.530 s Mar 9 2023 MITek Industries, Inc. Thu Apr 13 08:50:54 2023 Page 1  
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Scale = 1:50.5

Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [11:0-2-0,0-1-4]

<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 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IBC2021/TPI2014	TC 0.72 BC 0.20 WB 0.29 Matrix-S	Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.01	- - 7	n/a n/a n/a	999 999 n/a	MT20	197/144
TCDL 10.0							Weight: 90 lb	FT = 5%
BCLL 0.0								
BCDL 10.0								

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

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

**REACTIONS.** All bearings 19-2-6.  
(lb) - Max Horz 1=-264(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-138(LC 10), 12=-296(LC 12), 13=-205(LC 12),  
9=-295(LC 13), 8=-205(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=323(LC 18), 12=600(LC 18), 13=344(LC 21),  
9=600(LC 19), 8=345(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-316/218, 3-4=-263/258, 4-5=-263/258, 6-7=-274/139  
WEBS 3-12=-518/392, 2-13=-281/340, 5-9=-518/392, 6-8=-282/340

- NOTES-** (8)
- 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) 0-4-13 to 4-9-9, Exterior(2N) 4-9-9 to 5-2-8, Corner(3R) 5-2-8 to 13-8-5, Exterior(2N) 13-8-5 to 14-4-13, Corner(3E) 14-4-13 to 18-9-9 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) 7 except (jt=lb) 1=138, 12=296, 13=205, 9=295, 8=205.



April 14, 2023

**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

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Edenton, NC 27932