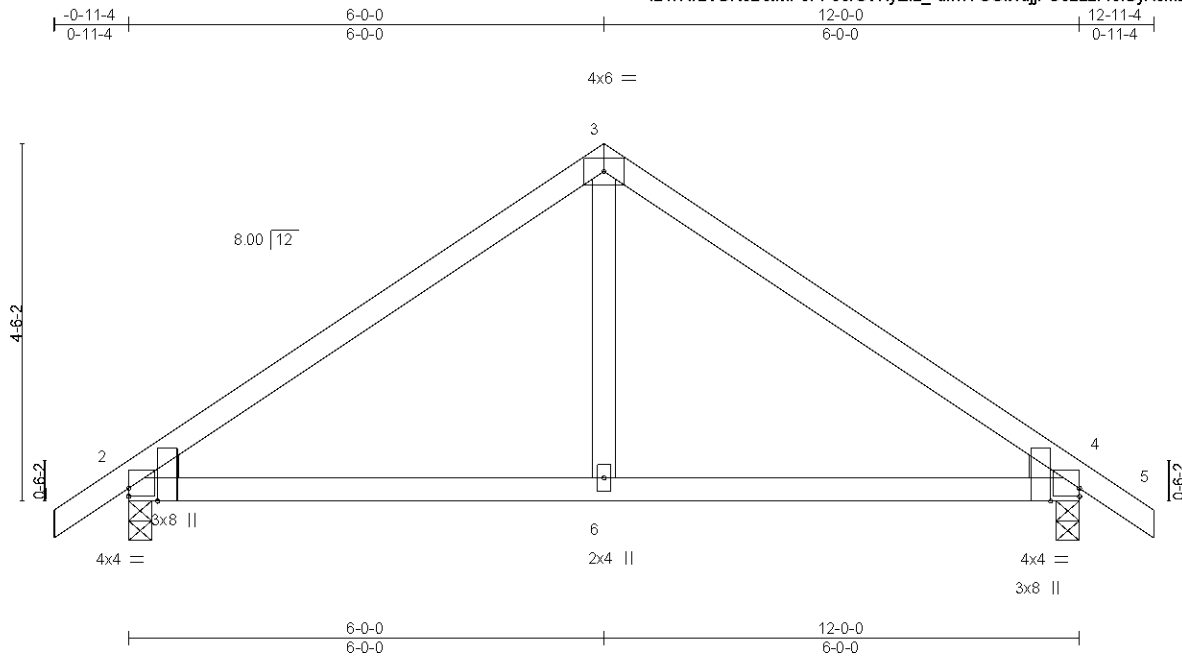


RLH-VK-0093-GBH00-01

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

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:24 2021 Page 1  
ID:?RrLVUNcBotMPeFP6cfGVKyElz\_-drrnYGGGrXdjJPOJLLzFF6IUyAJmzsf3dn5?sstyBF8z



Scale = 1:29.1

Plate Offsets (X,Y)-- [2:0-0-0,0-1-3], [2:0-1-15,Edge], [4:0-0-0,0-1-3], [4:0-1-15,Edge]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.03	2-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.06	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IBC2021/TP12014	Matrix-S	Wind(LL) 0.03	2-6	>999	240		
							Weight: 50 lb	FT = 5%

**LUMBER-**

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

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

**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.**

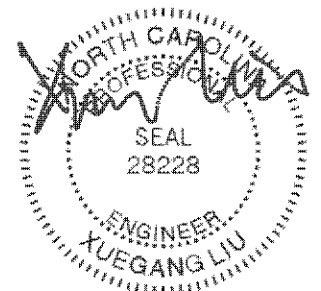
(size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=118(LC 9)  
 Max Uplift 2=-79(LC 10), 4=-79(LC 11)  
 Max Grav 2=533(LC 1), 4=533(LC 1)

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

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

**NOTES-** (6-8)

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



January 12, 2022

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

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

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

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

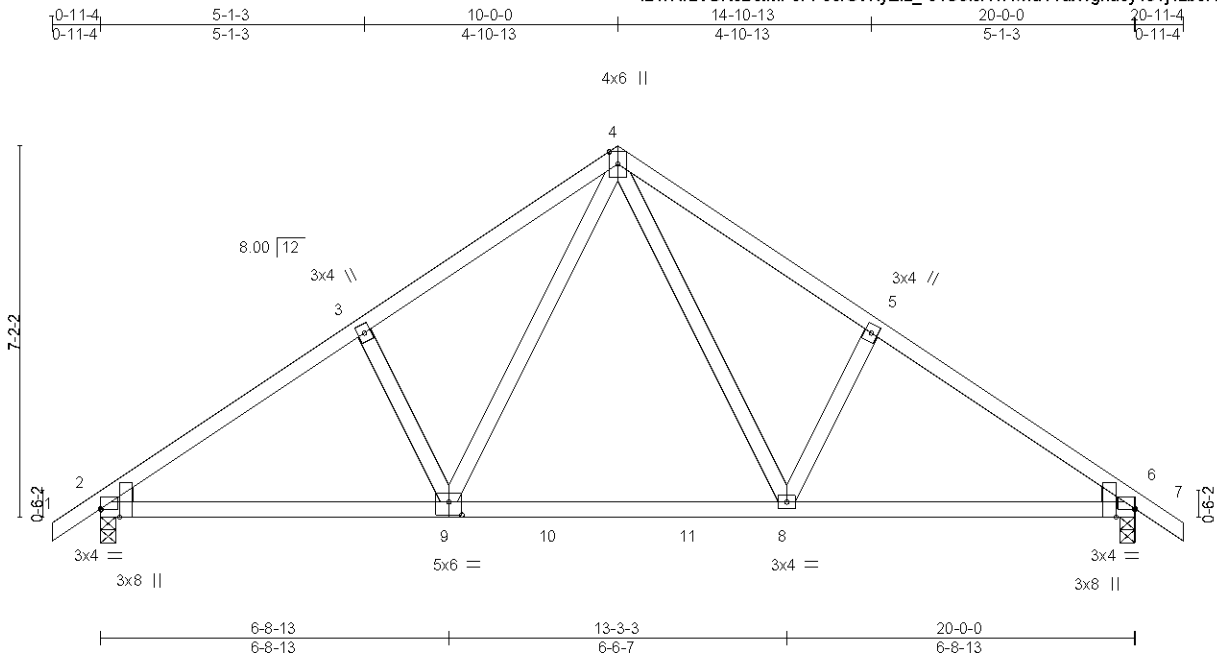


818 Soundside Road  
 Edenton, NC 27932

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

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:25 2021 Page 1  
ID:RrLVUNcBotMPeFP6cfGVKyElz\_-5109lcHTHwra1YuXvgvneuy19TJ4zb5Hm0IPOJyBF8y



Scale = 1.44.6

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

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

**LUMBER-**

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

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

**BRACING-**

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

**REACTIONS.**

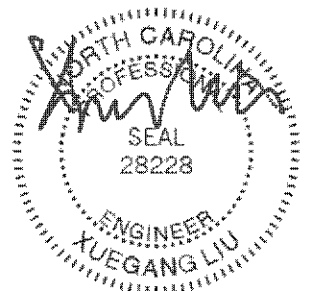
(size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-185(LC 8)  
 Max Uplift 2=-117(LC 10), 6=-117(LC 11)  
 Max Grav 2=853(LC 1), 6=853(LC 1)

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

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

**NOTES-** (6-8)

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



January 12, 2022

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

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

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

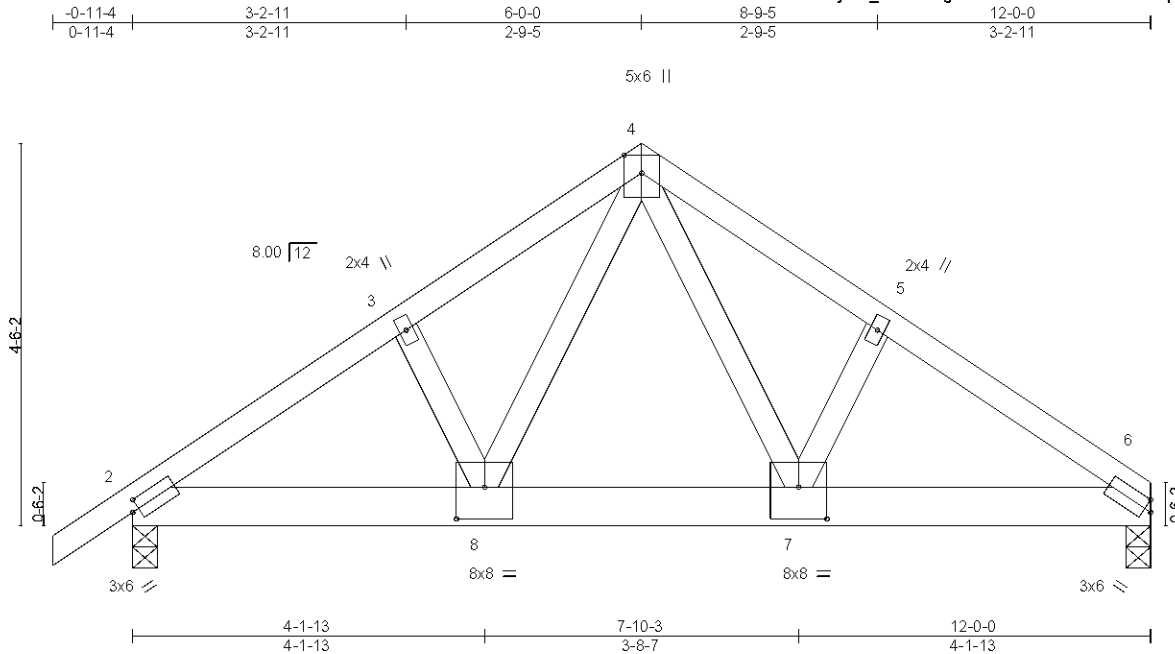


818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-14546	Truss Type COMN	Qty 1	Ply 2	11_Southeast-Girder-Int Job Reference (optional)	149147402
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MITek Industries, Inc. Tue Dec 7 20:30:58 2021 Page 1  
ID:?RrLVUNcBotMPeFP6cfGVKyElz\_-dNuehugAW3?uUdwtK6sdUvuoU0C1qvQdcOFF3uyBF8R



Scale = 1:27.2

Plate Offsets (X,Y)--	[2:0-1-0,0-1-8], [7:0-4-0,0-4-8], [8:0-4-0,0-4-8]				
<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 0.37	Vert(LL) -0.05 7-8 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 1.00	Vert(CT) -0.09 7-8 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.69	Horz(CT) 0.02 6 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.03 7-8 >999 240	Weight: 140 lb	FT = 5%

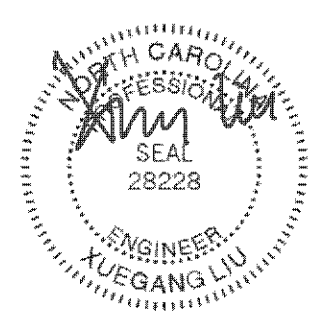
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	

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

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

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

**LOAD CASE(S)** Standard



January 12, 2022

Continued on page 2

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.  
 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**ENGINEERING BY**  
**TRENCO**  
 A MITEK AFFILIATE

818 Soundside Road  
 Edenton, NC 27932

Job ORDERS	Truss SE-14546	Truss Type COMN	Qty 1	Ply 2	11_Southeast-Girder-Int Job Reference (optional)	149147402
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:58 2021 Page 2  
ID:?RrLVUNcBotMPeFP6cfGVKyElz\_-dNuehugAW3?uUdwtK6sdUvuoU0C1qvQdcOFF3uyBF8R

**LOAD CASE(S)** Standard

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

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

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

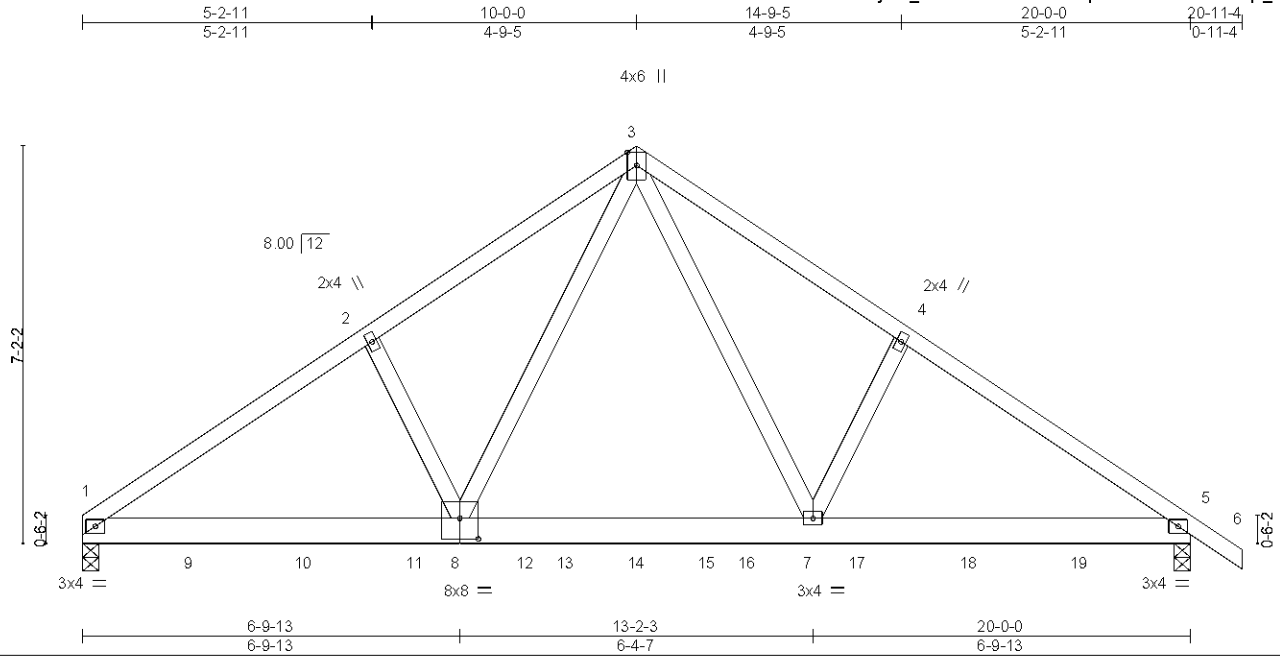
ENGINEERING BY  
**TRENCO**  
A MITEK Affiliate

818 Soundside Road  
Edenton, NC 27932

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

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:59 2021 Page 1  
ID:RrLVUNcBotMPeFP6cfGVkyElz\_-5aS0uEhoHN716nV3upOs07R?XQhHZSanq2\_DbLyBF8Q



Scale = 1:41.6

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.04 1-8 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.44	Vert(CT) -0.08 1-8 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.25	Horz(CT) 0.02 5 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matrix-S	Wind(LL) 0.03 1-8 >999 240		
				Weight: 233 lb	FT = 5%

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

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

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

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

**NOTES-** (9-11)

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



January 12, 2022

**LOAD CASE(S)** Standard

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818 Soundside Road  
 Edenton, NC 27932

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

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:59 2021 Page 2  
ID:?RrLVUNcBotMPeFP6cfGVKyElz\_-5aS0uEhoHN7I6nV3upOs07R?XQhHZSanq2\_DbLyBF8Q

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

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

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

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

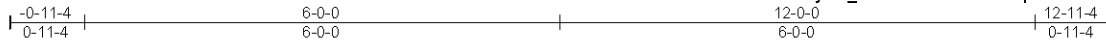
ENGINEERING BY  
**TRENCO**  
A MITEK Affiliate

818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-14549	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49147393
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NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:28 2021 Page 1  
ID:RrLVUNcBotMPeFP6cfGVKyElz\_Vc4IOeJMarD9u0d6apKbGbeluWCRoULDjz4?eyBF8v



4x6 =

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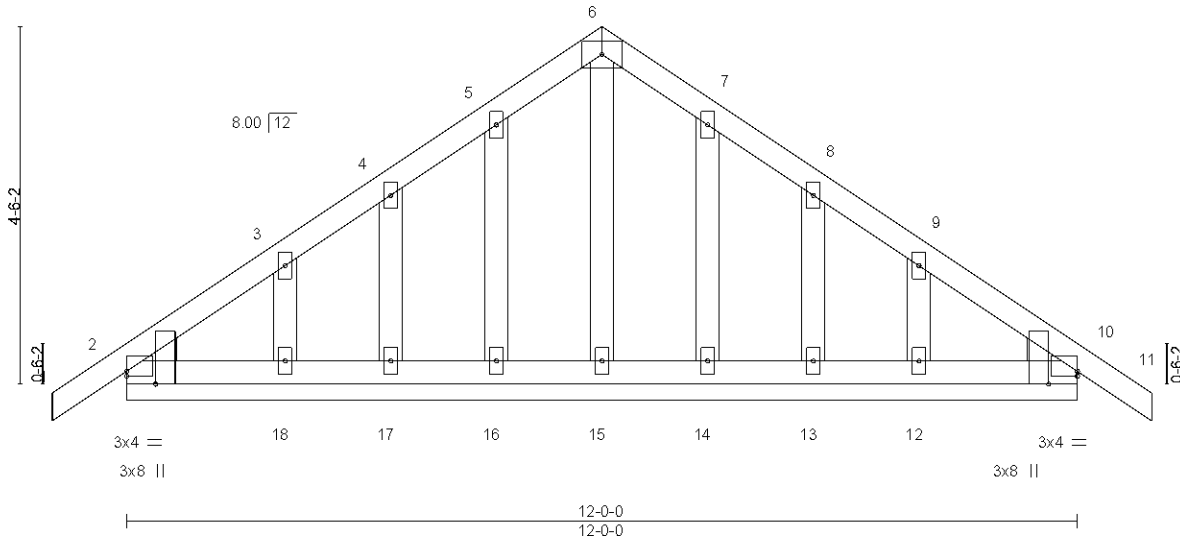


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [2:0-1-15,Edge], [10:0-0-0,0-0-11], [10:0-1-15,Edge]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.06	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 10 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.00 11 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 10 n/a n/a		
	Code IBC2021/TPI2014			Weight: 70 lb	FT = 5%

**LUMBER-**

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

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

**BRACING-**

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

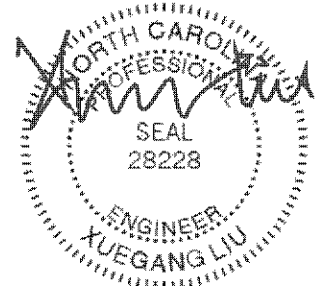
**REACTIONS.**

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

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

**NOTES-** (10-12)

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



January 12, 2022

**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

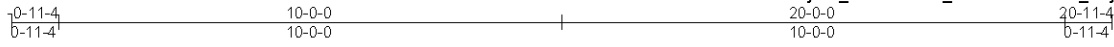


Job ORDERS	Truss SE-17641	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149171651
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NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 02:08:01 2021 Page 1

ID:RrLVUNcBotMPeFP6cfGVKyElz\_-EuzXW?12f\_NKfWzLF6LYO\_XPJFHHybXJuBrMyAr6S



4x6 =

Scale = 1.45.8

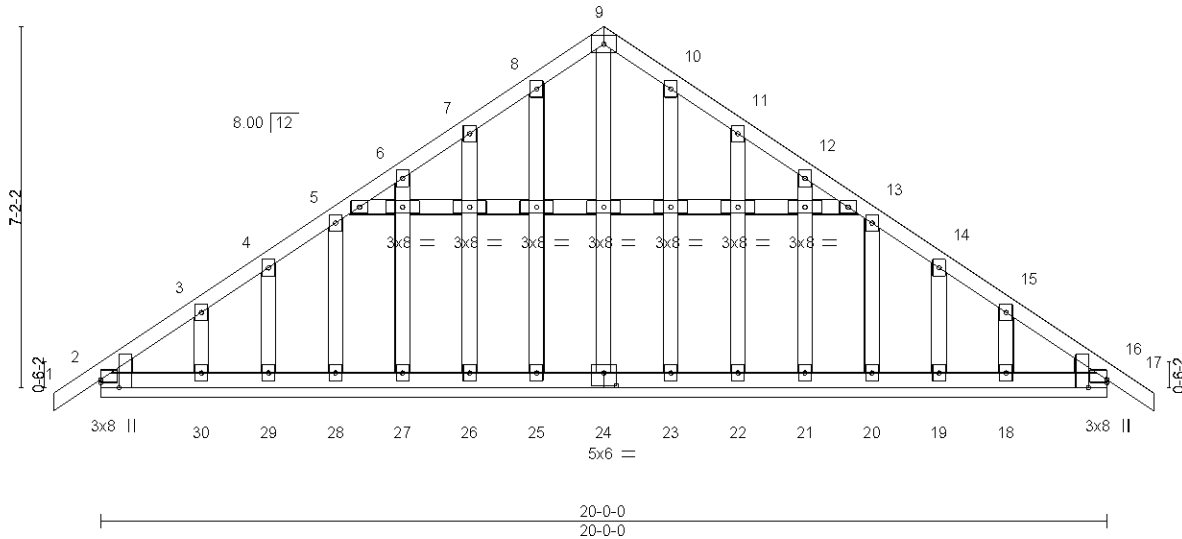


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [2:0-1-15,Edge], [16:0-0-0,0-0-11], [16:0-1-15,Edge], [24:0-3-0,0-3-0]

<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 0.06	Vert(LL)	-0.00	16	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	17	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00	16	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S						
								Weight: 155 lb	FT = 5%

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

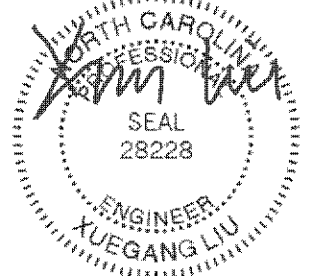
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** All bearings 20-0-0.  
(lb) - Max Horz 2--185(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18  
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 24, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18

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

- NOTES-** (10-13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.
  - Framing and bracing of the gable end frame shall be provided by the building designer.



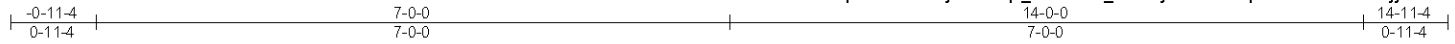
January 12, 2022

Job ORDERS	Truss SE-18423	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194674
					Job Reference (optional)	

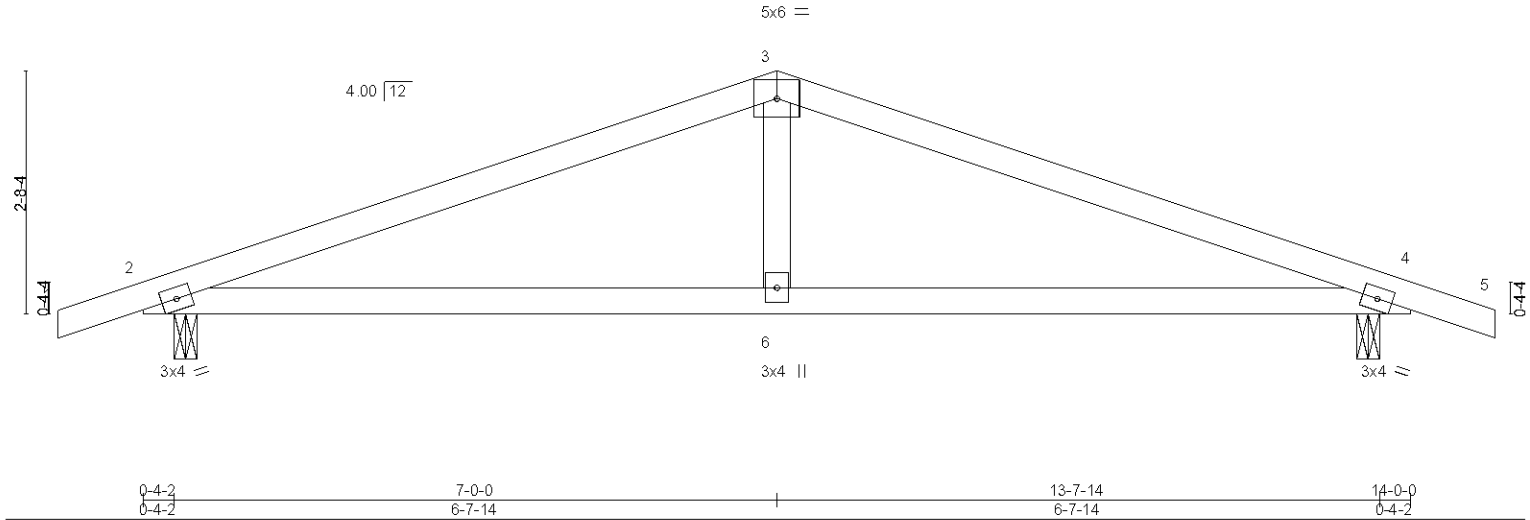
NVR, Frederick, MD - 21703,

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

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Scale = 1:25.5



LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.76	Vert(LL) -0.06	4-6	>999	360	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.57	Vert(CT) -0.14	2-6	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Horz(CT) 0.02	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.05	2-6	>999	240	Weight: 49 lb	FT = 5%
	Code IBC2021/TPI2014							

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

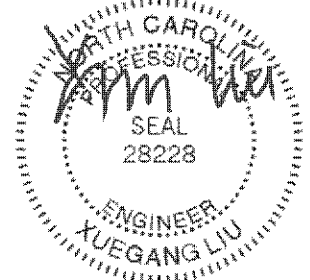
(size) 2=0-3-0, 4=0-3-0  
 Max Horz 2=-45(LC 15)  
 Max Uplift 2=-129(LC 6), 4=-129(LC 7)  
 Max Grav 2=614(LC 1), 4=614(LC 1)

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

TOP CHORD 2-3=-1021/122, 3-4=-1021/122  
 BOT CHORD 2-6=-65/903, 4-6=-65/903  
 WEBS 3-6=0/332

**NOTES-** (6-8)

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



January 12, 2022

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

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

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



818 Soundside Road  
 Edenton, NC 27932

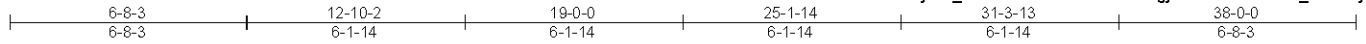
Job ORDERS	Truss SE-18424	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49194675
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NVR, Frederick, MD - 21703,

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

ID:RrLVUNcBotMPeFP6cfGVKyElz\_-DBFwXURCFHziowXURgjlzJA1OzbGkehY\_FA9a9yAarl

Job Reference (optional)



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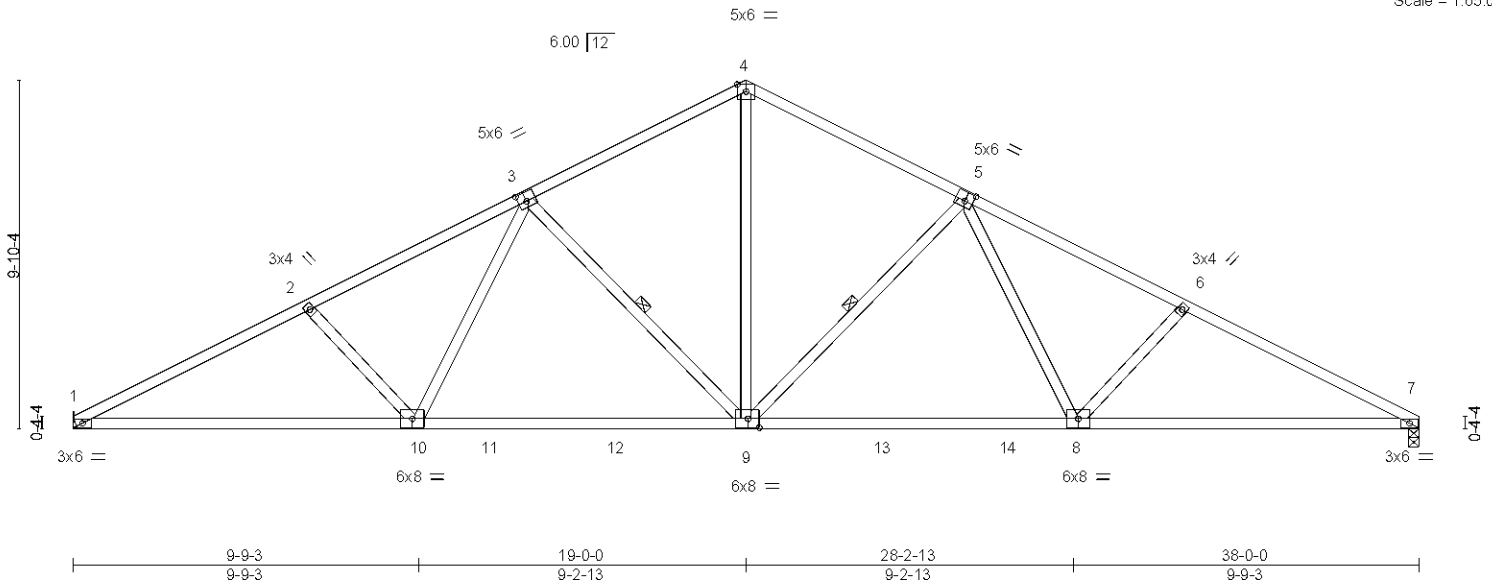


Plate Offsets (X,Y)--	[3:0-2-12,0-3-0], [5:0-2-12,0-3-0], [9:0-3-12,0-3-0]
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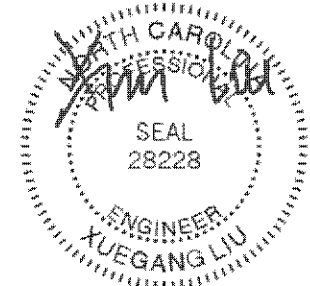
LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.96	Vert(LL) -0.26	9-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.94	Vert(CT) -0.50	1-10	>900	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.52	Horz(CT) 0.12	7	n/a	n/a		
BCDL 10.0	Code IBC2021/TP12014	Matrix-S	Wind(LL) 0.12	9	>999	240		
							Weight: 193 lb	FT = 5%

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

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

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

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



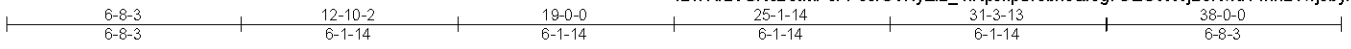
January 12, 2022

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

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

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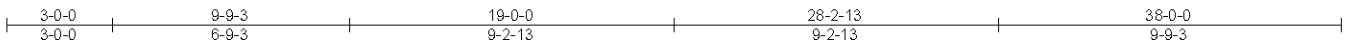
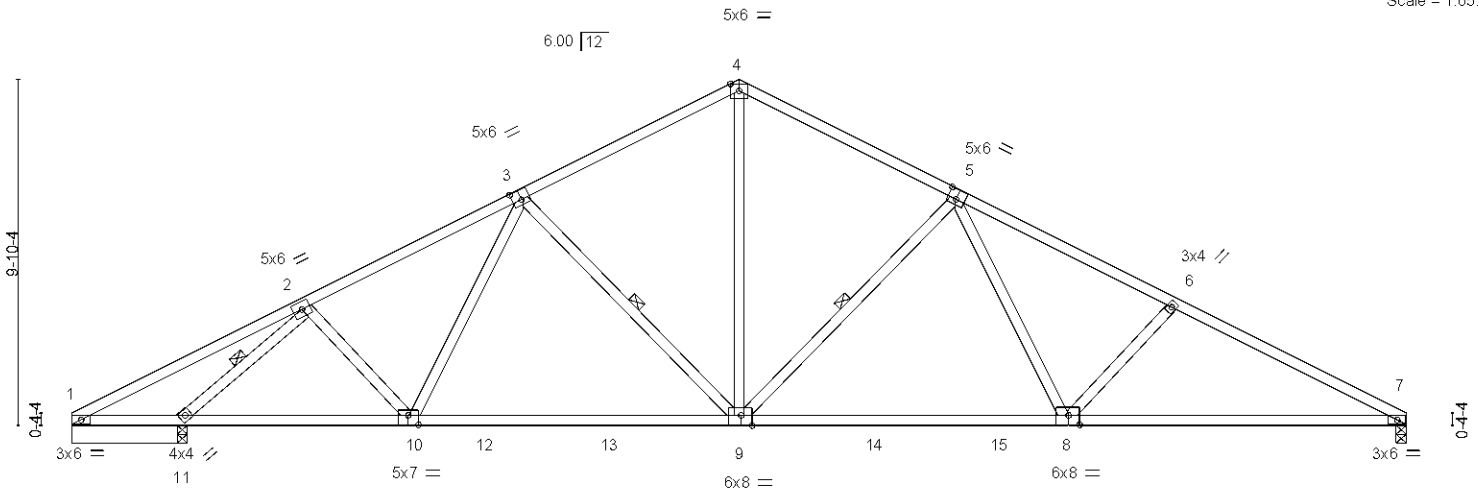


Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [8:0-3-12,0-3-4], [9:0-3-12,Edge], [10:0-3-8,0-3-4]

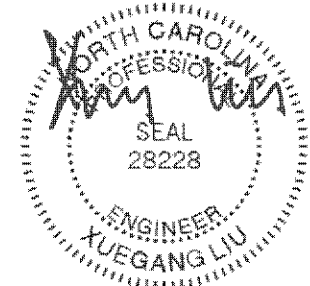
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.95	Vert(LL)	-0.24	8-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.47	7-8	>882		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.09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

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

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

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

- NOTES-** (6-8)
- 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 190 lb uplift at joint 7, 169 lb uplift at joint 1 and 221 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.



January 12, 2022

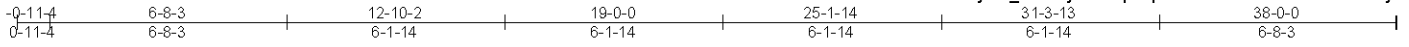
Job ORDERS	Truss SE-18426	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49194677
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NVR, Frederick, MD - 21703,

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

ID:RrLVUJNcBotMPeFP6cfGVKyElz\_-9ZNhy9STnvpT2phtZ5IV2kFNwnFnCYQrsZfGf2yAarG

Job Reference (optional)



Scale = 1:65.0

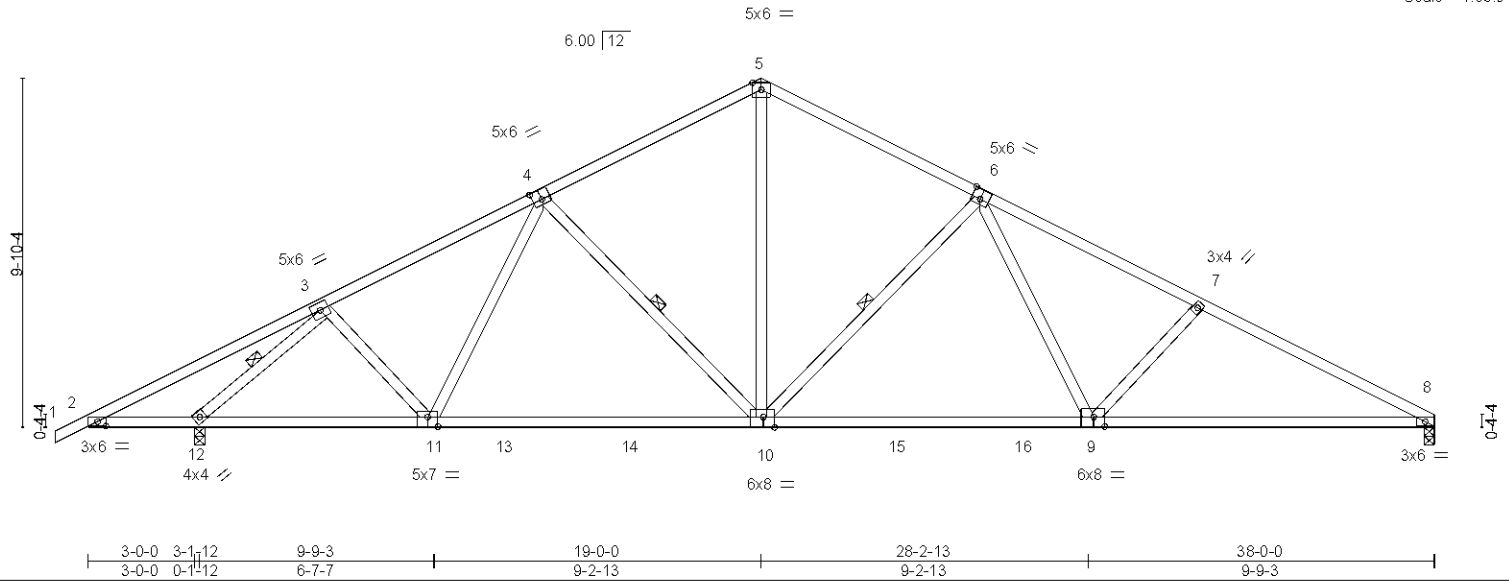


Plate Offsets (X,Y)-- [2:0-2-13,0-1-8], [4:0-3-0,0-3-4], [6:0-3-0,0-3-4], [9:0-3-12,0-3-4], [10:0-3-12,Edge], [11:0-3-8,0-3-4]

<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 0.96	Vert(LL)	-0.24	9-10	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.48	8-9	>881		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.57	Horz(CT)	0.09	8	n/a		
BCDL 10.0	Code IBC2021/TP12014		Matrix-S	Wind(LL)	0.10	8-9	>999		
								Weight: 201 lb	FT = 5%

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 \*Except\*  
 8-9: 2x4 SP No.2D  
 WEBS 2x4 SP No.3 or 2x4 SPF Stud

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied or 1-4 12 oc bracing.  
 WEBS 1 Row at midpt 4-10, 6-10, 3-12

**REACTIONS.**

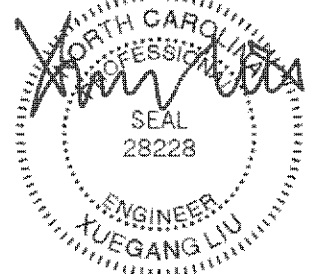
(size) 8=0-3-8, 12=0-3-8  
 Max Horz 12=178(LC 14)  
 Max Uplift 8=188(LC 11), 12=236(LC 10)  
 Max Grav 8=1380(LC 1), 12=1705(LC 1)

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

TOP CHORD 2-3=-159/534, 3-4=-1718/242, 4-5=-1498/274, 5-6=-1504/251, 6-7=-2289/342,  
 7-8=-2543/369  
 BOT CHORD 2-12=393/204, 11-12=-254/1281, 10-11=-178/1485, 9-10=-69/1736, 8-9=-251/2208  
 WEBS 3-11=0/330, 4-10=378/219, 5-10=-113/968, 6-10=-696/267, 6-9=-59/553, 7-9=-356/230,  
 3-12=-2258/381

**NOTES-** (6-8)

- 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 188 lb uplift at joint 8 and 236 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

**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



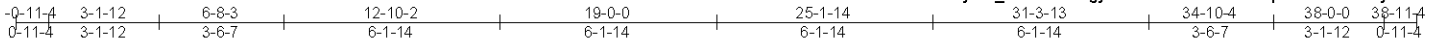
818 Soundside Road  
 Edenton, NC 27932

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

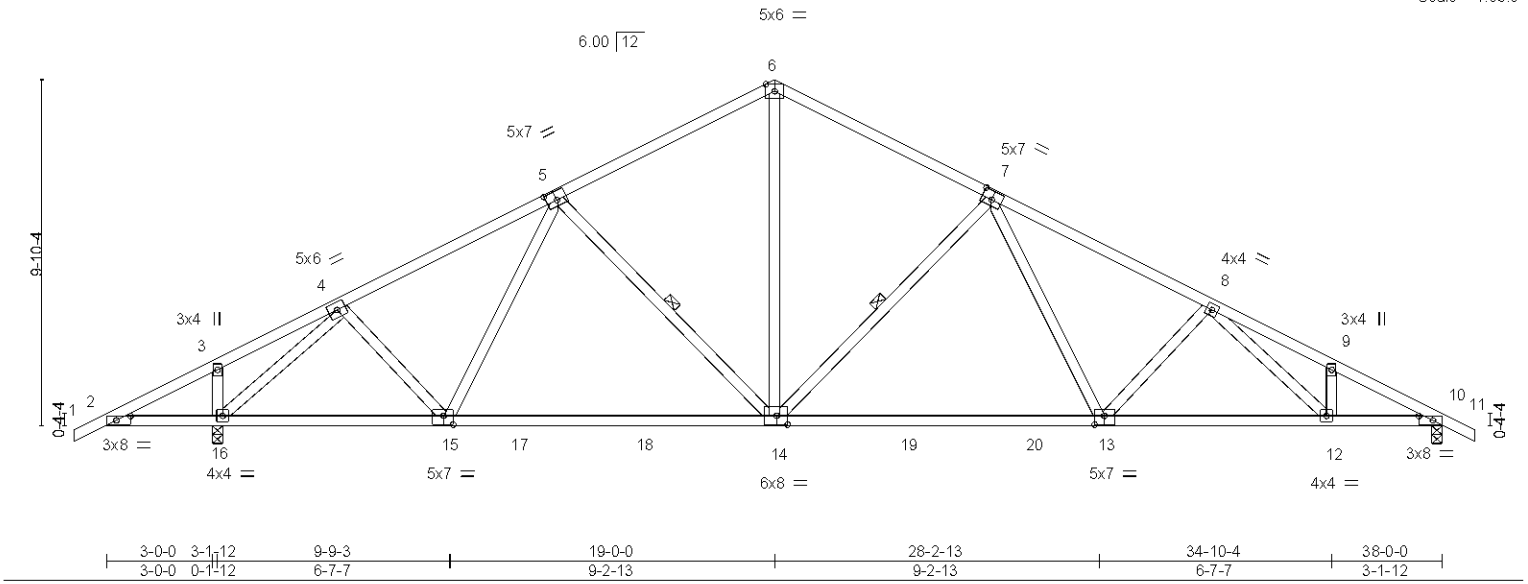
NVR, Frederick, MD - 21703,

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

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Scale = 1:65.6



<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSL</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.52	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.94	Vert(LL) -0.20 13-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.99	Vert(CT) -0.40 13-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.08 10 n/a n/a		
	Code IBC2021/TP12014		Wind(LL) 0.09 13 >999 240	Weight: 213 lb	FT = 5%

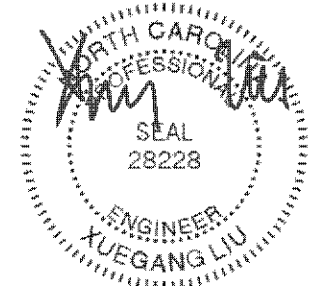
<b>LUMBER-</b>	<b>BRACING-</b>	[MCT]
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-4-11 oc purlins.	
BOT CHORD 2x4 SP No.2D *Except*	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.	
10-13: 2x4 SP 2250F 1.9E or 2x4 SPF 2100F 1.8E	WEBS 1 Row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

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

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

TOP CHORD	2-3=-111/370, 3-4=-55/371, 4-5=-1644/226, 5-6=-1481/271, 6-7=-1486/249, 7-8=-2237/335, 8-9=-2565/393, 9-10=-2643/335
BOT CHORD	2-16=-285/136, 15-16=-218/1188, 14-15=-169/1455, 13-14=-60/1715, 12-13=-210/2167, 10-12=-239/2280
WEBS	4-15=0/393, 5-14=-362/222, 6-14=-115/960, 7-14=-691/274, 7-13=-50/514, 8-13=-355/194, 4-16=-2001/255

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



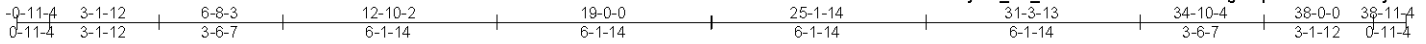
January 12, 2022

Job ORDERS	Truss SE-18453- <b>Cond2</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194686
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8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:38:47 2021 Page 1

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Scale = 1:66.2

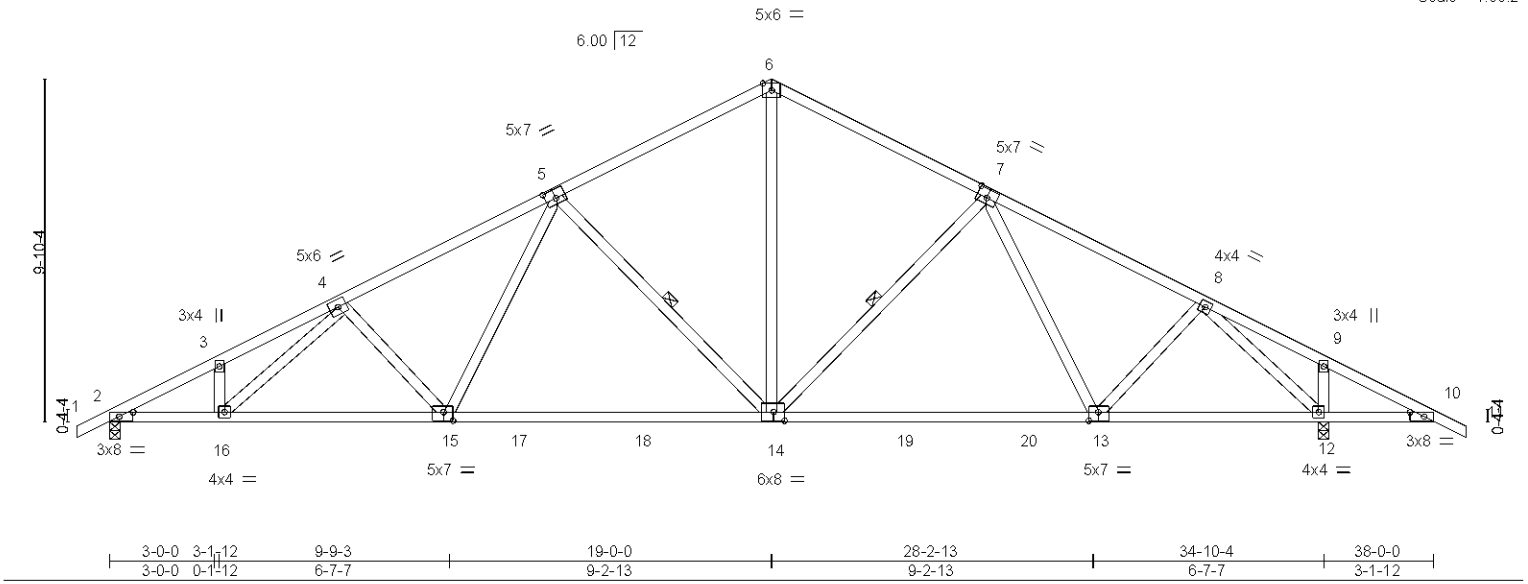


Plate Offsets (X,Y)--	[2:0-4-13,0-1-8], [5:0-3-8,0-3-0], [7:0-3-8,0-3-0], [10:0-4-13,0-1-8], [13:0-3-4,0-3-0], [14:0-3-12,0-3-0], [15:0-3-4,0-3-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.52	Vert(LL)	-0.21	14-15	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.94	Vert(CT)	-0.42	14-15	>990	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.98	Horz(CT)	0.09	12	n/a	n/a	
BCDL 10.0	Code IBC2021/TP12014		Matrix-S	Wind(LL)	0.10	15	>999	240	
									Weight: 213 lb FT = 5%

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

<b>REACTIONS.</b>	(size) 2=0-3-8, 12=0-3-8
	Max Horz 2=-171(LC 15)
	Max Uplift 2=-212(LC 10), 12=-237(LC 11)
	Max Grav 2=1437(LC 1), 12=1712(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2649/334, 3-4=-2571/392, 4-5=-2231/333, 5-6=-1478/247, 6-7=-1485/271, 7-8=-1641/226, 8-9=-54/370, 9-10=-109/367
BOT CHORD	2-16=-409/2285, 15-16=-381/2167, 14-15=-228/1715, 13-14=-71/1455, 12-13=-58/1156, 10-12=-284/135
WEBS	4-15=-358/194, 5-15=-48/513, 5-14=-694/274, 6-14=-114/958, 7-14=-359/222, 8-13=0/392, 8-12=-2000/253

- NOTES-** (6-8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=212, 12=237.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

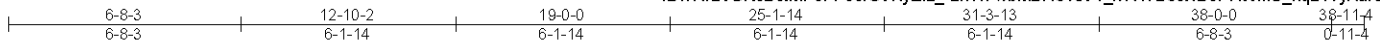
<p><b>WARNING</b> - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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/TPI-1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERED BY <b>TRENCO</b> A MITEK AFFILIATE</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job ORDERS	Truss SE-18454	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194687
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8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 20:38:48 2021 Page 1

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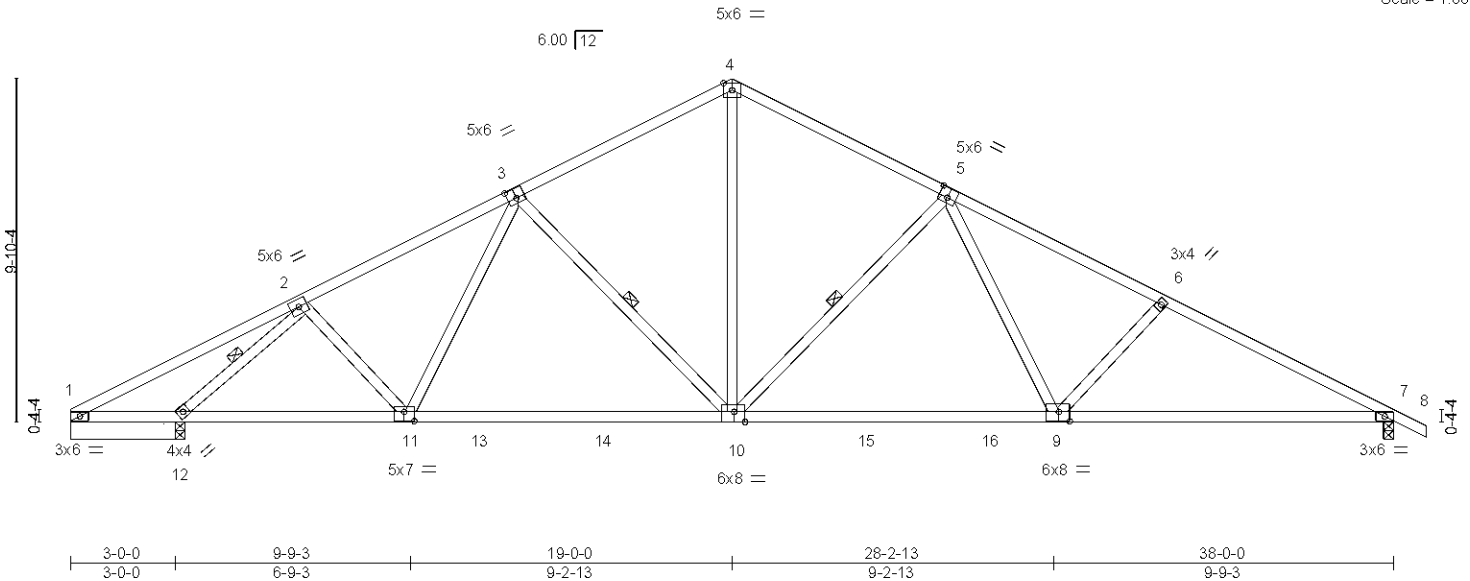


Plate Offsets (X,Y)--	[3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [9:0-3-12,0-3-4], [10:0-3-12,Edge], [11:0-3-8,0-3-4]
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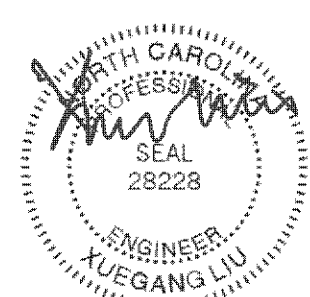
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	-0.24	9-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.45	7-9	>920	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.09	7	n/a	n/a		
BCDL 10.0	Code IBC2021/TP12014		Matrix-S	Wind(LL)	0.10	7-9	>999	240		
									Weight: 201 lb	FT = 5%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins.
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 7-9: 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 3-10, 5-10, 2-12

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

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

- NOTES-** (6-8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 214 lb uplift at joint 7, 168 lb uplift at joint 1 and 219 lb uplift at joint 12.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

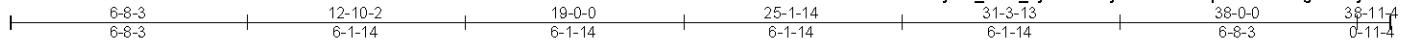


Job ORDERS	Truss SE-18455- <b>Cond1</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	I49194688
Job Reference (optional)						

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8:530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:38:51 2021 Page 1

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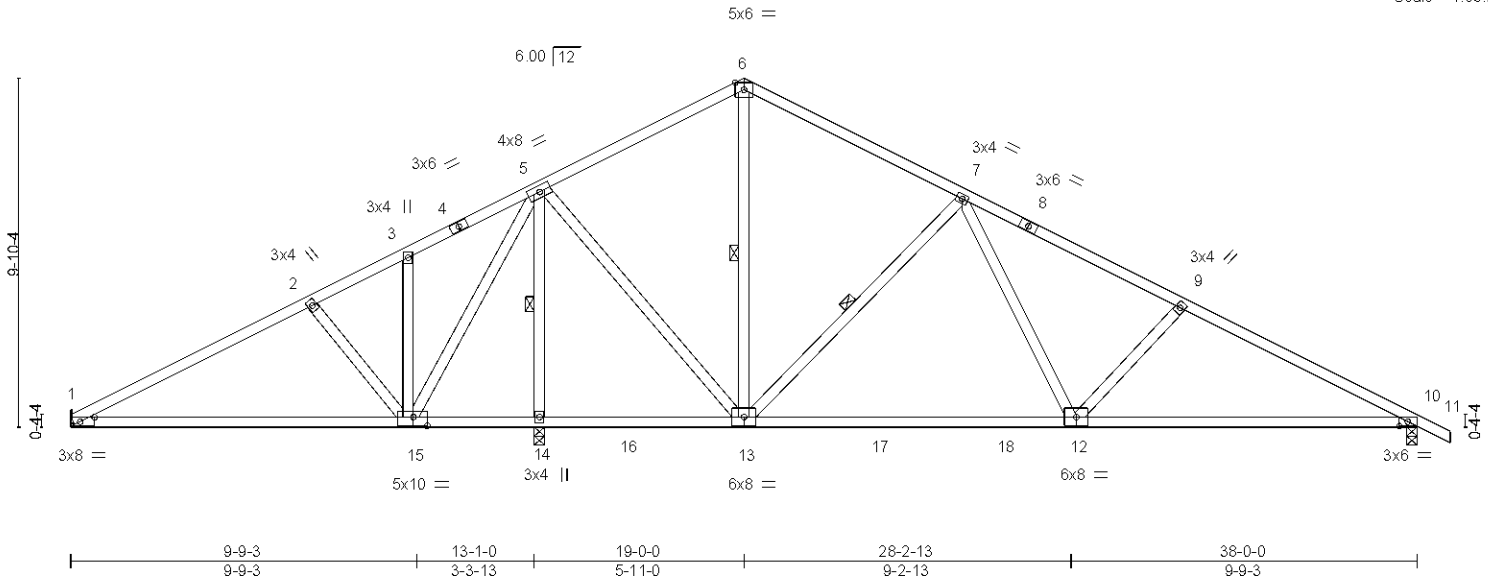


Plate Offsets (X,Y)-- [1:0-4-13,0-1-8], [10:0-2-13,0-1-8], [15:0-4-12,0-3-0]

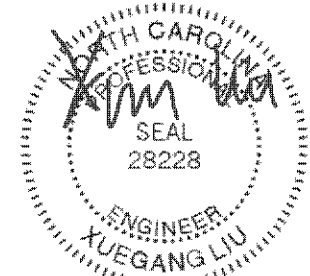
LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.77	Vert(LL) -0.24 1-15 >654 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.57	Vert(CT) -0.51 1-15 >311 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 10 n/a n/a		
	Code IBC2021/TP12014		Wind(LL) 0.07 10-12 >999 240	Weight: 210 lb	FT = 5%

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

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

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

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



January 12, 2022

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

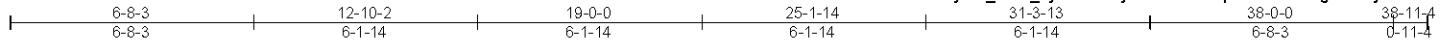
ENGINEERING BY  
**TRENCO**  
A MITEK AFFILIATE  
818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18455- <b>Cond2</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194688
Job Reference (optional)						

NVR, Frederick, MD - 21703,

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

ID: ?RrLVUNcBotMPeFP6cfGVKyElz\_-IGD\_uydFUCaUzmZN1?ndhqrWQ4xUuVugl208EyAar2



Scale = 1:63.3

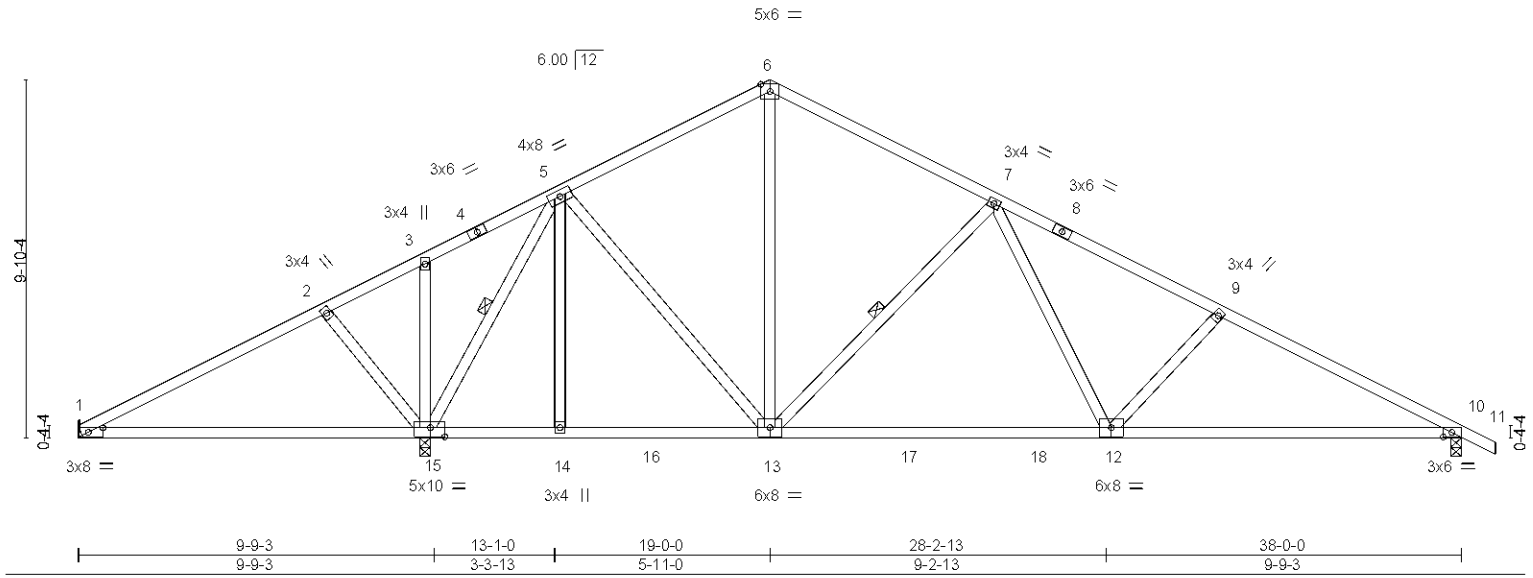


Plate Offsets (X,Y)--	[1:0-4-13,0-1-8], [10:0-2-13,0-1-8], [15:0-4-12,0-3-0]
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<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSL</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.70	Vert(LL) -0.23 1-15 >501 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.82	Vert(CT) -0.47 1-15 >243 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.53	Horz(CT) 0.03 10 n/a n/a		
BCDL 10.0	Code IBC2021/TP12014	Matrix-S	Wind(LL) 0.08 10-12 >999 240		
				Weight: 210 lb	FT = 5%

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

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

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

- NOTES-** (7-9)
- 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 250 lb uplift at joint 15, 192 lb uplift at joint 10 and 26 lb uplift at joint 1.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

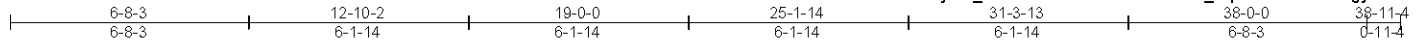
<p><b>WARNING</b> - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MitTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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</p> <p><b>Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERED 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 ORDERS	Truss SE-18455- <b>Cond3</b>	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194688
Job Reference (optional)						

NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITEK Industries, Inc. Thu Dec 9 20:38:52 2021 Page 1

ID:RrLVUNcBotMPEFP6cfGVKyEliz\_DSnm5letFWIKL7KixIW09uN\_XqO6DMF2uPoZhgyAar1



Scale: 3/16"=1'

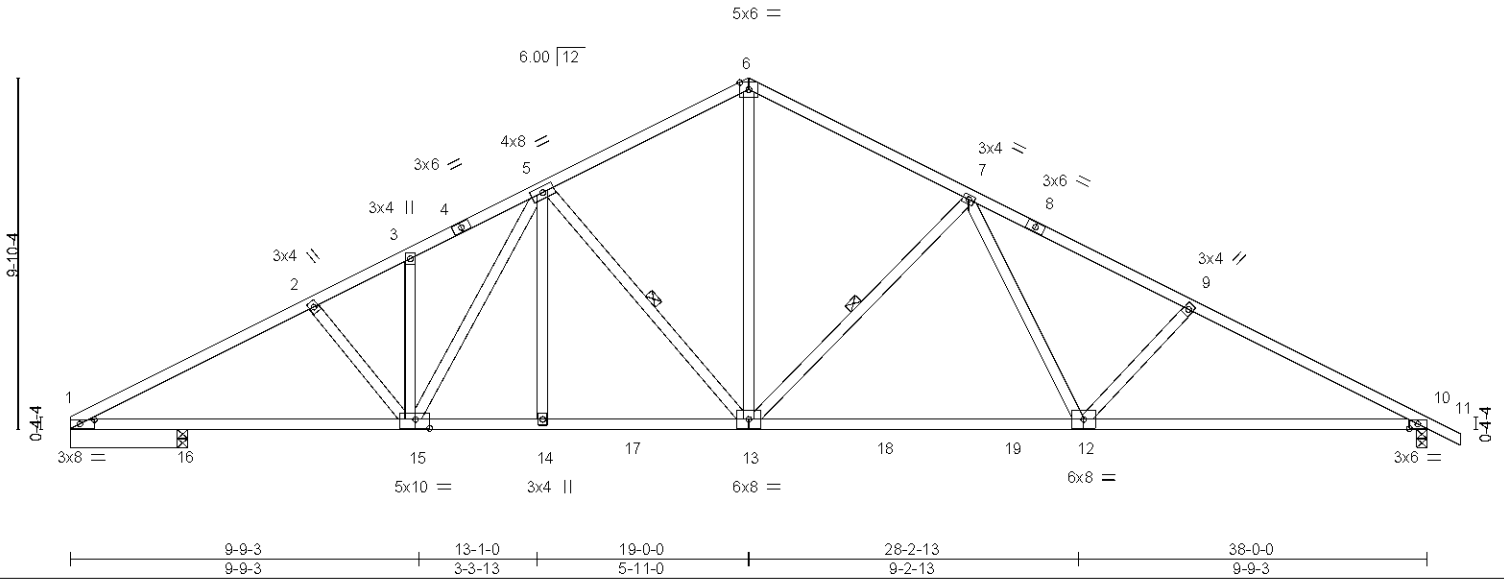


Plate Offsets (X,Y)-- [1:0-4-13,0-1-8], [10:0-2-13,0-1-8], [15:0-4-12,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.81	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.95	Vert(LL) -0.30 12-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.50	Vert(CT) -0.54 12-13 >776 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.12 10 n/a n/a		
	Code IBC2021/TP12014		Wind(LL) 0.14 14-15 >999 240	Weight: 210 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 2-2-0 oc purlins.	
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 10-12: 2x4 SP No.1, 12-13: 2x4 SP No.2D	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.	
WEBS 2x4 SP No.3 or 2x4 SPF Stud	WEBS 1 Row at midpt 5-13, 7-13	

**REACTIONS.** (size) 10=0-3-8, 1=3-0-0, 16=0-3-8  
 Max Horz 1=178(LC 15)  
 Max Uplift 10=224(LC 11), 1=228(LC 10)  
 Max Grav 10=1561(LC 1), 1=1307(LC 1), 16=296(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=2696/414, 2-3=2435/375, 3-5=2383/411, 5-6=1740/300, 6-7=1749/298,  
 7-9=2537/362, 9-10=2787/387  
 BOT CHORD 1-16=447/2326, 15-16=447/2326, 14-15=233/1913, 13-14=233/1913, 12-13=103/1959,  
 10-12=250/2422  
 WEBS 2-15=330/221, 5-15=144/433, 5-13=668/258, 6-13=140/1156, 7-13=699/264,  
 7-12=51/566, 9-12=347/224

- 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 224 lb uplift at joint 10 and 228 lb uplift at joint 1.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
  - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
  - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

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

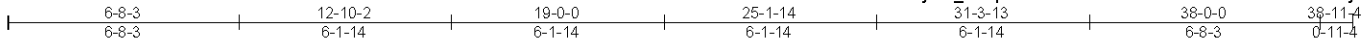


818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18456	Truss Type COMN	Qty 1	Ply 1	Plates added	155156609
Job Reference (optional)						

NVR, Frederick, MD - 21703,

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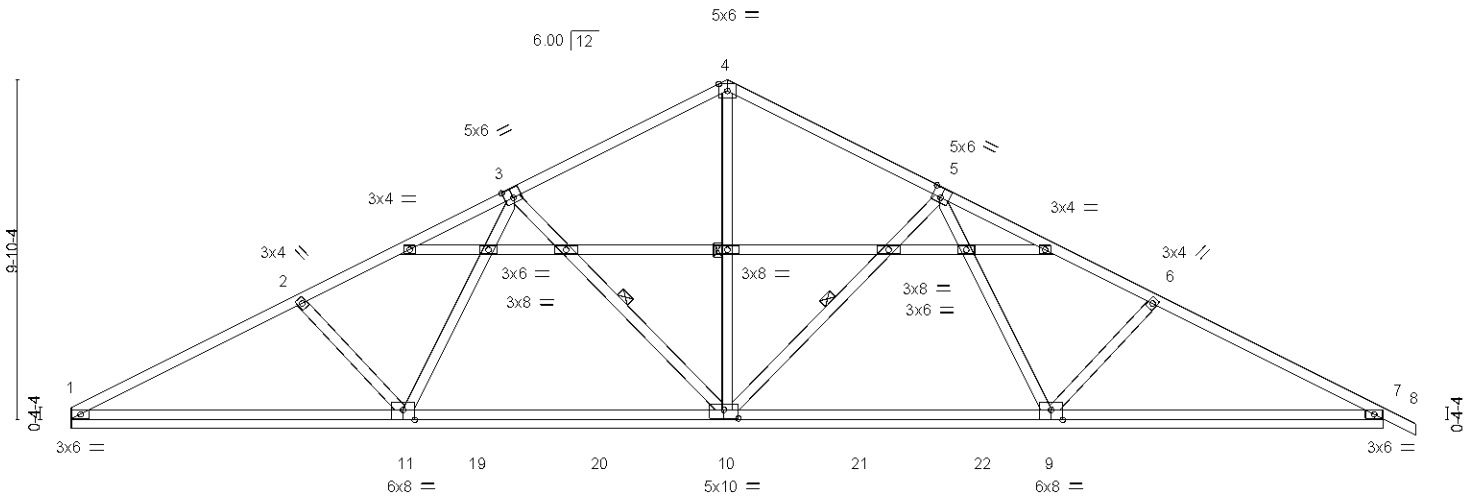


Plate Offsets (X,Y)--	[3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [9:0-4-0,Edge], [10:0-5-0,0-3-0], [11:0-4-0,Edge]
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<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.59	Vert(LL)	0.03	8	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	0.07	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IBC2021/TP12014		Matrix-S						
								Weight: 221 lb	FT = 5%

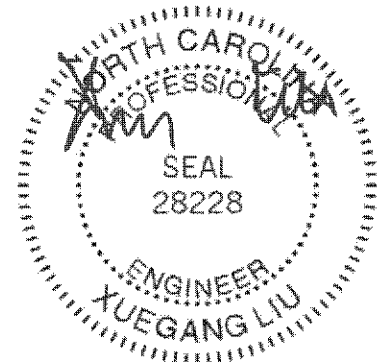
**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
WEBS 2x4 SP No.3 or 2x4 SPF Stud

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
6-0-0 oc bracing: 10-11.  
WEBS 1 Row at midpt 3-10, 4-10, 5-10

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

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

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



November 9, 2022

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-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



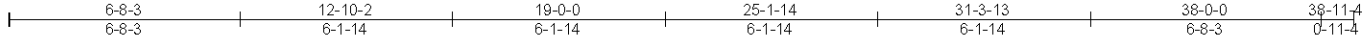
818 Soundside Road  
Edenton, NC 27932

Job ORDERS	Truss SE-18457	Truss Type COMN	Qty 1	Ply 1	Plates added Job Reference (optional)	155156610
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NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MITek Industries, Inc. Tue Nov 8 10:21:38 2022 Page 1

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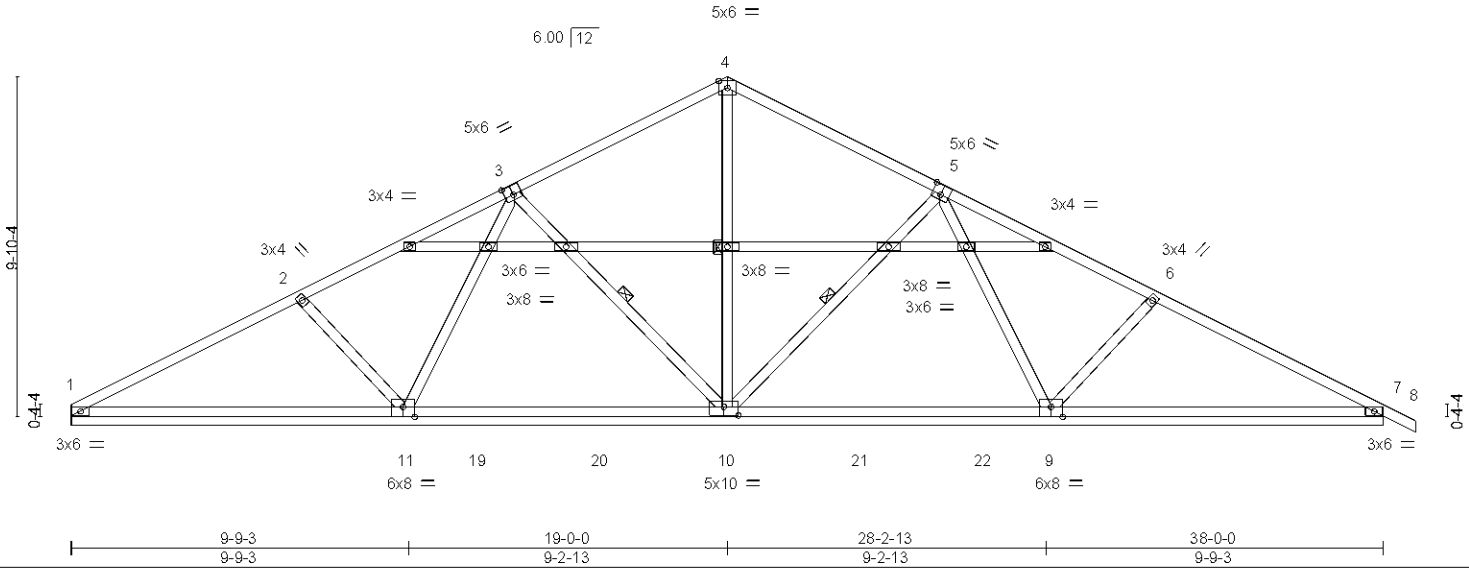


Plate Offsets (X,Y)--	[3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [9:0-4-0,Edge], [10:0-5-0,0-3-0], [11:0-4-0,Edge]
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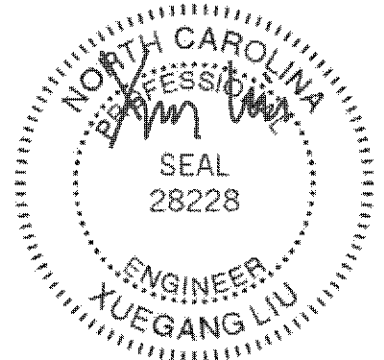
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSL</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.59	Vert(LL)	0.03	8	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	0.07	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S						
								Weight: 221 lb	FT = 5%

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

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

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

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



November 9, 2022

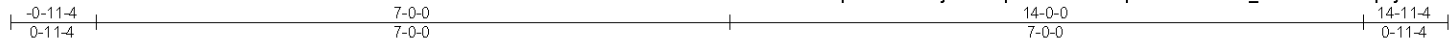
Job ORDERS	Truss SE-18591	Truss Type COMN	Qty 1	Ply 1	10_Southeast	149194693
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NVR, Frederick, MD - 21703,

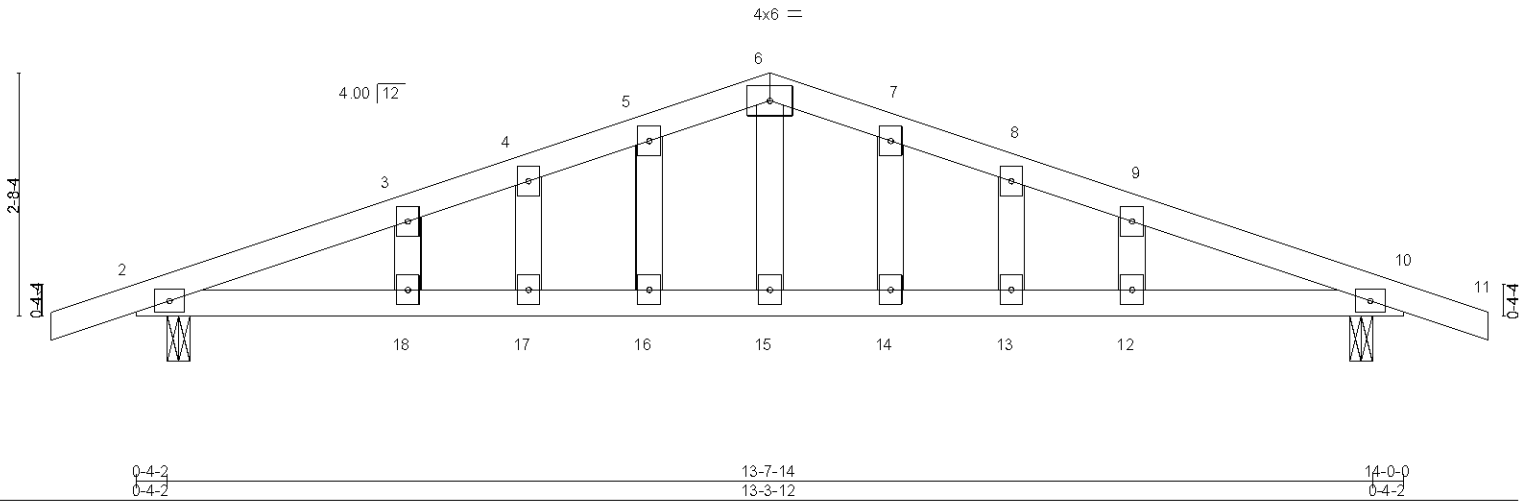
8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:45:06 2021 Page 1

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Job Reference (optional)



Scale = 1:25.5



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

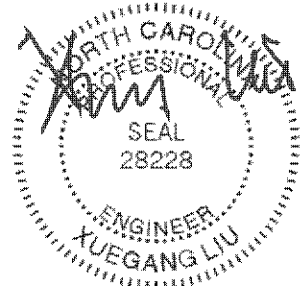
**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 OTHERS 2x4 SP No.3 or 2x4 SPF Stud

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

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

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

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



January 12, 2022

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-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

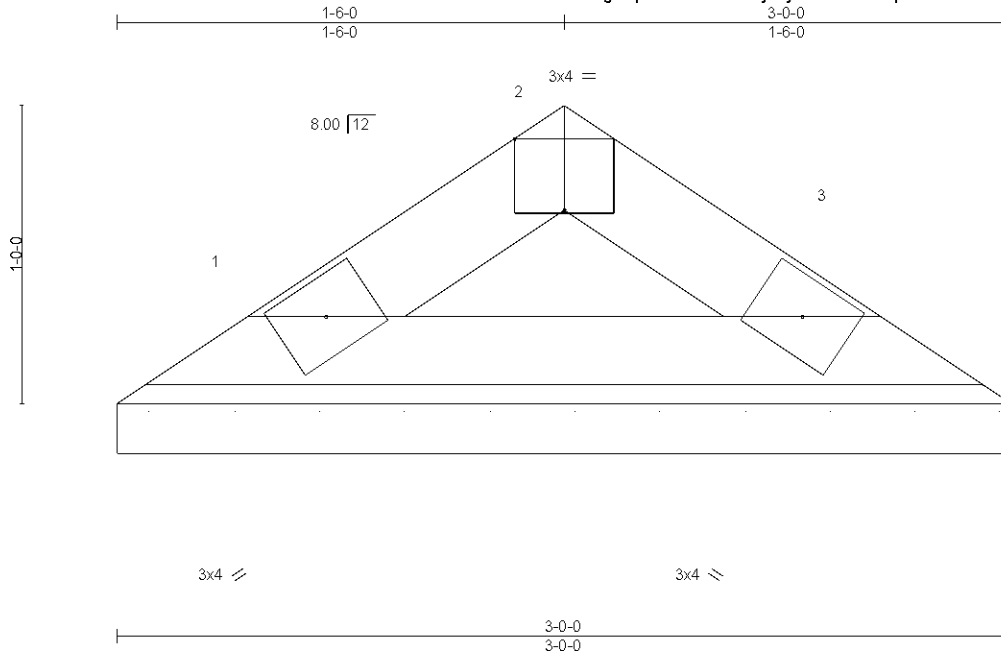


818 Soundside Road  
 Edenton, NC 27932

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:37 2022 Page 1  
ID:lwgfHqLuldM7W6Kxo5rjJByUXxn-110UVwpW5nlQcYkzK5McV9S1Qbd2s7Y0umzOByTqEK



Scale = 1:7.7

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 Lumber DOL 1.15	TC 0.08 BC 0.08 WB 0.00 Matrix-P	Vert(LL) Vert(CT) Horz(CT)	n/a n/a 0.00	- - 3	n/a n/a n/a	999 999 n/a	MT20 197/144
TCDL 10.0	Rep Stress Incr YES							
BCLL 0.0	Code IBC2021/TPI2014							
BCDL 10.0							Weight: 8 lb	FT = 5%

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

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

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

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

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



October 13, 2022

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

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

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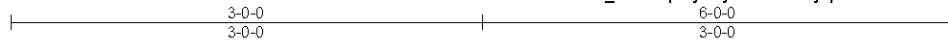
818 Soundside Road  
Edenton, NC 27932

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

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

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3x4 =

Scale = 1:14.7

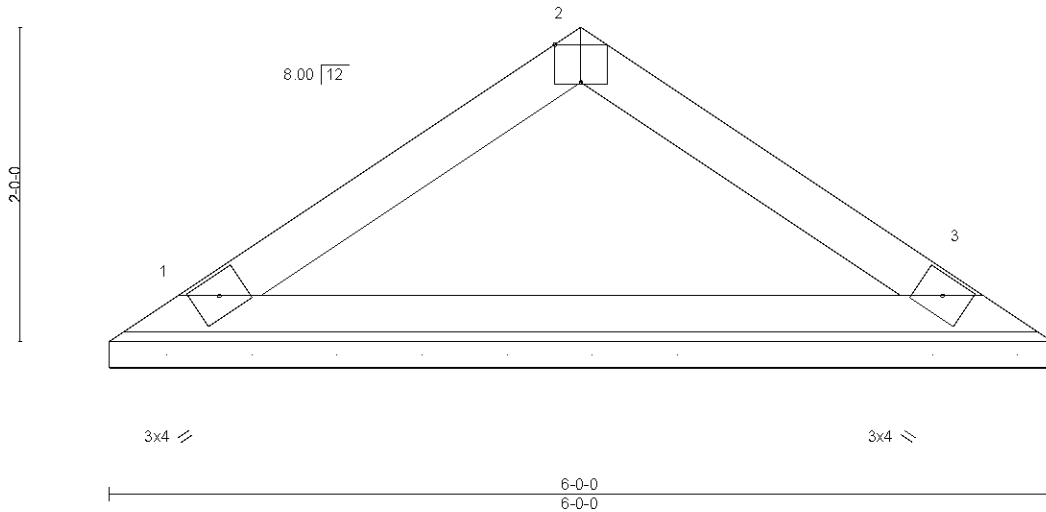


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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

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

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

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

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

- NOTES-** (7)
- 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
  - TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



October 13, 2022

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



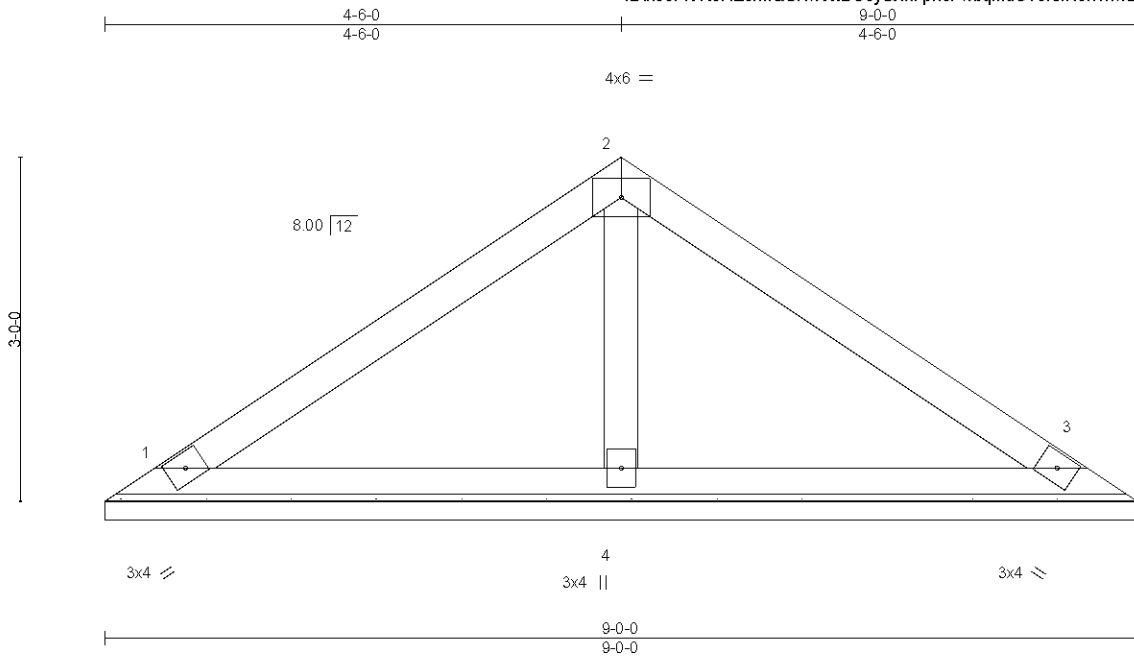
818 Soundside Road  
Edenton, NC 27932



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

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:39 2022 Page 1  
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Scale = 1:20.1

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

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

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

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

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

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



October 13, 2022

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

ENGINEERING BY  
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A MITEK AFFILIATE

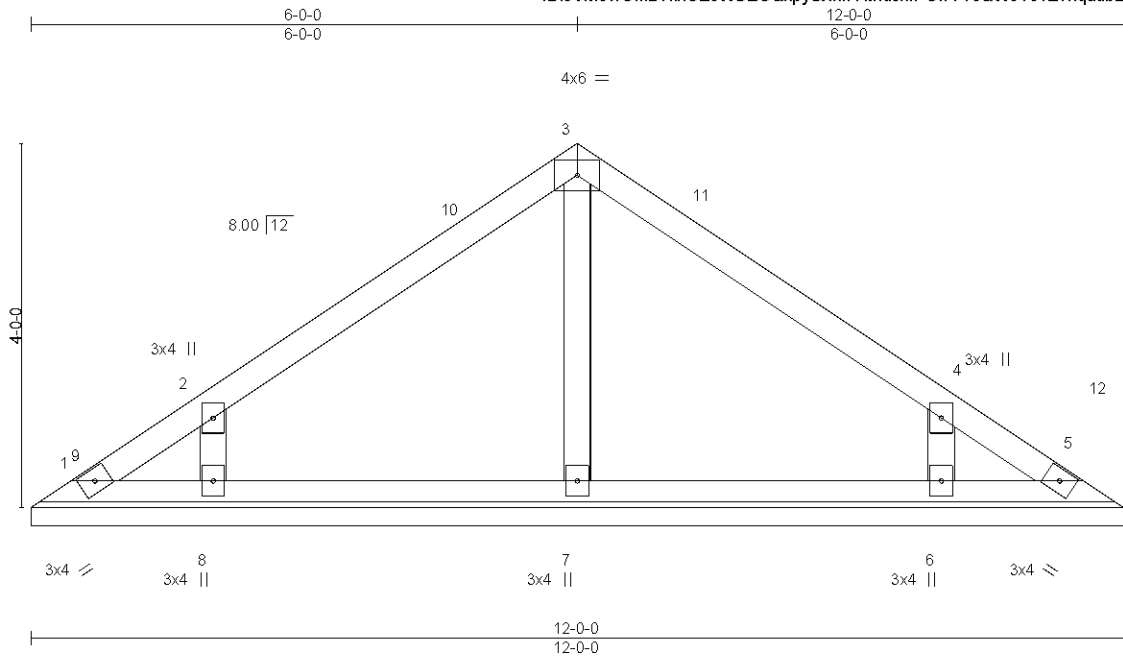
818 Soundside Road  
Edenton, NC 27932

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

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

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Scale = 1:25.3

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

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

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

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

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

- NOTES-** (7)
- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-5-12 to 4-10-8, Corner(3R) 4-10-8 to 7-1-8, Corner(3E) 7-1-8 to 11-6-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - 3) Unbalanced snow loads have been considered for this design.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=210, 6=209.



October 13, 2022

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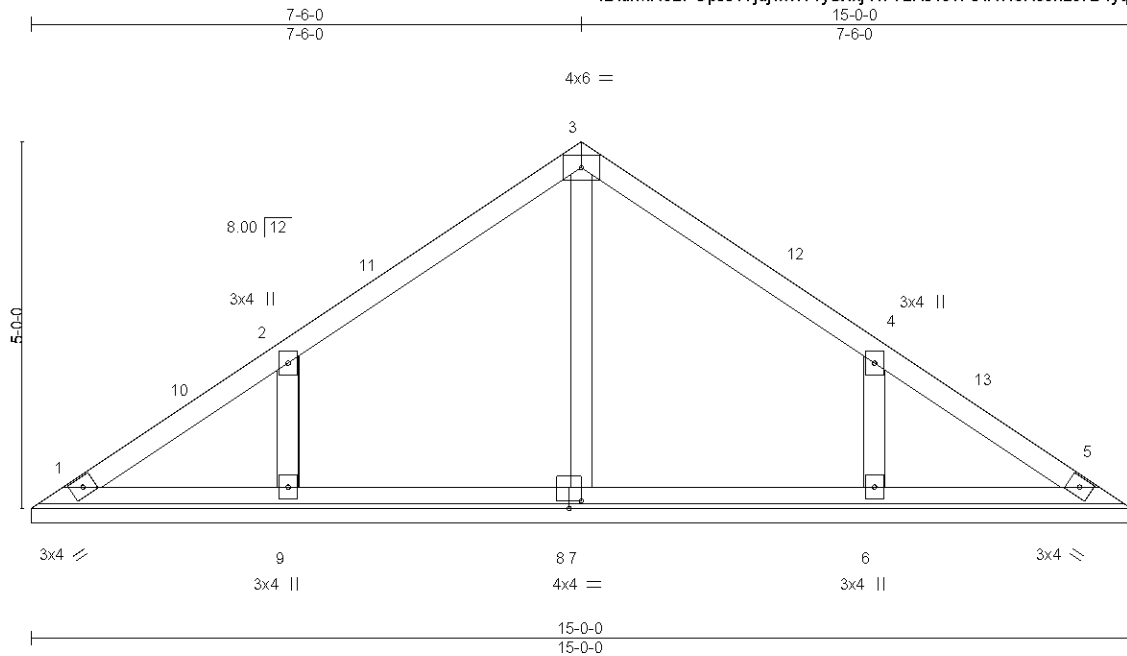


818 Soundside Road  
 Edenton, NC 27932

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:41 2022 Page 1  
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Scale = 1:31.4

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.65 BC 0.19 WB 0.12 Matrix-S	in (loc) l/def L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 5 n/a n/a	MT20	197/144
TCDL 10.0	Rep Stress Incr YES				
BCLL 0.0	Code IBC2021/TPI2014				
BCDL 10.0				Weight: 59 lb	FT = 5%

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

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

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

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

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



October 13, 2022

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

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818 Soundside Road  
Edenton, NC 27932

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

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:42 2022 Page 1  
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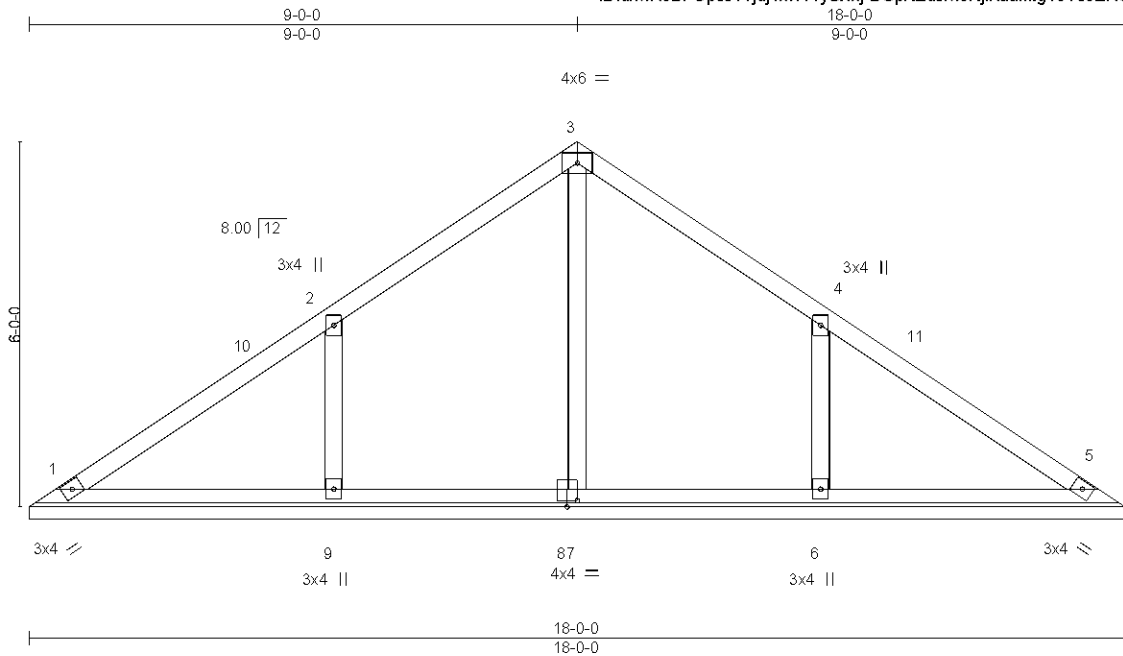


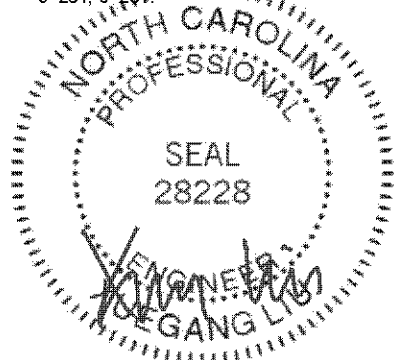
Plate Offsets (X,Y)-- [8:0-2-0,0-1-4]	
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0
TCLL 30.0 (Roof Snow=30.0)	Plate Grip DOL 1.15
TCDL 10.0	Lumber DOL 1.15
BCLL 0.0	Rep Stress Incr YES
BCDL 10.0	Code IBC2021/TPI2014
<b>CSL</b>	<b>DEFL.</b> in (loc) l/defl L/d
TC 0.82	Vert(LL) n/a - n/a 999
BC 0.28	Vert(CT) n/a - n/a 999
WB 0.16	Horz(CT) 0.00 5 n/a n/a
Matrix-S	
<b>PLATES</b>	<b>GRIP</b>
MT20	197/144
Weight: 74 lb FT = 5%	

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud	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.** All bearings 18-0-0.  
 (lb) - Max Horz 1=195(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=281(LC 12), 6=281(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=300(LC 18), 9=686(LC 18), 6=686(LC 19)

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

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

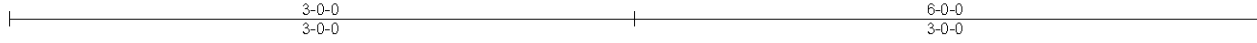


October 13, 2022

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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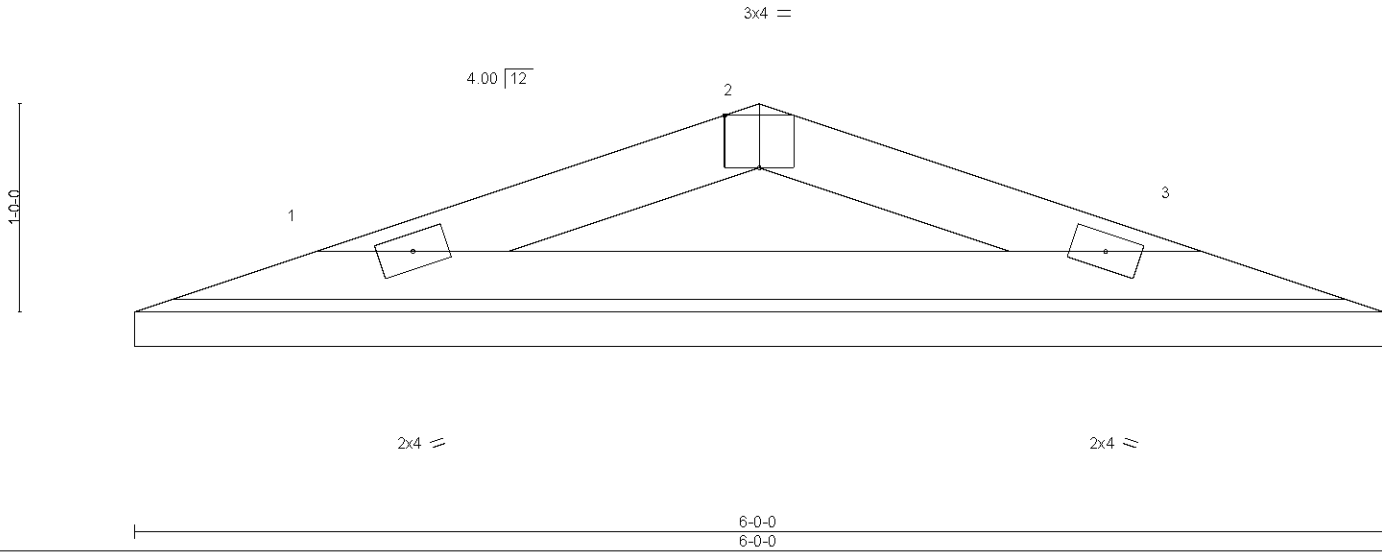


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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

**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.

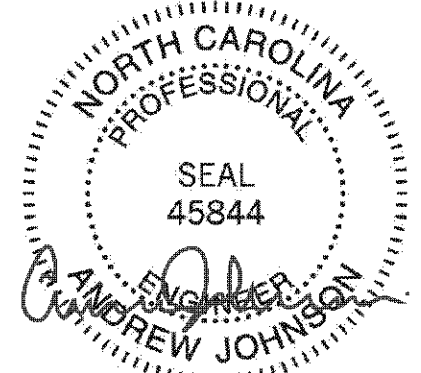
**REACTIONS.** (size) 1=6-0-0, 3=6-0-0  
Max Horz 1=16(LC 13)  
Max Uplift 1=51(LC 8), 3=51(LC 9)  
Max Grav 1=224(LC 18), 3=224(LC 19)

**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)

- 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
- TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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

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

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

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

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

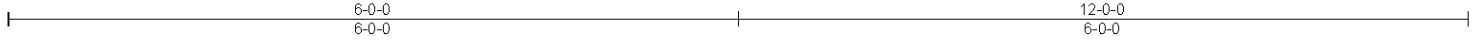
ENGINEERING BY  
**TRENCO**  
A MITEK AFFILIATE

818 Soundside Road  
Edenton, NC 27932

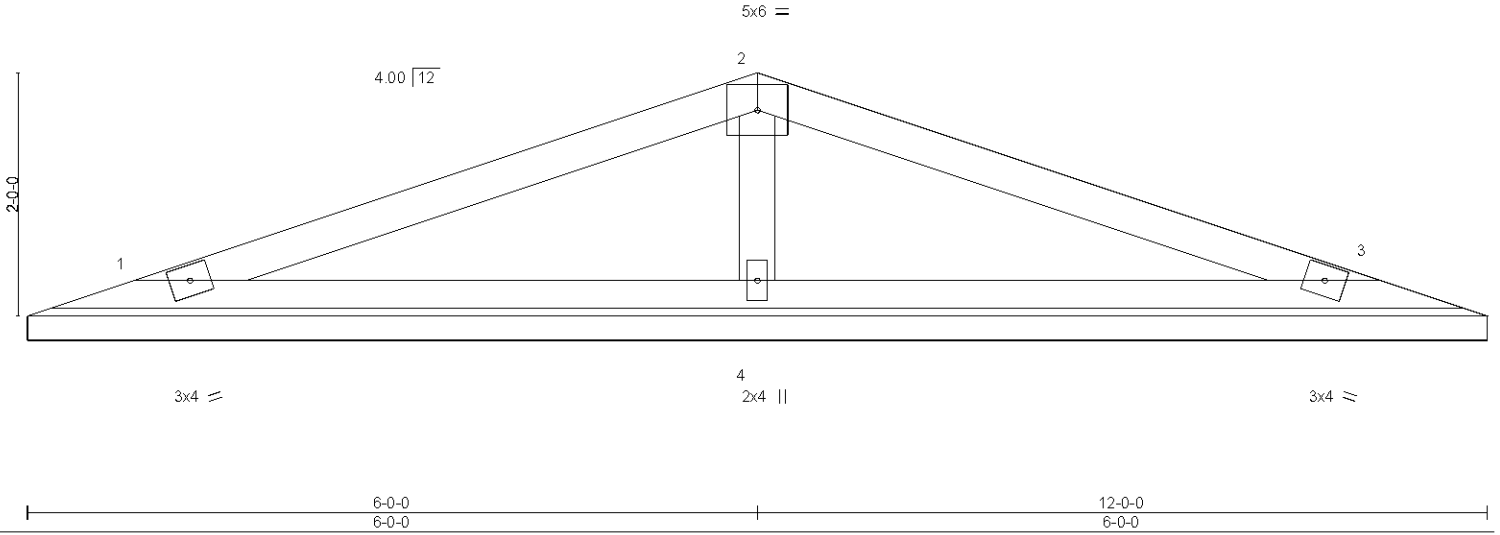
Job	Truss	Truss Type	Qty	Ply	02_Valley	147779322
ORDERS	VT-95511	VCOM	1	1	Job Reference (optional)	

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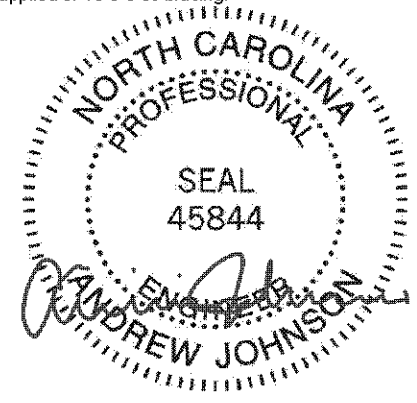
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0	TC 0.71	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.43	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber DOL 1.15	WB 0.10	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a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

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

**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.



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