

RLH-VK-0020-GBH00-01

Job	Truss	Truss Type	Qty	Ply	10_Southeast	I49147390
ORDERS	SE-14544	COMN	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:24 2021 Page 1
ID:7RrLVUNcBotMPeFP6cfGVKyElz_-drnYGGGrXdjJOLLzF6lUyAJmzsf3dn5?sstyBF8z

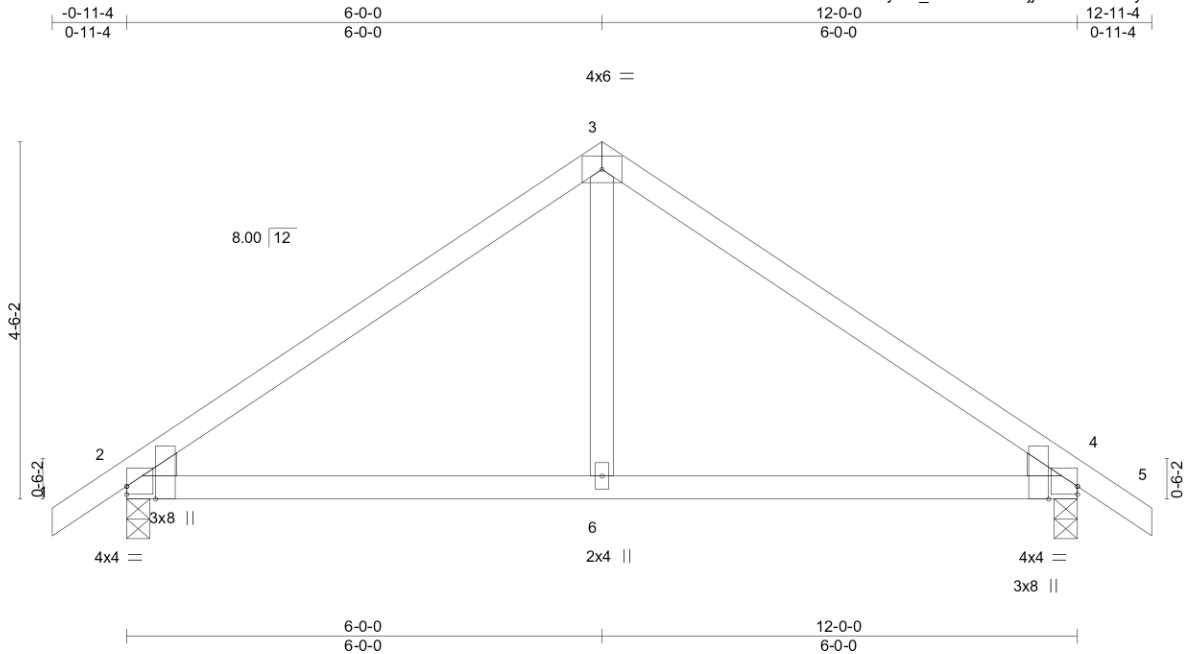


Plate Offsets (X,Y)--		[2:0-0-0,0-1-3], [2:0-1-15,Edge], [4:0-0-0,0-1-3], [4:0-1-15,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	PLATES	GRIP
TCLL 20.0		Plate Grip DOL	1.15	TC 0.49		Vert(LL)	-0.03 2-6 >999 360	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.38		Vert(CT)	-0.06 2-6 >999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

LUMBER-

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

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

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 MII-7473 rev. 5/19/2020 BEFORE USE.

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

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-14545	COMN	1	1	
					Job Reference (optional)

I49147391

NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:25 2021 Page 1
ID: ?RrLVUNcBotMPeFP6cfGVKyElz_-5109lcHTHwra1YuXvgnuuey19Tj4zb5Hm0IIPOJyBF8y

0-11-4 5-1-3 10-0-0 14-10-13 20-0-0 20-11-4
0-11-4 5-1-3 4-10-13 4-10-13 5-1-3 0-11-4

4x6 ||

Scale = 1:44.6

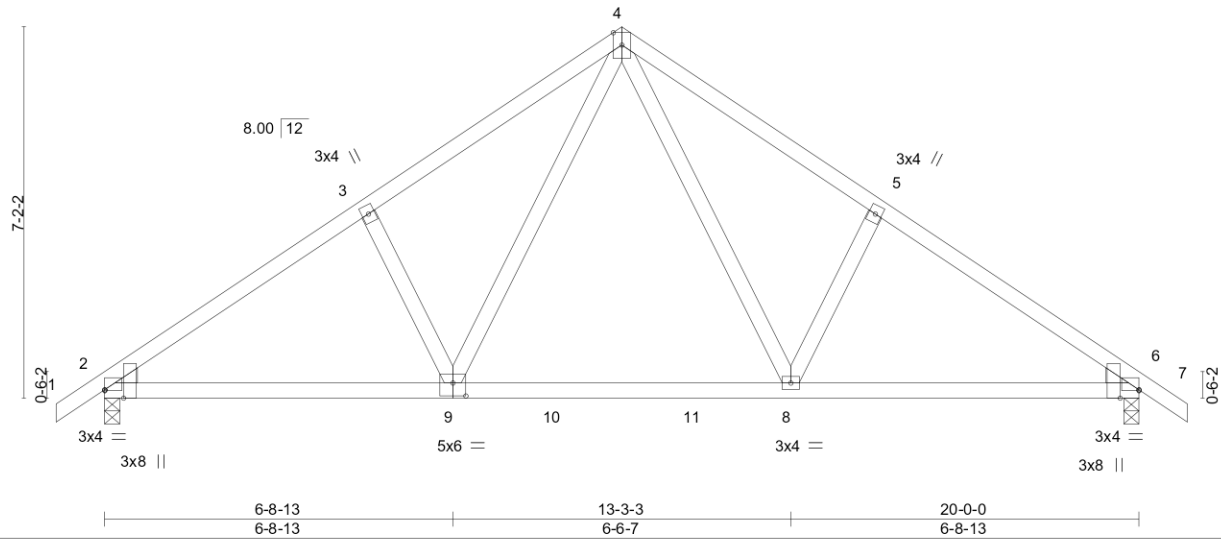


Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [2:0-1-15,Edge], [6:0-1-15,Edge], [6:0-0-0,0-0-3], [9:0-3-0,0-3-0]

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 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

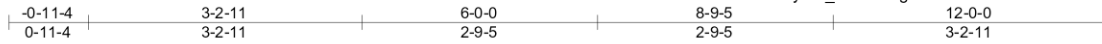
Job	Truss	Truss Type	Qty	Ply	11_Southeast-Girder-Int
ORDERS	SE-14546	COMN	1	2	

I49147402

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?uUdwtkK6sdUvuoU0CiqvQdcOf3uyBF8R



Scale = 1:27.2

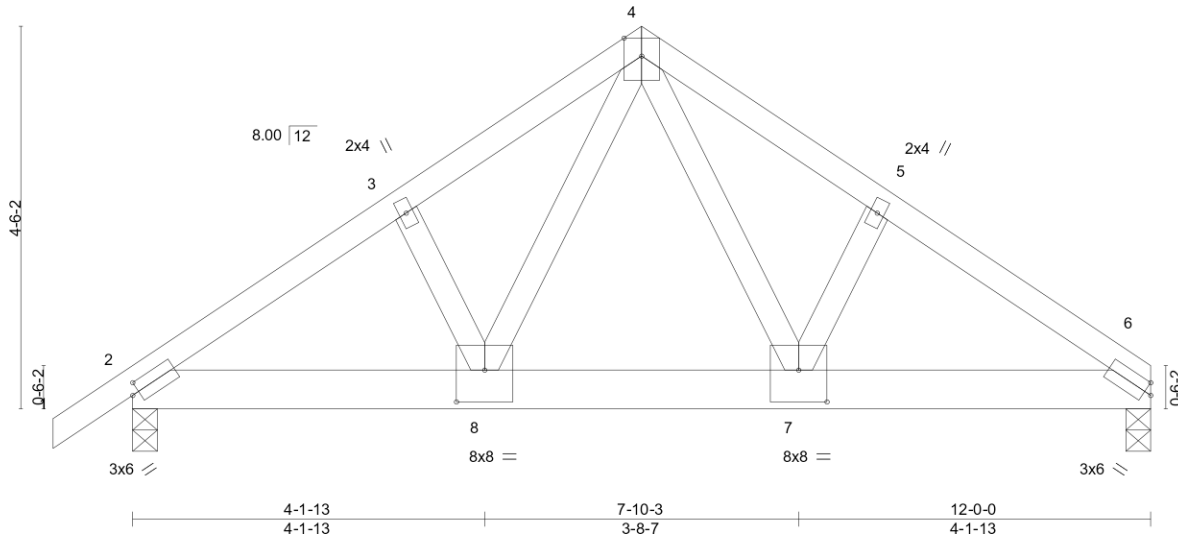


Plate Offsets (X,Y)-- [2:0-1-0,0-1-8], [7:0-4-0,0-4-8], [8:0-4-0,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.05	7-8	>999	360	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%

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 4-11-3 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=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	Truss	Truss Type	Qty	Ply	11_Southeast-Girder-Int
ORDERS	SE-14546	COMN	1	2	I49147402

NVR, Frederick, MD - 21703,

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

NVR, Frederick, MD - 21703, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:59 2021 Page 1
ID:?RrLVUNcBtMPeFP6cfGVKyElz_-5aS0uEhoHN7I6nV3up0s07R?XQHZZSanq2_DbLYBF8Q

5-2-11	10-0-0	14-9-5	20-0-0	20-11-4
5-2-11	4-9-5	4-9-5	5-2-11	0-11-4



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	11_Southeast-Girder-Int
ORDERS	SE-14547	COMN	1	2	I49147403

NVR, Frederick, MD - 21703,

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)

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-14549	COMN	1	1		I49147393

NVR, Frederick, MD - 21703,

8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:28 2021 Page 1
ID:RrLVUNcBotMPeFP6cfGVKyElz_Vc4IOeJMarD9u0d6apKbGbeluwCRoULDijz4?eyBF8v

-0-11-4	6-0-0	12-0-0	12-11-4
0-11-4	6-0-0	6-0-0	0-11-4

4x6 =

Scale = 1:29.1

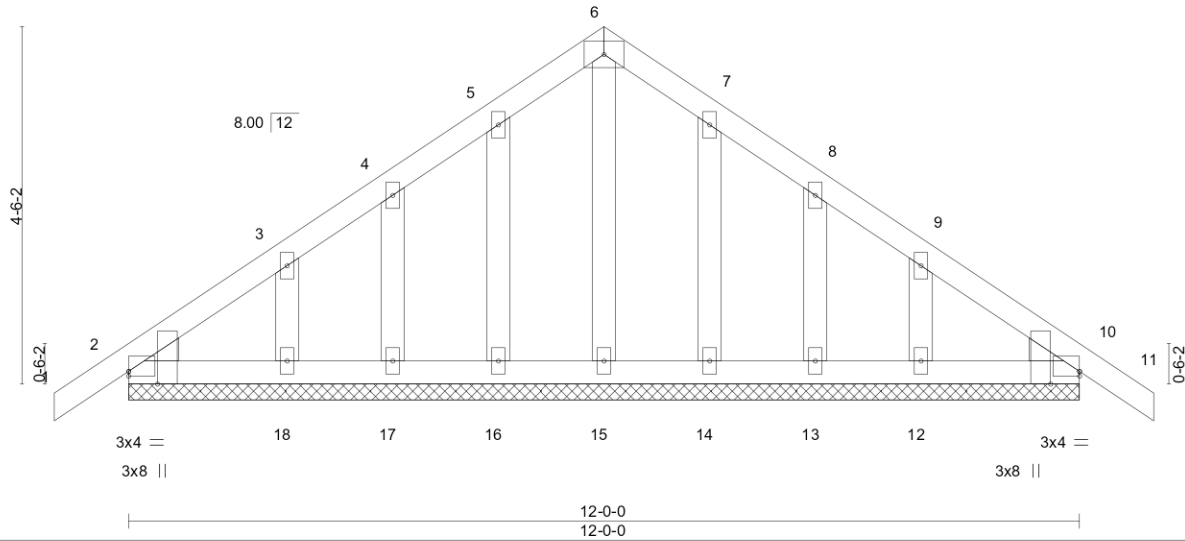


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [2:0-1-15,Edge], [10:0-0-0,0-0-11], [10:0-1-15,Edge]

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

LUMBER-

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

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

BRACING-

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

REACTIONS.

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

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

NOTES-

- 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

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-18452	COMN	1	1		I49194685
Job Reference (optional)						

NVR, Frederick, MD - 21703,

8.530 s Dec 6 2021 MITek Industries, Inc. Thu Dec 9 20:38:44 2021 Page 1

ID: ?RrLVUNcBotMPeFP6cfGVKyElz_-SwIKQZYs72hTNuJDT3N8rC2Z7bLLjws39s8P8yAar9
 25-1-14 6-1-14 31-3-13 6-1-14 38-0-0 6-8-3 38-11-4 0-11-4

Scale = 1:65.0

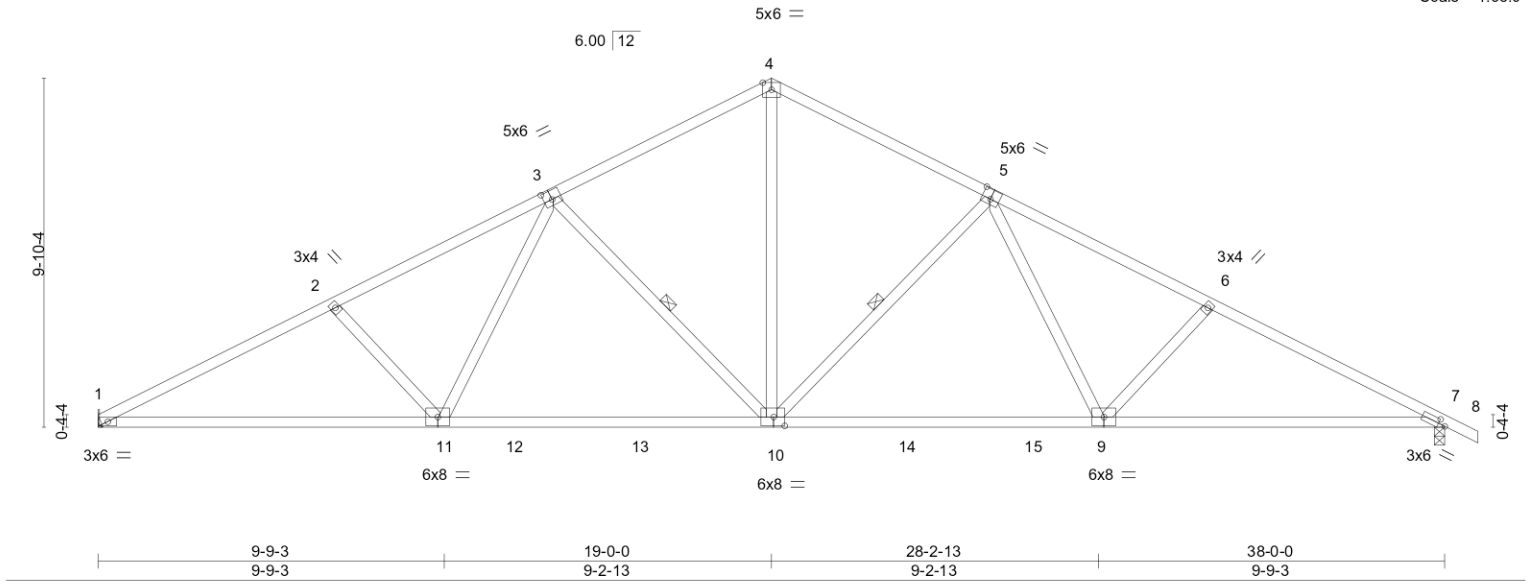


Plate Offsets (X,Y)--		[3:0-2-12,0-3-0], [5:0-3-0,0-3-4], [7:0-2-5,0-1-8], [10:0-3-12,0-3-0]
LOADING (psf)	SPACING-	2-0-0
TCCL 20.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IBC2021/TPI2014	
CSL	DEFL.	in (loc) l/defl L/d
TC 0.96	Vert(LL) -0.26	9-10 >999 360
BC 0.94	Vert(CT) -0.51	1-11 >897 240
WB 0.52	Horz(CT) 0.12	7 n/a n/a
Matrix-S	Wind(LL) 0.13	10 >999 240
PLATES	GRIP	
MT20	197/144	
Weight: 194 lb		FT = 5%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 1-3: 2x4 SP No.2D	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2D *Except* 7-9, 1-11: 2x4 SP No.1	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

REACTIONS. (size) 7=0-3-8, 1=Mechanical
 Max Horz 1=-178(LC 11)
 Max Uplift 7=-219(LC 11), 1=-195(LC 10)
 Max Grav 7=1577(LC 1), 1=1511(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-2848/387, 2-3=-2585/356, 3-4=-1783/288, 4-5=-1791/289, 5-6=-2570/352,
 6-7=-2820/378
 BOT CHORD 1-11=-424/2485, 10-11=-240/1999, 9-10=-96/1991, 7-9=-242/2452
 WEBS 2-11=-370/234, 3-11=-56/569, 3-10=-709/267, 4-10=-127/1208, 5-10=-694/266,
 5-9=-54/555, 6-9=-347/224

- 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 100 lb uplift at joint(s) except (jt=lb) 7=219, 1=195.
 - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
 - Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
 - Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12, 2022

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

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

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

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

ENGINEERING BY
TRENCO
 A MITek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-18453-	COND1	1	1	
					Job Reference (optional)

I49194686

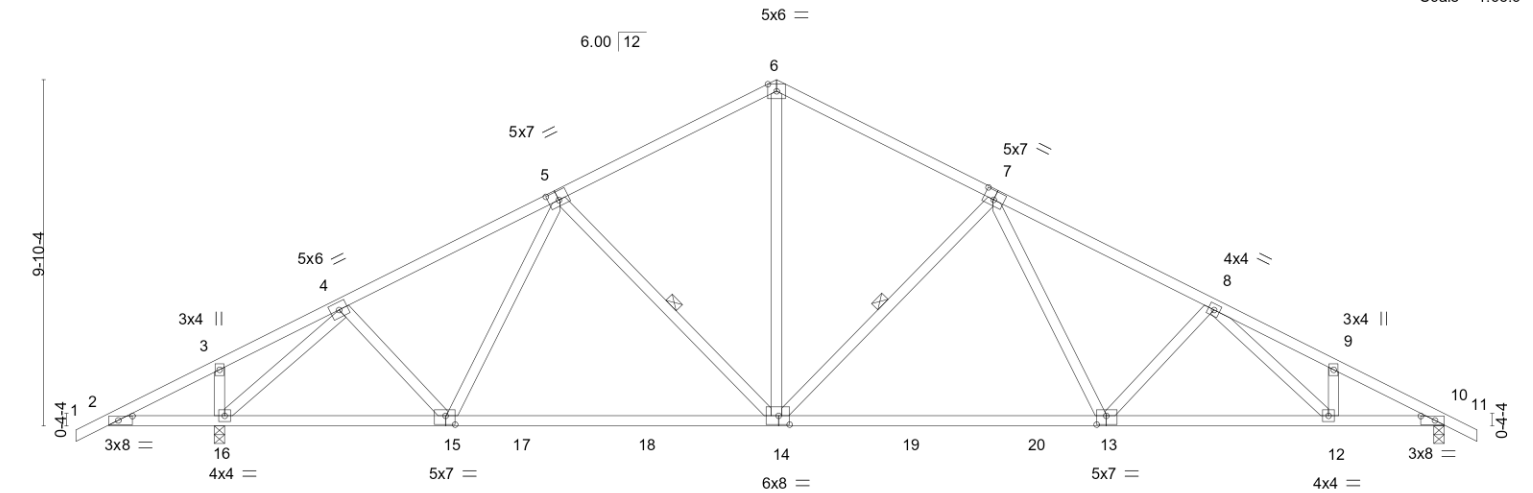
NVR, Frederick, MD - 21703,

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

ID: ?RrLVUNcBotMPeFP6cfGVkyElz_PIQ5rEZ6fgyBdCtbaUPcWd70cPLvpW89WTLFT0yAar7

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

Scale = 1:65.6



3-0-0	3-1-12	9-9-3	19-0-0	28-2-13	34-10-4	38-0-0
3-0-0	0-1-12	6-7-7	9-2-13	9-2-13	6-7-7	3-1-12
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]						

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

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

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

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

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

ENGINEERING BY
TRENCO
A MITek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-18454	COMN	1	1	
					Job Reference (optional)

I49194687

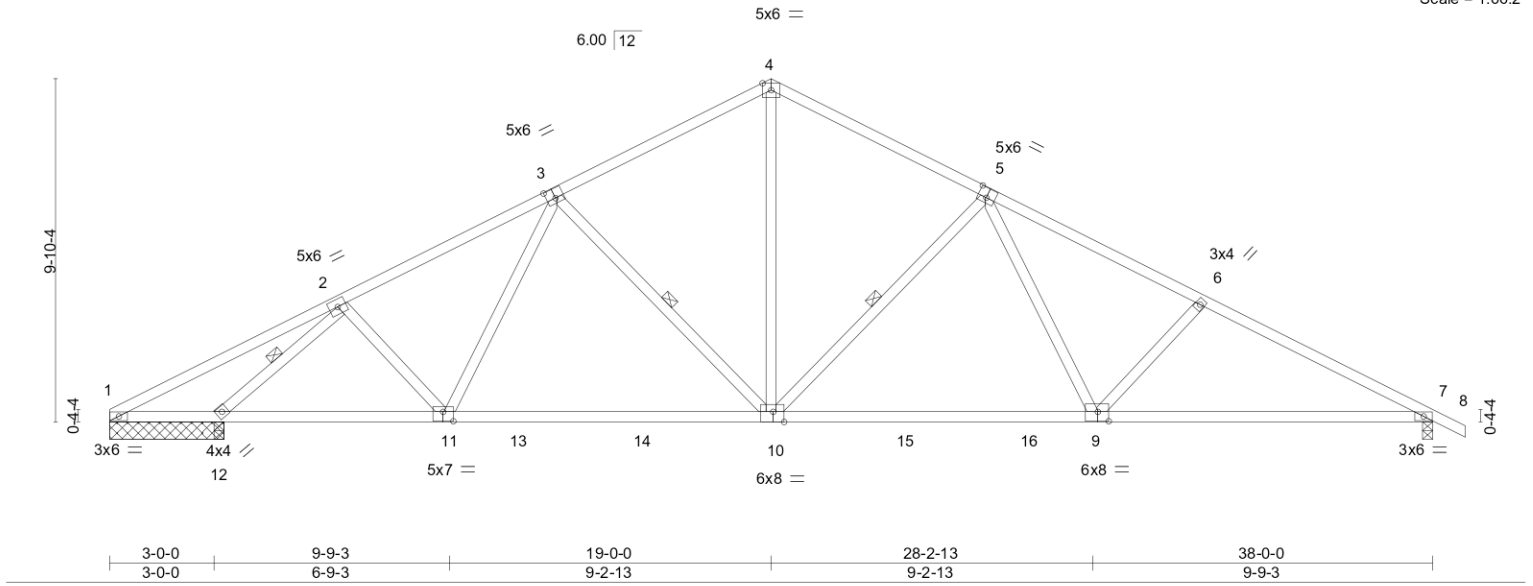
NVR, Frederick, MD - 21703,

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

ID: ?RrLVUNcBotMPEFP6cfGVKyElz_-LhYrFwbMBHCvsV1_ivR4?2CJXD0PHWms_nqLYvyAar5

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

Scale = 1:66.2



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.75	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 1.00	Vert(LL) -0.24 9-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.59	Vert(CT) -0.45 7-9 >920 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.09 7 n/a n/a		
	Code IBC2021/TPI2014		Wind(LL) 0.10 7-9 >999 240		
					Weight: 201 lb FT = 5%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 3-3-8 except (it=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

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

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

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

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

ENGINEERING BY
TRENCO
 A MITek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	I49194688
ORDERS	SE-18455- Cond2	COMN	1	1	Job Reference (optional)	

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Dec 9 20:38:51 2021 Page 1
ID: 2Rrj VUNcBotMPeEP6cfGVKvElz -IGD- uvdEIJCaljzmZN1?ndpdrWQ4xIuUvUqI208EvAar2

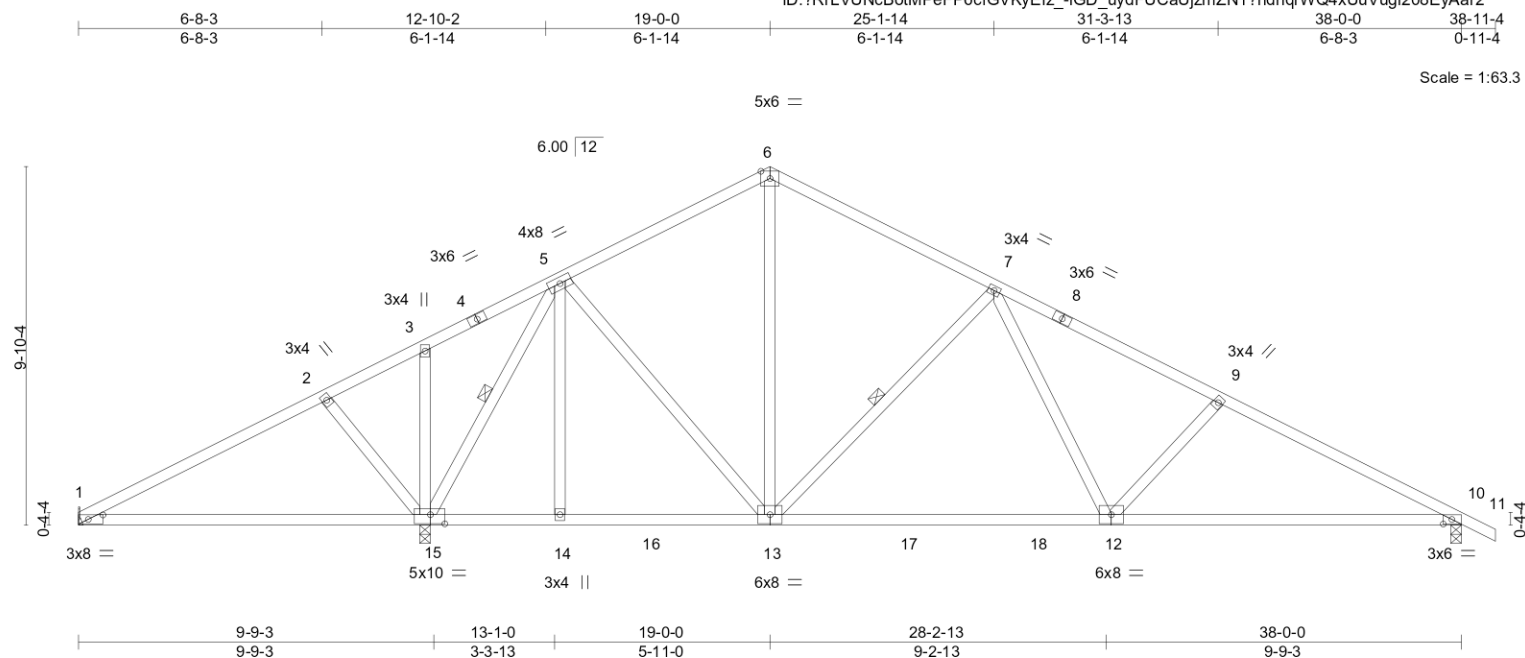


Plate Offsets (X,Y)-- [1:0-4-13,0-1-8], [10:0-2-13,0-1-8], [15:0-4-12,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.23	1-15	>501	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.47	1-15	>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/TPI2014		Matrix-S		Wind(LL)	0.08	10-12	>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 3-4-0 oc purlins.	
BOT CHORD	2x4 SP No.2 or 2x4 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:	
	10-12: 2x4 SP No.1, 12-13: 2x4 SP No.2D		6-0-0 oc bracing: 1-15.	
WEBS	2x4 SP No.3 or 2x4 SPF Stud	WEBS	1 Row at midpt	5-15, 7-13

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

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

TOP CHORD	1-2=-59/377, 2-3=-76/524, 3-5=-41/602, 5-6=-731/229, 6-7=-740/206, 7-9=-1542/292, 9-10=-1796/318
BOT CHORD	1-15=-301/192, 14-15=0/307, 13-14=0/307, 12-13=-14/1062, 10-12=-189/1543
WEBS	2-15=-378/221, 5-15=-1472/162, 5-13=-24/559, 6-13=-74/330, 7-13=-705/265, 7-12=-52/575, 9-12=-358/225

NOTES- (7-9)

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

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-18455-	Cond3	1	1	Job Reference (optional)
		COMN			

I49194688

NVR, Frederick, MD - 21703,

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

ID: ?RrLVUNcBotMPeFP6cfGVkYElz_-DSnM5letFWiKL7KixIW09uN_XqO6DMF2uPoZhgyAar1

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

Scale: 3/16"=1'

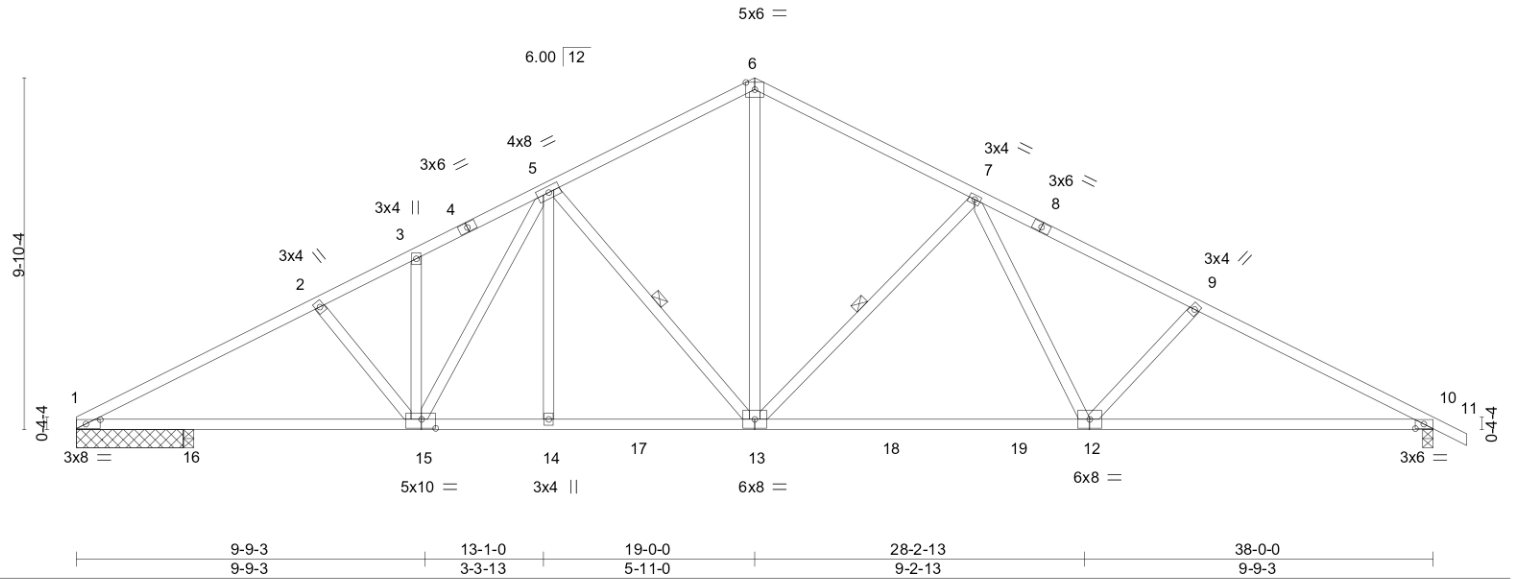


Plate Offsets (X,Y)-- [1:0-4-13,0-1-8], [10:0-2-13,0-1-8], [15:0-4-12,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.30	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.54	12-13	>776	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.12	10	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.14	14-15	>999	240	Weight: 210 lb	FT = 5%

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

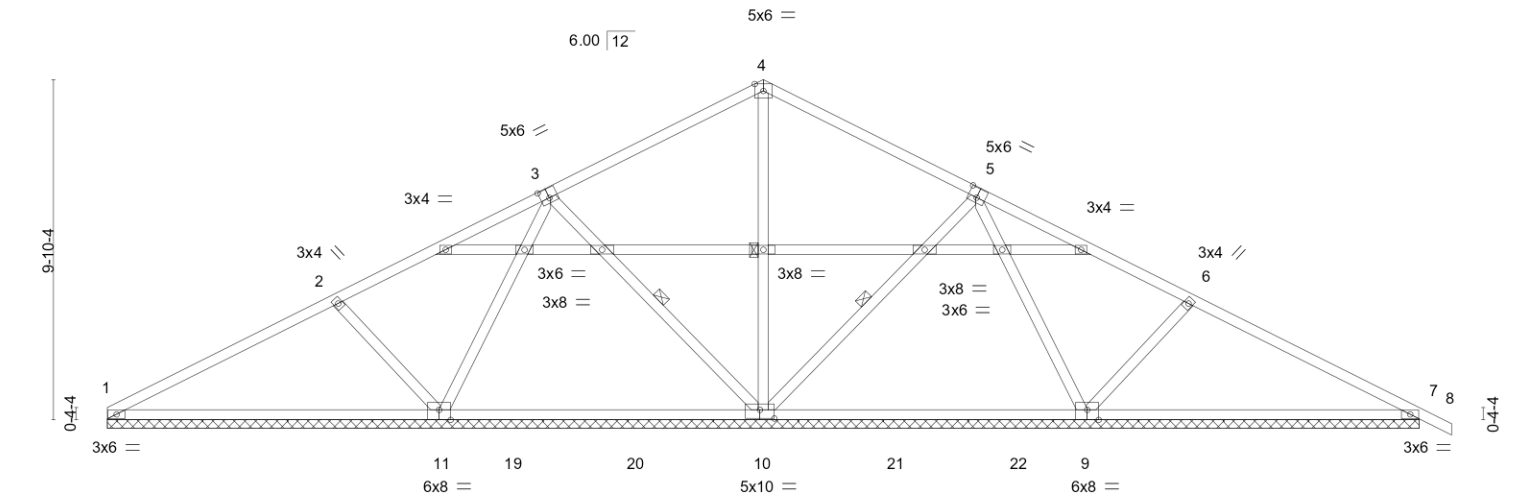
NVR, Frederick, MD - 21703,

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

ID: ?RrLVUNcBotMPeFP6cfGVKyElz_-J4kpIns0MXaNNMv2KZSS3nLMZ69R25XSwdbdInyLGTi

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

Scale = 1:66.7



		9-9-3		19-0-0		28-2-13		38-0-0	
		9-9-3		9-2-13		9-2-13		9-9-3	
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]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL 20.0		Plate Grip DOL 1.15		TC 0.59		Vert(LL) 0.03 8 n/r 120		MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.81		Vert(CT) 0.07 8 n/r 120			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.39		Horz(CT) 0.01 7 n/a n/a			
BCDL 10.0		Code IBC2021/TPI2014		Matrix-S				Weight: 221 lb	FT = 5%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 6-0-0 oc bracing: 10-11.
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 2), 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-

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



November 9,2022

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

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

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Plates added	155156610
ORDERS	SE-18457	COMN	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

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

ID:RrLVUNcBotMPeFP6cfGVKyElz_nGICV7te7riE?WUEuH_hc?uWJWVgnYmb9HLArDyLGth

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

Scale = 1:66.7

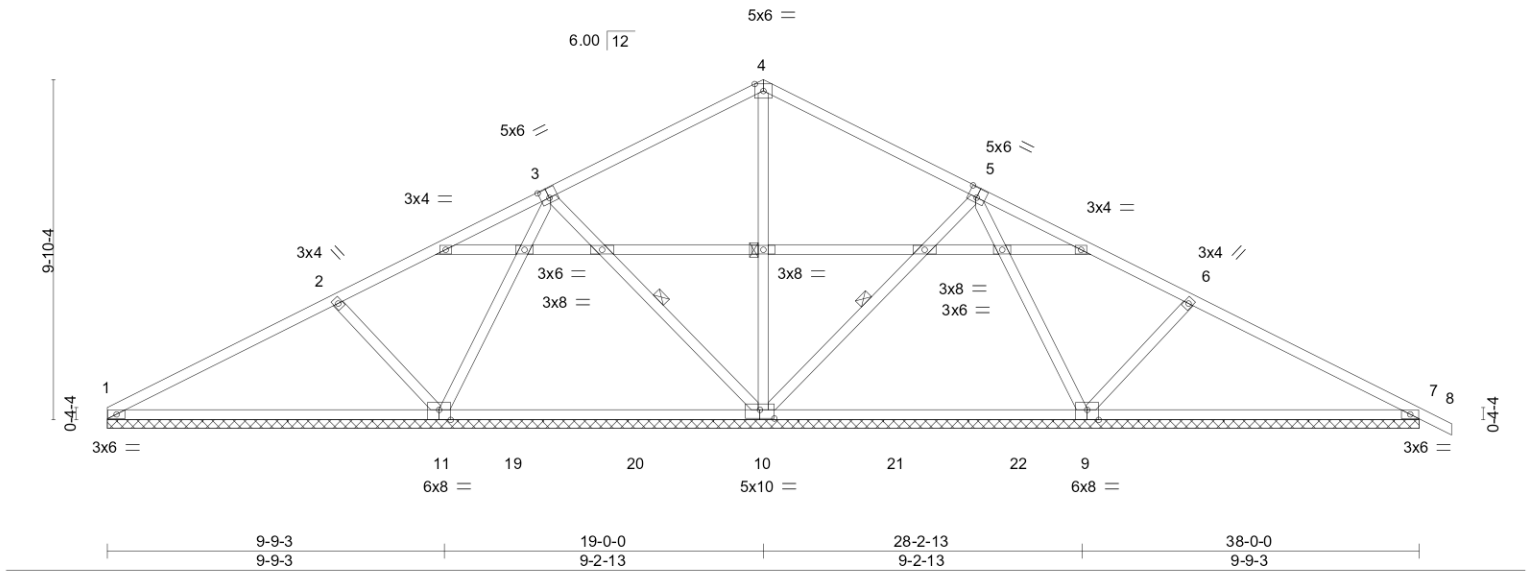


Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [9:0-4-0,Edge], [10:0-5-0,0-3-0], [11:0-4-0,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	0.03 8 n/r 120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	0.07 8 n/r 120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.01 7 n/a n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S				Weight: 221 lb	FT = 5%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 6-0-0 oc bracing: 10-11. 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 2), 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-

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



November 9,2022

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

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

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	
ORDERS	SE-19192	COMN	1	1		I49194932

NVR, Frederick, MD - 21703,

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

ID: ?RrLVUNcBotMPeFP6cfGVKyElz_-XUw3txfUO9UinDxqxj_wefGdmq6YdFKzDQYSDkyAZdY

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

4x6 =

Scale = 1:45.8

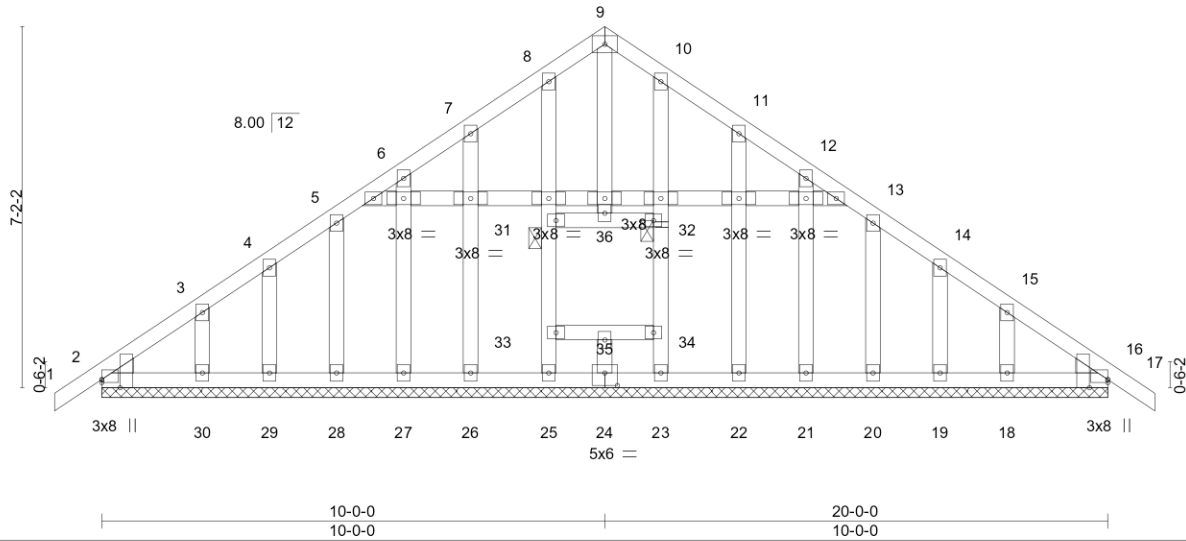


Plate Offsets (X,Y)--		[2:0-0-0,0-0-11], [2:0-1-15,Edge], [16:0-0-0,0-0-11], [16:0-1-15,Edge], [24:0-3-0,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSL
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06
TCDL 10.0	Lumber DOL	1.15	BC 0.04
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.00 16 n/r 120
			Vert(CT) -0.00 17 n/r 120
			Horz(CT) 0.01 16 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 157 lb FT = 5%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 31, 32

REACTIONS.

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

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

NOTES- (10-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; 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, 25, 26, 27, 28, 29, 30, 22, 21, 20, 19, 18.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
- Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



January 12,2022

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

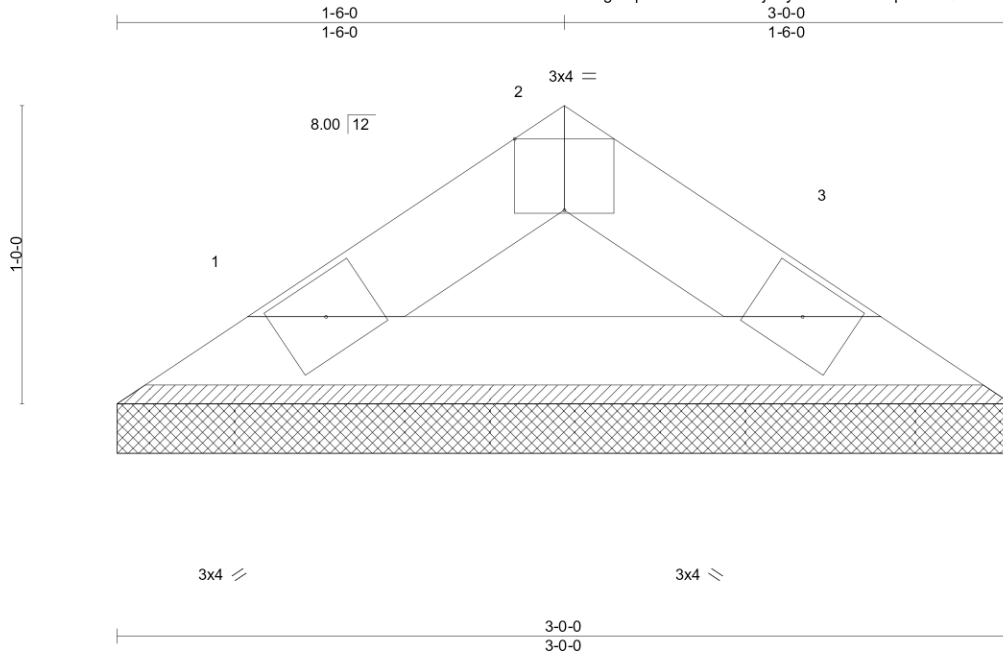
ENGINEERING BY
TRENCO
A Mitek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	154705066
ORDERS	VT-00861	VCOM	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:37 2022 Page 1
ID:lwgfHqLuldM7W6Kxo5rjJByUXxn-tl0UVwpW5nlQcYixzK5McV9S1Qbd2s7Y0umzOByTqEK



Scale = 1:7.7

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0	Code IBC2021/TPI2014		Matrix-P						Weight: 8 lb	FT = 5%
BCDL 10.0										

LUMBER-

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

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=1.0; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



October 13, 2022

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

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

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

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

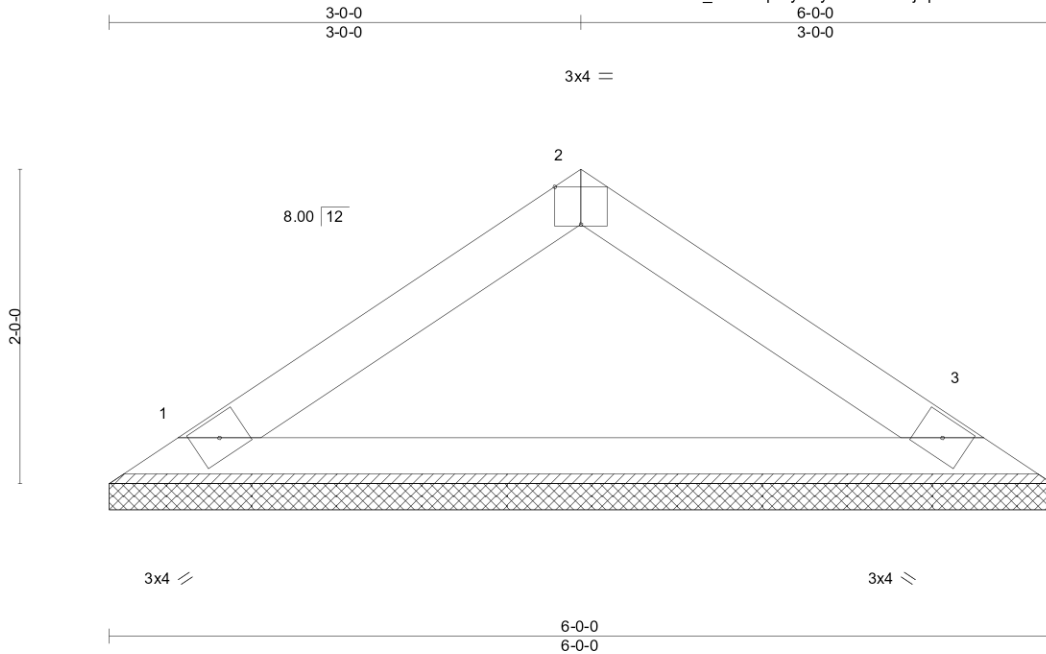
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	02_Valley	
ORDERS	VT-00862	VCOM	1	1		154705067

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:38 2022 Page 1
ID:D6E1UAMWWxU_8Gv8MpMysOyUXxm-LVatjFp8s4tHDIH7X2cb9ihYkpqYnJNIFYVWwdyTqEJ



Scale = 1:14.7

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

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

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

NOTES- (7)

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



October 13, 2022

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

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

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

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

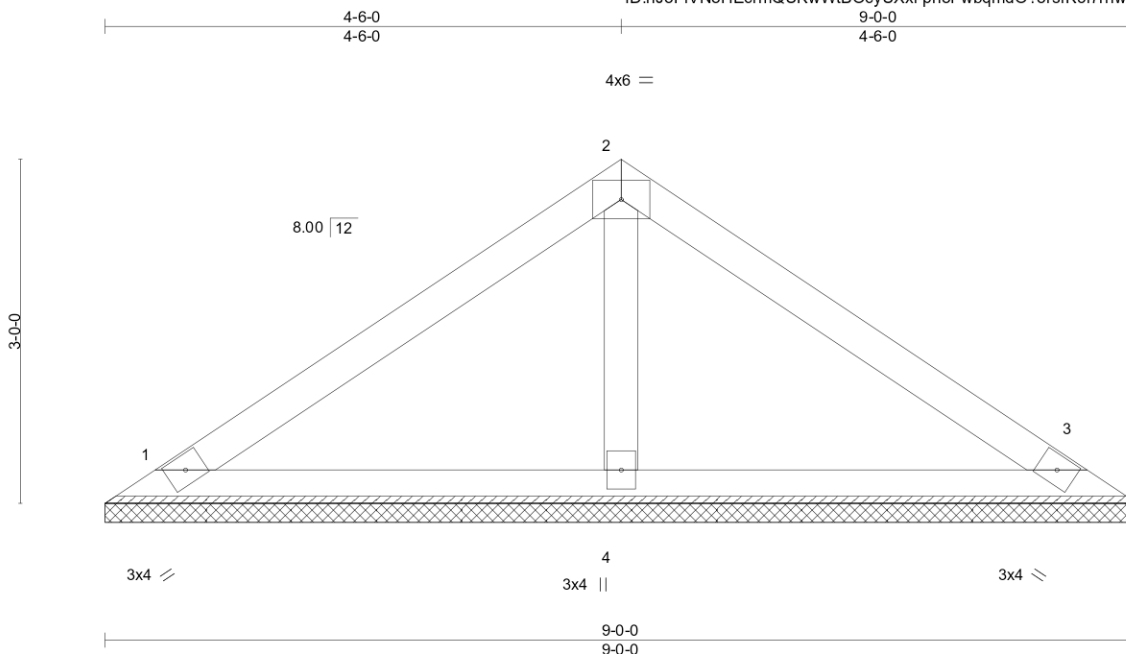
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

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

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:39 2022 Page 1
ID:hJoPIVN8HEcmQUKwWtBOcyUXxl-ph8FwbqmdO?8rsrK5i7rhWEfIDE1WlarUCF3T3yTqEI



Scale = 1:20.1

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

LUMBER-

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

BRACING-

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

REACTIONS.

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

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

WEBS 2-4=-264/218

NOTES- (7)

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



October 13, 2022

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

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

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

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

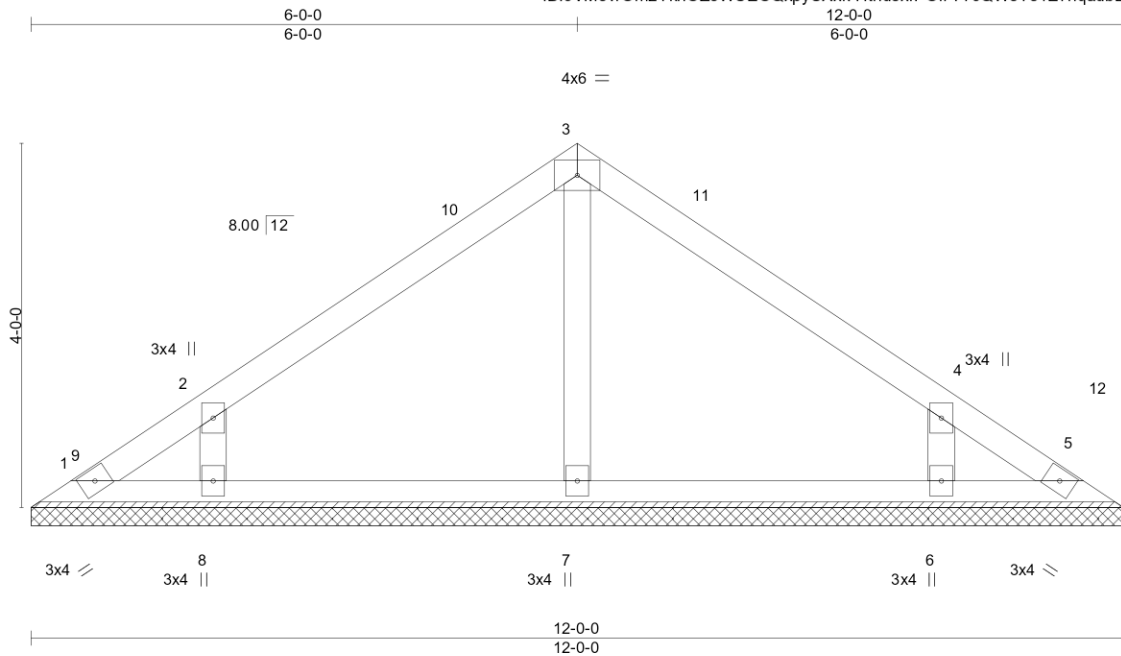
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

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

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:40 2022 Page 1
ID:9VMovrOm2YkhOZ3WUEOQxpyUXxk-Hthd8xrPOI7?T0QWeTe4E7nqadbLFCu?is_d?WyTqEH



Scale = 1:25.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IBC2021/TPI2014		Matrix-S						Weight: 45 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" oc purlins.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS.

All bearings 12'-0".

(lb) - Max Horz 1=-127(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-210(LC 12), 6=-209(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=341(LC 19), 8=561(LC 18), 6=561(LC 19)

FORCES.

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

WEBS 3-7=-255/83, 2-8=-507/413, 4-6=-507/413

NOTES- (7)

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



October 13, 2022

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

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

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

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

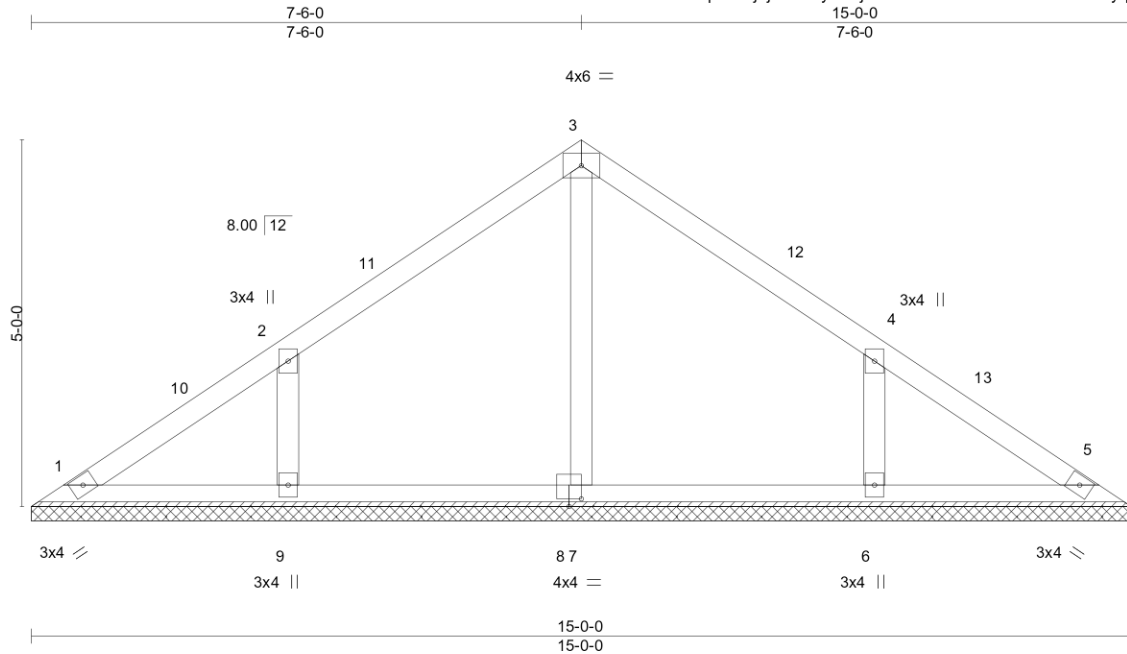
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

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

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:41 2022 Page 1
ID:dhwA6BPOpssY?jdj1xvft1yUXxj-l4F?LHs19?Fs4A?ICA9JnLJ?D1yq_fD8xWkAXyyTqEG



Scale = 1:31.4

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

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

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 15-0-0.

(lb) - Max Horz 1=-161(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-230(LC 12), 6=-230(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=334(LC 18), 9=592(LC 18), 6=592(LC 19)

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

WEBS 3-7=-254/22, 2-9=-512/383, 4-6=-512/383

NOTES- (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 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
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=230, 6=230.



October 13,2022

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

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

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

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

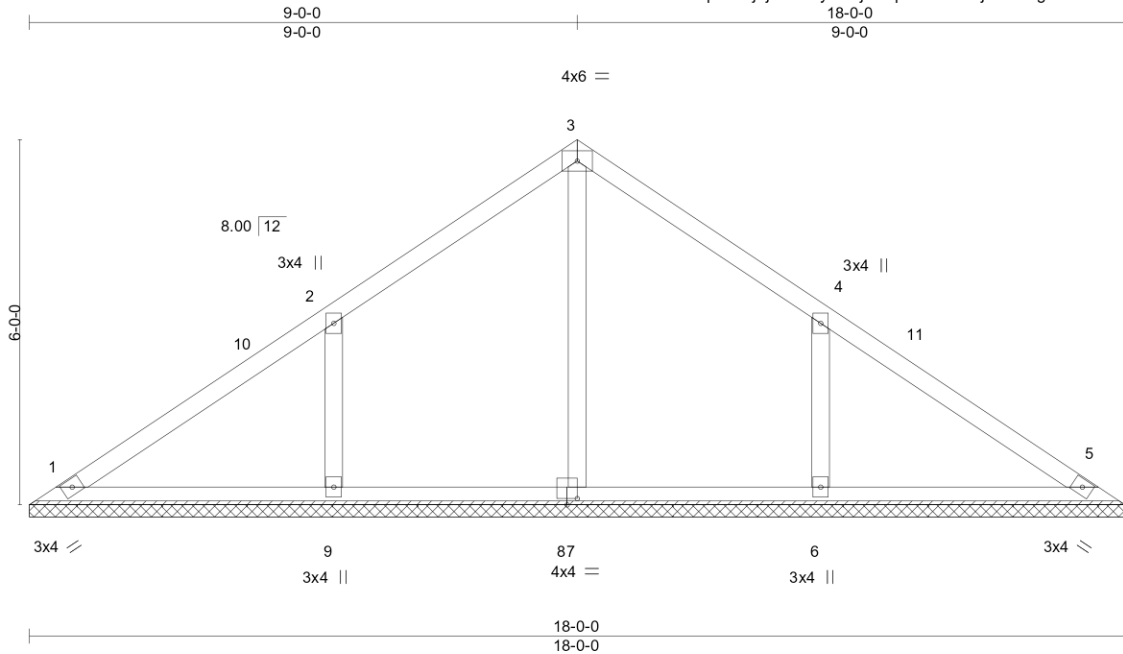
ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

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

NVR, Frederick, MD - 21703,

8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:42 2022 Page 1
ID:dhwA6BPOpssY?jdj1xvfT1yUXxj-DGpNZdsfwJNjiKaumtgYJYs8ERGIJ5HAATk4OyTqEF



Scale = 1:37.9

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

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 18'-0'-0".

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

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=281(LC 12), 6=281(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=300(LC 18), 9=686(LC 18), 6=686(LC 19)

FORCES.

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

WEBS 2-9=-576/406, 4-6=-576/406

NOTES-

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



October 13, 2022

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

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

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932