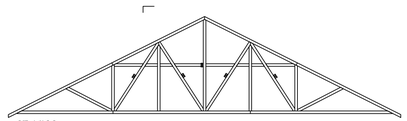
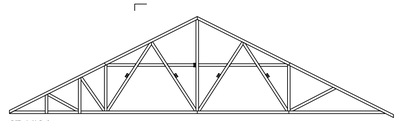
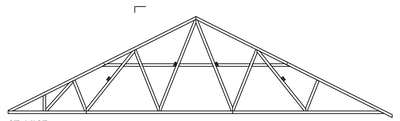
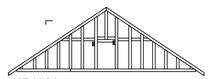

SE-17122


SE-17124


SE-17125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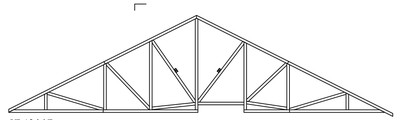
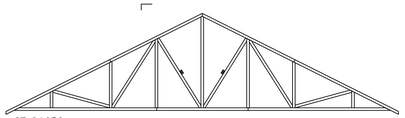
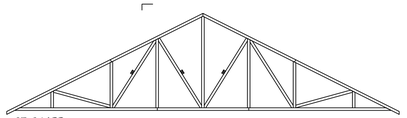
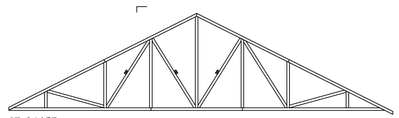
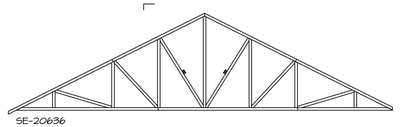
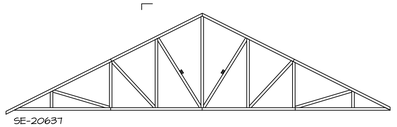

SE-18665


SE-20632


SE-20633


SE-20635


SE-20636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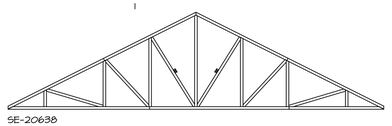
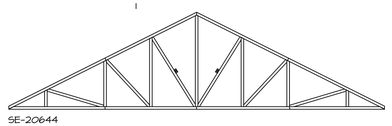
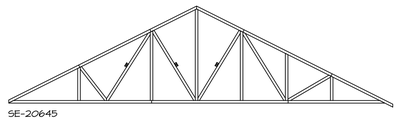

SE-20638


SE-20644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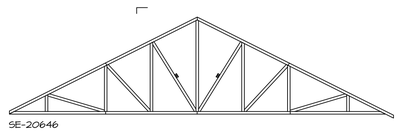
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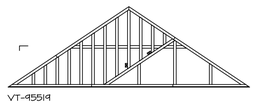
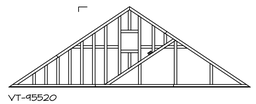

VT-45519


VT-45520

TRUSS BRACING DETAILS

S-4

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

TRUSS BRACING NOTES:

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

DIV-COMM-LOT-UNIT: RLH-VK-0104
COMM-LOT: KIPLING VILLAGE - 0104
STREET ADDRESS: 26 ARTESA COURT
APT. NO.: ----
CITY: FUQUAY VARINA
STATE: NC
ZIP: 27526

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

MODEL: GRAND CAYMAN
DRAWING TITLE: TRUSS BRACING DETAILS
SHEET NO.: S-4
OPTION DESCRIPTION
SET NO.: 6GM00
VERSION: 01
RELEASE NO.: ----
DRAWN BY: BN
DATE: 2/02/20
OPTION

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

NVR, Frederick, MD - 21703, 8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:09 2021 Page 1
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-ZyR6O84R30qr65gSzJU8?aMQWGcErsLQKGtZrEyBF9C

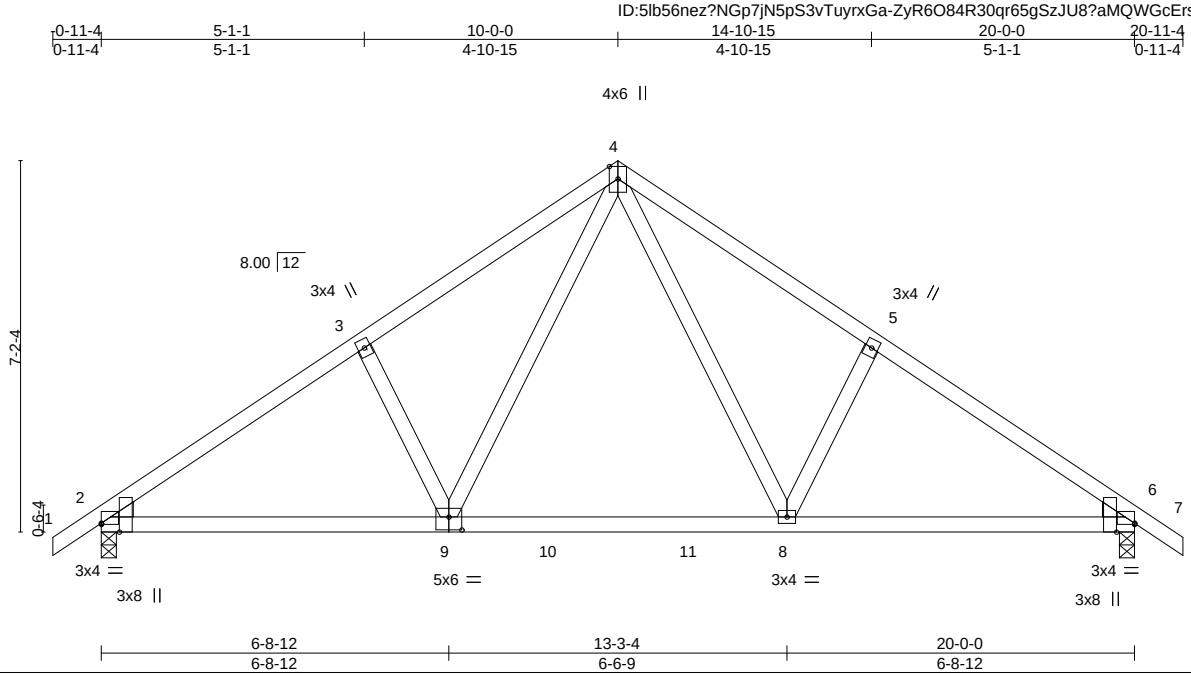


Plate Offsets (X,Y)-- [2:0-0-0,0-0-4], [2:0-2-1,Edge], [6:0-2-1,Edge], [6:0-0-0,0-0-4], [9:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		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 5-3-0 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=-116(LC 10), 6=-116(LC 11)
Max Grav 2=853(LC 1), 6=853(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1111/140, 3-4=-977/207, 4-5=-977/207, 5-6=-1111/140
BOT CHORD 2-9=-145/938, 8-9=-2/615, 6-8=-38/840
WEBS 3-9=-269/210, 4-9=-122/481, 4-8=-122/481, 5-8=-269/210

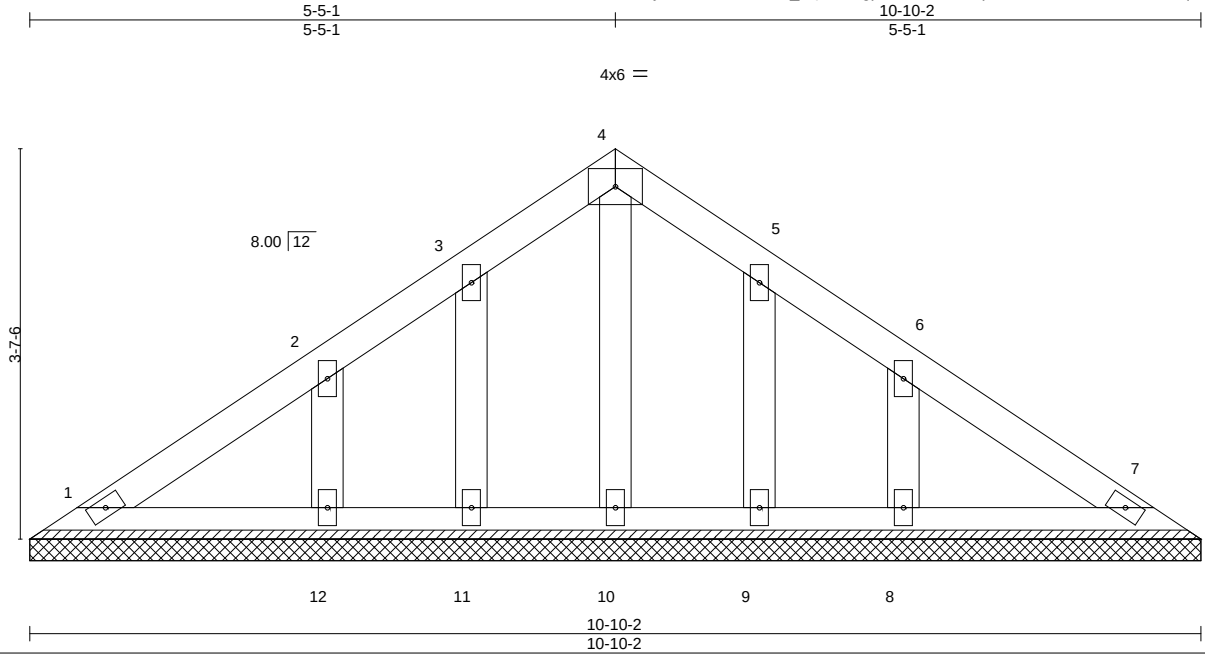
NOTES- (6-8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=116, 6=116.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

January 12,2022

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

Job	Truss	Truss Type	Qty	Ply	02_Valley
ORDERS	VT-95382	VCOM	1	1	I47778952
					Job Reference (optional)

NVR, Frederick, MD - 21703, 8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 04:04:47 2021 Page 1
ID:i52JFl2yM0mmtcvT3fwF?_zQDKR-gpokeULZOoVopEEERTKJrWW10LL6PF7qOGMY7yygTHE



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	0.19	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	0.06	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0	Code	IBC2021/TPI2014	Matrix-S							Weight: 49 lb	FT = 5%
BCDL	10.0											

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

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

REACTIONS. All bearings 10-10-2.
(lb) - Max Horz 1=-111(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 11, 9 except 12=-121(LC 12), 8=-121(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 9 except 12=342(LC 18), 8=342(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-12=-281/139, 6-8=-281/140

NOTES- (8-9)
1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 11, 9 except (jt=lb) 12=121, 8=121.
8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
9) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.

September 8,2021

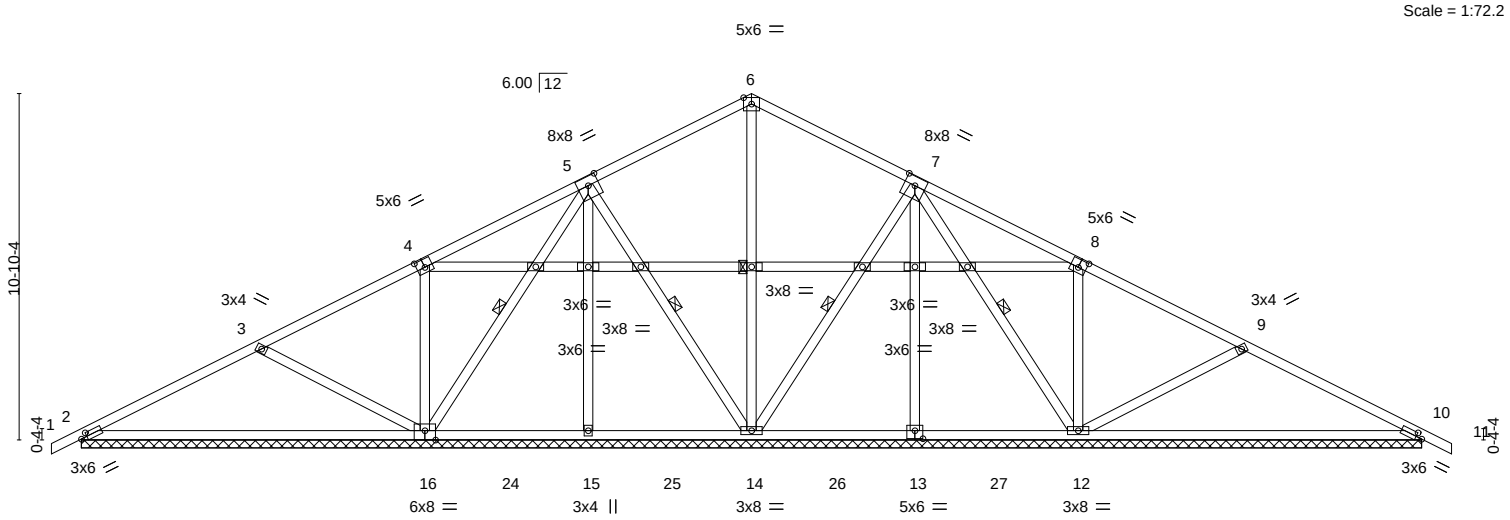
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	I49171046
ORDERS	SE-17122	COMN	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:01:55 2021 Page 1
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-a9lNS?Kr380S94h3wDLRuiqU38uca1hA50?qaDyAujA

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

Scale = 1:72.2



10-9-3	15-10-9	21-0-0	26-1-7	31-2-13	42-0-0
10-9-3	5-1-7	5-1-7	5-1-7	5-1-7	10-9-3

Plate Offsets (X,Y)-- [2:0-2-5,0-1-8], [4:0-3-0,0-3-0], [5:0-4-0,0-3-4], [7:0-4-0,0-3-4], [8:0-3-0,0-3-0], [10:0-2-5,0-1-8], [13:0-3-0,0-3-0], [16:0-4-0,Edge]

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	0.44	Vert(LL)	0.02	11	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	0.06	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S							Weight: 288 lb	FT = 5%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-16, 5-14, 6-14, 7-14, 7-12

REACTIONS. All bearings 42-0-0.
(lb) - Max Horz 2=-188(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 10, 15, 13 except 16=-214(LC 10), 12=-217(LC 11)
Max Grav All reactions 250 lb or less at joint(s) except 2=400(LC 23), 16=867(LC 23), 14=527(LC 1), 12=867(LC 24), 10=400(LC 24), 15=330(LC 17), 13=323(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-317/114, 4-5=-21/251, 9-10=-317/83
BOT CHORD 2-16=-109/281
WEBS 3-16=-413/228, 4-16=-280/183, 6-14=-333/8, 8-12=-280/182, 9-12=-413/227

NOTES- (7-10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 10, 15, 13 except (jt=lb) 16=214, 12=217.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
9) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.
10) Framing and bracing of the gable end frame shall be provided by the building designer.

January 12,2022

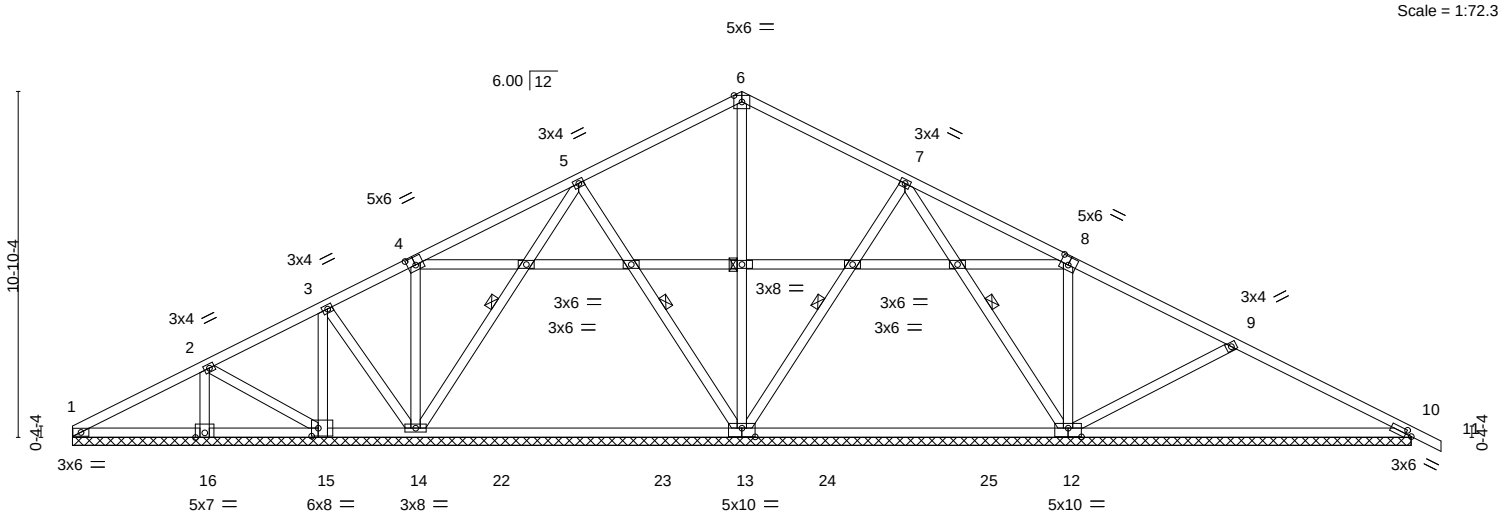
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast	I49171048
ORDERS	SE-17124	COMN	1	1	Job Reference (optional)	

NVR, Frederick, MD - 21703, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:01:58 2021 Page 1
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-?kRV40NkM3O10XPecLu8VKS?QLuXnOUcn_EVBYyAuj7

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

Scale = 1:72.3



10-9-3	21-0-0	31-2-13	42-0-0
10-9-3	10-2-13	10-2-13	10-9-3

Plate Offsets (X,Y)-- [4:0-3-0,0-3-0], [8:0-3-0,0-3-0], [10:0-2-5,0-1-8], [12:0-5-0,0-3-4], [13:0-5-0,0-3-4], [15:0-2-8,0-3-0]

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	0.43	Vert(LL)	0.01	11	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	0.06	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S							Weight: 277 lb	FT = 5%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-14, 5-13, 6-13, 7-13, 7-12

REACTIONS. All bearings 42-0-0.
(lb) - Max Horz 1=-195(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 16, 13, 10, 15 except 14=-145(LC 10), 12=-227(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 15 except 16=348(LC 23), 14=651(LC 25), 13=898(LC 2), 12=960(LC 24), 10=400(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-321/82
WEBS 6-13=-314/0, 7-12=-296/77, 8-12=-291/189, 9-12=-408/227, 2-16=-252/104

NOTES- (8-11)
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) Bearing at joint(s) 16, 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 16, 13, 10, 15 except (jt=lb) 14=145, 12=227.
8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
9) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
10) 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.
11) Framing and bracing of the gable end frame shall be provided by the building designer.

January 12,2022

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

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-17127	COMN	1	1	I49171051
					Job Reference (optional)

NVR, Frederick, MD - 21703, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:02:02 2021 Page 1
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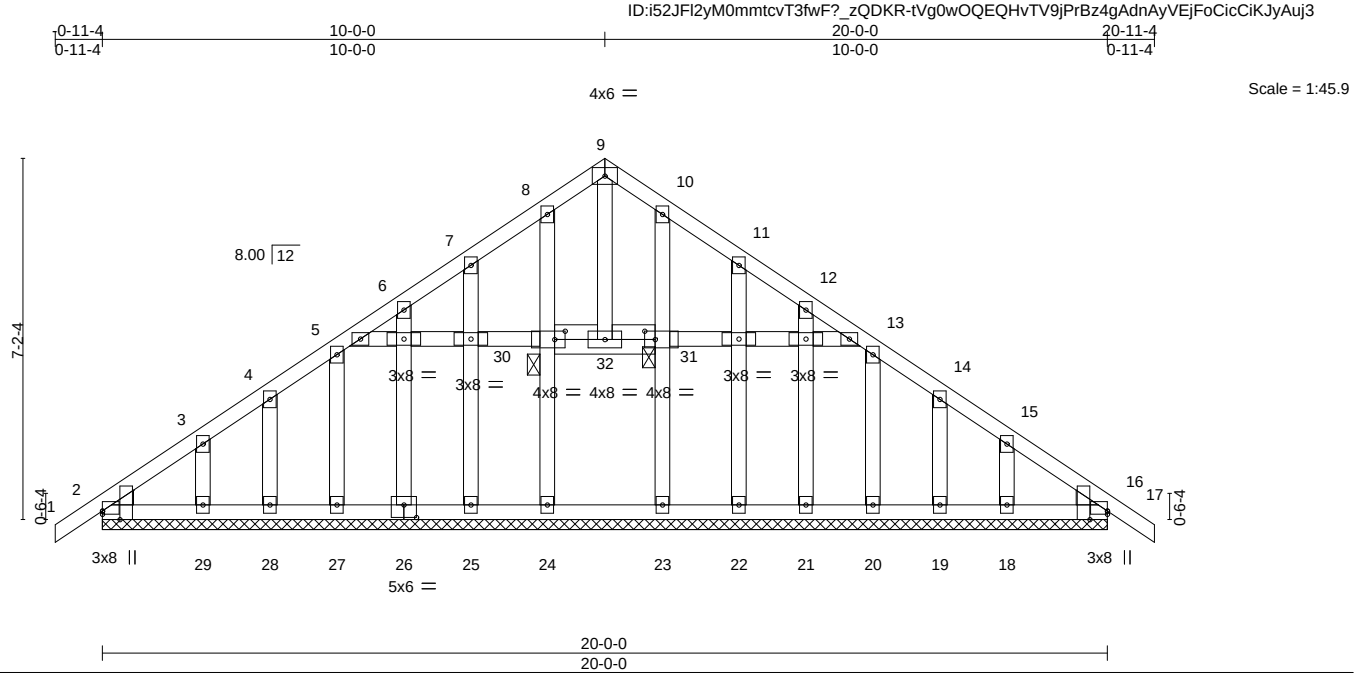

Plate Offsets (X,Y)-- [2:0-0-0,0-0-12], [2:0-2-1,Edge], [16:0-0-0,0-0-12], [16:0-2-1,Edge], [26:0-3-0,0-3-0], [30:0-2-8,0-2-0], [31:0-2-8,0-2-0]

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	0.06	Vert(LL)	-0.00	16	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S							Weight: 154 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*
30-31,9-32: 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): 30, 31

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

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

NOTES- (10-13)
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) 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.
4) All plates are 3x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * 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.
9) 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, 22, 21, 20, 19, 18.
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.
11) 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.
12) 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.
13) Framing and bracing of the gable end frame shall be provided by the building designer.

January 12,2022

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

Job	Truss	Truss Type	Qty	Ply	02_Valley
ORDERS	VT-95517	VCOM	1	1	I47779328
					Job Reference (optional)

NVR, Frederick, MD - 21703, 8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 05:29:22 2021 Page 1
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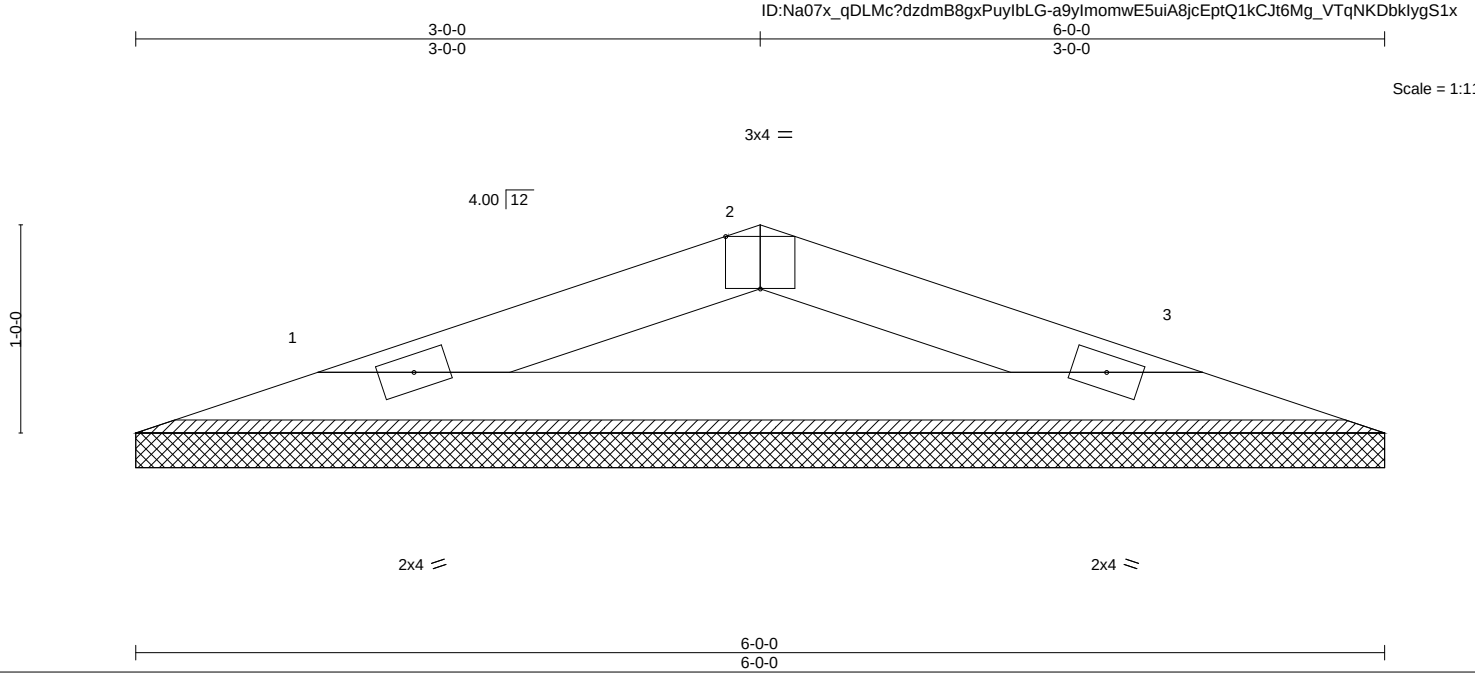

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.38	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IBC2021/TPI2014	Matrix-P							Weight: 16 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=-16(LC 13)
Max Uplift 1=-51(LC 8), 3=-51(LC 9)
Max Grav 1=224(LC 18), 3=224(LC 19)

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

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

September 16,2021

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

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

NVR, Frederick, MD - 21703, 8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 05:29:23 2021 Page 1
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6-0-0 12-0-0
6-0-0 6-0-0

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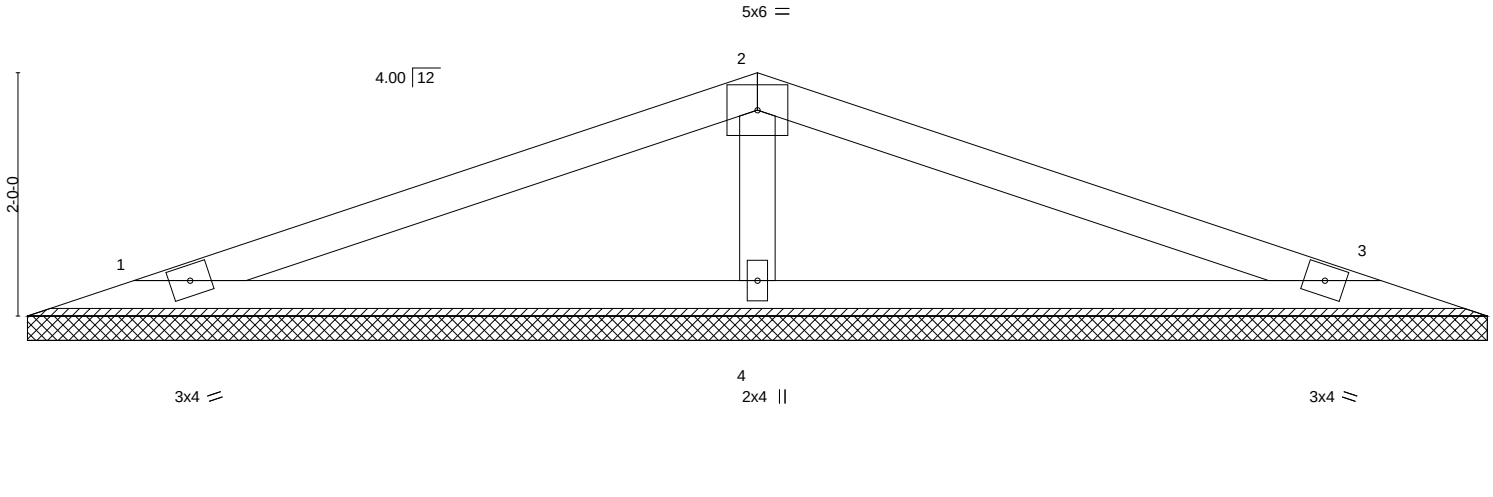

12-0-0
12-0-0

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	0.71	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.43	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IBC2021/TPI2014	Matrix-S							Weight: 36 lb	FT = 5%
BCDL	10.0											

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

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

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

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

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

September 16,2021

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

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-18663	COMN	1	1	I49194707
					Job Reference (optional)

NVR, Frederick, MD - 21703, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Dec 9 21:29:29 2021 Page 1
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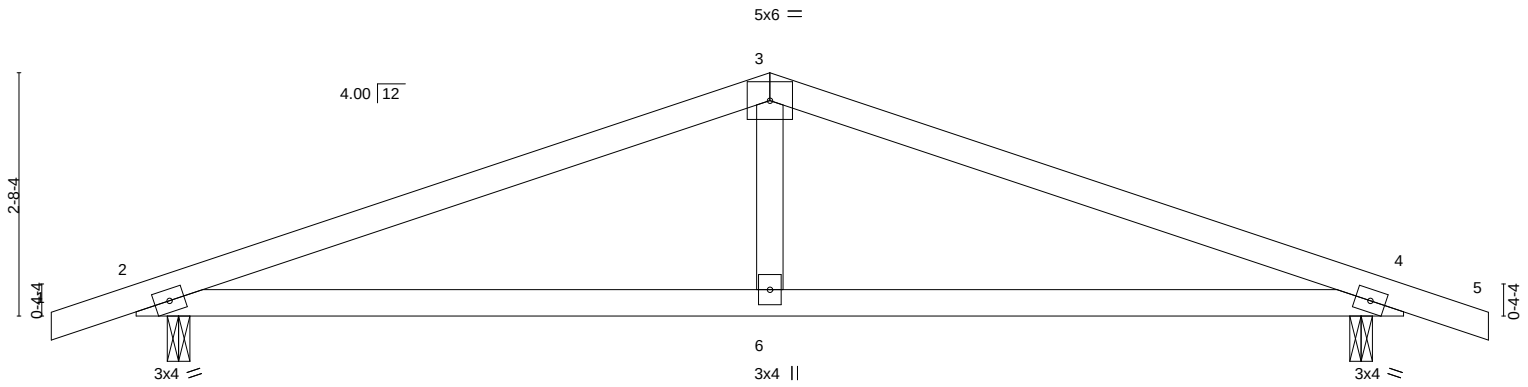
Scale = 1:25.5



0-4-2 0-4-2 | 7-0-0 6-7-14 | 13-7-14 6-7-14 | 14-0-0 0-4-2

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	0.76	Vert(LL)	-0.06	4-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.14	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.05	2-6	>999	240	Weight: 49 lb	FT = 5%

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

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

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

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

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

NORTH CAROLINA PROFESSIONAL SEAL 28228 ENGINEER XUEGANG LIU

January 12,2022

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

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

NVR, Frederick, MD - 21703, 8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Dec 9 21:29:30 2021 Page 1
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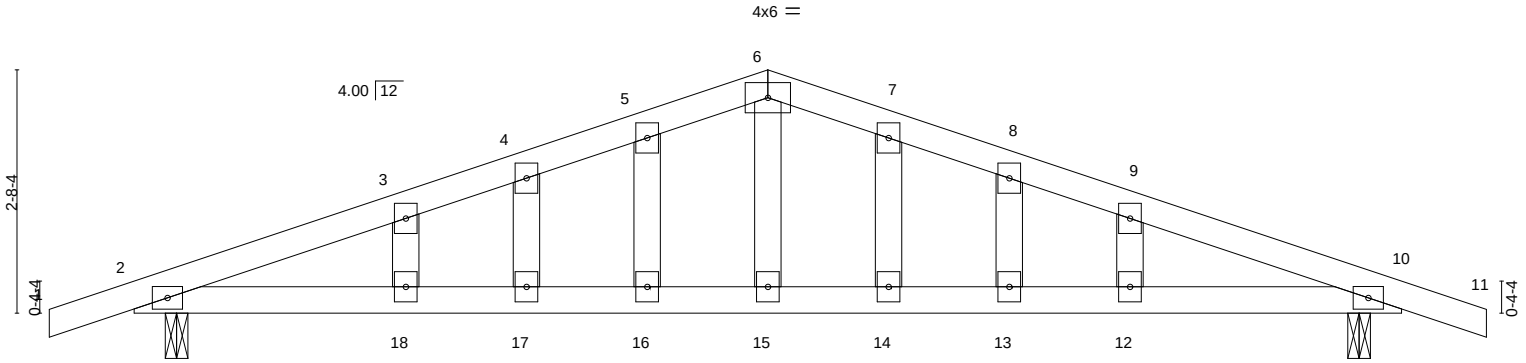

0-4-2 0-4-2 | 13-7-14 13-3-12 | 14-0-0 0-4-2

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	0.40	Vert(LL)	-0.10	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.17	12-13	>975	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.09	17-18	>999	240	Weight: 60 lb	FT = 5%

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

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

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

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

NOTES- (9-11)
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) 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.
4) All plates are 3x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=129, 10=129.
9) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
10) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
11) 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

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

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

NVR, Frederick, MD - 21703, 8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:28 2022 Page 1
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-ZVw1epS8okxzm3VirJqzJXX5z2Q?XskqJgtAaDynHAj

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

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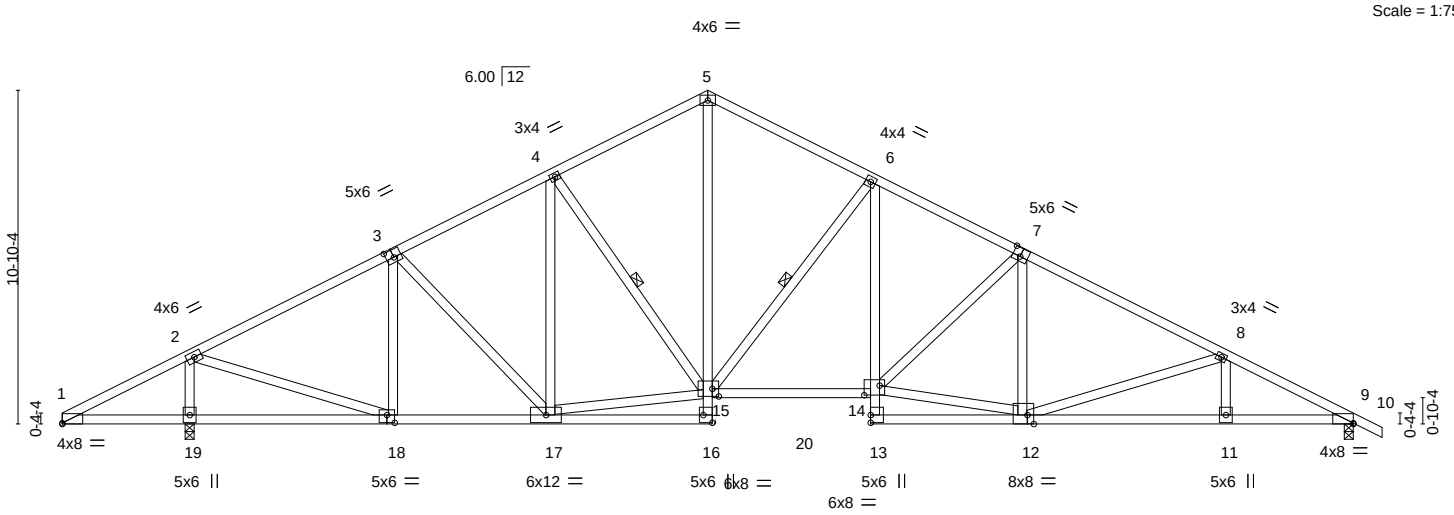


4-0-0	4-1-12	10-9-3	15-10-9	21-0-0	26-5-5	31-2-13	37-10-4	42-0-0
4-0-0	0-1-12	6-7-7	5-1-7	5-1-7	5-5-5	4-9-8	6-7-7	4-1-12

Plate Offsets (X,Y)-- [1:0-0-0,0-0-5], [3:0-3-0,0-3-0], [7:0-3-0,0-3-4], [9:0-0-0,0-0-5], [12:0-2-8,Edge], [14:0-6-0,0-3-12], [15:0-2-8,0-3-0], [16:Edge,0-3-8], [18:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.15	14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.34	14-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.12	9	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.13	14	>999	240	Weight: 272 lb	FT = 5%

LUMBER-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except* 1-18,12-13: 2x4 SP No.3 or 2x4 SPF Stud
WEBS 2x4 SP No.3 or 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-19,18-19.
WEBS 1 Row at midpt 6-15, 4-15

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

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

NOTES- (6-8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=242, 9=232.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

August 17,2022

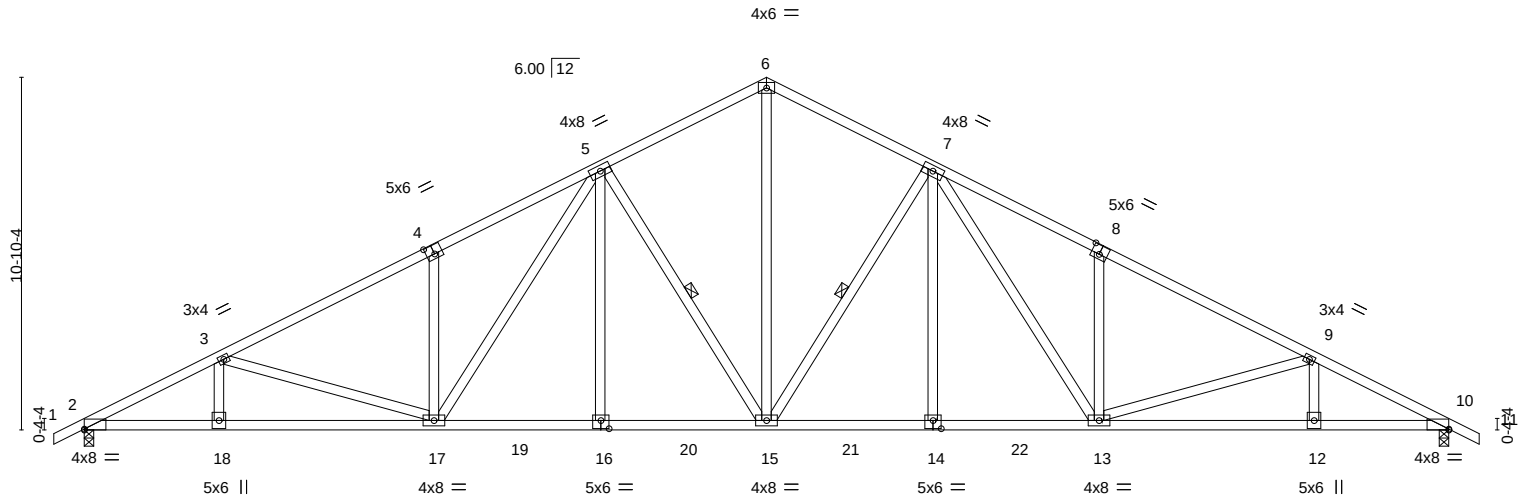
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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

NVR, Frederick, MD - 21703, 8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:29 2022 Page 1
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-1hUPs9TnZ23qNC3uP0LCsk4GzRkiGOhzYKcj6fynHAi

-0-11-4 4-1-12 5-7-12 10-9-3 15-10-9 21-0-0 26-1-7 31-2-13 36-4-4 37-10-4 42-0-0 42-11-4
0-11-4 4-1-12 1-6-0 5-1-7 5-1-7 5-1-7 5-1-7 5-1-7 5-1-7 1-6-0 4-1-12 0-11-4

Scale = 1:70.9



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

Plate Offsets (X,Y)-- [2:0-0-0,0-0-5], [4:0-3-0,0-3-4], [8:0-3-0,0-3-4], [10:0-0-0,0-0-5], [14:0-3-0,0-3-0], [16:0-3-0,0-3-0]

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

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

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3329/422, 3-4=-2851/366, 4-5=-2838/493, 5-6=-1946/329, 6-7=-1946/329, 7-8=-2837/493, 8-9=-2852/367, 9-10=-3329/419
BOT CHORD 2-18=-316/2905, 17-18=-316/2905, 16-17=-87/2104, 15-16=-87/2105, 14-15=-203/2104, 13-14=-203/2105, 12-13=-502/2904, 10-12=-502/2904
WEBS 3-17=-473/176, 4-17=-370/226, 5-17=-244/762, 5-15=-781/253, 6-15=-183/1441, 7-15=-780/253, 7-13=-244/759, 8-13=-369/226, 9-13=-471/173, 5-16=0/265, 7-14=0/265

NOTES- (6-8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=239, 2=239.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

August 17,2022

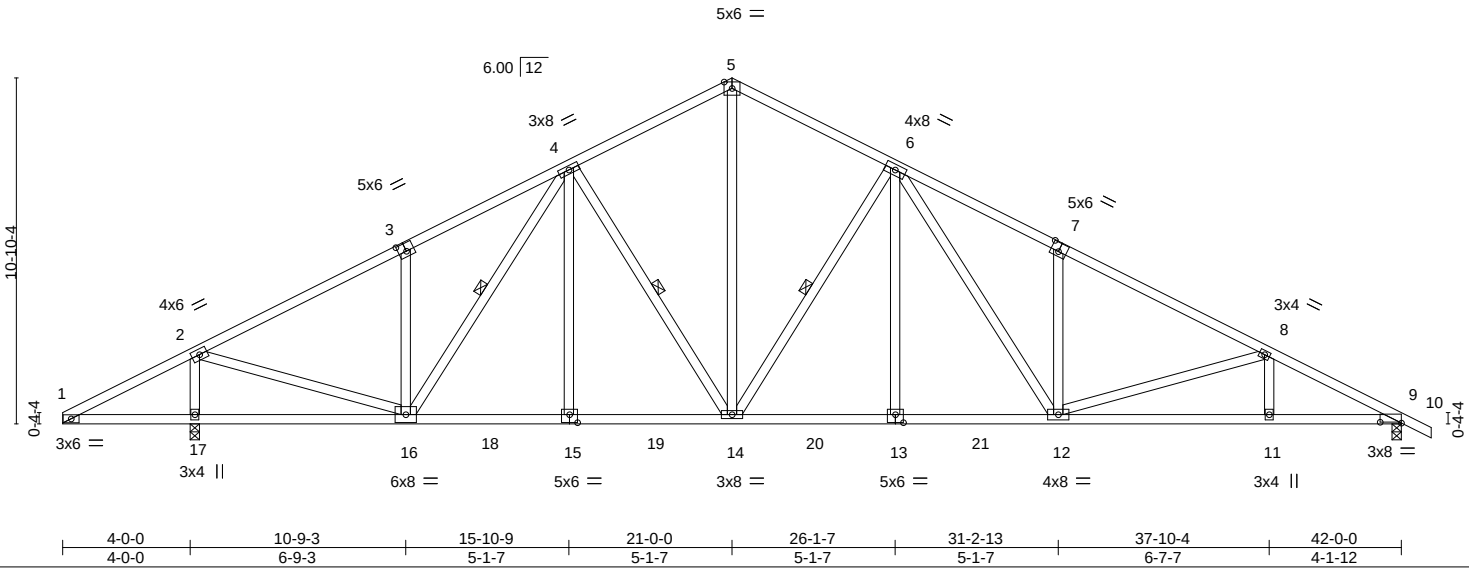
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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

NVR, Frederick, MD - 21703, 8.530 s Aug 2 2023 MiTek Industries, Inc. Fri Oct 6 12:34:26 2023 Page 1
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-aSKSrvcU1XdIKE4p1e4zOwjAIEq9FTRq8Nf2lwyW7vR

4-1-12	5-7-12	10-9-3	15-10-9	21-0-0	26-1-7	31-2-13	36-4-4	37-10-4	42-0-0	42-11-4
4-1-12	1-6-0	5-1-7	5-1-7	5-1-7	5-1-7	5-1-7	5-1-7	1-6-0	4-1-12	0-11-4

Scale = 1:72.3



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

Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [7:0-3-0,0-3-4], [9:0-8-0,0-0-5], [13:0-3-0,0-3-0], [15:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.15	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.30	11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	-0.10	17	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.13	12	>999	240	Weight: 267 lb	FT = 5%

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 2-10-4 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-16, 4-14, 6-14

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

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

TOP CHORD	1-2=-51/286, 2-3=-1733/221, 3-4=-1716/347, 4-5=-1566/310, 5-6=-1566/290, 6-7=-2449/474, 7-8=-2464/348, 8-9=-2955/401
BOT CHORD	15-16=-67/1547, 14-15=-67/1547, 13-14=-193/1769, 12-13=-193/1769, 11-12=-493/2574, 9-11=-493/2574
WEBS	2-16=-101/1724, 3-16=-354/224, 4-14=-417/200, 5-14=-166/1104, 6-14=-783/253, 6-12=-245/762, 7-12=-368/226, 8-12=-482/173, 2-17=-1718/309, 4-15=0/268, 6-13=0/265

NOTES- (6-8)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=231, 17=241.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

October 10,2023

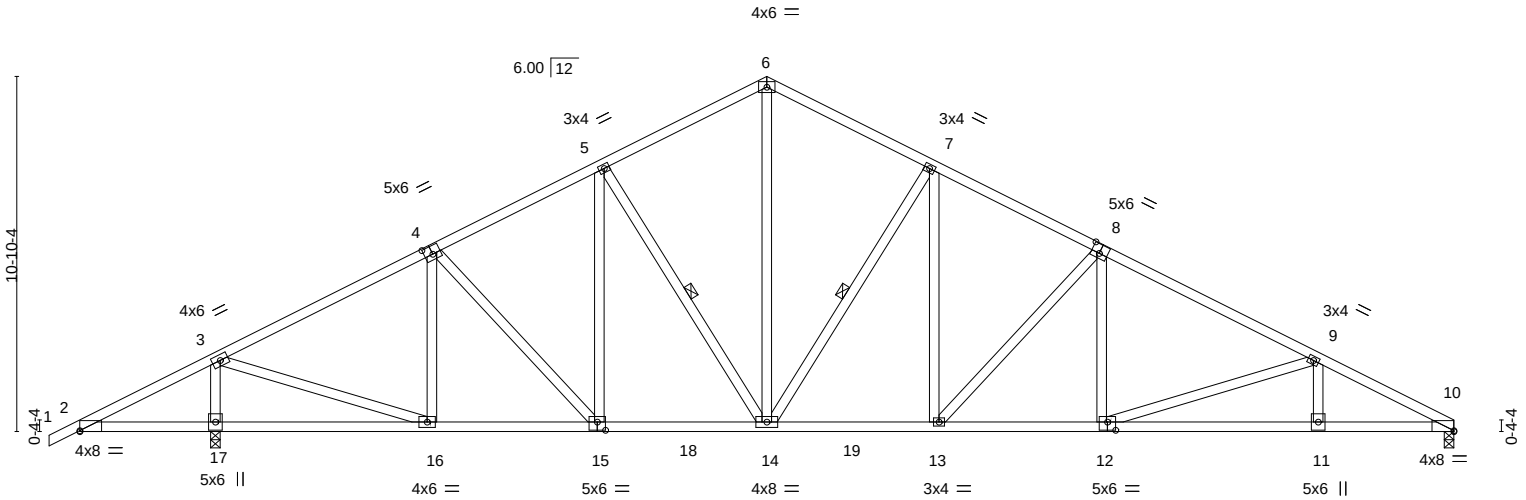
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-20636	COMN	1	1	I53690306
					Job Reference (optional)

NVR, Frederick, MD - 21703, 8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:34 2022 Page 1
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-OfHIvsXvNai7U_yrCaxNZon7?STExbTjhcKUosynHAd

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

Scale = 1:70.4



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

Plate Offsets (X,Y)-- [2:0-0-0,0-0-5], [4:0-3-0,0-3-0], [8:0-3-0,0-3-4], [10:0-0-0,0-0-5], [12:0-3-0,0-3-0], [15:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.14	13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.29	11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.12	12-13	>999	240	Weight: 261 lb	FT = 5%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-17,16-17.
WEBS 1 Row at midpt 7-14, 5-14

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-101/422, 3-4=-1672/205, 4-5=-1711/257, 5-6=-1522/309, 6-7=-1521/289, 7-8=-1976/327, 8-9=-2454/349, 9-10=-2946/410
BOT CHORD 2-17=-308/127, 16-17=-308/205, 15-16=-198/1411, 14-15=-127/1464, 13-14=-45/1700, 12-13=-147/2118, 11-12=-321/2579, 10-11=-321/2579
WEBS 6-14=-164/1005, 7-14=-757/253, 7-13=-86/535, 8-13=-610/198, 8-12=0/363, 9-12=-498/183, 5-14=-374/193, 4-16=-439/116, 3-16=-137/1806, 3-17=-1783/334

NOTES- (6-8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=264, 10=206.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

August 17,2022

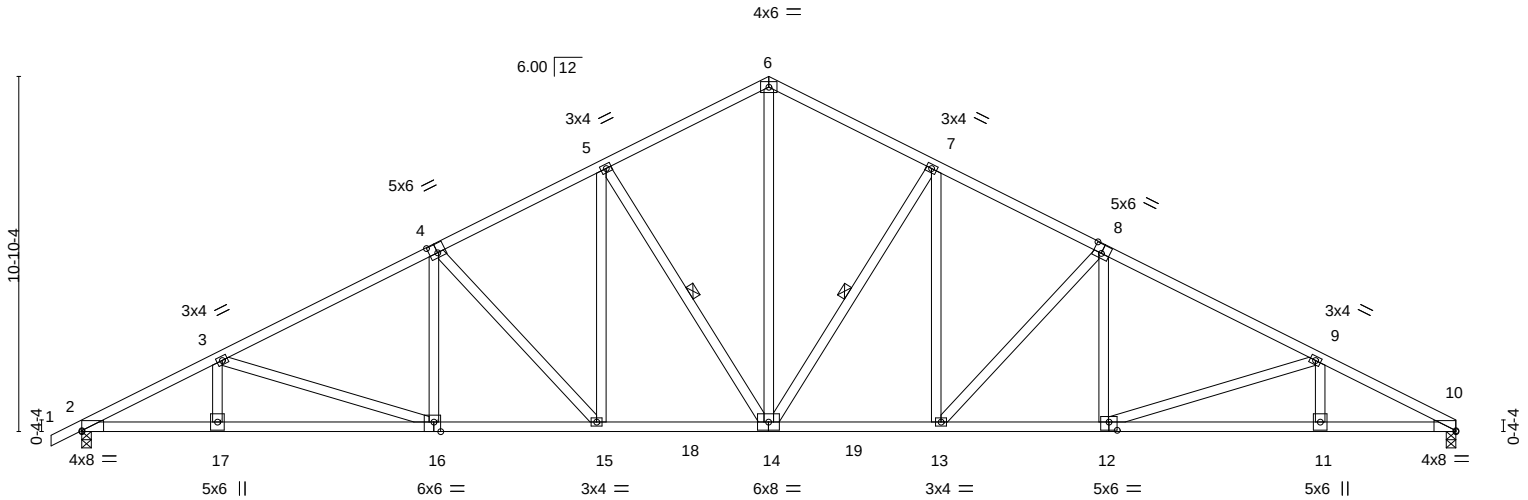
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-20637	COMN	1	1	I53690307
					Job Reference (optional)

NVR, Frederick, MD - 21703, 8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:36 2022 Page 1
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-K1P2KYZAvCyrjH6EJ?zseDsRyG7NPXJ?9wpbslynHAb

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

Scale = 1:70.4



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

Plate Offsets (X,Y)-- [2:0-0-0,0-0-5], [4:0-3-0,0-3-4], [8:0-3-0,0-3-4], [10:0-0-0,0-0-5], [12:0-3-0,0-3-0], [16:0-2-8,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	0.72	Vert(LL)	-0.20	13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.42	13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.18	10	n/a	n/a		
BCDL	10.0	Code	IBC2021/TPI2014	Matrix-S		Wind(LL)	0.18	15	>999	240	Weight: 261 lb	FT = 5%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-2-7 oc bracing: 2-17
8-2-15 oc bracing: 16-17.
WEBS 1 Row at midpt 7-14, 5-14

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=195(LC 14)
Max Uplift 2=-240(LC 10), 10=-215(LC 11)
Max Grav 2=1734(LC 1), 10=1667(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3331/420, 3-4=-2853/367, 4-5=-2380/347, 5-6=-1929/330, 6-7=-1928/329, 7-8=-2382/347, 8-9=-2857/369, 9-10=-3335/429
BOT CHORD 2-17=-510/2907, 16-17=-510/2907, 15-16=-343/2472, 14-15=-209/2061, 13-14=-94/2063, 12-13=-165/2478, 11-12=-338/2922, 10-11=-338/2922
WEBS 6-14=-182/1364, 7-14=-754/252, 7-13=-86/533, 8-13=-608/198, 8-12=0/360, 9-12=-487/182, 5-14=-752/251, 5-15=-86/533, 4-15=-605/197, 4-16=0/359, 3-16=-475/175

NOTES- (6-8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=240, 10=215.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

August 17,2022

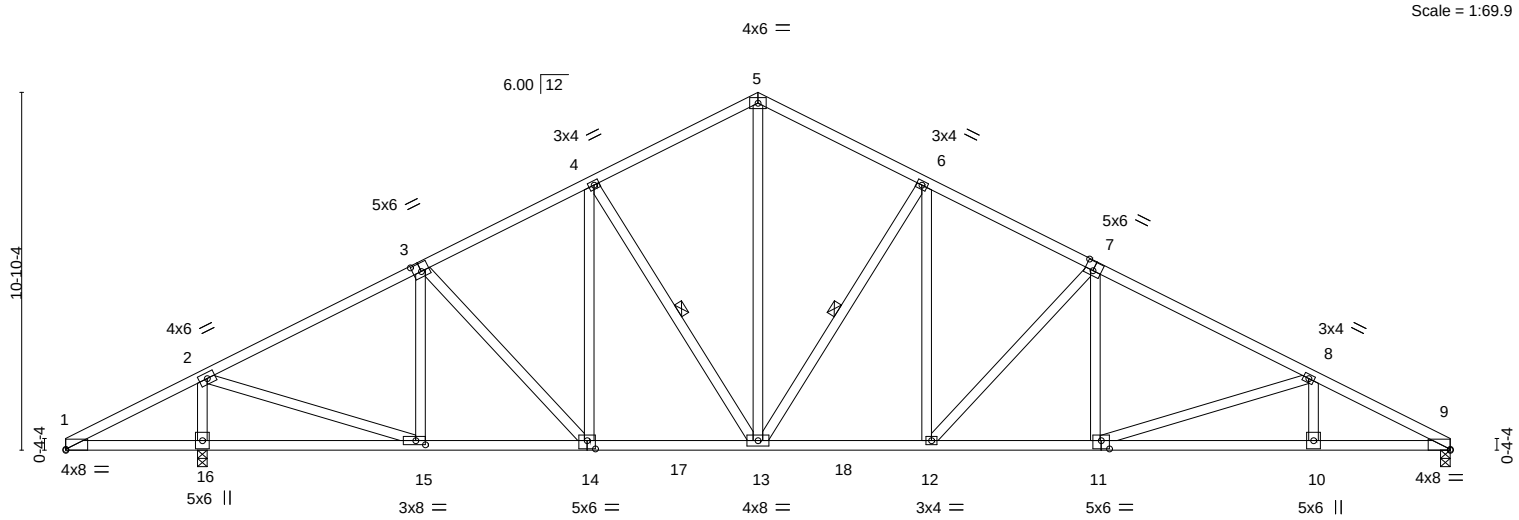
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	10_Southeast
ORDERS	SE-20638	COMN	1	1	I53690308
					Job Reference (optional)

NVR, Frederick, MD - 21703, 8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:37 2022 Page 1
ID:5lb56nez?NGp7jN5pS3vTuyrxGa-oEzQXuZogV4iLRhQtiU5BQPeCgUu8zo9OaY8OBynHAa

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

Scale = 1:69.9



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

Plate Offsets (X,Y)-- [1:0-0-0,0-0-5], [3:0-3-0,0-3-0], [7:0-3-0,0-3-4], [9:0-0-0,0-0-5], [11:0-3-0,0-3-0], [14:0-3-0,0-3-0], [15:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.14	12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.30	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI2014		Matrix-S		Wind(LL)	0.12	11-12	>999	240	Weight: 260 lb	FT = 5%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 1-16,15-16.
WEBS 1 Row at midpt 6-13, 4-13

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-51/287, 2-3=-1716/222, 3-4=-1736/264, 4-5=-1537/311, 5-6=-1536/291, 6-7=-1991/329, 7-8=-2469/350, 8-9=-2960/411
BOT CHORD 14-15=-213/1451, 13-14=-136/1487, 12-13=-50/1714, 11-12=-148/2131, 10-11=-322/2592, 9-10=-322/2592
WEBS 5-13=-165/1017, 6-13=-757/253, 6-12=-86/535, 7-12=-610/198, 7-11=0/363, 8-11=-498/183, 4-13=-390/199, 3-15=-412/106, 2-15=-104/1719, 2-16=-1719/311

NOTES- (6-8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=241, 9=207.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

August 17,2022

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

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

Job Reference (optional)

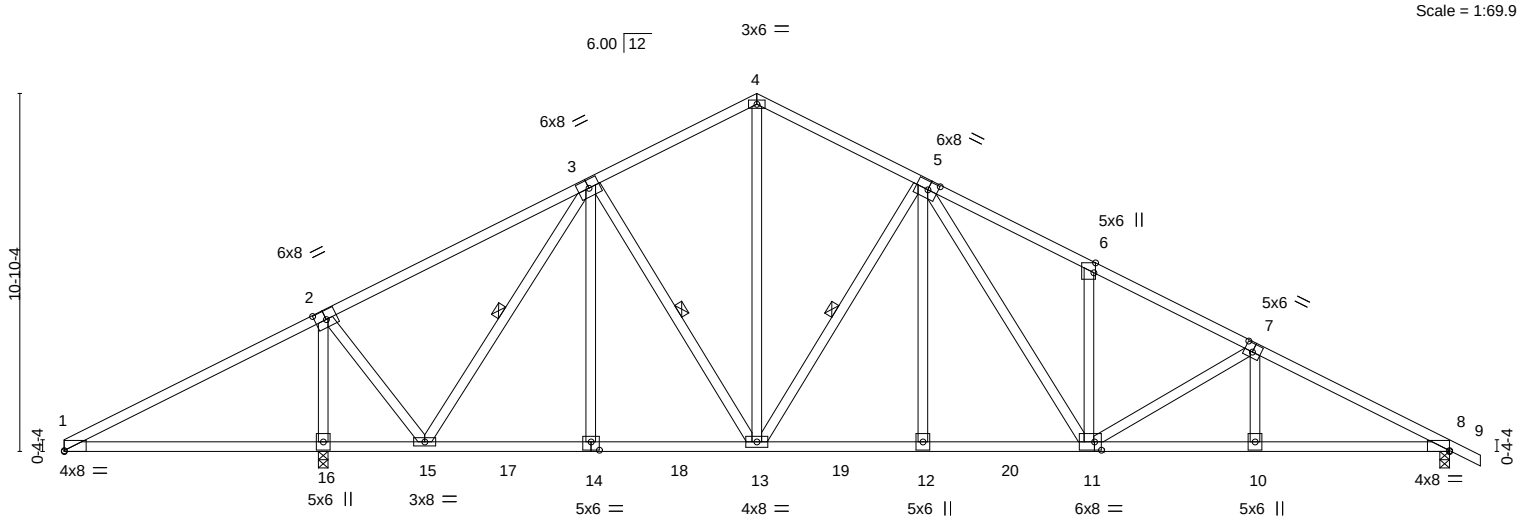
NVR, X

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

ID:5lb56nez?NGp7jN5pS3vTuyrxGa-Qvi_W6?l?d2wAUYfLXFd_m0sKRtb7vJ019hISZynCYy

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

Scale = 1:69.9



7-8-8	10-11-3	15-11-9	21-0-0	26-0-7	31-0-13	36-1-4	42-0-0
7-8-8	3-2-11	5-0-7	5-0-7	5-0-7	5-0-7	5-0-7	5-10-12

Plate Offsets (X,Y)-- [1:0-0-0,0-0-5], [2:0-4-0,0-3-4], [5:0-3-8,0-3-0], [6:0-3-10,Edge], [7:0-3-0,0-3-0], [8:0-0-0,0-0-5], [11:0-2-8,0-3-0], [14:0-3-0,0-3-0]

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

LUMBER-

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

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

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

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

NOTES- (6-8)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 221 lb uplift at joint 8 and 267 lb uplift at joint 16.
6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.

LOAD CASE(S) Standard

August 17,2022

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

Job	Truss	Truss Type	Qty	Ply	02_Valley
ORDERS	VT-00861	VCOM	1	1	I54705066
					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
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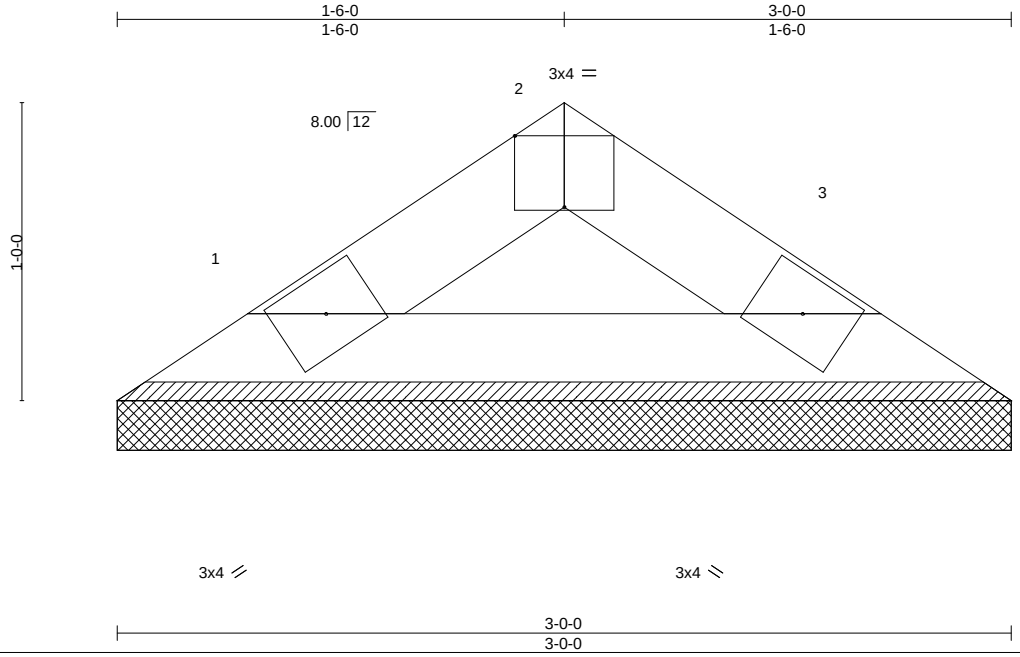

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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								
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

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	I54705067
					Job Reference (optional)

NVR, Frederick, MD - 21703, 8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:38 2022 Page 1
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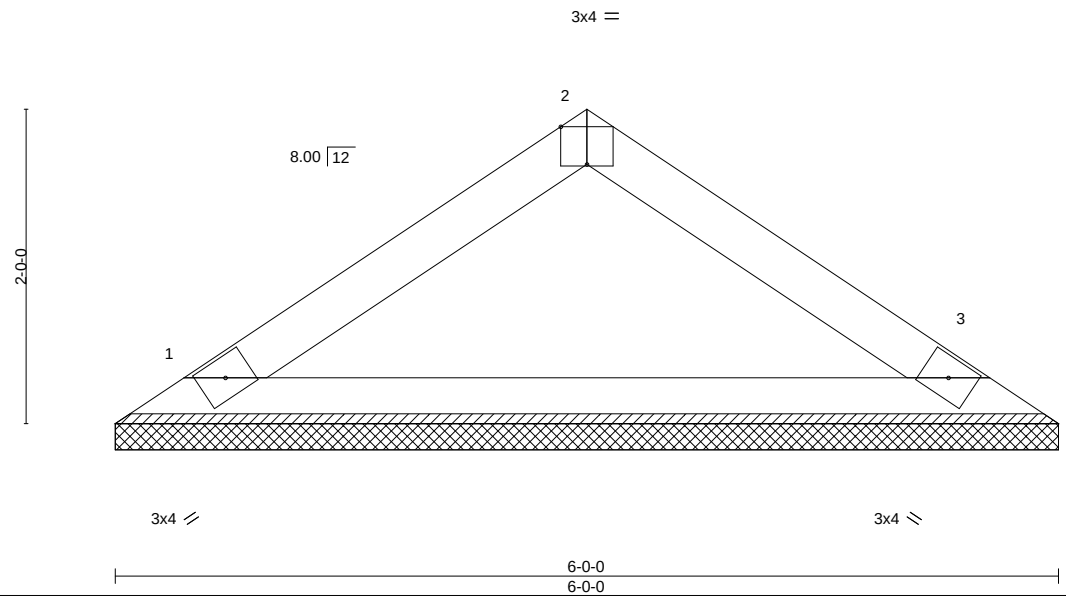

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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=1.00; 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

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

Job	Truss	Truss Type	Qty	Ply	02_Valley
ORDERS	VT-00863	VCOM	1	1	I54705068
					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
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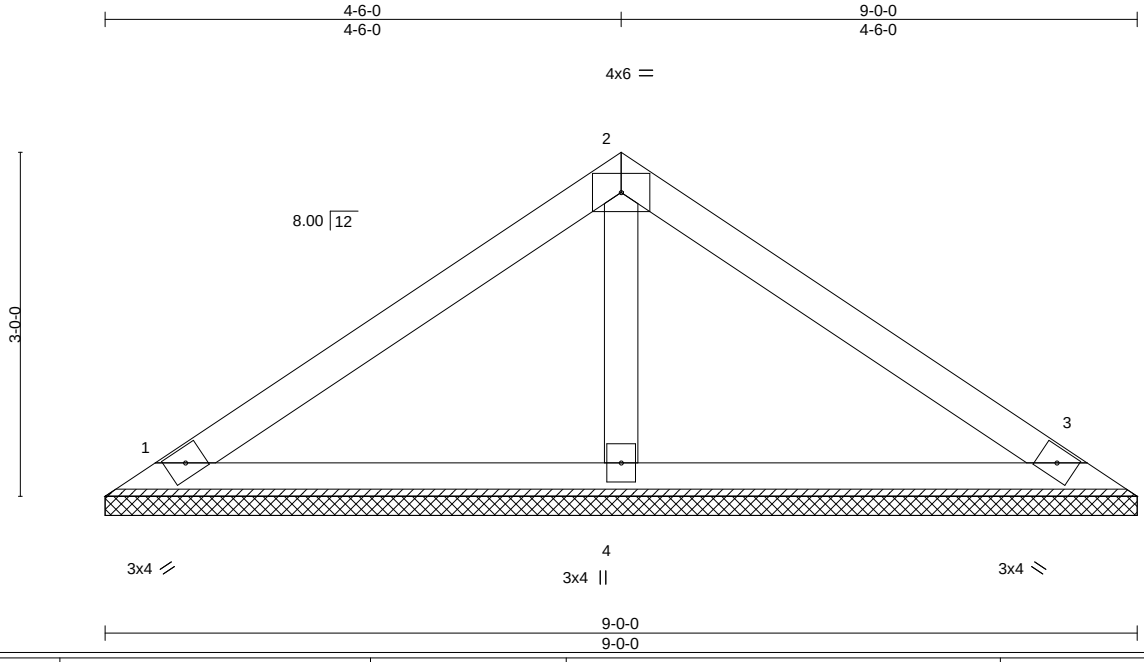

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IBC2021/TPI2014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

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

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

Job	Truss	Truss Type	Qty	Ply	02_Valley
ORDERS	VT-00864	VCOM	1	1	I54705069
					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
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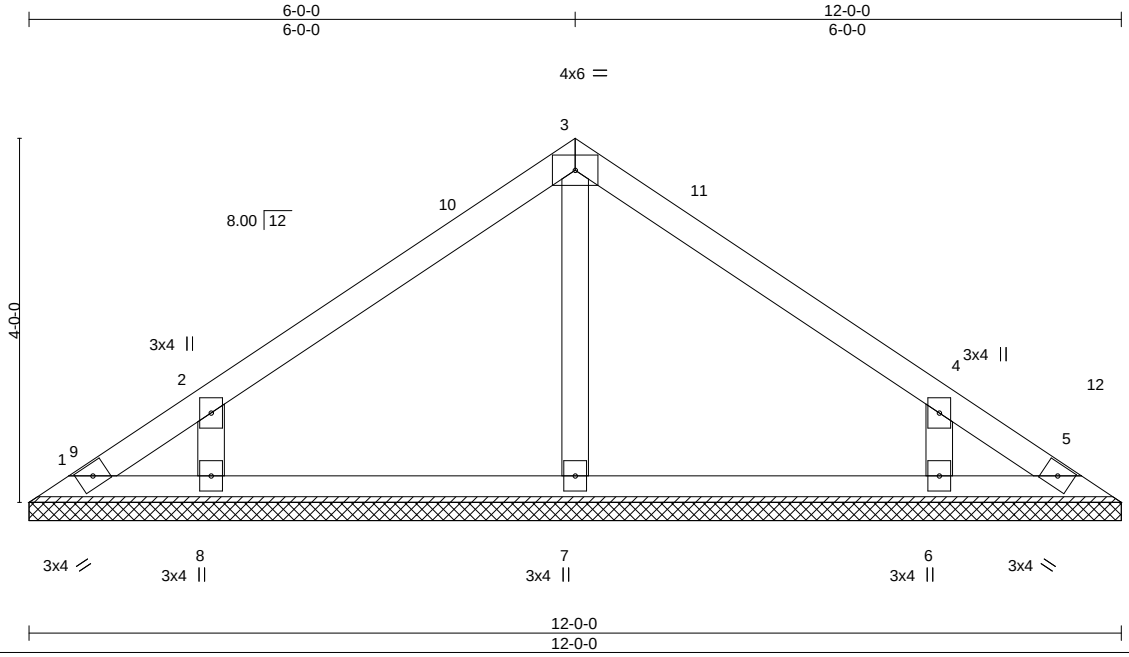

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IBC2021/TPI2014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

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

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

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

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

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

October 13,2022

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

Job	Truss	Truss Type	Qty	Ply	02_Valley
ORDERS	VT-00865	VCOM	1	1	I54705070
					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
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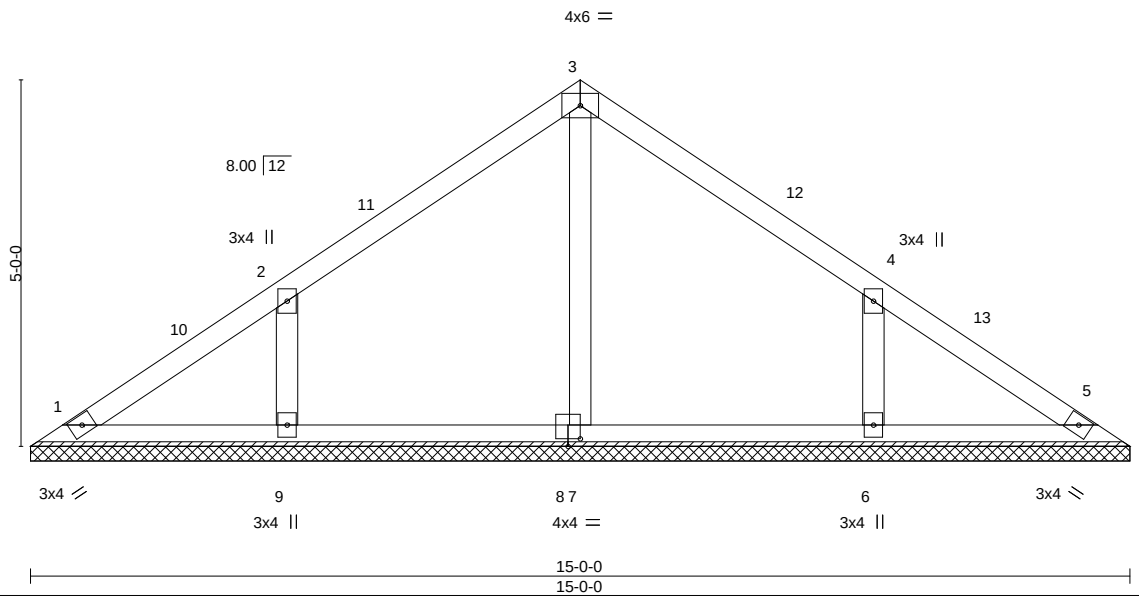

Scale = 1:31.4

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

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	0.65	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IBC2021/TPI2014	Matrix-S							Weight: 59 lb	FT = 5%
BCDL	10.0											

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

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

REACTIONS. All bearings 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

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

Job	Truss	Truss Type	Qty	Ply	02_Valley
ORDERS	VT-00866	VCOM	1	1	I54705071
					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
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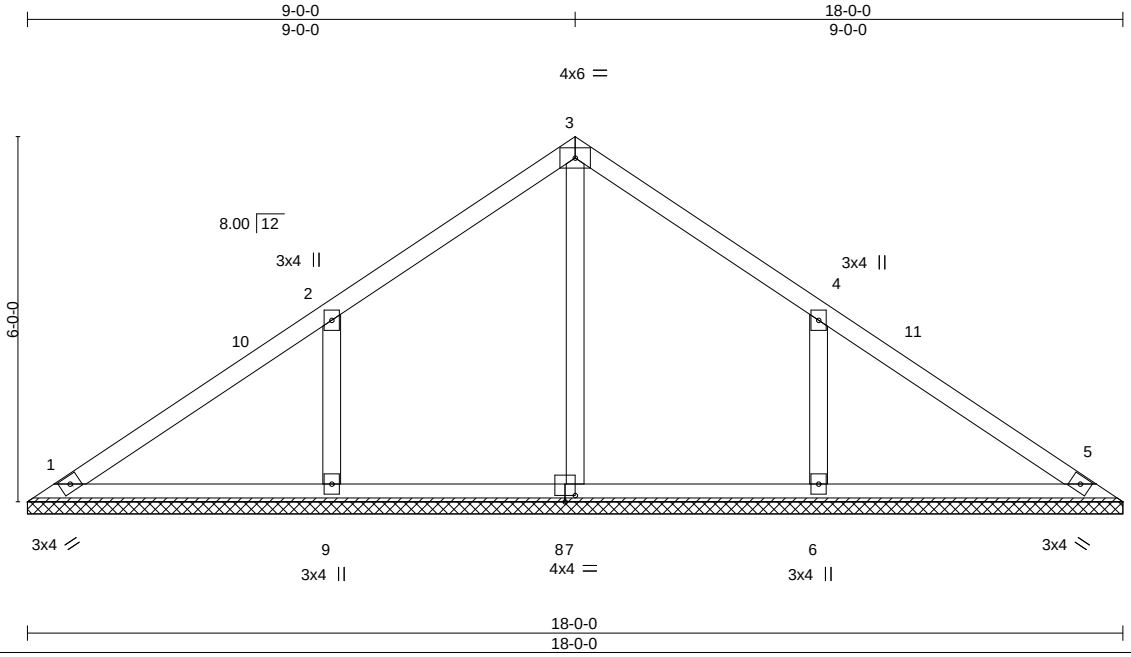

Plate Offsets (X,Y)-- [8:0-2-0,0-1-4]

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	0.82	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IBC2021/TPI2014	Matrix-S							Weight: 74 lb	FT = 5%
BCDL	10.0											

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

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

REACTIONS. All bearings 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)
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 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
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=281, 6=281.

October 13,2022

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932