



# TRUSS BRACING NOTES:

- . 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) IOD
- NAILS. PROVISIONS MUST BE MADE AT ENDS OR SPECIFIED INTERVALS TO RESTRAIN OR ANCHOR LATERAL BRACING.

  3. WEB "T" BRACE, DETAIL 3/RF-Ic, 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-Ic)
- 5. STUDDED GABLE BRACING DETAIL (I/RF-Ic) TO BE
  UTILIZED FOR TRUSSES 6'-9" IN HEIGHT OR GREATER.
  6. PARTIALLY SHEATHED GABLES, SEE (5/RF-Ic) 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.

MODEL

GRAND

DRAWING TITLE

TRUSS BRACIN

Job Truss Truss Type Qty 02\_Valley 163630249 **ORDERS** VT-93026 VCOM Job Reference (optional) 8.530 s Aug 2 2023 MiTek Industries, Inc. Wed Feb 14 12:12:36 2024 Page 1 NVR, Frederick, MD - 21703, ID:rX8t\_AojBI?JmPLOOTboslyPc1a-KXm2xw55w0Gbit8y5xpY2dCdxnV\_1a?8sF0xeDzlDrf 10-6-0 10-6-0 10-6-0 4x6 = Scale = 1:44.1 8.00 12 15 ········<del>\*</del> 11 10 13 12 9 8 4x4 = 21-0-0 Plate Offsets (X,Y)--[10:0-2-0,0-1-4] LOADING (psf) GRIP SPACING-CSI. DEFL in (loc) I/defI L/d **PLATES** TCLL 30.0 Plate Grip DOL 1.15 TC 0.41 Vert(LL) 999 197/144 n/a n/a MT20 (Roof Snow=30.0) Lumber DOL 1.15 ВС 0.20 Vert(CT) n/a n/a 999 **TCDL** 10.0 Rep Stress Incr YES WB 0.23 0.01 Horz(CT) n/a n/a **BCLL** 0.0

LUMBER-

BCDL

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

**BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 6-0-0 oc purlins.

Weight: 91 lb

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 21-0-0.

(lb) -Max Horz 1=-226(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-235(LC 12), 13=-173(LC 12), 9=-235(LC 13),

8=-174(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=324(LC 18), 12=612(LC 18), 13=353(LC 21),

Matrix-S

9=612(LC 19), 8=353(LC 22)

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

Code IBC2021/TPI2014

WFBS 3-12=-530/285, 2-13=-284/214, 5-9=-530/284, 6-8=-284/214

### NOTES-

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) All plates are 3x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 12=235, 13=173, 9=235, 8=174.



FT = 5%

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply 10 Southeast 149147380 **ORDERS** SE-14530 COMN Job Reference (optional)

4x6

NVR. Frederick, MD - 21703

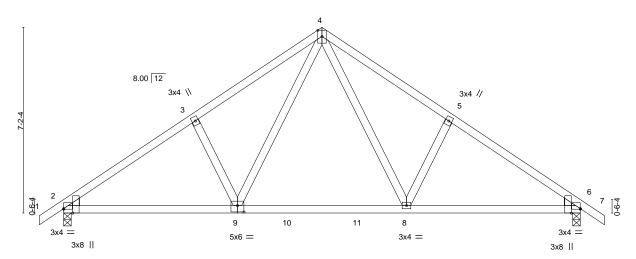
8.530 s Nov 29 2021 MiTek Industries, Inc. Tue Dec 7 20:30:09 2021 Page 1 ID:5lb56nez?NGp7jN5pS3vTuyrxGa-ZyR6O84R30qr65gSzJU8?aMQWGcErsLQKGtZrEyBF9C

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

Scale = 1:44 6

Structural wood sheathing directly applied or 5-3-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



6-8-12 13-3-4 20-0-0 6-8-12 6-6-9 6-8-12 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] **PLATES** GRIP

**BRACING-**

TOP CHORD

**BOT CHORD** 

LOADING (psf) SPACING-CSI. DEFL. I /d 2-0-0 in (loc) I/defI **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.33 Vert(LL) -0.08 8-9 >999 360 MT20 BC 0.46 TCDL 10.0 Lumber DOL 1.15 Vert(CT) -0.126-8 >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

LUMBER-

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

WEDGE

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8

Max Horz 2=-185(LC 8)

Max Uplift 2=-116(LC 10), 6=-116(LC 11) Max Grav 2=853(LC 1), 6=853(LC 1)

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

TOP CHORD 2-3=-1111/140, 3-4=-977/207, 4-5=-977/207, 5-6=-1111/140 **BOT CHORD** 2-9=-145/938, 8-9=-2/615, 6-8=-38/840

WEBS 3-9=-269/210, 4-9=-122/481, 4-8=-122/481, 5-8=-269/210

NOTES-(6-8)

- 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.



197/144

FT = 5%

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



Job Truss Truss Type Qty Ply NC VT-95002 159511688 VCOM **ORDERS** VT-95002 Job Reference (optional) 8.630 s Nov 19 2022 MiTek Industries, Inc. Thu Jul 13 10:35:19 2023 Page 1 NVR, Frederick, MD - 21703, ID:Na07x\_qDLMc?dzdmB8gxPuylbLG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 12-0-0 12-0-0 Scale: 1/4"=1 4x6 = 5x6 🖊 5x6 < 8.00 12 3-0-0 3x4 II 18 15 3x4 || 3x4 / 3x4 × 13 12 109 14 11 8 4x4 = 4x4 = 3x4 || 3x4 || 3x4 || 24-0-0 24-0-0 Plate Offsets (X,Y)--[3:0-3-0,0-3-4], [5:0-3-0,0-3-4], [10:0-2-0,0-1-4], [12:0-2-0,0-1-4] LOADING (psf) SPACING-DEFL in (loc) I/defI L/d **PLATES** GRIP **TCLL** 30.0 Plate Grip DOL 1.15 TC 0.40 Vert(LL) 999 197/144 n/a n/a MT20 (Roof Snow=30.0) Lumber DOL 1.15 ВС 0.12 Vert(CT) n/a n/a 999 **TCDL** 10.0 Rep Stress Incr YES WB 0.31 0.01 Horz(CT) n/a n/a **BCLL** 0.0 Code IBC2021/TPI2014 Weight: 108 lb FT = 5% Matrix-S BCDL LUMBER-

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

**BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 24-0-0.

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

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

8=-217(LC 13)

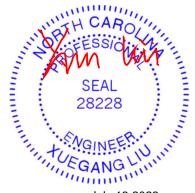
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=338(LC 18), 13=589(LC 18), 14=433(LC 21),

9=589(LC 19), 8=433(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown WFBS 4-11=-256/0, 3-13=-512/279, 2-14=-340/278, 5-9=-512/278, 6-8=-340/278

# NOTES-

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-5-12 to 4-10-8, Exterior(2N) 4-10-8 to 7-7-5, Corner(3R) 7-7-5 to 16-4-11, Exterior(2N) 16-4-11 to 19-1-8, Corner(3E) 19-1-8 to 23-6-4 zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 13=229, 14=216, 9=228, 8=217.



July 13,2023



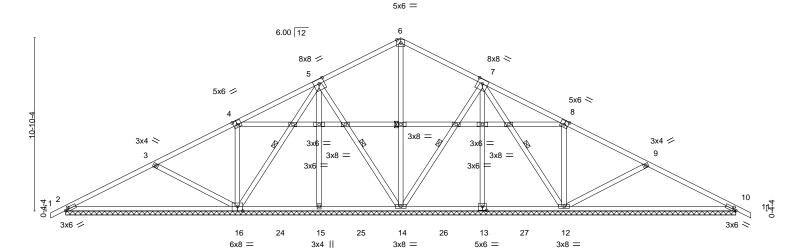
Job Truss Truss Type Qty Ply 10 Southeast 149171046 **ORDERS** SE-17122 COMN Job Reference (optional)

NVR Frederick, MD - 21703

5-7-12

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:01:55 2021 Page 1 ID:5lb56nez?NGp7iN5pS3vTuvrxGa-a9lNS?Kr380S94h3wDLRuigU38uca1hA50?gaDvAuiA 15-10-9 21-0-0 31-2-13 36-4-4 42-0-0 42-11-4 0-11-4 10-9-3 26-1-7 5-1-7 5-1-7 5-1-7 5-1-7 5-1-7 5-1-7 5-7-12

Scale = 1:72.2



		10-9-3	5-1-	-7	5-1-7	5-1-	7		5-1-7		10-9-3	
Plate Offs	sets (X,Y)	[2:0-2-5,0-1-8], [4:0-3-0,0-3-	)], [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	1-8], [13	3:0-3-0,0-3	0], [16:0-4	-0,Edge]	
LOADING	G (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	<u>`11</u>	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	/ES	WB	0.30	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IBC2021/TPI20	14	Matr	ix-S						Weight: 288 lb	FT = 5%

21-0-0

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-**

26-1-7

TOP CHORD **BOT CHORD** WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins.

42-0-0

Rigid ceiling directly applied or 2-2-0 oc bracing. 1 Row at midpt 5-16, 5-14, 6-14, 7-14, 7-12

31-2-13

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)

15-10-9

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

10-9-3

**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 (it=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.





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Job Truss Truss Type Qty Ply 10 Southeast 149171048 **ORDERS** SE-17124 COMN Job Reference (optional)

21-0-0

5-1-7

NVR. Frederick, MD - 21703

10-9-3

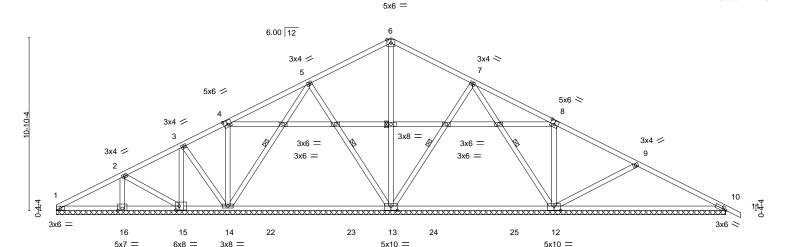
5-1-7

15-10-9

5-1-7

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:01:58 2021 Page 1 ID:5lb56nez?NGp7jN5pS3vTuyrxGa-?kRV40NkM3O10XPecLu8VKS?QLuXnOUcn\_EVBYyAuj7 26-1-7 31-2-13 42-0-0 42-11-4 0-11-4 36-4-4 5-1-7 5-7-12 5-1-7 5-1-7

Scale = 1.72.3



	10-9-3			10-2-13			10-2-13				10-9-3		
Plate Offs	sets (X,Y)	[4:0-3-0,0-3-0], [8:0-3-0,0-3	5,0-1-8], [12:0-5	5-0,0-3-4], [13:0	)-5-0,0-3-4], [	15:0-2-8	3,0-3-0]						
LOADING	G (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/TPI	2014	Matrix-S	5						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 **BOT CHORD** WEBS

31-2-13

Structural wood sheathing directly applied or 6-0-0 oc purlins.

42-0-0

Rigid ceiling directly applied or 2-2-0 oc bracing.

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)

10-9-3

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)

21-0-0

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.



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Job Truss Truss Type Qty Ply 10 Southeast 149171050 **ORDERS** SE-17126 COMN Job Reference (optional)

10-0-0

10-0-0

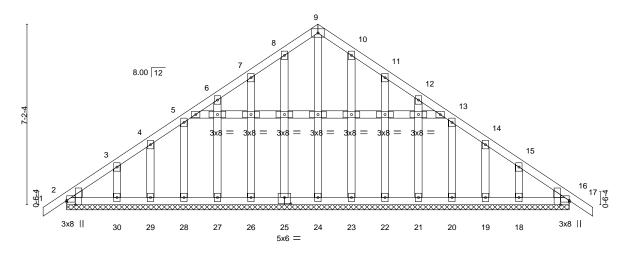
NVR. Frederick, MD - 21703

8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Dec 8 22:02:01 2021 Page 1 ID:5lb56nez?NGp7jN5pS3vTuyrxGa-PJ6ej2Pcf\_mct?8CHUSr7z4cQZ94\_oy3TyS9otyAuj4 20-0-0 20-11-4

10-0-0

4x6 =

Scale = 1:45.9



20-0-0 Plate Offsets (X,Y)--[2:0-0-0,0-0-12], [2:0-2-1,Edge], [16:0-0-0,0-0-12], [16:0-2-1,Edge], [25:0-3-0,0-3-0] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defI I/d 20.0 Plate Grip DOL 1.15 TC 0.06 Vert(LL) -0.00120 197/144 TCLL 16 n/r MT20 BC 0.03 TCDL 10.0 Lumber DOL 1.15 Vert(CT) -0.0017 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.12 Horz(CT) 0.00 16 n/a n/a BCDL 10.0 Code IBC2021/TPI2014 Matrix-S Weight: 156 lb FT = 5%

20-0-0

LUMBER-

**BRACING-**TOP CHORD

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

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

**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

REACTIONS. All bearings 20-0-0.

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

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

22, 21, 20, 19, 18

All reactions 250 lb or less at joint(s) 2, 16, 24, 25, 26, 27, 28, 29, 30,

23, 22, 21, 20, 19, 18

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

#### NOTES-(10-13)

- 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, 16, 25, 26, 27, 28, 29, 30, 23, 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.
- 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.





Design Valid to its 90 mly with win New Commercials. This design is based only upon parameters shown, and is 10 at an individual outlining Component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



Job Truss Truss Type Qty Ply 02 Valley 147779330 **ORDERS** VT-95519 VSPC Job Reference (optional) NVR, Frederick, MD - 21703, 8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 05:29:25 2021 Page 1 ID:Na07x\_qDLMc?dzdmB8gxPuylbLG-\_kdROqopW0HH1cRBwxR7eMqlXKRyBm3G3IRGLdygS1u 13-6-0 27-0-0 13-6-0 Scale = 1:59.8 4x6 = 10 12 13 5x7 <> 14 5x6 // 8.00 12 3x8 = 32 15 33 6x10 31 3x8 = <sup>22</sup> 21 18 23 19 20 4x4 = 4x6 =3x8 =18-7-12 22-7-12 27-0-0 14-7-12 4-0-0 4-0-0 4-4-4 Plate Offsets (X,Y)-- [4:0-3-0,0-3-0], [14:0-3-8,0-3-0], [19:0-3-0,0-1-4], [23:0-2-0,0-1-4], [41:0-5-0,0-1-4]

LOADING (psf)           TCLL 30.0           (Roof Snow=30.0)           TCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.45 0.22 0.39	Ve Ve	EFL. ert(LL) ert(CT) orz(CT)	in n/a n/a 0.01	(loc) - - 16	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 197/144
BCLL 0.0 BCDL 10.0	Code IBC2021/TPI2		Matri			3.L(0.)	0.0.		.,, α	.,, &	Weight: 206 lb	FT = 5%

**BRACING-**

JOINTS

TOP CHORD

BOT CHORD

LUMBER-

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

**OTHERS** 2x4 SP No.3 or 2x4 SPF Stud

REACTIONS. All bearings 27-0-0.

(lb) -Max Horz 1=-221(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 21, 22, 24, 25, 26, 27, 28, 20 except 17=-148(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 16, 22, 24, 25, 26, 27, 28 except 21=352(LC 18), 18=432(LC

19), 17=452(LC 22), 20=536(LC 19)

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

TOP CHORD 1-2=-275/129

**BOT CHORD**  $1-28 = -116/264,\ 27-28 = -116/264,\ 26-27 = -116/264,\ 25-26 = -116/265,\ 24-25 = -116/265,$ 

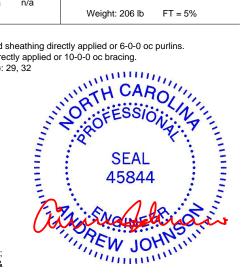
22-24=-116/265, 21-22=-116/265

**WEBS** 8-21=-276/66, 11-31=-295/69, 31-33=-253/218, 14-18=-357/20, 15-17=-353/193,

20-33=-454/75

#### NOTES-(8-9)

- 1) 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
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) All plates are 3x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 21, 22, 24, 25, 26, 27, 28, 20 except (jt=lb) 17=148.
- 8) Design checked for ASCE 7-10 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 7-10 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Brace at Jt(s): 29, 32

September 16,2021



Job Truss Truss Type Qty Ply 02 Valley 147779332 **ORDERS** VT-95521 VCOM Job Reference (optional) NVR, Frederick, MD - 21703, 8.520 s Aug 27 2021 MiTek Industries, Inc. Mon Sep 6 05:29:28 2021 Page 1 ID:Na07x\_qDLMc?dzdmB8gxPuylbLG-PJJZ1rqhpxfsu3Amb3\_qG?SDuXSxOBqilGgwyyygS1r 16-2-4 8-1-2 8-1-2 Scale = 1:30.4 4x6 = 3 8.00 12 10 9 6 8 16-2-4 Plate Offsets (X,Y)--[8:0-2-0,0-0-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP **TCLL** 30.0 Plate Grip DOL 1.15 TC 0.70 Vert(LL) n/a n/a 999 MT20 197/144 (Roof Snow=30.0) Lumber DOL 1.15 BC 0.20 Vert(CT) n/a n/a 999 **TCDL** 10.0 WB Rep Stress Incr YES 0.14 Horz(CT) 0.00 5 n/a n/a **BCLL** 0.0 Code IBC2021/TPI2014 Matrix-S Weight: 65 lb FT = 5% BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x4 SP No 3 or 2x4 SPF Stud TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. **BOT CHORD** 2x4 SP No.3 or 2x4 SPF Stud **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.3 or 2x4 SPF Stud

REACTIONS. All bearings 16-2-4.

(lb) -

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

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. **WEBS** 2-9=-533/285, 4-6=-533/285

#### NOTES-(8-9)

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=33ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) All plates are 3x4 MT20 unless otherwise indicated.

Max Horz 1=-172(LC 10)

- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=243, 6=242.
- 8) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- 9) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.

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September 16,2021

Job Truss Truss Type Qty Ply 10 Southeast 153690301 **ORDERS** SE-18665 COMN Job Reference (optional)

NVR. Frederick, MD - 21703

4-1-12

4-1-12

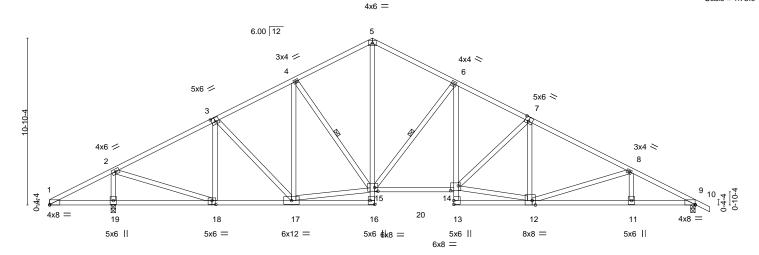
10-9-3

6-7-7

5-1-7

8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:28 2022 Page 1 ID:5lb56nez?NGp7jN5pS3vTuyrxGa-ZVw1epS8okxzm3VirJqzJXX5z2Q?XskqJgtAaDynHAj 42-11<sub>t</sub>4 21-0-0 31-2-13 37-10-4 42-0-0 15-10-9 26-5-5 5-1-7 4-1-12 5-5-5 6-7-7

Scale = 1:75.0



	4-0-0	4-1 <sub>iī</sub> 12 10-9-3	15-10-9	21-0-0	26-5-5	1 31-2-13	37-10-4	42-0-0		
	4-0-0	0-1 <sup>!</sup> -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.	<b>DEFL</b> . in	(loc) I/defl	L/d <b>PLATE</b>	S 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/TPI	2014	Matrix-S	Wind(LL) 0.13	14 >999	240 Weight:	272 lb FT = 5%		

**BRACING-**

**WEBS** 

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 2x4 SP No.2 or 2x4 SPF No.2 \*Except\* **BOT CHORD** 

1-18,12-13: 2x4 SP No.3 or 2x4 SPF Stud

**WEBS** 2x4 SP No.3 or 2x4 SPF Stud

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

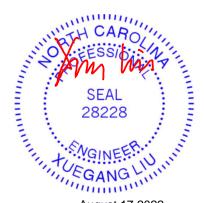
**BOT CHORD** 17-18=-207/1448, 11-12=-304/2571, 9-11=-304/2571, 14-15=-56/1980

5-15=-151/1113, 6-14=-87/699, 8-12=-478/181, 3-18=-413/105, 2-18=-105/1717, WEBS 2-19=-1718/312, 6-15=-911/257, 12-14=-134/2139, 7-14=-272/167, 15-17=-133/1472

NOTES-

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.



Structural wood sheathing directly applied or 2-8-10 oc purlins.

6-15, 4-15

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 1-19,18-19.

1 Row at midpt

August 17,2022



Job Truss Truss Type Qty Ply 10 Southeast 153690302 **ORDERS** SE-20632 COMN Job Reference (optional) 8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:29 2022 Page 1

21-0-0

5-1-7

NVR Frederick, MD - 21703

15-10-9

5-1-7

15-10-9

10-9-3

5-1-7

4-1-12

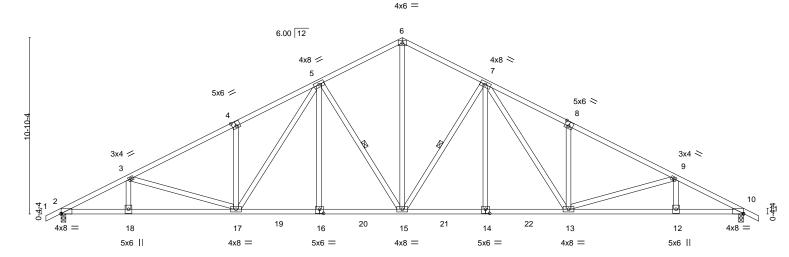
4-1-12

5-7-12

1-6-0

ID:5lb56nez?NGp7jN5pS3vTuyrxGa-1hUPs9TnZ23qNC3uP0LCsk4GzRkiGOhzYKcj6fynHAi <u> 37-10-4</u> 36-4-4 42-0-0 26-1-7 31-2-13 42-11<sub>1</sub>4 1-6-0 5-1-7 4-1-12 5-1-7

Scale = 1:70.9



	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)	I/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%
			` '		

21-0-0

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 **BOT CHORD** 

26-1-7

Structural wood sheathing directly applied or 2-4-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

37-10-4

42-0-0

8-3-12 oc bracing: 12-13 8-3-6 oc bracing: 10-12.

31-2-13

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)

10-9-3

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

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)

**BOT CHORD** 

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





Job Truss Truss Type Qty Ply 10 Southeast 153690303 **ORDERS** SE-20633 COMN Job Reference (optional)

5-1-7

NVR Frederick, MD - 21703 4-1-12

4-1-12

5-7-12

1-6-0

10-9-3

5-1-7

15-10-9

5-1-7

8.530 s Jul 18 2022 MiTek Industries, Inc. Tue Aug 16 12:07:31 2022 Page 1 ID:5lb56nez?NGp7jN5pS3vTuyrxGa-\_4c9HqV15fJYdWDGWRNgx99cwFODkEkG?e5qBXynHAg 37-10-4 21-0-0 26-1-7 31-2-13 36-4-4 42-0-0 42-11-4 0-11-4 5-1-7 1-6-0 4-1-12

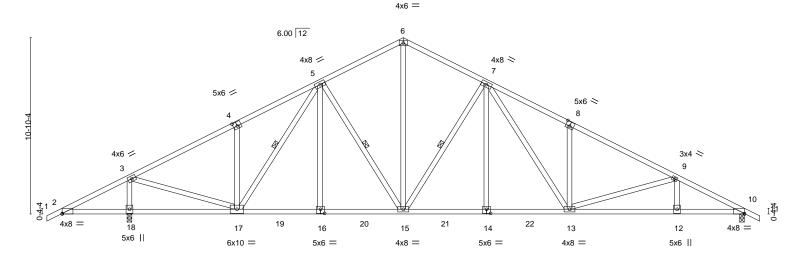
Structural wood sheathing directly applied or 2-10-6 oc purlins.

5-17, 5-15, 7-15

Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Row at midpt

Scale = 1:70.9



4-0-0	10-9-3	13-10-9	21-0-0	20-1-7	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)	[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], [14:0-3-	0,0-3-0], [16:0-3-0,0-3-	0]		
LOADING (psf)	SPACING- 2-0-0	CSI.		DEFL. in (lo	c) I/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	5 TC	0.61	Vert(LL) -0.15 13-1	4 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	5 BC	0.98	Vert(CT) -0.30 12-1	3 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	S WB	0.78	Horz(CT) -0.10 1	18 n/a n/a		
BCDL 10.0	Code IBC2021/TPI2014	Matri	x-S	Wind(LL) 0.13 1	13 >999 240	Weight: 269 lb	FT = 5%
				,			

**BRACING-**

WEBS

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 2x4 SP No.2 or 2x4 SPF No.2 \*Except\* **BOT CHORD** 

14-16: 2x4 SP No.3 or 2x4 SPF Stud

**WEBS** 2x4 SP No.3 or 2x4 SPF Stud

REACTIONS. (size) 10=0-3-8, 18=0-3-8

Max Horz 10=188(LC 10)

Max Uplift 10=-230(LC 11), 18=-264(LC 10) Max Grav 10=1549(LC 1), 18=1920(LC 1)

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

TOP CHORD 2-3=-99/422, 3-4=-1696/204, 4-5=-1679/330, 5-6=-1554/309, 6-7=-1554/289, 7-8=-2435/473, 8-9=-2449/347, 9-10=-2940/400

2-18=-308/125, 17-18=-308/125, 16-17=-58/1528, 15-16=-57/1529, 14-15=-185/1766,

13-14=-184/1767, 12-13=-485/2561, 10-12=-485/2561 WEBS

3-17=-134/1804, 4-17=-354/224, 5-15=-403/194, 6-15=-165/1092, 7-15=-783/253, 7-13=-245/762, 8-13=-368/226, 9-13=-482/173, 3-18=-1782/333, 5-16=0/268,

7-14=0/265

#### NOTES-(6-8)

**BOT CHORD** 

- 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=230, 18=264.
- 6) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust), wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 115 mph.
- 7) Design checked for ASCE 7-16 ultimate wind speed at 130 mph (3-second gust) meets or exceeds IRC2012 nominal wind speed of 100 mph, wind reaction x 0.78 will adjust wind uplift reaction to a wind speed of 90 mph.
- 8) Metal hangers, of any seat size, can be used in place of wood bearing, of any seat size, provided the hanger has been sized for the required maximum reaction.



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

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

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



Job Truss Truss Type Qty 10 Southeast 161259435 ORDERS SE-20635 COMN 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-aSKSrvcU1XdlKE4p1e4zOwjAIEq9FTRq8Nf2lwyW7vR

5-1-7

26-1-7

5-1-7

31-2-13

5-1-7

0-11-4 Scale = 1:72.3

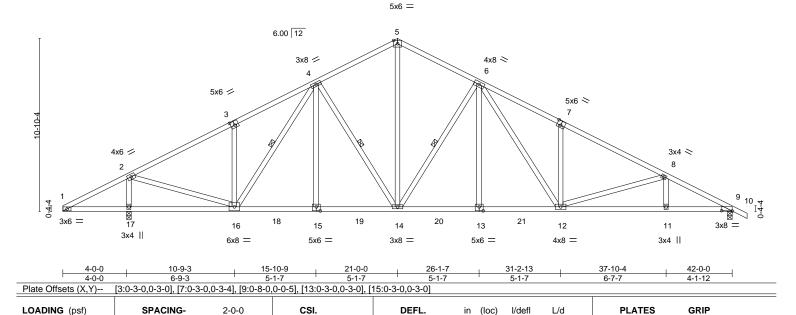
37-10-4 1-6-0

42-0-0

4-1-12

36-4-4

5-1-7



Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

-0.15 12-13

-0.30 11-12

17

12

1 Row at midpt

-0.10

0.13

>999

>999

>999

n/a

360

240

n/a

240

Rigid ceiling directly applied or 6-0-0 oc bracing.

MT20

Structural wood sheathing directly applied or 2-10-4 oc purlins.

4-16, 4-14, 6-14

Weight: 267 lb

197/144

FT = 5%

LUMBER-

20.0

10.0

10.0

0.0

TCLL

TCDL

**BCLL** 

**BCDL** 

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

4-1-12

1-6-0

5-1-7

5-1-7

TOP CHORD **BOT CHORD** WEBS

TC

BC

WB

Matrix-S

0.61

0.77

0.74

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)

Plate Grip DOL

Rep Stress Incr

Code IBC2021/TPI2014

Lumber DOL

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

1-2=-51/286, 2-3=-1733/221, 3-4=-1716/347, 4-5=-1566/310, 5-6=-1566/290, TOP CHORD

6-7=-2449/474, 7-8=-2464/348, 8-9=-2955/401

15-16=-67/1547, 14-15=-67/1547, 13-14=-193/1769, 12-13=-193/1769, 11-12=-493/2574, BOT CHORD 9-11=-493/2574

1.15

1.15

YES

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,

#### NOTES-(6-8)

**WEBS** 

- 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-Č 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.
- \* 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job Truss Type Qty 10\_Southeast 153690310 ORDERS SE-20645 COMN Job Reference (optional) B.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 NVR, X 5-10-12 10-11-3 21-0-0 26-0-7 31-0-13 36-1-4 42-0-0 5-10-12 5-0-7 5-0-7 5-0-7 5-0-7 5-0-7 5-10-12 Scale = 1:69.9 3x6 = 6.00 12

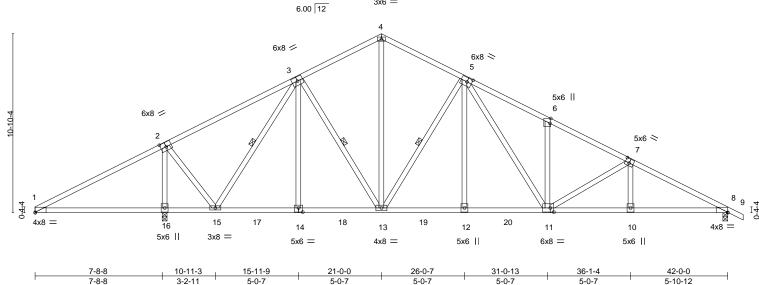


Plate Offsets	te Offsets (X,Y) [1:0-0-0,0-0-5], [2:0-4-0,0-3-4], [5:0-3-8,0-3-0], [6:0-3-10,Edge], [7:0-3-0,0-3-0], [8:0-0-0,0-0-5], [11:0-2-8,0-3-0], [14:0-3-0,0-3-0]												
LOADING (	psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 2	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.11	11-12	>999	360	MT20	197/144	
TCDL 1	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 1	10.0	Code IBC2021/TF	PI2014	Matri	x-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\*

**BOT CHORD** 2x4 SP No 2 or 2x4 SPF No 2

1-2.2-3: 2x4 SP No.2D

**WEBS** 2x4 SP No.3 or 2x4 SPF Stud **BRACING-**

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

A VIIII

6-0-0 oc bracing: 1-16,15-16.

WEBS 3-15, 3-13, 5-13 1 Row at midpt

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

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 ioint 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



Job Truss Truss Type 02\_Valley Qty 154705066 **ORDERS** VT-00861 VCOM Job Reference (optional) 8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:37 2022 Page 1 ID:lwgfHqLuldM7W6Kxo5rjJByUXxn-tl0UVwpW5nlQcYixzK5McV9S1Qbd2s7Y0umzOByTqEK NVR. Frederick, MD - 21703 1-6-0 3-0-0 1-6-0 Scale = 1.7.73x4 = 2 8.00 12 3 3x4 🖊 3x4 ≫ 3-0-0 3-0-0 Plate Offsets (X,Y)--[2:0-2-0,Edge] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defl I/d **TCLL** 30.0 Plate Grip DOL 1.15 TC 0.08 Vert(LL) 999 197/144 n/a n/a MT20 (Roof Snow=30.0) BC Lumber DOL 1.15 0.08 Vert(CT) n/a n/a 999 TCDL 10.0

Horz(CT)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.00

3

n/a

n/a

Rigid ceiling directly applied or 10-0-0 oc bracing.

Structural wood sheathing directly applied or 3-0-0 oc purlins.

Weight: 8 lb

FT = 5%

LUMBER-

BCLL

**BCDI** 

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

0.0

10.0

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)

Rep Stress Incr

Code IBC2021/TPI2014

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

### NOTES-

- 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

WB

Matrix-P

0.00

- 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.

YES

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





Job Truss Truss Type 02\_Valley Qty 154705067 **ORDERS** VT-00862 VCOM Job Reference (optional) 8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:38 2022 Page 1 ID:D6E1UAMWWxU\_8Gv8MpMysOyUXxm-LVatjFp8s4tHDiH7X2cb9ihYkpqYnJNiFYVWwdyTqEJ NVR. Frederick, MD - 21703, 3-0-0 6-0-0 3-0-0 Scale = 1:14 7 3x4 =2 8.00 12 3x4 / 3x4 × 6-0-0 6-0-0 Plate Offsets (X,Y)--[2:0-2-0,Edge] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defl I/d **TCLL** 30.0 Plate Grip DOL 1.15 TC 0.41 Vert(LL) 999 197/144 n/a n/a MT20 (Roof Snow=30.0) BC Lumber DOL 1.15 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%**BCDI** 10.0 LUMBER-**BRACING-**TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. 2x4 SP No.3 or 2x4 SPF Stud **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

(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-

REACTIONS.

- 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



Job Truss Type 02\_Valley Truss Qty 154705068 **ORDERS** VT-00863 VCOM Job Reference (optional) 8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:39 2022 Page 1 NVR. Frederick, MD - 21703 ID:hJoPiVN8HEcrmQUKwWtBOcyUXxl-ph8FwbqmdO?8rsrK5l7rhwEfiDE1WlarUCF3T3yTqEllup files for the control of the co4-6-0 9-0-0 4-6-0 4-6-0 Scale = 1:20 1 4x6 = 2 8.00 12 3x4 / 3x4 × 3x4 || 9-0-0 9-0-0 LOADING (psf) SPACING-DEFL. **PLATES GRIP** 2-0-0 CSI L/d in (loc) I/defl TCLL 30.0 Plate Grip DOL TC 0.65 Vert(LL) 999 197/144 1.15 n/a n/a MT20 (Roof Snow=30.0) Lumber DOL BC 0.28 Vert(CT) 999 1.15 n/a n/a TCDL WB Rep Stress Incr YES 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 **BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-TOP CHORD

2x4 SP No.2 or 2x4 SPF No.2 2x4 SP No.3 or 2x4 SPF Stud

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

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-

- 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

October 13,2022



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ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



02\_Valley Job Truss Type Truss Qty Ply 154705069 **ORDERS** VT-00864 VCOM Job Reference (optional) 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 NVR. Frederick, MD - 21703 12-0-0 6-0-0 6-0-0 Scale = 1:25.3 4x6 = 3 10 8.00 12 3x4 || <sub>4</sub>3x4 || 12 3x4 <> 3x4 / 3x4 II 3x4 II 3x4 II 12-0-0 12-0-0 LOADING (psf) SPACING-**PLATES GRIP** 2-0-0 CSI DEFL. L/d in (loc) I/defl TCLL 30.0 Plate Grip DOL TC Vert(LL) 999 197/144 1.15 0.64 n/a n/a MT20 (Roof Snow=30.0) Lumber DOL BC 0.21 Vert(CT) 999 1.15 n/a n/a TCDL WB 5 Rep Stress Incr YES 0.13 Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IBC2021/TPI2014 Matrix-S Weight: 45 lb FT = 5%BCDL 10.0 LUMBER-**BRACING-**

TOP CHORD

**BOT CHORD** 

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

2x4 SP No.3 or 2x4 SPF Stud **OTHERS** 

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-

- 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

October 13,2022



02\_Valley Job Truss Truss Type Qty Ply 154705070 **ORDERS** VT-00865 VCOM Job Reference (optional) 8.530 s Aug 11 2022 MiTek Industries, Inc. Thu Oct 13 12:35:41 2022 Page 1 ID:dhwA6BPOpssY?jdj1xvfT1yUXxj-I4F?LHs19?Fs4A?iCA9JnLJ?D1yq\_fD8xWkAXyyTqEG NVR. Frederick, MD - 21703 15-0-0 7-6-0 7-6-0 Scale = 1:31.4 4x6 = 3 8.00 12 12 3x4 II 3x4 || 13 3x4 // 3x4 <> 9 6 87 3x4 || 4x4 = 3x4 || 15-0-0 15-0-0 Plate Offsets (X,Y)--[8:0-2-0,0-1-4] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defl I/d **TCLL** 30.0 Plate Grip DOL TC 0.65 Vert(LL) 999 197/144 1.15 n/a n/a MT20 (Roof Snow=30.0) BC Lumber DOL 1.15 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-**BRACING-**TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. 2x4 SP No.3 or 2x4 SPF Stud **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.3 or 2x4 SPF Stud **OTHERS** 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 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 DOI = 1.602) 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=280.

SEAL
28228 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

October 13.2022



02\_Valley Truss Type Job Truss Qty 154705071 **ORDERS** VT-00866 VCOM 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  $ID: dhwA6BPOpssY? jdj\overset{-}{1}xvfT1yUXxj-DGpNZdsfwJNjiKaumtgYJYs8ERGlj5tHAATk4OyTqEF$ 9-0-0 18-0-0 9-0-0 Scale = 1:37.94x6 = 3 8.00 12 3x4 || 3x4 || 3x4 <> 3x4 🖊 9 87 6 4x4 =3x4 II 3x4 II 18-0-0 18-0-0 Plate Offsets (X,Y)--[8:0-2-0,0-1-4] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defl I/d **TCLL** 30.0 Plate Grip DOL TC 0.82 Vert(LL) 999 197/144 1.15 n/a n/a MT20 (Roof Snow=30.0) BC Lumber DOL 1.15 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-**BRACING-**TOP CHORD 2x4 SP No.3 or 2x4 SPF Stud TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. 2x4 SP No.3 or 2x4 SPF Stud **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.3 or 2x4 SPF Stud **OTHERS** 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 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 DOI = 1.602) 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.

SEAL
28228 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

