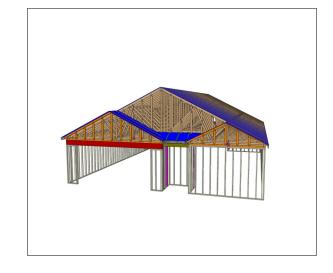


Carter Sanford Component Plant 298 Harvey Faulk Rd Sanford, NC 27332

Phone #:919-775-1450



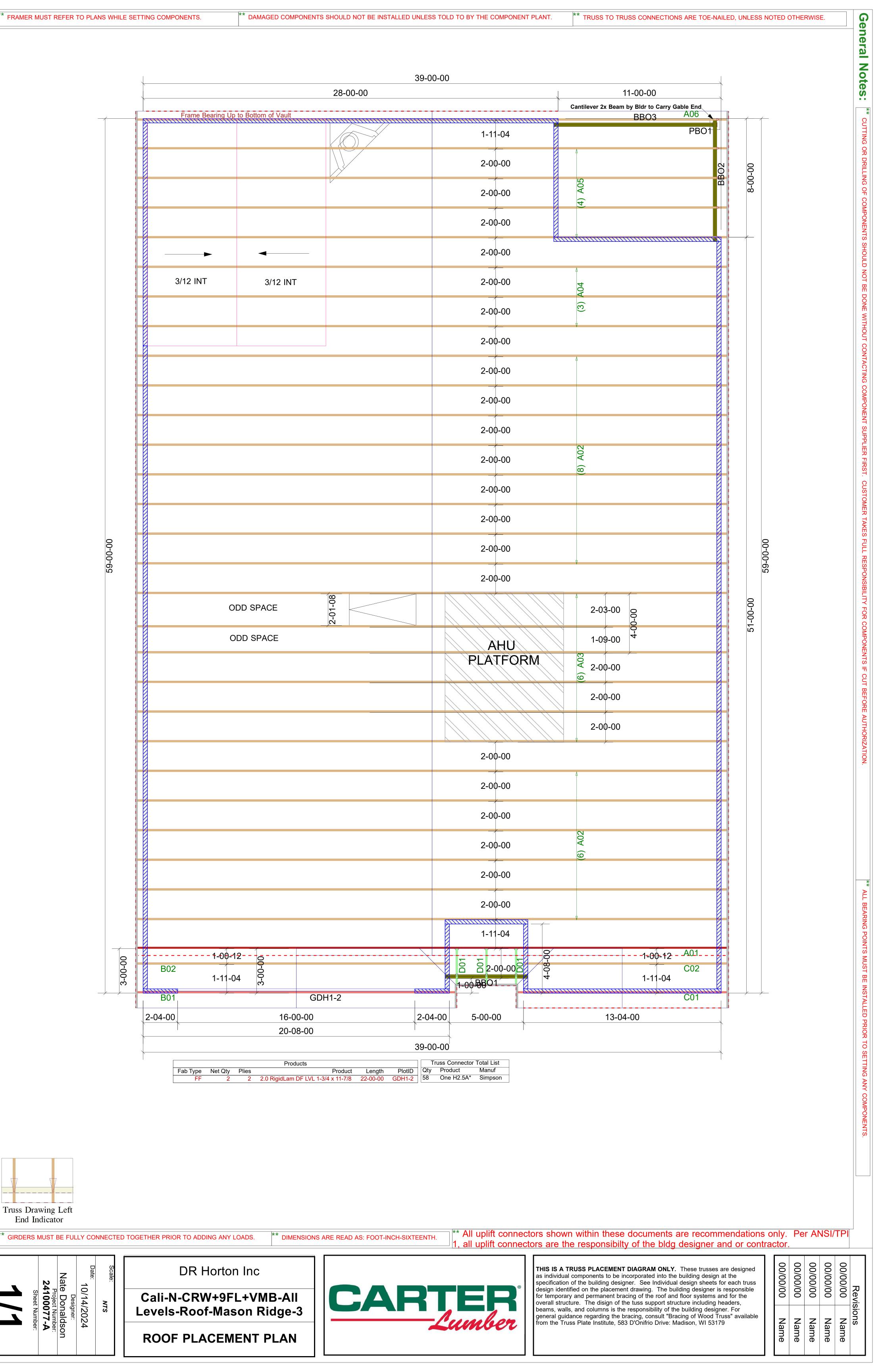
Model: Cali N VMB



THE PLACEMENT PLAN NOTES:

- 1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.
- 2. The responsibilities of the Owner, Contractor, Building Designer, Component Designer and Component Manufacturer shall be as set forth in ANSI/TPI 1. Capitalized terms shall be as defined in ANSI/TP 1 unless otherwise indicated.
- 3. Each Component is designed as an individual component utilizing information provided by others. The Owner/Building Designer is responsible for reviewing all Component Submittal Packages and individual Component Design Drawings for compliance with the Construction Documents and compatibility with the overall Building design.
- 4. Contractor will not proceed with component installation until the Owner/Building Designer has reviewed the Component Submittal Package. Questions on the suitability of any Component will be resolved by the Building Designer.
- 5. The Building Designer and Contractor are responsible for all temporary and permanent bracing.
- 6. The Placement Plan assumes the building is dimensionally correct, structurally sound, and in a suitable condition to support each Component during installation and thereafter, including but not limited to installation of all bearing points. Proper design and construction of all structural components, including foundations, headers, beams, walls and columns are the responsibility of the Owner, Building Designer and Contractor.
- 7. Do not cut, drill, or modify any Component without first consulting the Component Manufacturer or Building Designer. Damaged Components shall not be installed unless directed by the Building Designer or approved by the Component Manufacturer.
- 8. Components must be handled and installed following all applicable safety standards and best practices, including but not limited to BCSI, OSHA, TPI and local codes. Failure to properly handle, brace or otherwise install Component can result in serious injury or death.
- 9. All uplift connectors shown within these documents are recommendations only. Per ANSI/TPI 1, all uplift connectors are the responsibility of the building designer and or contractor.

Approved By:	Date:
--------------	-------



REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS



RE: 24100077

3 Mason Ridge-Roof-Cali N GLH VMB

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: DR Horton Inc Project Name: 24100077 Lot/Block: 3 Model:

Address: Subdivision: Mason Ridge

City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6

Wind Code: ASCE 7-16 Wind Speed: 130 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 11 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	163021349	A01	1/15/2024
2	163021350	A02	1/15/2024
3	I63021351	A03	1/15/2024
4	163021352	A04	1/15/2024
5	I63021353	A05	1/15/2024
6	163021354	A06	1/15/2024
7	163021355	B01	1/15/2024
8	I63021356	B02	1/15/2024
9	163021357	C01	1/15/2024
10	163021358	C02	1/15/2024
11	163021359	D01	1/15/2024

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

based on the parameters provided by Carter Components (Sanford, NC)).

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2024

North Carolina COA: C-0844

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



January 15, 2024

Job Truss Truss Type Qty Ply 3 Mason Ridge-Roof-Cali N GLH VMB 163021349 24100077 A01 Common Girder Job Reference (optional) Carter Components (Sanford, NC), Sanford, NC - 27332 Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries. Inc. Fri Jan 12 14:59:43 Page: 1

ID:5fg?3sW?giQBPJ7djNhRIFzwUS3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-4-8 39-4-8 6-8-5 12-9-13 19-6-0 26-2-3 32-3-11 39-0-0 0-4-8 6-8-5 6-1-8 6-8-3 6-8-3 6-1-8 6-8-5 0-4-8

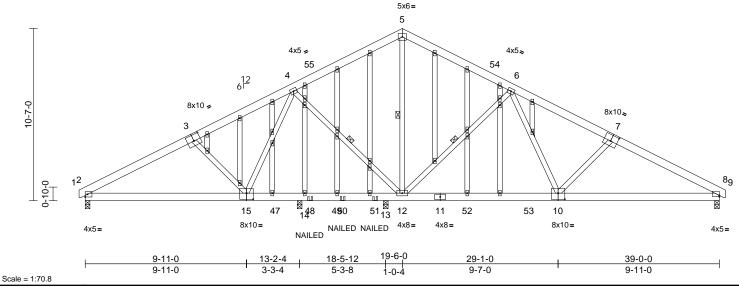


Plate Offsets (X, Y): [3:0-5-0,0-4-8], [7:0-5-0,0-4-8], [8:Edge,0-0-15], [10:0-5-0,0-4-8], [15:0-5-0,0-4-8]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.15	10-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.27	10-12	>904	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 356 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No 2

BOT CHORD 2x6 SP No.2 *Except* 15-11:2x6 SP 2400F

2.0E

WEBS 2x4 SP No.3 **OTHERS** 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or

5-9-12 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing. **WEBS**

4-12, 5-12, 6-12 1 Row at midpt 2=0-3-8, 8=0-3-8, 13=0-3-8,

REACTIONS (size) 14=0-3-8

Max Horiz 2=152 (LC 16)

Max Uplift 2=-101 (LC 38), 8=-111 (LC 39), 13=-206 (LC 12), 14=-88 (LC 31)

2=944 (LC 5), 8=1007 (LC 6),

13=1568 (LC 4), 14=61 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 5-6=-433/117, 6-8=-1547/197, 8-9=0/8

1-2=0/8, 2-4=-1371/175, 4-5=-437/140

BOT CHORD 2-14=-232/1191, 13-14=-88/795,

12-13=-88/795, 8-12=-100/1316 WEBS

4-15=-39/506, 3-15=-337/186,

4-12=-723/243, 5-12=-158/124, 6-12=-846/237, 6-10=-29/691, 7-10=-315/185

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face). see Standard Industry Gable End Details as applicable or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 14, 8, and 13. This connection is for uplift only and does not consider lateral forces
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 41-44=-19, 5-9=-58, 1-5=-58

Concentrated Loads (lb)

Vert: 48=-65 (F), 50=-65 (F), 51=-65 (F)



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/TP11 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 3 Mason Ridge-Roof-Cali N GLH VMB 163021350 24100077 A02 Common 14 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Fri Jan 12 14:59:46 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-4-8 0-4-8 39-4-8 6-8-5 12-9-13 19-6-0 26-2-3 32-3-11 39-0-0 0-4-8 6-8-5 6-1-7 6-8-3 6-8-3 6-1-7 6-8-5

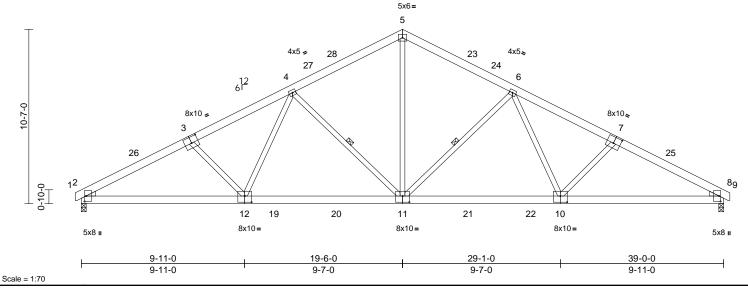


Plate Offsets (X, Y): [2:0-4-0,0-1-1], [3:0-5-0,0-4-8], [7:0-5-0,0-4-8], [8:0-4-0,0-1-1], [10:0-5-0,0-4-8], [11:0-5-0,0-4-8], [12:0-5-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.17	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.31	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.09	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 273 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 2x6 SP No.2 **BOT CHORD WEBS** 2x4 SP No.3 WEDGE Left: 2x4 SP No.3 Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-0-12 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

WEBS 1 Row at midpt 6-11, 4-11 REACTIONS 2=0-3-8, 8=0-3-8 (size)

Max Horiz 2=157 (LC 18)

Max Uplift 2=-156 (LC 14), 8=-156 (LC 15)

Max Grav 2=1730 (LC 3), 8=1730 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 5-6=-2008/327, 6-8=-2964/318, 8-9=0/9, 1-2=0/9, 2-4=-2964/318, 4-5=-2008/327

BOT CHORD 2-8=-323/2577

WEBS 5-11=-108/1411, 6-11=-771/240,

6-10=-21/557, 7-10=-287/181,

4-11=-771/239, 4-12=-20/557, 3-12=-287/181

NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-3-14 to 3-6-14, Interior (1) 3-6-14 to 15-7-5, Exterior(2R) 15-7-5 to 23-4-11, Interior (1) 23-4-11 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

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

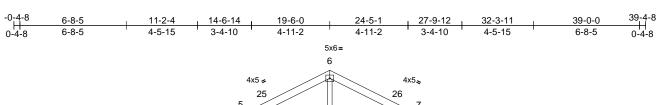
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overal 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/TP11 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	3 Mason Ridge-Roof-Cali N GLH VMB	
24100077	A03	Common	6	1	Job Reference (optional)	l63021351

Run: 8 63 S. Nov. 1 2023 Print: 8 630 S.Nov. 1 2023 MiTek Industries. Inc. Fri Jan 12 14:59:46 ID:fvtoJLOdMAmYCtCW0gi3vAzwVFs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



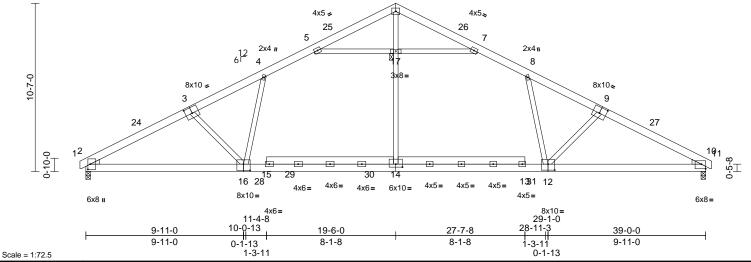


Plate Offsets (X, Y): [2:0-4-0,0-1-13], [3:0-5-0,0-4-8], [9:0-5-0,0-4-8], [10:Edge,0-3-8], [12:0-5-0,0-4-8], [14:0-5-0,0-2-4], [16:0-5-0,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.50	12-23	>943	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.72	16-20	>649	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.06	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 295 lb	FT = 20%

LUMBER

2x6 SP No.2 *Except* 9-6,3-6:2x6 SP 2400F TOP CHORD

2.0E

BOT CHORD 2x6 SP 2400F 2.0E *Except* 14-15,13-14:2x6 SP No.2

WFBS 2x4 SP No.3 *Except* 14-6:2x4 SP No.2

WEDGE Left: 2x4 SP No.3 Right: 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or

3-11-1 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

JOINTS 1 Brace at Jt(s): 17

REACTIONS 2=0-3-8, 10=0-3-8 (size)

Max Horiz 2=157 (LC 18)

Max Uplift 2=-34 (LC 14), 10=-77 (LC 15)

Max Grav 2=1923 (LC 3), 10=1881 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=0/9, 2-4=-3321/78, 4-5=-2644/151,

5-6=-1305/0, 6-7=-1327/0, 7-8=-2653/142,

8-10=-3247/151, 10-11=0/9

BOT CHORD 2-10=-129/2911

WEBS 14-17=0/1007, 6-17=0/1066, 8-12=-54/452,

9-12=-534/318, 4-16=0/554, 3-16=-601/250,

5-17=-1473/288, 7-17=-1458/302

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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-3-14 to 3-6-14, Interior (1) 3-6-14 to 15-7-5, Exterior(2R) 15-7-5 to 23-4-11, Interior (1) 23-4-11 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 15-4-4 from left end, supported at two points, 5-0-0 apart.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



January 15,2024

Page: 1

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

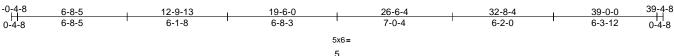
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TP11 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 3 Mason Ridge-Roof-Cali N GLH VMB 163021352 24100077 A04 3 Roof Special Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries. Inc. Fri Jan 12 14:59:47 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



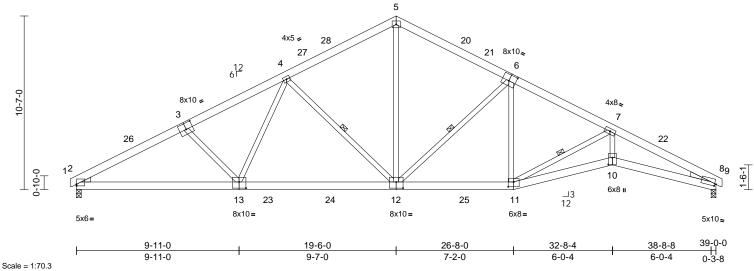


Plate Offsets (X, Y): [2:Edge,0-1-3], [3:0-5-0,0-4-8], [6:0-5-0,0-4-8], [8:0-1-0,0-1-9], [10:0-5-0,0-3-0], [11:0-4-0,0-3-8], [12:0-5-0,0-4-8], [13:0-5-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.25	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.46	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.21	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 280 lb	FT = 20%

LUMBER

2x6 SP No.2 TOP CHORD

2x6 SP No.2 *Except* 11-10,10-8:2x6 SP **BOT CHORD**

2400F 2.0E **WEBS** 2x4 SP No.3 Left: 2x4 SP No.3 WEDGE

Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

WEBS 1 Row at midpt 6-12, 7-11, 4-12

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

Max Horiz 2=-157 (LC 15) Max Uplift 2=-156 (LC 14), 8=-156 (LC 15)

Max Grav 2=1727 (LC 3), 8=1722 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

5-7=-2576/327, 7-8=-4875/436, 8-9=0/9,

TOP CHORD 1-2=0/9, 2-4=-2970/318, 4-5=-1991/328

BOT CHORD 2-11=-326/2569, 10-11=-323/4370,

8-10=-320/4343

WEBS 5-12=-105/1405, 6-12=-851/233, 6-11=0/402,

7-11=-2252/257, 3-13=-286/186,

4-13=-18/566, 4-12=-782/237, 7-10=-69/2050

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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-3-14 to 3-6-14, Interior (1) 3-6-14 to 15-7-5, Exterior(2R) 15-7-5 to 23-4-11, Interior (1) 23-4-11 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 zone; cantilever left and right exposed; end vertical left and right exposed: C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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 overal 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/TP11 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
 3 Mason Ridge-Roof-Cali N GLH VMB

 24100077
 A05
 Roof Special
 4
 1
 Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Fri Jan 12 14:59:48 ID:zRFAQ5VdjTHmpTlx8qwP8Lzwj80-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f



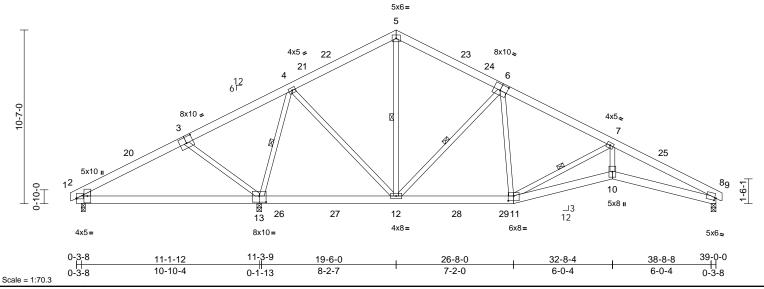


Plate Offsets (X, Y): [2:Edge,0-0-7], [3:0-5-0,0-4-8], [6:0-5-0,0-4-8], [8:0-1-0,0-1-13], [11:0-4-0,0-3-8], [13:0-5-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.14	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.25	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.10	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 279 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3 WEDGE 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-0-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc

bracing.

WEBS 1 Row at midpt 5-12, 7-11, 4-13, 6-12

REACTIONS (size) 2=0-3-0, 8=0-3-8, 13=0-3-8

Max Horiz 2=157 (LC 18)

Max Uplift 2=-167 (LC 35), 8=-123 (LC 15),

13=-174 (LC 14)

Max Grav 2=240 (LC 34), 8=1071 (LC 6), 13=2358 (LC 3)

I J=.

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=0/9, 2-4=-116/930, 4-5=-557/196,

5-7=-1203/196, 7-8=-2762/285, 8-9=0/9 BOT CHORD 2-12=-560/234, 11-12=0/998,

10-11=-189/2459, 8-10=-190/2446

5-12=-33/189, 7-11=-1536/241,

4-13=-1712/249, 6-12=-869/233,

3-13=-473/203, 6-11=-4/485, 4-12=-60/1125,

7-10=-15/1268

NOTES

WEBS

TOP CHORD

 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-3-14 to 3-6-14, Interior (1) 3-6-14 to 15-7-5, Exterior(2R) 15-7-5 to 23-4-11, Interior (1) 23-4-11 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, and 8. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

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

Design valid for use only with Mil 1ek® 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 ANS/ITPH Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Roa Edenton, NC 27932

Qty Job Truss Truss Type Ply 3 Mason Ridge-Roof-Cali N GLH VMB 163021354 24100077 A06 Roof Special Job Reference (optional)

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries. Inc. Fri Jan 12 14:59:49 ID:_7cSAj4o96MMcJVXf9hWJZzwj0p-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1

39-4-8 19-6-0 26-6-4 32-8-4 39-0-0 19-6-0 7-0-4 6-2-0 6-3-12 0-4-8

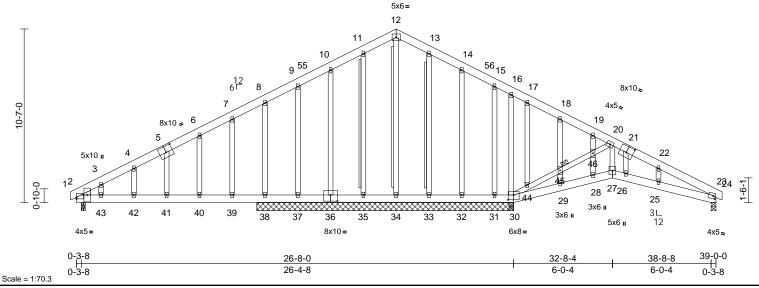


Plate Offsets (X, Y): [2:Edge,0-1-3], [5:0-5-0,0-4-8], [21:0-5-0,0-4-8], [23:0-1-7,0-2-0], [30:0-4-0,0-3-8], [36:0-5-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	0.18	41	>768	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.23	41	>605	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	-0.04	38	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 351 lb	FT = 20%

LUMBER TOP CHORD 2x6 SP No 2 2x6 SP No 2 **BOT CHORD WEBS** 2x4 SP No.3

OTHERS 2x4 SP No.3 *Except* 0-0,0-0,0-0:2x4 SP

No.2(flat) WEDGE Left: 2x4 SP No.3

BRACING

TOP CHORD

Structural wood sheathing directly applied or

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc

bracing, Except: 10-0-0 oc bracing:

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

WEBS T-Brace: 2x4 SP No.2 - 12-34,

11-35, 13-33

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails. 6in

o.c., with 3in minimum end distance. Brace must cover 90% of web length.

JOINTS 1 Brace at Jt(s): 45

Max Grav

REACTIONS (size) 2=0-3-0, 23=0-3-8, 30=15-8-0,

31=15-8-0, 32=15-8-0, 33=15-8-0,

34=15-8-0, 35=15-8-0, 36=15-8-0, 37=15-8-0, 38=15-8-0

Max Horiz 23=157 (LC 18)

Max Uplift 2=-125 (LC 11), 23=-80 (LC 14),

30=-188 (LC 15), 31=-97 (LC 1),

32=-50 (LC 15), 33=-28 (LC 15),

34=-1 (LC 34), 36=-95 (LC 14),

37=-528 (LC 1), 38=-332 (LC 14)

2=500 (LC 34), 23=526 (LC 1),

30=773 (LC 1), 31=5 (LC 14),

32=237 (LC 22), 33=238 (LC 22), 34=244 (LC 14), 35=195 (LC 21),

36=364 (LC 21), 37=179 (LC 11),

38=1180 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/9, 2-3=-243/217, 3-4=-250/236, 4-6=-189/250, 6-7=-126/229, 7-8=-119/260,

8-9=-294/434, 9-10=-186/380,

10-11=-199/429, 11-12=-194/453, 12-13=-172/452, 13-14=-181/430,

14-15=-182/386. 15-16=-204/370.

16-17=-173/336, 17-18=-154/313,

18-19=-172/283, 19-20=-204/268,

20-22=-953/422, 22-23=-1013/379

23-24=0/9

BOT CHORD 2-43=-115/159, 42-43=-115/159, 41-42=-115/159, 40-41=-112/153,

39-40=-112/153, 38-39=-112/153,

37-38=-112/153, 35-37=-112/153,

34-35=-112/153, 33-34=-112/153,

32-33=-112/153, 31-32=-112/153, 30-31=-112/153, 29-30=-291/863,

28-29=-293/875, 27-28=-292/883,

26-27=-290/877, 25-26=-296/881,

23-25=-290/856

WEBS 16-30=-170/63, 30-44=-989/262

> 44-45=-899/233. 45-46=-884/231. 20-46=-913/240, 20-27=-117/503,

12-34=-281/51, 11-35=-187/27

10-36=-205/89 9-37=-146/138

8-38=-506/365, 7-39=-120/69, 6-40=-74/74

5-41=-130/72, 4-42=-67/68, 3-43=-68/46,

13-33=-205/52. 14-32=-179/78.

15-31=-28/39, 17-44=-163/53, 18-45=-45/57,

29-45=-15/61, 19-46=0/77, 28-46=-12/31,

21-26=-4/67, 22-25=-69/63

NOTES

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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-3-14 to 3-6-0, Interior (1) 3-6-0 to 15-6-0, Exterior(2R) 15-6-0 to 23-6-0, Interior (1) 23-6-0 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 zone; end vertical left and right exposed; porch left exposed:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.



January 15,2024

Continued on page 2

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 overal 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/TP11 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	3 Mason Ridge-Roof-Cali N GLH VMB	
24100077	A06	Roof Special	1	1	Job Reference (optional)	163021354

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Fri Jan 12 14:59:49 ID:_7cSAj4o96MMcJVXf9hWJZzwj0p-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 2

- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi, Joint 31 User Defined crushing capacity of 425 psi.
- 12) Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) N/A
- 14) N/A
- 15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 16) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

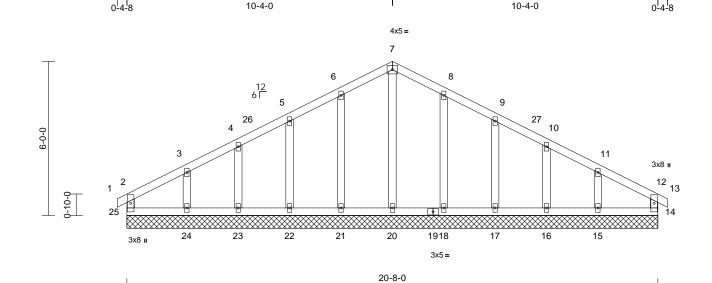
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	3 Mason Ridge-Roof-Cali N GLH VMB	
24100077	B01	Common Supported Gable	1	1	Job Reference (optional)	l63021355

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Fri Jan 12 14:59:50 ID:Ts5oRqu4mUn5A3y3B3BrkuzwimG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

20-8-0

Page: 1



1-11-4 CSI **DEFL** I/defI L/d **PLATES** GRIP Loading (psf) Spacing in (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.07 Vert(LL) n/a 999 MT20 244/190 n/a Snow (Pf) 20.0 BC Lumber DOL 1 15 0.04 Vert(CT) n/a n/a 999 **TCDL** 10.0 Rep Stress Incr YES WB 0.09 Horz(CT) 0.00 14 n/a n/a **BCLL** 0.0 IRC2018/TPI2014 Matrix-MR BCDL 10.0 Weight: 111 lb FT = 20%

LUMBER

Scale = 1:44.8

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x4 SP No.3 WFBS OTHERS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

REACTIONS (size)

14=20-8-0, 15=20-8-0, 16=20-8-0, 17=20-8-0, 18=20-8-0, 20=20-8-0, 21=20-8-0, 22=20-8-0, 23=20-8-0, 24=20-8-0, 25=20-8-0

Max Horiz 25=-80 (LC 12)

Max Uplift 14=-16 (LC 14), 15=-72 (LC 15), 16=-34 (LC 15), 17=-45 (LC 15),

18=-42 (LC 15), 21=-42 (LC 14), 22=-46 (LC 14), 23=-33 (LC 14), 24=-77 (LC 14), 25=-26 (LC 15)

Max Grav 14=118 (LC 1), 15=174 (LC 35), 16=164 (LC 22), 17=222 (LC 22) 18=237 (LC 22), 20=144 (LC 27), 21=237 (LC 21), 22=222 (LC 21), 23=164 (LC 21), 24=174 (LC 34),

25=118 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-25=-100/79. 1-2=0/14. 2-3=-78/53. 3-4=-57/90, 4-5=-58/131, 5-6=-74/178,

6-7=-89/221, 7-8=-89/221, 8-9=-74/178 9-10=-58/131, 10-11=-48/90, 11-12=-68/39,

12-13=0/14, 12-14=-100/79

BOT CHORD 24-25=-23/49, 23-24=-23/49, 22-23=-23/49, 21-22=-23/49, 20-21=-23/49, 18-20=-23/49, 17-18=-23/49, 16-17=-23/49, 15-16=-23/49,

14-15=-23/49

WEBS

10-4-0

7-20=-134/21, 6-21=-198/73, 5-22=-183/81, 4-23=-128/68, 3-24=-128/119, 8-18=-198/73, 9-17=-183/81, 10-16=-128/68, 11-15=-128/119

NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-4-8 to 2-4-0, Exterior(2N) 2-4-0 to 7-4-0, Corner(3R) 7-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 18-0-8. Corner(3E) 18-0-8 to 21-0-8 zone: end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 25. 16 lb uplift at joint 14, 42 lb uplift at joint 21, 46 lb uplift at joint 22, 33 lb uplift at joint 23, 77 lb uplift at joint 24, 42 lb uplift at joint 18, 45 lb uplift at joint 17, 34 lb uplift at joint 16 and 72 lb uplift at joint 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



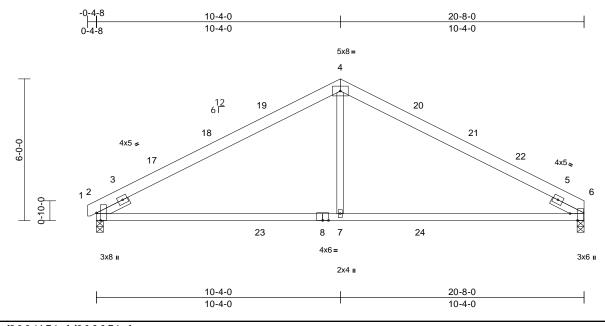
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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ſ	Job	Truss	Truss Type	Qty	Ply	3 Mason Ridge-Roof-Cali N GLH VMB	
	24100077	B02	Common	1	1	Job Reference (optional)	l63021356

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Scale = 1:48.8

Plate Offsets (X, Y):	[2:0-3-14,Edge]	, [6:0-3-8,Edge]
-----------------------	-----------------	------------------

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.95	DEFL Vert(LL)	in -0.24	(loc) 7-15	l/defl >999		PLATES MT20	GRIP 244/190
Snow (Pf) TCDL	20.0 10.0	Lumber DOL Rep Stress Incr	1.15 YES	BC WB	0.84 0.21	Vert(CT) Horz(CT)	-0.40 0.05	7-15	>617 n/a	180 n/a	IWITZO	244/100
BCLL BCDL	0.0 * 10.0	Code	IRC2018/TPI2014	Matrix-MSH	0.21	11012(01)	0.03	2	Π/a	II/a	Weight: 99 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2

BOT CHORD 2x4 SP No.2 *Except* 8-6:2x4 SP No.1

WEBS 2x4 SP No.3

SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or

1-7-8 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 Horiz 2=87 (LC 14)

Max Uplift 2=-84 (LC 14), 6=-78 (LC 15)

Max Grav 2=980 (LC 5), 6=964 (LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/9, 2-4=-1229/216, 4-6=-1229/216

BOT CHORD 2-7=-271/1023, 6-7=-244/1023

WEBS 4-7=0/545

NOTES

- 1) Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-3-14 to 2-8-2, Interior (1) 2-8-2 to 7-4-0, Exterior(2R) 7-4-0 to 13-4-0, Interior (1) 13-4-0 to 17-8-0, Exterior(2E) 17-8-0 to 20-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

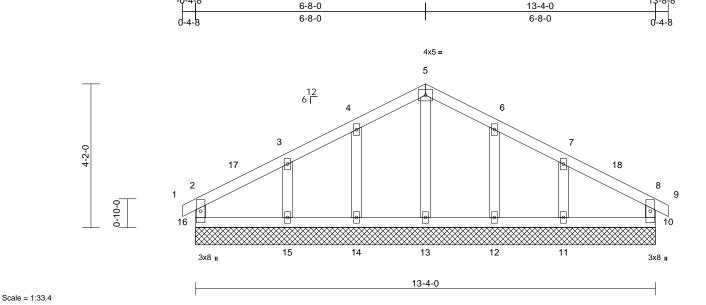
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	3 Mason Ridge-Roof-Cali N GLH VMB	
24100077	C01	Common Supported Gable	1	1	Job Reference (optional)	163021357

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Page: 1



L	U	M	В	Е	R

Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL

BCDL

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x4 SP No.3 WFBS OTHERS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

(psf)

20.0

20.0

10.0

0.0

10.0

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size)

10=13-4-0, 11=13-4-0, 12=13-4-0, 13=13-4-0, 14=13-4-0, 15=13-4-0, 16=13-4-0

Spacing

Plate Grip DOL

Rep Stress Incr

Lumber DOL

1-11-4

1.15

1 15

YES

IRC2018/TPI2014

Max Horiz 16=59 (LC 13)

Max Uplift 10=-20 (LC 14), 11=-64 (LC 15),

12=-38 (LC 15), 14=-38 (LC 14),

15=-66 (LC 14), 16=-24 (LC 15)

Max Grav 10=143 (LC 22), 11=262 (LC 22), 12=225 (LC 22), 13=127 (LC 22),

14=225 (LC 21), 15=262 (LC 21),

16=143 (LC 21)

FORCES (lb) - Maximum Compression/Maximum

Tension

2-16=-123/106, 1-2=0/14, 2-3=-70/67, TOP CHORD

3-4=-75/140, 4-5=-87/195, 5-6=-87/195.

6-7=-75/140, 7-8=-67/67, 8-9=0/14,

8-10=-123/106

BOT CHORD 15-16=-15/44, 14-15=-15/44, 13-14=-15/44, 12-13=-15/44, 11-12=-15/44, 10-11=-15/44

WEBS 5-13=-89/6, 4-14=-190/99, 3-15=-211/141,

6-12=-190/99, 7-11=-211/141

NOTES

1) Unbalanced roof live loads have been considered for this design.

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-4-8 to 2-8-0, Exterior(2N) 2-8-0 to 3-8-0, Corner(3R) 3-8-0 to 9-8-0, Exterior(2N) 9-8-0 to 10-8-0, Corner(3E) 10-8-0 to 13-8-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

DEFL

Vert(LL)

Vert(CT)

Horz(CT)

0.09

0.05

0.05

in

n/a

n/a

0.00

(loc)

10

CSI

TC

BC

WB

Matrix-MR

- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 16, 20 lb uplift at joint 10, 38 lb uplift at joint 14, 66 lb uplift at joint 15, 38 lb uplift at joint 12 and 64 lb uplift at ioint 11.

14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Weight: 63 lb

PLATES

MT20

GRIP

244/190

FT = 20%

LOAD CASE(S) Standard

I/defI

n/a 999

n/a 999

n/a n/a

L/d





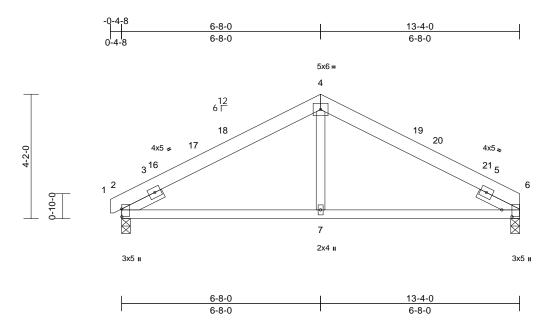
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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/TP11 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	3 Mason Ridge-Roof-Cali N GLH VMB	
24100077	C02	Common	1	1	Job Reference (optional)	l63021358

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Scale = 1:38.6

Plate Offsets (X, Y):	[2:0-3-2,0-0-1],	[6:0-2-12,0-4-1]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.04	7-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07	7-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 66 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 BOT CHORD 2x4 SP No 2 **WEBS** 2x4 SP No.3

SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3

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

Max Horiz 2=58 (LC 14)

Max Uplift 2=-56 (LC 14), 6=-50 (LC 15)

Max Grav 2=639 (LC 21), 6=619 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/9, 2-4=-715/239, 4-6=-715/238

BOT CHORD 2-7=-161/552, 6-7=-157/552

WEBS 4-7=0/261

NOTES

- 1) Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-3-14 to 2-8-2, Interior (1) 2-8-2 to 3-8-0, Exterior(2R) 3-8-0 to 9-8-0, Interior (1) 9-8-0 to 10-4-0, Exterior(2E) 10-4-0 to 13-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

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)

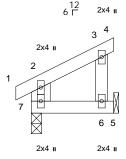


Job	Truss	Truss Type	Qty	Ply	3 Mason Ridge-Roof-Cali N GLH VMB	
24100077	D01	Jack-Closed	3	1	Job Reference (optional)	l63021359

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Scale = 1:28

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	n/a	-	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 10 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2

2x6 SP No.2 *Except* 3-6:2x4 SP No.3 WFBS

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 5= Mechanical, 7=0-3-0

Max Horiz 7=37 (LC 11)

Max Uplift 5=-29 (LC 14), 7=-6 (LC 10)

Max Grav 5=84 (LC 21), 7=152 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-7=-120/48, 1-2=0/23, 2-3=-37/20, 3-4=-11/0

BOT CHORD 6-7=0/0, 5-6=0/0 3-6=-81/63

WEBS **NOTES**

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 7 User Defined crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 7 and 29 lb uplift at joint 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

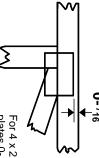


Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- ¹/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 × 4

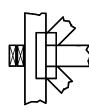
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

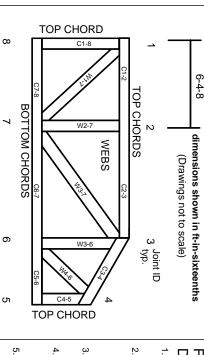
Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.

Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-22:

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282 ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek



MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

▲ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.