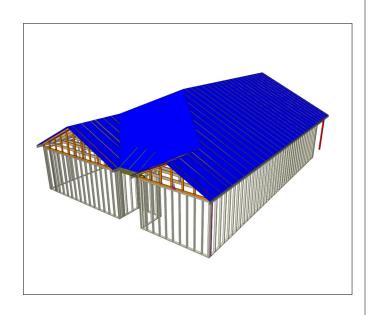


Kempsville Sanford Component Plant 298 Harvey Faulk Rd Sanford, NC 27332

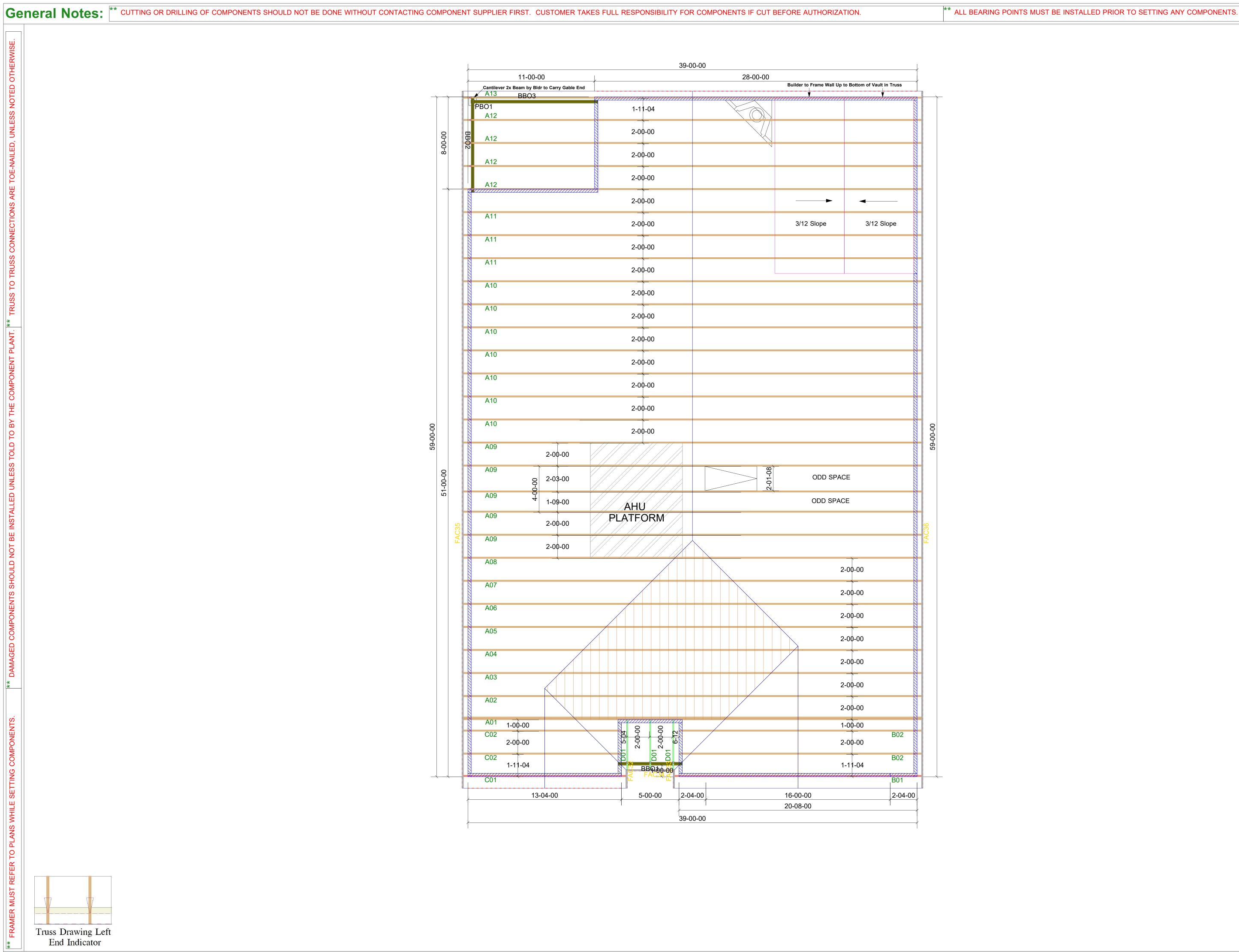
Phone #:919-775-1450

Builder: DR HORTON Model: 43 Mason Ridge Cali "M" LH



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.



Revisions Name 00/00/00 Name

00/00/00 Name 00/00/00 Name

00/00/00 Name

n Ridge-Roof-Ca VMB GLH DR Horton Inc

ROOF 43 8/2/2024 Designer:

Nate Donaldson Project Number: **24070189-01** Sheet Number:

Truss Drawing Left End Indicator



RE: 24070189

43 Mason Ridge-Roof-Cali M VMB GRH

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: DR Horton Inc Project Name: 24070189 Lot/Block: 43 Model:

Address: Subdivision: Mason Ridge

City: Spring Lake State: NC

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.7

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

This package includes 18 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	165976663	A01	6/4/2024
2	165976664	A02	6/4/2024
3	165976665	A03	6/4/2024
4	165976666	A04	6/4/2024
5	165976667	A05	6/4/2024
6	165976668	A06	6/4/2024
7	165976669	A07	6/4/2024
8	165976670	A08	6/4/2024
9	165976671	A09	6/4/2024
10	165976672	A10	6/4/2024
11	165976673	A11	6/4/2024
12	165976674	A12	6/4/2024
13	165976675	A13	6/4/2024
14	165976676	B01	6/4/2024
15	165976677	B02	6/4/2024
16	165976678	C01	6/4/2024
17	165976679	C02	6/4/2024
18	165976680	D01	6/4/2024

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.

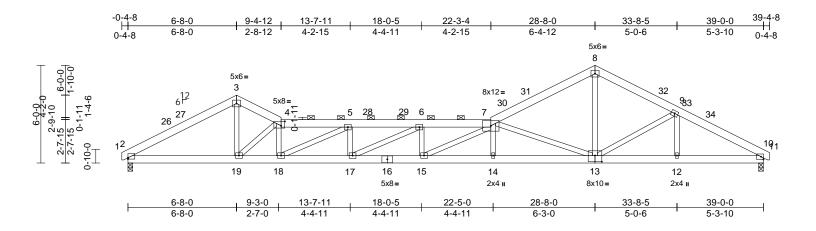


June 04, 2024

Job	Truss	Truss Type	Qty	Ply	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A01	Roof Special	1	2	Job Reference (optional)	165976663

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:51 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:70.7

Plate Offsets (X, Y): [2:Edge,0-0-15], [4:0-2-12,0-3-4], [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	0.24	Vert(LL)	-0.31	14-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.60	14-15	>780	180	1	
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.08	10	n/a	n/a	1	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							1	
BCDL	10.0	1									Weight: 525 lb	FT = 20%

LUMBER

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

BRACING

FORCES

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except

2-0-0 oc purlins (5-9-9 max.): 4-7. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing

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

Max Horiz 2=84 (LC 18)

Max Uplift 2=-226 (LC 14), 10=-113 (LC 14) Max Grav 2=1610 (LC 46), 10=1647 (LC 50)

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/16, 2-3=-2768/396, 3-4=-2698/414,

4-5=-4946/692, 5-6=-6480/858,

6-7=-7014/895, 7-8=-2629/360,

8-9=-2585/370, 9-10=-2833/351, 10-11=0/9

BOT CHORD 2-19=-351/2376, 18-19=-706/4996,

17-18=-869/6480, 15-17=-905/7013 14-15=-816/6768, 12-14=-811/6767,

10-12=-243/2443

WEBS 4-18=-46/872, 7-14=-9/138, 8-13=-152/1858,

9-13=-364/142, 7-13=-4778/654,

9-12=-79/74, 7-15=-133/718, 5-17=0/399

5-18=-1749/186, 6-17=-707/71, 6-15=-205/154, 3-19=-241/2230,

4-19=-3497/460

NOTES

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 - Top chords connected as follows: 2x6 2 rows staggered at 0-9-0 oc.
 - Bottom chords connected as follows: 2x6 2 rows staggered at 0-9-0 oc.
- Web connected as follows: 2x4 1 row at 0-9-0 oc. All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-3-14 to 3-6-14, Exterior(2R) 3-6-14 to 6-8-0, Exterior(2E) 6-8-0 to 9-4-12, Interior (1) 9-4-12 to 24-9-5, Exterior(2R) 24-9-5 to 32-6-11, Interior (1) 32-6-11 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 4x5 MT20 unless otherwise indicated.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 11) * 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.
- 12) 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.
- 13) 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.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 4,2024

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

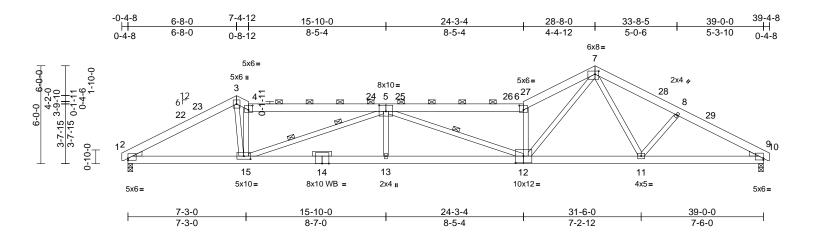
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A02	Roof Special	1	1	Job Reference (optional)	165976664

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:52 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:70.7

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

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	0.88	Vert(LL)	-0.39	12-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.73	12-13	>645	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.10	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 263 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No 2

2x6 SP 2400F 2.0E *Except* 12-9:2x6 SP **BOT CHORD**

No.2

WEBS 2x4 SP No.3 *Except* 15-3,12-7:2x4 SP No.2

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

BRACING

BOT CHORD

TOP CHORD

TOP CHORD Structural wood sheathing directly applied or

3-0-6 oc purlins, except

2-0-0 oc purlins (2-2-0 max.): 4-6. Rigid ceiling directly applied or 10-0-0 oc

bracing.

WEBS 1 Row at midpt **WEBS** 2 Rows at 1/3 pts 5-15

REACTIONS (size) 2=0-3-8, 9=0-3-8 Max Horiz 2=84 (LC 18)

Max Uplift 2=-226 (LC 14), 9=-113 (LC 14) Max Grav 2=1604 (LC 21), 9=1670 (LC 50)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=0/16, 2-3=-2926/397, 3-4=-3533/492, 4-6=-4630/540, 6-7=-5247/669,

7-8=-2745/373, 8-9=-2948/373, 9-10=0/9

BOT CHORD 2-15=-353/2562, 13-15=-650/5354, 11-13=-650/5354, 9-11=-262/2539

WEBS 3-15=-315/3036, 4-15=-2101/318,

5-15=-2372/249, 5-13=0/362, 5-12=-776/159,

6-12=-2766/442, 7-12=-512/4025,

7-11=-50/427. 8-11=-350/169

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 3-6-14, Exterior(2R) 3-6-14 to 6-8-0, Exterior(2E) 6-8-0 to 7-4-12, Interior (1) 7-4-12 to 24-9-5, Exterior(2R) 24-9-5 to 32-6-11, Interior (1) 32-6-11 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
- 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.
- Provide adequate drainage to prevent water ponding.
- 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) 2 and 9. 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 4,2024

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

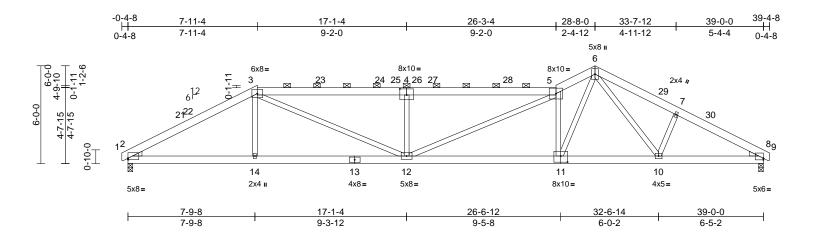
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A03	Roof Special	1	1	Job Reference (optional)	165976665

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:52 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:70.7

Plate Offsets (X, Y): [2:Edge,0-0-15], [4:0-5-0,0-4-8], [8:Edge,0-1-3], [11:0-5-0,0-4-8]

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	0.96	Vert(LL)	-0.29	12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.52	11-12	>893	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.10	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 261 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No 2 BOT CHORD 2x6 SP No.2

WFBS 2x4 SP No.3 *Except* 11-6:2x4 SP No.2

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

3-8-0 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 3-5.

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

bracing.

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

Max Horiz 2=84 (LC 18)

Max Uplift 2=-226 (LC 14), 8=-113 (LC 14)

Max Grav 2=1604 (LC 21), 8=1642 (LC 46)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=0/13, 2-3=-2959/392, 3-5=-4234/552,

5-6=-3694/499, 6-7=-2733/405,

7-8=-2863/366, 8-9=0/9 **BOT CHORD**

2-14=-336/2594, 12-14=-339/2591, 10-12=-343/3411, 8-10=-256/2465

WEBS 3-14=0/309, 3-12=-226/1809, 4-12=-944/268

5-12=-161/905, 5-11=-2478/420,

6-11=-351/2842, 6-10=-111/435,

7-10=-349/167

NOTES

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 4-0-9, Exterior(2R) 4-0-9 to 11-9-15, Interior (1) 11-9-15 to 26-3-4. Exterior(2R) 26-3-4 to 32-6-11. Interior (1) 32-6-11 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
- 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.
- Provide adequate drainage to prevent water ponding.
- 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) 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 4,2024

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

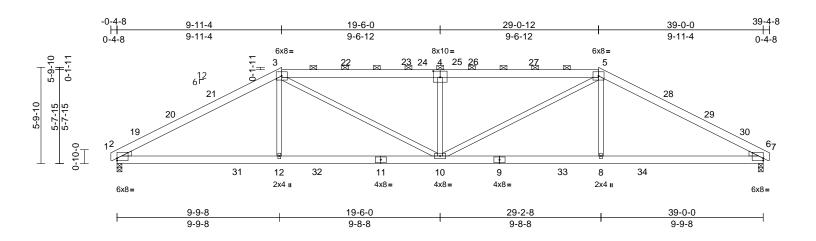
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A04	Hip	1	1	Job Reference (optional)	165976666

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:52 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:69.5

Plate Offsets (X, Y): [2	2:Edge,0-1-11], [4:0-5-0	0,0-4-8], [6:Edge,0-1-11]
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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	0.93	Vert(LL)	-0.25	10-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.41	10-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.11	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 245 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No 2 BOT CHORD 2x6 SP No.2

WFBS 2x4 SP No.3 *Except* 10-3,10-5:2x4 SP No.2

WEDGE Left: 2x4 SP No.3

Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or

2-2-0 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 3-5.

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=80 (LC 18)

Max Uplift 2=-89 (LC 11), 6=-89 (LC 10)

Max Grav 2=1769 (LC 5), 6=1769 (LC 6)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/9, 2-3=-3067/377, 3-5=-3714/462,

5-6=-3067/377, 6-7=0/9

BOT CHORD 2-12=-216/2686, 10-12=-219/2676,

8-10=-219/2676, 6-8=-216/2686

WEBS 3-12=0/465, 3-10=-214/1211, 4-10=-955/278,

5-10=-214/1211, 5-8=0/465

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 6-0-9, Exterior(2R) 6-0-9 to 13-9-15, Interior (1) 13-9-15 to 25-2-1. Exterior(2R) 25-2-1 to 32-11-7. Interior (1) 32-11-7 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
- 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.
- Provide adequate drainage to prevent water ponding.
- 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 6. 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

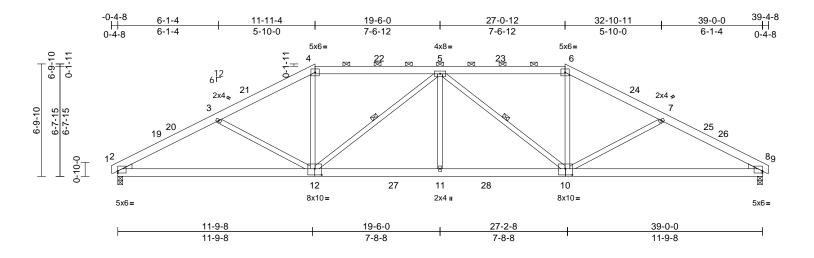
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/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	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A05	Hip	1	1	Job Reference (optional)	165976667

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:52 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:69.7

Plate Offsets (X, Y): [2:Edge,0-1-7], [8:Edge,0-1-7], [10:0-5-0,0-4-8], [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	0.51	Vert(LL)	-0.16	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.29	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.10	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 266 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 **BOT CHORD** 2x6 SP No.2 **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

4-0-6 oc purlins, except

2-0-0 oc purlins (4-4-1 max.): 4-6. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

WEBS 5-12, 5-10 1 Row at midpt

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

Max Horiz 2=96 (LC 18)

Max Uplift 2=-97 (LC 14), 8=-97 (LC 15)

Max Grav 2=1735 (LC 45), 8=1735 (LC 45)

FORCES Tension

(lb) - Maximum Compression/Maximum

TOP CHORD

1-2=0/9, 2-3=-2959/437, 3-4=-2701/384,

4-5=-2410/389, 5-6=-2410/389, 6-7=-2701/384, 7-8=-2959/437, 8-9=0/9

BOT CHORD 2-11=-307/2974, 8-11=-307/2974

WEBS 3-12=-503/213, 4-12=0/844, 5-12=-731/164, 5-11=0/338, 5-10=-731/163, 6-10=0/844,

7-10=-503/214

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 8-0-9, Exterior(2R) 8-0-9 to 15-9-15, Interior (1) 15-9-15 to 23-2-1, Exterior(2R) 23-2-1 to 30-11-7, Interior (1) 30-11-7 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
- 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.
- Provide adequate drainage to prevent water ponding.
- 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.
- 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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.

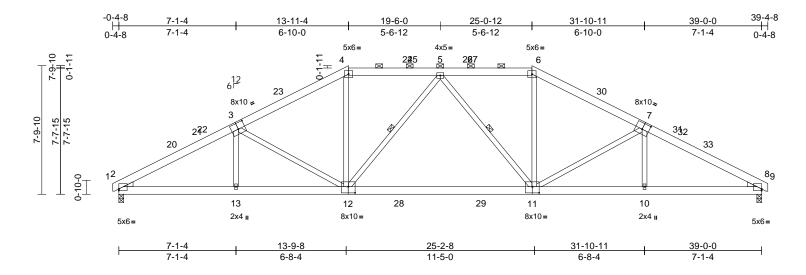
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/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	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A06	Hip	1	1	Job Reference (optional)	165976668

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:53 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:69.9

Plate Offsets (X, Y): [2:Edge,0-1-3], [3:0-5-0,0-4-8], [7:0-5-0,0-4-8], [8:Edge,0-1-3], [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	0.45	Vert(LL)	-0.24	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.42	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.10	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

WEBS

TOP CHORD Structural wood sheathing directly applied or

3-10-3 oc purlins, except

2-0-0 oc purlins (4-9-14 max.): 4-6. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

5-12, 5-11 1 Row at midpt

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

Max Horiz 2=112 (LC 14)

Max Uplift 2=-115 (LC 14), 8=-115 (LC 15)

Max Grav 2=1775 (LC 45), 8=1775 (LC 45)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=0/9, 2-4=-3071/399, 4-5=-2212/402,

5-6=-2212/402, 6-8=-3071/399, 8-9=0/9 **BOT CHORD** 2-13=-269/2663, 10-13=-270/2662,

8-10=-269/2663

WEBS 3-13=0/177, 3-12=-618/206, 4-12=-12/788,

5-12=-379/148, 5-11=-379/148, 6-11=-12/788,

7-11=-618/207, 7-10=0/177

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 10-0-9, Exterior(2R) 10-0-9 to 17-9-15, Interior (1) 17-9-15 to 21-2-1, Exterior(2R) 21-2-1 to 28-11-7, Interior (1) 28-11-7 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
- 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.
- Provide adequate drainage to prevent water ponding.
- 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.
- 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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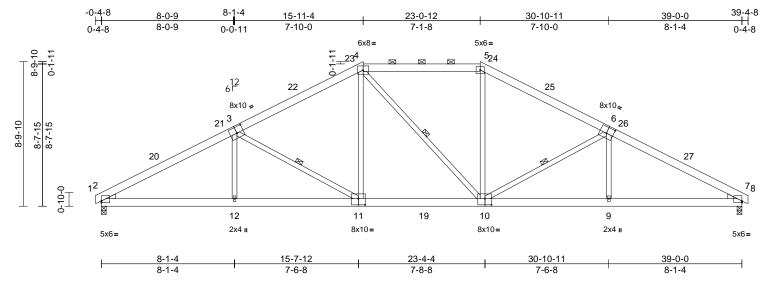
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Job	Truss	Truss Type	Qty	Ply	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A07	Hip	1	1	Job Reference (optional)	165976669

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:53 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:70.1

Plate Offsets (X, Y): [2:Edge,0-1-3], [3:0-5-0,0-4-8], [6:0-5-0,0-4-8], [7:Edge,0-1-3], [10:0-4-12,0-4-8], [11:0-5-0,0-4-8]

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	0.62	Vert(LL)	-0.16	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.27	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.11	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 271 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 **BOT CHORD** 2x6 SP No.2

WEBS 2x4 SP No.3 *Except* 10-4:2x4 SP No.2

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

3-7-0 oc purlins, except

2-0-0 oc purlins (4-7-0 max.): 4-5. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

WEBS 3-11, 4-10, 6-10 1 Row at midpt

REACTIONS (size) 2=0-3-8, 7=0-3-8

Max Horiz 2=128 (LC 18)

Max Uplift 2=-132 (LC 14), 7=-132 (LC 15)

Max Grav 2=1810 (LC 45), 7=1804 (LC 45)

(lb) - Maximum Compression/Maximum Tension

4-5=-2095/414, 1-2=0/9, 2-4=-3147/405,

TOP CHORD 5-7=-3135/404, 7-8=0/9

BOT CHORD 2-12=-253/2728, 9-12=-254/2726,

7-9=-254/2718

WEBS 3-12=0/270, 3-11=-736/224, 4-11=-21/698,

4-10=-235/239, 5-10=0/671, 6-10=-734/225,

NOTES

FORCES

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 12-0-9, Exterior(2R) 12-0-9 to 26-11-7, Interior (1) 26-11-7 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
- 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.
- Provide adequate drainage to prevent water ponding.
- 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 7. 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 4,2024

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 Truss Type Qtv Ply 43 Mason Ridge-Roof-Cali M VMB GRH 165976670 24070189 A08 Hip Job Reference (optional) Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:53 Page: 1 ID:fvtoJLOdMAmYCtCW0gi3vAzwVFs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 21-0-12 19-6-0 39-4-8 1 0-4-8 7-5-12 17-11-4 24-4-11 27-9-4 31-6-4 39-0-0 3-4-9 7-5-12 3-9-0 3-4-9 3-3-15 3-9-0 3-3-15 7-5-12 1-6-12 3x10 II 5x6= 7 8 9 3x5= 3x5= ¹⁰36 35 ⁶ 12 6F 23 22 11 8x10 = 33³⁴ ³⁷38 2x4 II 2x4 ı 8x10 9-9-10 9-7-15 12 32 39 4x5 ≤ 4x5. 13 3 1415 20 4019 41 42 1743 16 4x6= 4x6= 4x6= 4x6= 6x10= 8x10= 4x6: 4x6= 4x6= 4x6= 8x10= 11-4-12 29-1-4 10-0-9 28-11 9-10-12 39-0-0 19-6-0 27-7-4 9-10-12 8-1-4 8-1-4 9-10-12 0-1-13 1-4-3 1-4-3 0-1-13 Scale = 1:71.9 Plate Offsets (X, Y): [2:0-3-12,0-2-9], [4:0-5-0,0-4-8], [12:0-5-0,0-4-8], [14:0-3-12,0-2-9], [16:0-5-0,0-5-0], [18:0-5-0,0-2-8], [20:0-5-0,0-5-0] Loading 2-0-0 CSI DEFL I/defI L/d **PLATES** GRIP (psf) Spacing (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.65 Vert(LL) -0.5316-30 >878 240 MT20 244/190 Snow (Pf) 20.0 Lumber DOL 1.15 BC 0.51 Vert(CT) -0.7420-26 >625 180

LUMBER

BOT CHORD

TCDL

BCLL

BCDL

TOP CHORD 2x6 SP No.2 *Except* 4-7,12-9:2x6 SP 2400F

10.0

0.0

10.0

Rep Stress Incr

Code

YES

IRC2018/TPI2014

2.0E

BOT CHORD 2x6 SP 2400F 2.0E *Except* 19-18,18-17:2x6

SP No.2

WFBS 2x4 SP No.3 *Except* 18-8:2x4 SP No.2 **SLIDER** Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3

BRACING

Structural wood sheathing directly applied or TOP CHORD

3-5-6 oc purlins, except

2-0-0 oc purlins (5-2-13 max.): 7-9. Rigid ceiling directly applied or 10-0-0 oc

bracing.

WEBS 1 Row at midpt 6-21, 10-21

JOINTS 1 Brace at Jt(s): 21

REACTIONS (size) 2=0-3-8, 14=0-3-8

Max Horiz 2=144 (LC 18)

Max Uplift 2=-26 (LC 14), 14=-69 (LC 15) Max Grav 2=2066 (LC 45), 14=2023 (LC 45)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/13, 2-5=-3508/113, 5-6=-2877/184,

6-7=-1441/0, 7-8=-1201/0, 8-9=-1217/0, 9-10=-1472/0, 10-11=-2887/173,

11-14=-3438/176, 14-15=0/13

BOT CHORD 2-14=-62/3061

WEBS 18-21=0/968, 8-21=0/915, 12-16=-528/329,

4-20=-597/259, 5-20=0/624, 11-16=-109/510, 6-22=-1591/289, 21-22=-1594/289 21-23=-1574/310, 10-23=-1569/310

7-22=-36/107, 9-23=-21/122

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 14-0-9, Exterior(2R) 14-0-9 to 24-9-7, Interior (1) 24-9-7 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

0.75

Horz(CT)

0.07

WB

Matrix-MSH

- 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.
- 200.0lb AC unit load placed on the bottom chord, 15-4-4 from left end, supported at two points, 5-0-0 apart.
- Provide adequate drainage to prevent water ponding.
- All plates are 4x6 MT20 unless otherwise indicated.
- 9) 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.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 14. 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

n/a

n/a

Weight: 299 lb

FT = 20%



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORF 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)

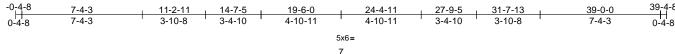


Job	Truss	Truss Type	Qty	Ply	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A09	Common	5	1	Job Reference (optional)	165976671

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:53 ID:fvtoJLOdMAmYCtCW0gi3vAzwVFs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

39-4-8

Page: 1



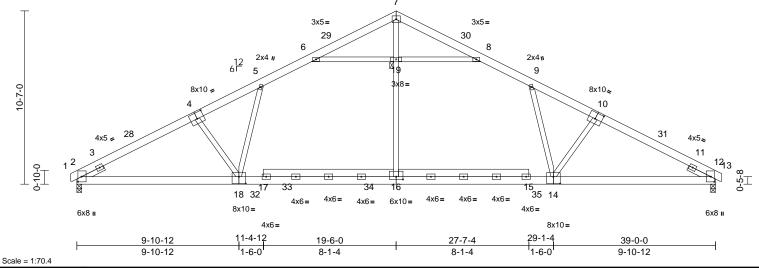


Plate Offsets (X, Y): [2:0-3-12,0-2-9], [4:0-5-0,0-4-8], [10:0-5-0,0-4-8], [12:0-3-12,0-2-9], [14:0-5-0,0-5-0], [16:0-5-0,0-2-0], [18:0-5-0,0-5-0]

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	0.96	Vert(LL)	-0.56	14-26	>831	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.81	18-22	>573	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.07	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 297 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No 2

2x6 SP 2400F 2.0E *Except* 16-15,17-16:2x6 **BOT CHORD**

SP No.2

WEBS 2x4 SP No.3 *Except* 16-7:2x4 SP No.2 SLIDER

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

-- 1-6-0

BRACING TOP CHORD

Structural wood sheathing directly applied. **BOT CHORD**

Rigid ceiling directly applied or 10-0-0 oc

JOINTS 1 Brace at Jt(s): 19

REACTIONS 2=0-3-8, 12=0-3-8 (size) Max Horiz 2=157 (LC 18)

Max Uplift 2=-36 (LC 14), 12=-78 (LC 15)

Max Grav 2=1919 (LC 3), 12=1876 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/13, 2-5=-3209/81, 5-6=-2610/148, 6-7=-1306/0, 7-8=-1329/0, 8-9=-2617/141,

9-12=-3144/138, 12-13=0/13

BOT CHORD 2-12=-68/2803

16-19=0/1028, 7-19=0/1049, 9-14=-75/443,

10-14=-503/314, 5-18=0/543, 4-18=-568/247,

6-19=-1422/295, 8-19=-1405/312

NOTES

WEBS

- 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 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

- 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
- 4) 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.
- 200.0lb AC unit load placed on the bottom chord, 15-4-4 from left end, supported at two points, 5-0-0 apart.
- All plates are 4x6 MT20 unless otherwise indicated.
- 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.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
- 11) 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/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	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A10	Common	7	1	Job Reference (optional)	165976672

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:54 ID:Evh8gst48bcCRWOT7Y3HWIzwjCh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

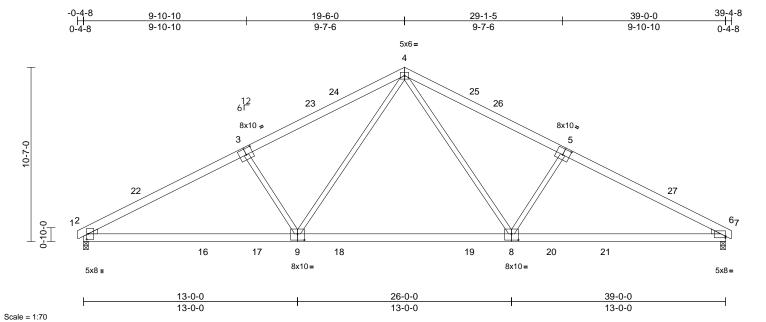


Plate Offsets (X, Y): [2:0-4-0,0-1-1], [3:0-5-0,0-4-8], [5:0-5-0,0-4-8], [6:Edge,0-1-3], [8:0-5-0,0-4-8], [9:0-5-0,0-4-8]

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	0.88	Vert(LL)	-0.31	8-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.51	8-9	>926	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.08	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 249 lb	FT = 20%

LUMBER

2x6 SP No.2 TOP CHORD **BOT CHORD** 2x6 SP No.2

WEBS 2x4 SP No.3 *Except* 9-4,8-4:2x4 SP No.2

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

2-2-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc

bracing

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

Max Horiz 2=157 (LC 18)

Max Uplift 2=-156 (LC 14), 6=-156 (LC 15)

Max Grav 2=1782 (LC 3), 6=1782 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD 1-2=0/9. 2-4=-2968/365. 4-6=-2980/364.

6-7=0/9

BOT CHORD 2-6=-292/2574

WEBS 3-9=-612/317, 4-9=-145/1172, 4-8=-144/1171,

5-8=-613/322

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 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
- 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) 2 and 6. 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.

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Job Truss Truss Type Qty Ply 43 Mason Ridge-Roof-Cali M VMB GRH 165976673 24070189 Roof Special 3 A11 Job Reference (optional)

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

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:54 ID:rmlr88hAphVvRaslw2ITbwzwjAL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

39-4-8

6x10 i

3L

12

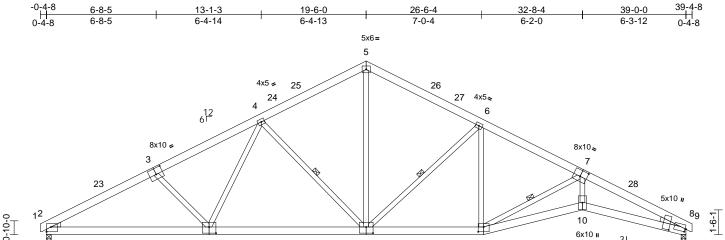
38-8-8

6-0-4

5x8-39-0-0

0-3-8

Page: 1



12

8x10=

22

26-8-0

7-2-0

11

6x8=

32-8-4

6-0-4

Plate Offsets (X, Y): [2:Edge, 0-3-8], [3:0-5-0, 0-4-8], [7:0-5-0, 0-4-8], [8:0-0-12, 0-2-1], [8:0-3-9, 1-0-2], [11:0-4-0, 0-3-8], [12:0-5-0, 0-4-8], [13:0-5-0, 0-4-8]

19-6-0

9-7-0

13

8x10=

20

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.24	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.44	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.19	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 280 lb	FT = 20%

LUMBER

Scale = 1:70.3

10-7-01

TOP CHORD 2x6 SP No 2

2x6 SP No.2 *Except* 10-8:2x6 SP 2400F **BOT CHORD**

9-11-0

9-11-0

2.0E

6x8=

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

2-10-15 oc purlins.

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

bracing, Except: 2-2-0 oc bracing: 10-11.

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

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=1723 (LC 3) (lb) - Maximum Compression/Maximum

FORCES

Tension

TOP CHORD

1-2=0/9, 2-4=-2965/319, 4-5=-1990/330, 5-6=-2002/327, 6-8=-4915/439, 8-9=0/9

BOT CHORD 2-11=-326/2578, 10-11=-320/4384,

8-10=-320/4406

WEBS 4-13=-25/584, 4-12=-772/238,

5-12=-109/1412, 6-12=-851/234, 6-11=0/403,

7-11=-2270/252, 7-10=-80/2104,

3-13=-300/189

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.
- 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) 8 and 2. 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 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)

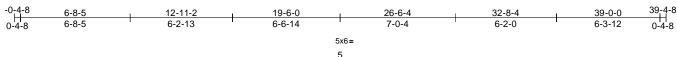


Job Truss Truss Type Qty Ply 43 Mason Ridge-Roof-Cali M VMB GRH 165976674 24070189 A12 Roof Special Job Reference (optional)

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

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:54 ID:zRFAQ5VdjTHmpTlx8qwP8Lzwj80-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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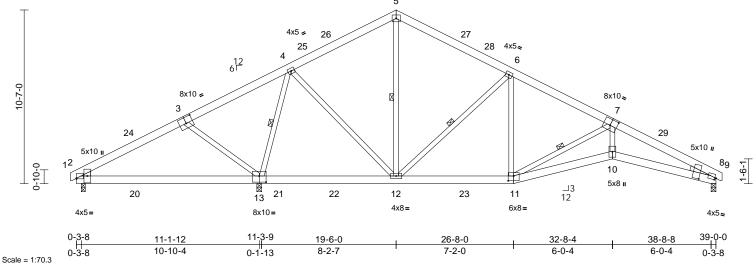


Plate Offsets (X, Y): [2:Edge,0-0-7], [3:0-5-0,0-4-8], [7:0-5-0,0-4-8], [8:0-0-14,0-1-5], [8:0-3-9,1-0-2], [11:0-4-0,0-3-8], [13:0-5-0,0-4-8]

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	0.45	Vert(LL)	0.18	13-16	>753	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	0.13	13-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.08	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 281 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

4-2-12 oc purlins.

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

bracing.

WEBS 4-13, 5-12, 6-12, 7-11 1 Row at midpt REACTIONS 2=0-3-0, 8=0-3-8, 13=0-3-8 (size)

Max Horiz 2=-157 (LC 15)

2=-129 (LC 11), 8=-126 (LC 15), Max Uplift

13=-173 (LC 14)

2=273 (LC 34), 8=1099 (LC 6),

13=2269 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/9, 2-4=-147/823, 4-5=-602/249,

5-6=-626/249. 6-8=-2840/333. 8-9=0/9 **BOT CHORD** 2-12=-457/224, 11-12=-65/1109,

10-11=-225/2524, 8-10=-225/2541 **WEBS** 4-13=-1626/181, 4-12=-55/1066,

5-12=-31/212, 6-12=-895/232, 6-11=0/473, 7-11=-1530/221, 7-10=-37/1316,

3-13=-465/260

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 3-6-14, 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; porch left 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.
- 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



June 4,2024

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 Truss Type Qty Ply 43 Mason Ridge-Roof-Cali M VMB GRH 165976675

24070189 A13 Roof Special 1 1 1 Job Reference (optional)

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

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:54 ID:_7cSAj4o96MMcJVXf9hWJZzwj0p-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

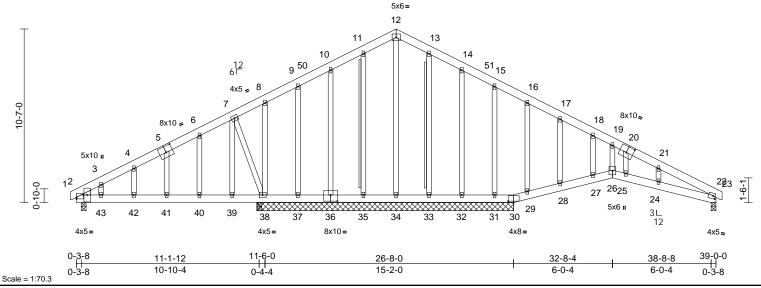


Plate Offsets (X, Y): [2:Edge,0-1-3], [5:0-5-0,0-4-8], [20:0-5-0,0-4-8], [22:0-1-7,0-2-0], [30:0-4-0,0-1-0], [36:0-5-0,0-4-8]

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	0.32	Vert(LL)	0.08	41-42	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.12	41-42	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	-0.02	30	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 340 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2

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

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

(flat) WEDGE Left:

Left: 2x4 SP No.3

BRACING TOP CHORD

D Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

WEBS T-Brace: 2x4 SP No.2 - 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.

REACTIONS (size) 2=

2=0-3-8, 22=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 2=1200 (LC 1), 22=-1200 (LC 1) Max Uplift 2=-43 (LC 14), 22=-50 (LC 15),

30=-226 (LC 15), 31=-121 (LC 35), 32=-53 (LC 15), 33=-17 (LC 15), 34=-88 (LC 1), 35=-21 (LC 14), 36=-49 (LC 14), 37=-66 (LC 14),

38=-131 (LC 14)

Max Grav 2=643 (LC 1), 22=652 (LC 1), 30=801 (LC 35), 31=32 (LC 15),

32=244 (LC 22), 33=195 (LC 22), 34=139 (LC 15), 35=206 (LC 21), 36=235 (LC 21), 37=223 (LC 21),

38=489 (LC 34)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/9, 2-3=-705/22, 3-4=-711/41,

4-6=-656/86, 6-7=-589/108, 7-8=-443/125, 8-9=-347/144, 9-10=-360/169, 10-11=-367/199, 11-12=-345/233, 12-13=-345/233, 13-14=-366/199, 14-15=-376/160, 15-16=-371/131, 16-17=-319/107, 17-18=-365/85, 18-19=-366/64, 19-21=-347/50,

21-22=-417/13, 22-23=0/9

BOT CHORD 2-43=-762/272, 42-43=-762/272, 41-42=-762/272, 40-41=-764/274, 39-40=-764/274, 38-39=-764/274,

37-38=-905/284, 35-37=-905/284, 34-35=-905/284, 33-34=-905/284, 32-33=-905/284, 31-32=-905/284,

30-31=-905/284, 29-30=-1011/317, 28-29=-946/298, 27-28=-934/295, 26-27=-907/285, 25-26=-885/275,

24-25=-918/285, 22-24=-1019/290 WEBS 19-26=-100/29, 12-34=-116/160, 11-35=-164/49, 10-36=-202/77,

9-37=-154/75, 8-38=-2/111, 7-39=-81/362, 6-40=0/70, 5-41=-115/72, 4-42=0/54, 3-43=-62/45, 13-33=-166/49, 14-32=-163/67, 15-31=-149/71, 16-29=-238/99, 17-28=-6/47, 18-27=-83/56, 20-25=-163/85, 21-24=-18/58,

7-38=-772/243

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; 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) 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) 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.



Continued on page 2

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/TPH 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	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	A13	Roof Special	1	1	Job Reference (optional)	165976675

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:54 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.
- 11) Bearings are assumed to be: , Joint 2 User Defined , Joint 31 User Defined .
- 12) Bearing at joint(s) 22 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) Non Standard bearing condition. Review required.
- 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.

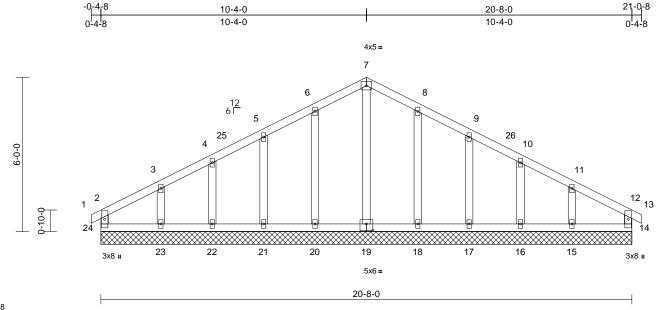
LOAD CASE(S) Standard

Ply Job Truss Truss Type Qty 43 Mason Ridge-Roof-Cali M VMB GRH 165976676 24070189 B01 Common Supported Gable Job Reference (optional)

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

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:54 ID:Ts5oRqu4mUn5A3y3B3BrkuzwimG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:44.8 Plate Offsets (X, Y): [19:0-3-0,0-3-0]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	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*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 111 lb	FT = 20%

LUMBER

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

REACTIONS (size)

14=20-8-0, 15=20-8-0, 16=20-8-0, 17=20-8-0. 18=20-8-0. 19=20-8-0. 20=20-8-0, 21=20-8-0, 22=20-8-0, 23=20-8-0, 24=20-8-0

Max Horiz 24=-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), 20=-42 (LC 14), 21=-46 (LC 14), 22=-33 (LC 14), 23=-77 (LC 14), 24=-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), 19=144 (LC 27), 20=237 (LC 21), 21=222 (LC 21),

22=164 (LC 21), 23=174 (LC 34),

24=118 (LC 1) **FORCES** (lb) - Maximum Compression/Maximum

Tension TOP CHORD 2-24=-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,

16-17=-23/49, 15-16=-23/49, 14-15=-23/49

9-10=-58/131, 10-11=-48/90, 11-12=-68/39, 12-13=0/14, 12-14=-100/79

BOT CHORD 23-24=-23/49, 22-23=-23/49, 21-22=-23/49, 20-21=-23/49, 18-20=-23/49, 17-18=-23/49, WEBS

7-19=-134/21, 6-20=-198/73, 5-21=-183/81, 4-22=-128/68, 3-23=-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 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 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 24, 16 lb uplift at joint 14, 42 lb uplift at joint 20, 46 lb uplift at joint 21, 33 lb uplift at joint 22, 77 lb uplift at joint 23, 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.
- 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.

LOAD CASE(S) Standard



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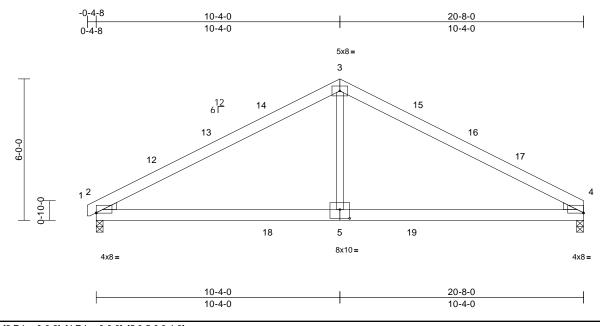
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Job	Truss	Truss Type	Qty	Ply	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	B02	Common	2	1	Job Reference (optional)	165976677

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:54 ID:0HizdM6Q_WVmnaATcnVXKBzwikh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:48.9

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

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	0.89	Vert(LL)	-0.12	5-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.19	5-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.03	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 113 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 **BOT CHORD** 2x6 SP No.2 **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

2-2-0 oc purlins.

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

bracing.

REACTIONS (size) 2=0-3-8, 4=0-3-8

Max Horiz 2=87 (LC 14)

Max Uplift 2=-85 (LC 14), 4=-79 (LC 15) Max Grav 2=975 (LC 5), 4=959 (LC 6)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/9, 2-3=-1282/221, 3-4=-1282/221

BOT CHORD 2-4=-233/1037 WEBS 3-5=0/574

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) 4 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



June 4,2024

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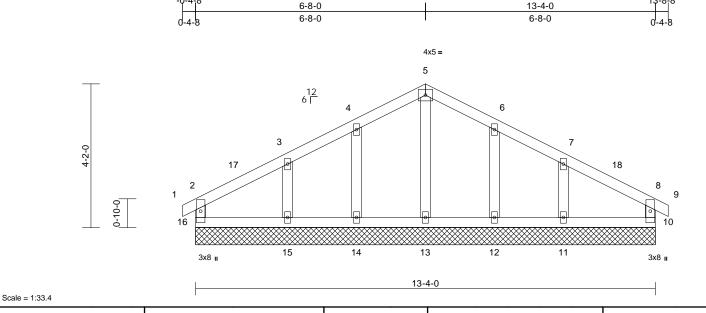
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Job	Truss	Truss Type	Qty	Ply	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	C01	Common Supported Gable	1	1	Job Reference (optional)	165976678

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:55 ID:Kw41b4tysUsfFYG9TCDw0tzwios-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



BCDL	
LUMBI	ER

Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL

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

BRACING

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

(psf)

20.0

20.0

10.0

0.0

10.0

6-0-0 oc purlins, except end verticals. 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



June 4,2024

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

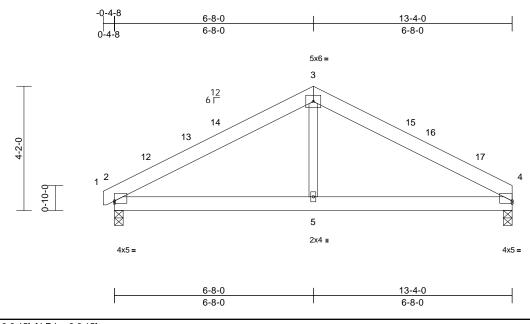
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	C02	Common	2	1	Job Reference (optional)	165976679

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:55 ID:d4azmvaKCIAQCTiJsNFXM6zwiny-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:38.6

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

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.35	DEFL Vert(LL)	in -0.02	(loc) 5-8	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	0.25 0.11	Vert(CT) Horz(CT)	-0.04 0.01	5-8	>999 n/a	180 n/a		244/100
BCLL BCDL	0.0* 10.0	Code	IRC2018/TPI2014	Matrix-MSH	0.11	11012(01)	0.01	2	Π/α	II/a	Weight: 73 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No 2 BOT CHORD 2x6 SP No 2 **WEBS** 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 (size) 2=0-3-8, 4=0-3-8

Max Horiz 2=58 (LC 14)

Max Uplift 2=-56 (LC 14), 4=-50 (LC 15)

Max Grav 2=639 (LC 21), 4=619 (LC 22) (lb) - Maximum Compression/Maximum

FORCES Tension

1-2=0/9, 2-3=-761/244, 3-4=-761/244

TOP CHORD 2-5=-132/567, 4-5=-119/567

BOT CHORD

WEBS 3-5=0/285

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
- 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.
- * 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) 4 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



June 4,2024

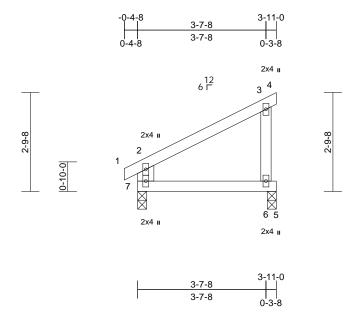
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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	43 Mason Ridge-Roof-Cali M VMB GRH	
24070189	D01	Jack-Closed	3	1	Job Reference (optional)	165976680

Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Mon Jun 03 09:40:55 ID:gmewhzvG7_9mXKUwHs9FKOzwiiN-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:32.6

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	0.27	Vert(LL)	0.02	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	0.02	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	n/a	-	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 17 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 3-11-0 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 6=0-3-0, 7=0-3-0 Max Horiz 7=68 (LC 14)

Max Uplift 6=-54 (LC 14), 7=-10 (LC 11)

Max Grav 6=222 (LC 21), 7=252 (LC 21)

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-7=-228/87, 1-2=0/25, 2-3=-77/51, 3-4=-12/0

BOT CHORD 6-7=0/0, 5-6=0/0

WEBS 3-6=-172/123

NOTES

FORCES

- 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 , Joint 6 SP No.2 .
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 6. 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.

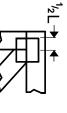
LOAD CASE(S) Standard



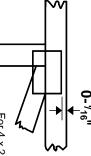


Symbols

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

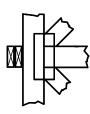
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

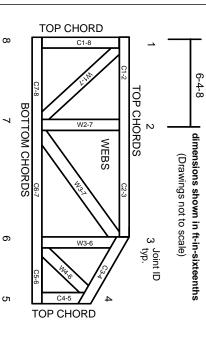
Industry Standards:

ANSI/TPI1: DSB-22:

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.

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 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.

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- 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.

'n

- 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.

9

- 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.