

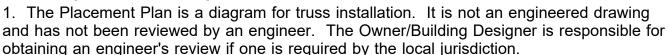
Carter Sanford Component Plant 298 Harvey Faulk Rd Sanford, NC 27332

Phone #:919-775-1450



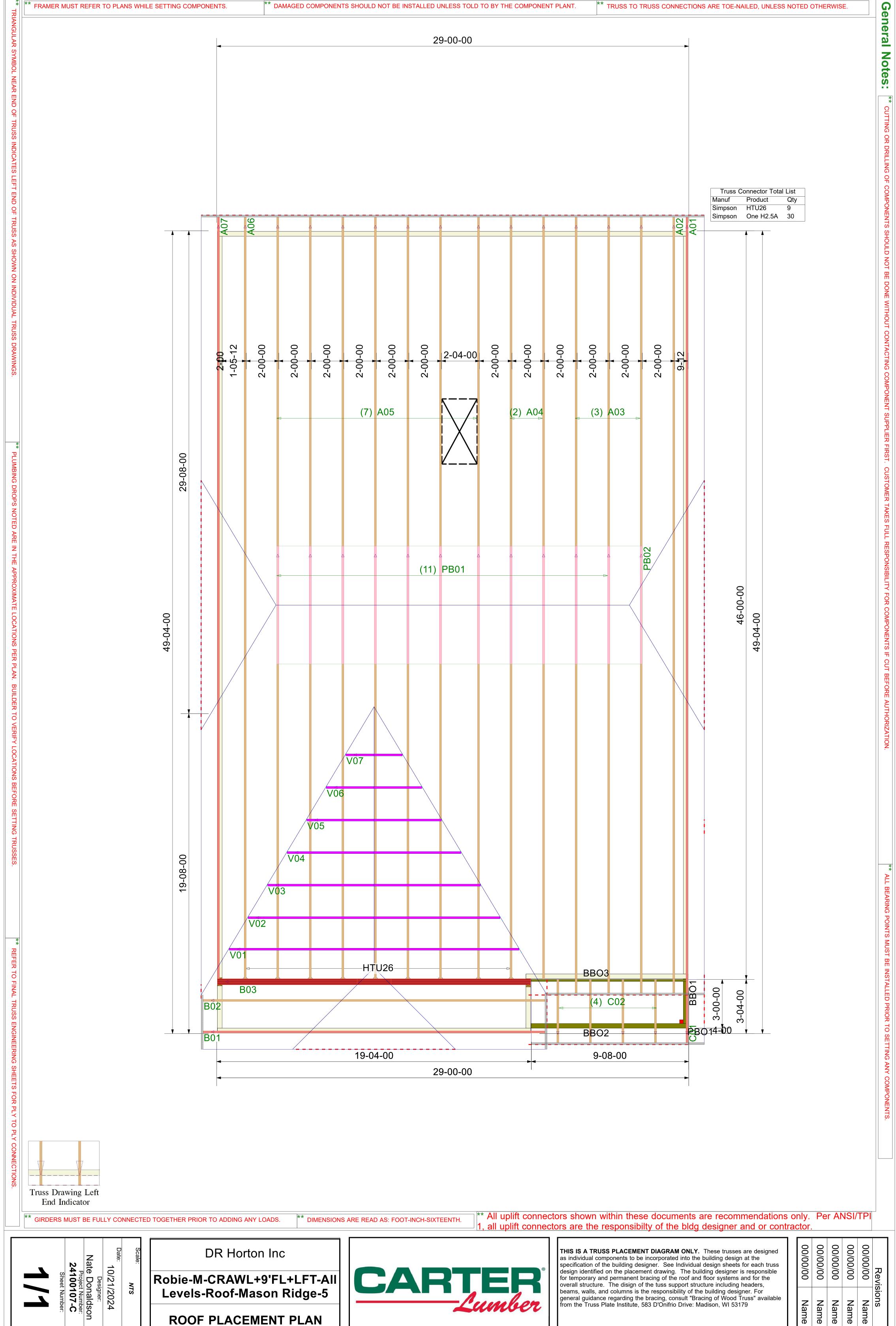
Model: Robie M LFT GLH





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

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



Name Name



RE: 24100107

Robie-M-CRAWL+9'FL+LFT-Roof-All Levels

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: DR Horton Inc Project Name: 24100107 Lot/Block: 5 Model: Robie

Address: Subdivision: Mason Ridge

City: State:

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

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

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

This package includes 26 individual, dated Truss Design Drawings and 0 Additional Drawings.

No. 1 2 3	Seal# I69004659 I69004660 I69004661	Truss Name A01 A02 A03	Date 10/21/2024 10/21/2024 10/21/2024	No. 21 22 23	Seal# I69004679 I69004680 I69004681	Truss Name V02 V03 V04	Date 10/21/2024 10/21/2024 10/21/2024
4	169004662	A03 A04	10/21/2024	23 24	169004682	V05	10/21/2024
5	169004663	A05	10/21/2024	25	169004683	V06	10/21/2024
6	169004664	A06	10/21/2024	26	169004684	V07	10/21/2024
7	169004665	A07	10/21/2024				
8	169004666	B01	10/21/2024				
9	169004667	B02	10/21/2024				
10	169004668	B03	10/21/2024				
11	169004669	C01	10/21/2024				
12	169004670	C02	10/21/2024				
13	169004671	CJ01	10/21/2024				
14	169004672	D01	10/21/2024				
15	169004673	D02	10/21/2024				
16	169004674	D03	10/21/2024				
17	169004675	J01	10/21/2024				
18	169004676	PB01	10/21/2024				
19	169004677	PB02	10/21/2024				
20	169004678	V01	10/21/2024				

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

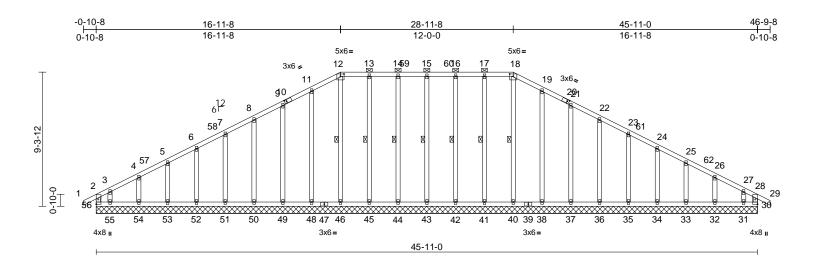
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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.



October 21, 2024

Job	Truss	Truss Type	Qty	Ply	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	A01	Hip Supported Gable	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:10 Page: 1



Scale = 1:80

TOP CHORD

REACTIONS (size)

Plate Offsets (X, Y):	Plate Offsets (X, Y): [10:0-1-11,0-1-8], [12:0-3-0,0-2-0], [18:0-3-0,0-2-0], [20:0-1-11,0-1-8]												
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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	30	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR									

Loading	(psi)	Spacing	2-0-0	l coi		DELL	111	(100)	i/deli	L/U	PLAIES	GKIF
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	30	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 339 lb	FT = 20%
LUMBER				Max Uplift 30=-	14 (LC 11),	31=-121 (LC	15),	TOP CH	HORD	2-56=	-134/50, 1-2=0/2	7, 2-3=-187/77,
TOP CHORD	2x4 SP No.2			32=-3	39 (LC 15),	33=-45 (LC 1	15),			3-4=-	132/71, 4-5=-94/8	33, 5-6=-65/102,
BOT CHORD	2x4 SP No.2				, ,,	35=-44 (LC 1	,,				,	69, 8-9=-69/214,
WEBS	2x4 SP No.3				, ,,	37=-45 (LC 1	, .				-85/261, 11-12=-	,
OTHERS	2x4 SP No.3				, ,,	41=-26 (LC 1	,,				=-96/289, 13-14=	/
BRACING					, ,,	43=-25 (LC 1	, .				=-96/289, 15-16=	/

6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 12-18. **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. **WEBS** 1 Row at midpt 15-43, 14-44, 13-45,

12-46, 16-42, 17-41, 18-40

Structural wood sheathing directly applied or

30=45-11-0, 31=45-11-0, 32=45-11-0, 33=45-11-0, 34=45-11-0, 35=45-11-0, 36=45-11-0, 37=45-11-0, 38=45-11-0, 40=45-11-0, 41=45-11-0, 42=45-11-0, 43=45-11-0, 44=45-11-0, 45=45-11-0, 46=45-11-0, 48=45-11-0, 49=45-11-0, 50=45-11-0, 51=45-11-0, 52=45-11-0, 53=45-11-0,

54=45-11-0, 55=45-11-0,

56=45-11-0 Max Horiz 56=124 (LC 13)

44=-26 (LC 10), 45=-26 (LC 11), 48=-45 (LC 14), 49=-45 (LC 14), 50=-43 (LC 14), 51=-44 (LC 14), 52=-43 (LC 14), 53=-46 (LC 14), 54=-36 (LC 14), 55=-156 (LC 14), 56=-63 (LC 10) Max Grav 30=139 (LC 28), 31=95 (LC 53), 32=169 (LC 45), 33=158 (LC 1), 34=193 (LC 45), 35=228 (LC 45), 36=225 (LC 45), 37=223 (LC 45), 38=237 (LC 45), 40=154 (LC 45), 41=228 (LC 40), 42=215 (LC 40), 43=217 (LC 40), 44=215 (LC 40), 45=228 (LC 40), 46=162 (LC 57), 48=237 (LC 43), 49=223 (LC 43), 50=225 (LC 43), 51=228 (LC 43), 52=193 (LC 43), 53=158 (LC 1), 54=169 (LC 43), 55=122 (LC 51), 56=179 (LC 27)

(lb) - Maximum Compression/Maximum Tension

16-17=-96/289, 17-18=-96/289, 18-19=-104/305, 19-21=-85/261, 21-22=-69/214, 22-23=-57/169, 23-24=-41/124, 24-25=-32/79, 25-26=-54/44, 26-27=-88/46, 27-28=-135/57, 28-29=0/27, 28-30=-106/39



October 21,2024

ontinued on page 2

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

FORCES

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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	A01	Hip Supported Gable	1	1	Job Reference (optional)

16) Graphical purlin representation does not depict the size

or the orientation of the purlin along the top and/or

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:10 ID:3MyMA21koMWXjvVOhxcMGjz9Jxh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

55-56=-28/146, 54-55=-28/146, BOT CHORD 53-54=-28/146, 52-53=-28/146, 51-52=-28/146, 50-51=-28/146, 49-50=-28/146, 48-49=-28/146, 46-48=-28/146, 45-46=-28/146, 44-45=-28/146, 43-44=-28/146, 42-43=-28/146, 41-42=-28/146, 40-41=-28/146, 38-40=-28/146, 37-38=-28/146, 36-37=-28/146, 35-36=-28/146, 34-35=-28/146, 33-34=-28/146, 32-33=-28/146, 31-32=-28/146, 30-31=-28/146 **WEBS** 15-43=-177/56, 14-44=-175/60, 13-45=-188/51, 12-46=-122/0, 11-48=-197/76, 9-49=-183/80, 8-50=-185/77, 7-51=-188/77, 6-52=-153/77, 5-53=-125/77,

LOAD CASE(S) Standard

bottom chord.

NOTES

Unbalanced roof live loads have been considered for this design

17-41=-188/51, 18-40=-114/0, 19-38=-197/76, 21-37=-183/80, 22-36=-185/77, 23-35=-188/77, 24-34=-153/77, 25-33=-125/77, 26-32=-132/117, 27-31=-87/119

4-54=-131/117, 3-55=-94/113, 16-42=-175/60,

- 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) -0-10-8 to 3-8-10, Exterior(2N) 3-8-10 to 12-4-6, Corner(3R) 12-4-6 to 21-6-10, Exterior (2N) 21-6-10 to 24-4-6, Corner(3R) 24-4-6 to 33-6-10, Exterior(2N) 33-6-10 to 42-2-6, Corner(3E) 42-2-6 to 46-9-8 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
- 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.
- 6) 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 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely
- braced against lateral movement (i.e. diagonal web). 11) Gable studs spaced at 2-0-0 oc.
- 12) 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.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 56, 14 lb uplift at joint 30, 25 lb uplift at joint 43, 26 lb uplift at joint 44, 26 lb uplift at joint 45, 45 lb uplift at joint 48, 45 lb uplift at joint 49, 43 lb uplift at joint 50, 44 lb uplift at joint 51, 43 lb uplift at joint 52, 46 lb uplift at joint 53, 36 lb uplift at joint 54, 156 lb uplift at joint 55, 26 lb uplift at joint 42, 26 lb uplift at joint 41, 44 lb uplift at joint 38, 45 lb uplift at joint 37, 43 lb uplift at joint 36, 44 lb uplift at joint 35, 43 lb uplift at joint 34, 45 lb uplift at joint 33, 39 lb uplift at joint 32 and 121 lb uplift at joint 31.
- 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.

Job	Truss	Truss Type	Qty	Ply	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	A02	Hip	1	1	Job Reference (optional)

6-3-9

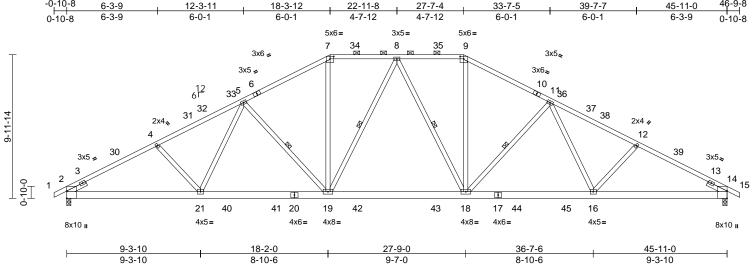
12-3-11

-0-10-8

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries. Inc. Fri Oct 18 09:02:11 ID:y7Cs0P4Fsb0zCWp9wmhIQZz9Jxd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

46-9-8 22-11-8 27-7-4 33-7-5 39-7-7 45-11-0 4-7-12 4-7-12 6-0-1 6-0-1 6-3-9 0-10-8 5x6= 3x5 =5x6=

Page: 1



Scale = 1:80.1

Plate Offsets (X, Y): [7:0-3-0,0-2-0], [9:0-3-0,0-2-0]

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	0.98	Vert(LL)	-0.27	18-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.47	18-19	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.12	14	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 307 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-6,10-15:2x4 SP No.1 **BOT CHORD** 2x6 SP 2400F 2.0E *Except* 20-17:2x6 SP

No.2 2x4 SP No.3 *Except* 19-8,18-8:2x4 SP No.2

WEBS 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,

except

2-0-0 oc purlins (3-5-3 max.): 7-9. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

WEBS 1 Row at midpt 5-19, 8-19, 8-18, 11-18

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

Max Horiz 2=152 (LC 14)

Max Uplift 2=-201 (LC 14), 14=-201 (LC 15)

Max Grav 2=2171 (LC 47), 14=2171 (LC 47)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/23, 2-4=-4141/382, 4-5=-3967/384,

5-7=-3280/401, 7-8=-2829/391, 8-9=-2829/391, 9-11=-3280/401

11-12=-3967/384, 12-14=-4141/382, 14-15=0/23

BOT CHORD 2-21=-374/3613, 19-21=-252/3285,

18-19=-97/2775, 16-18=-176/3285,

14-16=-241/3613

WEBS 4-21=-262/173, 5-21=-18/423,

> 5-19=-802/221, 7-19=-61/1110, 8-19=-340/146, 8-18=-340/146,

9-18=-61/1110, 11-18=-802/222,

11-16=-18/423, 12-16=-262/173

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) -0-10-8 to 3-8-10, Interior (1) 3-8-10 to 11-9-13, Exterior(2R) 11-9-13 to 34-1-3, Interior (1) 34-1-3 to 42-2-6, Exterior(2E) 42-2-6 to 46-9-8 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 14. 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



October 21,2024

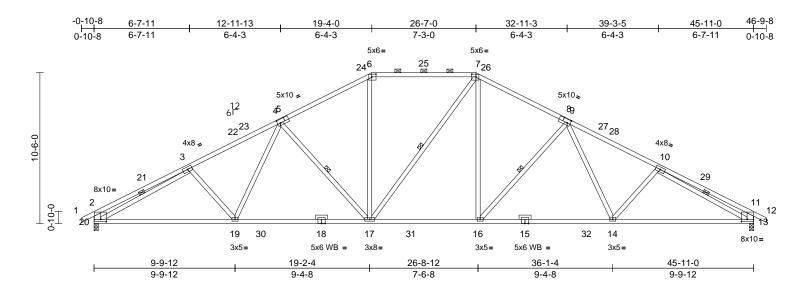
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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 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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	A03	Piggyback Base	3	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:12 ID:y7Cs0P4Fsb0zCWp9wmhIQZz9Jxd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:80.2

Plate Offsets (X, Y): [2:0-4-12,0-2-0], [5:0-2-8,0-3-0], [6:0-3-8,0-2-4], [7:0-3-8,0-2-4], [8:0-2-8,0-3-0], [13:0-4-12,0-2-0]

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	0.70	Vert(LL)	-0.32	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.54	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.15	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 283 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E **BOT CHORD** 2x4 SP 2400F 2.0E

WEBS 2x4 SP No.3 *Except* 17-7:2x4 SP No.2,

20-2,13-11:2x6 SP No.2

OTHERS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-12 oc purlins, except end verticals, and

2-0-0 oc purlins (4-3-6 max.): 6-7. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

WEBS 1 Row at midp 4-17, 7-17, 9-16, 3-20,

10-13 **REACTIONS** (size) 13=0-3-8 20=0-3-8

Max Horiz 20=141 (LC 14)

Max Uplift 13=-202 (LC 15), 20=-202 (LC 14)

Max Grav 13=2193 (LC 47), 20=2188 (LC 47)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/30, 2-3=-1075/181, 3-4=-3903/362,

4-6=-3144/385, 6-7=-2710/381, 7-9=-3154/385, 9-10=-3911/363,

10-11=-1063/181, 11-12=0/30, 2-20=-721/183, 11-13=-716/191

19-20=-353/3449, 17-19=-227/3202,

16-17=-21/2634, 14-16=-122/3210, 13-14=-213/3455

WEBS 3-19=-157/184, 4-19=-15/504,

4-17=-848/225, 6-17=-29/986, 7-17=-260/262, 7-16=-71/1003,

9-16=-849/225, 9-14=-15/502, 10-14=-157/184, 3-20=-2996/207,

10-13=-3015/191

NOTES

BOT CHORD

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-8-10, Interior (1) 3-8-10 to 12-10-1, Exterior(2R) 12-10-1 to 32-11-3, Interior (1) 32-11-3 to 42-2-6, Exterior(2E) 42-2-6 to 46-9-8 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) 20 and 13. 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



October 21,2024

Page: 1

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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the 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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
241001	07	A04	Piggyback Base	2	1	I69004662 Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:12 ID:BbjrLg_El705ElCcS5YQ6tz9Jxl-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

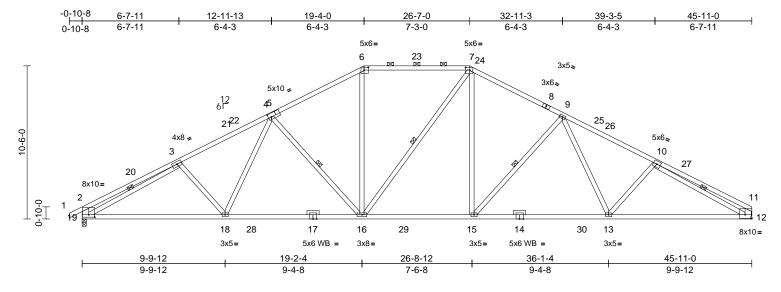


Plate Offsets (X, Y): [2:0-4-12,0-2-0], [5:0-2-8,0-3-0], [6:0-3-8,0-2-4], [7:0-3-8,0-2-4], [12:Edge,0-3-0]

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	0.70	Vert(LL)	-0.32	13-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.54	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.15	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 282 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP 2400F 2.0E

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

19-2,12-11:2x6 SP No.2 2x4 SP No.3

OTHERS BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-13 oc purlins, except end verticals, and

2-0-0 oc purlins (4-3-10 max.): 6-7. Rigid ceiling directly applied or 10-0-0 oc

BOT CHORD bracing.

WEBS 4-16, 7-16, 9-15, 3-19, 1 Row at midpt

10-12

REACTIONS (size) 12= Mechanical 19=0-3-8

> Max Horiz 19=149 (LC 18) 12=-180 (LC 15), 19=-202 (LC 14)

Max Grav 12=2137 (LC 47), 19=2189 (LC 47)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/30, 2-3=-1075/181, 3-4=-3904/364,

4-6=-3145/387, 6-7=-2711/383, 7-9=-3155/388, 9-10=-3921/374

10-11=-839/126, 2-19=-721/183, 11-12=-543/115

BOT CHORD 18-19=-362/3447, 16-18=-236/3199,

15-16=-53/2632, 13-15=-156/3208,

12-13=-234/3469

WFBS 3-18=-157/184, 4-18=-15/504,

4-16=-849/225, 6-16=-29/987, 7-16=-261/256, 7-15=-71/1003, 9-15=-848/224, 9-13=-19/513

10-13=-172/188. 3-19=-2997/208.

10-12=-3255/247

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) -0-10-8 to 3-8-10, Interior (1) 3-8-10 to 12-10-1, Exterior(2R) 12-10-1 to 32-11-3, Interior (1) 32-11-3 to 41-1-2, Exterior(2E) 41-1-2 to 45-8-4 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.
- Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19. 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



October 21,2024

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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	A05	Piggyback Base	7	1	I69004663 Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:12 ID:RolbS?ozoBN92ZDIM1oAnAz9L6s-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

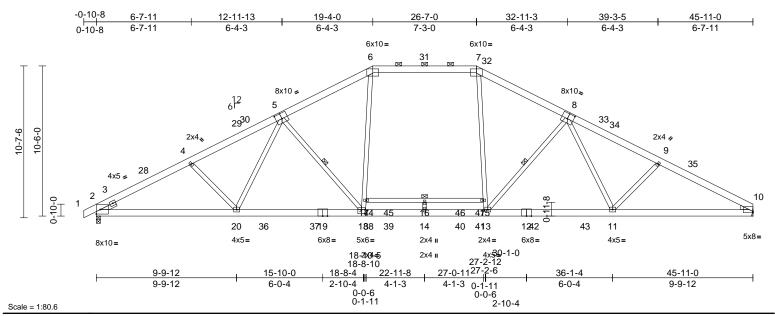


Plate Offsets (X, Y): [2:Edge,0-3-12], [5:0-5-0,0-4-8], [8:0-5-0,0-4-8], [10:Edge,0-0-15], [18:0-3-0,0-3-8]

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	0.34	Vert(LL)	-0.43	11-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.57	11-13	>972	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.12	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 332 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP 2400F 2 0F

BOT CHORD 2x6 SP 2400F 2.0E *Except* 17-15:2x4 SP

No.2

WEBS 2x4 SP No.3 WEDGE Right: 2x4 SP No.3 SLIDER Left 2x4 SP No.3 -- 1-2-1

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-5-8 oc purlins, except

2-0-0 oc purlins (5-7-9 max.): 6-7. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing, Except:

6-0-0 oc bracing: 16-17,15-16. WEBS 1 Row at midpt 5-18, 8-13

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

Max Horiz 2=168 (LC 18)

Max Uplift 2=-50 (LC 14), 10=-32 (LC 15)

Max Grav 2=2522 (LC 47), 10=2467 (LC 47)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=0/27, 2-4=-4806/77, 4-6=-4630/74, TOP CHORD

6-7=-3414/99, 7-9=-4701/82, 9-10=-4911/88 **BOT CHORD**

2-20=-124/4162, 18-20=0/3924,

14-18=0/3321, 13-14=0/3321, 11-13=0/3950,

10-11=-71/4263, 16-17=-10/0, 15-16=-10/0

4-20=-184/175, 5-20=-92/390,

5-18=-889/314. 17-18=0/1283. 6-17=0/1379. 7-15=0/1388, 13-15=0/1292, 8-13=-927/313,

8-11=-94/455, 9-11=-235/184, 14-16=-268/0

NOTES

WEBS

Unbalanced roof live loads have been considered for 1) 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) -0-10-8 to 3-8-10, Interior (1) 3-8-10 to 12-10-1, Exterior(2R) 12-10-1 to 33-0-8. Interior (1) 33-0-8 to 41-3-14, Exterior(2E) 41-3-14 to 45-11-0 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
- 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, 22-11-8 from left end, supported at two points, 5-0-0 apart.
- Provide adequate drainage to prevent water ponding.
- 8) 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 9) 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) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. 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.

Page: 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



October 21,2024

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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	A06	Hip	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:12 ID:RolbS?ozoBN92ZDIM1oAnAz9L6s-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

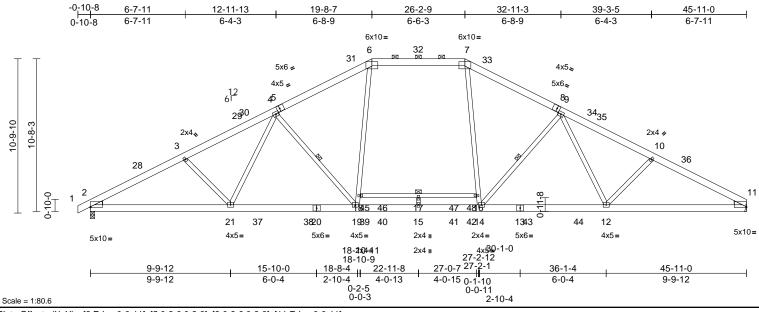


Plate Offsets (X, Y): [2:Edge,0-0-11], [5:0-2-6,0-2-8], [8:0-2-6,0-2-8], [11:Edge,0-0-11]

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	0.30	Vert(LL)	-0.41	12-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.53	12-14	>999	180	1	
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.12	11	n/a	n/a	1	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 332 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP 2400F 2 0F

BOT CHORD 2x6 SP 2400F 2.0E *Except* 18-16:2x4 SP

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

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-5-12 oc purlins, except

2-0-0 oc purlins (5-8-5 max.): 6-7. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing, Except:

6-0-0 oc bracing: 17-18,16-17. **WEBS** 1 Row at midpt 4-19. 9-14

REACTIONS (size) 2=0-3-8, 11= Mechanical

Max Horiz 2=170 (LC 14)

Max Uplift 2=-49 (LC 14), 11=-32 (LC 15)

Max Grav 2=2521 (LC 47), 11=2477 (LC 47)

FORCES (lb) - Maximum Compression/Maximum

TOP CHORD 1-2=0/23, 2-3=-4929/80, 3-4=-4719/76

4-6=-4055/61, 6-7=-3390/106, 7-9=-4055/62,

9-10=-4722/82, 10-11=-4932/88

2-21=-231/4277, 19-21=0/3966, 15-19=0/3295, 14-15=0/3295, 12-14=0/3967,

11-12=-70/4281, 17-18=-13/0, 16-17=-13/0

3-21=-231/183, 4-21=-90/448,

4-19=-913/318, 18-19=0/1311, 6-18=0/1405, 7-16=0/1405. 14-16=0/1311. 9-14=-924/319.

9-12=-92/452, 10-12=-235/185, 15-17=-264/0

NOTES

WEBS

BOT CHORD

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) -0-10-8 to 3-8-10, Interior (1) 3-8-10 to 12-11-13, Exterior(2R) 12-11-13 to 32-11-3. Interior (1) 32-11-3 to 41-3-14, Exterior(2E) 41-3-14 to 45-11-0 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
- 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, 22-11-8 from left end, supported at two points, 5-0-0 apart.
- Provide adequate drainage to prevent water ponding.
- 8) 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) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. 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



October 21,2024

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

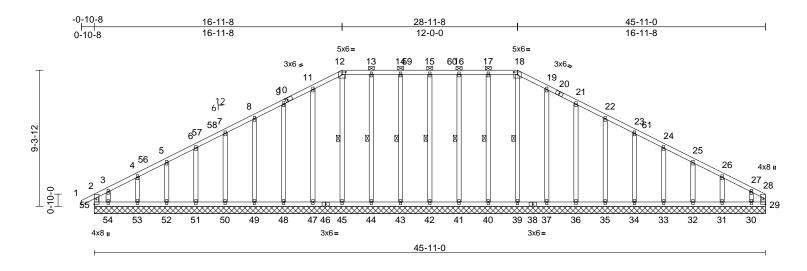
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	A07	Hip Supported Gable	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:13 ID:uWJdR55VOCGgRqzX2BjmW_z9Jxb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:78.8

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	29	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 338 lb	FT = 20%

BCDL	10.0					
LUMBER			Ma	ax Uplift	29=-21 (LC 13),	30
TOP CHORD	2x4 SP No.2			·	31=-38 (LC 15),	32
BOT CHORD	2x4 SP No.2				33=-43 (LC 15),	34
WEBS	2x4 SP No.3				35=-43 (LC 15),	36
OTHERS	2x4 SP No.3				37=-44 (LC 15),	4(
BRACING					41=-26 (LC 10),	42
TOP CHORD	Structural wood she	athing directly applied or			43=-26 (LC 10),	44
TOT OHORD		cept end verticals, and			47=-45 (LC 14),	48
	0-0-0 oc purins, ext	cepi enu verticais, anu			40 42 (LC 44)	-

2-0-0 oc purlins (6-0-0 max.): 12-18.

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

WEBS 1 Row at midpt 15-42, 14-43, 13-44,

1 Row at midpt 15-42, 14-43, 13-44, 12-45, 16-41, 17-40,

18-39

29=45-11-0, 30=45-11-0, 31=45-11-0, 32=45-11-0, 33=45-11-0, 34=45-11-0, 35=45-11-0, 36=45-11-0, 36=45-11-0, 37=45-11-0, 39=45-11-0, 40=45-11-0, 41=45-11-0, 42=45-11-0, 45=45-11-0, 47=45-11-0, 48=45-11-0,

53=45-11-0, 54=45-11-0, 55=45-11-0 Max Horiz 55=131 (LC 18)

49=45-11-0, 50=45-11-0,

51=45-11-0, 52=45-11-0,

30=-131 (LC 15), 32=-45 (LC 15), 34=-44 (LC 15), 36=-45 (LC 15), 40=-26 (LC 11). 42=-25 (LC 11), 44=-26 (LC 11), 48=-45 (I C 14) 49=-43 (LC 14), 50=-44 (LC 14), 51=-43 (LC 14), 52=-46 (LC 14), 53=-36 (LC 14), 54=-158 (LC 14), 55=-60 (LC 10) Max Grav 29=142 (LC 15), 30=129 (LC 41), 31=166 (LC 45), 32=159 (LC 1), 33=193 (LC 45), 34=228 (LC 45), 35=225 (LC 45), 36=223 (LC 45), 37=237 (LC 45), 39=152 (LC 45),

35=225 (LC 45), 36=223 (LC 45), 37=237 (LC 45), 39=152 (LC 45), 40=228 (LC 40), 41=215 (LC 40), 42=217 (LC 40), 43=215 (LC 40), 44=228 (LC 43), 48=222 (LC 43), 47=236 (LC 43), 48=222 (LC 43), 49=224 (LC 43), 50=225 (LC 43), 51=179 (LC 43), 52=158 (LC 58), 53=169 (LC 43), 54=118 (LC 51), 55=185 (LC 32)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-55=-138/49, 1-2=0/27, 2-3=-190/73,

2-55=-138/49, 1-2=0/27, 2-3=-190/73, 3-4=-134/68, 4-5=-98/78, 5-6=-70/99, 6-7=-56/122, 7-8=-61/165, 8-9=-74/211, 9-11=-90/257, 11-12=-109/302, 12-13=-100/286, 13-14=-100/286

14-15=-100/286, 15-16=-100/286, 16-17=-100/286, 17-18=-100/286, 18-19=-109/302, 19-21=-90/257, 21-22=-74/211, 22-23=-61/166,

23-24=-44/120, 24-25=-37/76, 25-26=-60/39, 26-27=-92/41, 27-28=-141/51, 28-29=-93/28



BOT CHORD 54-55=-29/126, 53-54=-29/126,

52-53=-29/126, 51-52=-29/126,

50-51=-29/126, 49-50=-29/126,

48-49=-29/126, 47-48=-29/126, 45-47=-29/126, 44-45=-29/126,

43-44=-29/126, 42-43=-29/126, 41-42=-29/126, 40-41=-29/126,

39-40=-29/126, 37-39=-29/126.

36-37=-29/126, 35-36=-29/126,

34-35=-29/126, 33-34=-29/126,

32-33=-29/126, 31-32=-29/126,

30-31=-29/126, 29-30=-29/126

October 21,2024

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 we be and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI Quality Criteria 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 Robie-M-CRAWI +9'FI +I FT-Roof-All Levels 169004665 24100107 A07 Hip Supported Gable Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:13 ID:uWJdR55VOCGgRqzX2BjmW_z9Jxb-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 2

WEBS

15-42=-177/56, 14-43=-175/59, 13-44=-188/51, 12-45=-120/0,

11-47=-196/76, 9-48=-182/80, 8-49=-184/77. 7-50=-185/77, 6-51=-139/77, 5-52=-125/77, 4-53=-131/117, 3-54=-92/114, 16-41=-175/59, 17-40=-188/51, 18-39=-112/0,

19-37=-197/76, 21-36=-183/80, 22-35=-185/77, 23-34=-188/78, 24-33=-153/75, 25-32=-126/99, 26-31=-130/125, 27-30=-112/145

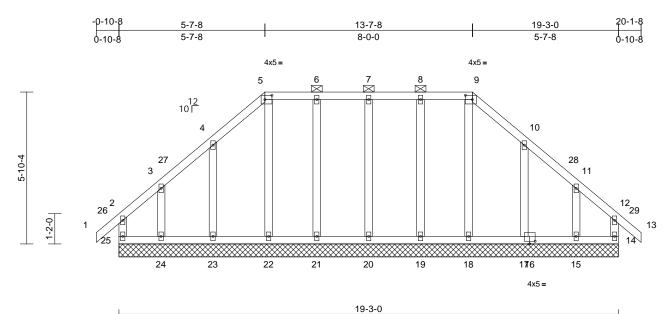
NOTES

- Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 3-8-10, Exterior(2N) 3-8-10 to 12-4-6, Corner(3R) 12-4-6 to 21-6-10, Exterior (2N) 21-6-10 to 24-4-6, Corner(3R) 24-4-6 to 33-6-10, Exterior(2N) 33-6-10 to 40-11-8, Corner(3E) 40-11-8 to 45-9-4 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
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * 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.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 55, 21 lb uplift at joint 29, 25 lb uplift at joint 42, 26 lb uplift at joint 43, 26 lb uplift at joint 44, 45 lb uplift at joint 47, 45 lb uplift at joint 48, 43 lb uplift at joint 49, 44 lb uplift at joint 50, 43 lb uplift at joint 51, 46 lb uplift at joint 52, 36 lb uplift at joint 53, 158 lb uplift at joint 54, 26 lb uplift at joint 41, 26 lb uplift at joint 40, 44 lb uplift at joint 37, 45 lb uplift at joint 36, 43 lb uplift at joint 35, 44 lb uplift at joint 34, 43 lb uplift at joint 33, 45 lb uplift at joint 32, 38 lb uplift at joint 31 and 131 lb uplift at joint 30.
- 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.
- 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

ſ	Job	Truss	Truss Type	Qty		Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
	24100107	B01	Hip Supported Gable	1	1	I69004666 Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:13 ID:qdvylzw5wbNp8WJffYyFPpz9Jxq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:44.4

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

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 124 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No 2 2x4 SP No 2 BOT CHORD **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, and 2-0-0 oc purlins (10-0-0 max.): 5-9.

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

bracing. REACTIONS (size)

14=19-3-0. 15=19-3-0. 17=19-3-0. 18=19-3-0, 19=19-3-0, 20=19-3-0, 21=19-3-0, 22=19-3-0, 23=19-3-0, 24=19-3-0, 25=19-3-0

Max Horiz 25=-155 (LC 12)

14=-61 (LC 11), 15=-103 (LC 15), 17=-73 (LC 15), 19=-31 (LC 11),

20=-24 (LC 10), 21=-30 (LC 10), 23=-73 (LC 14), 24=-107 (LC 14),

25=-81 (LC 10)

Max Grav 14=186 (LC 51), 15=217 (LC 53), 17=251 (LC 41), 18=164 (LC 55), 19=238 (LC 40), 20=222 (LC 40),

21=238 (LC 40), 22=167 (LC 57), 23=251 (LC 41), 24=227 (LC 51),

25=203 (LC 53) **FORCES** (lb) - Maximum Compression/Maximum

Tension TOP CHORD

2-25=-171/115, 1-2=0/61, 2-3=-96/103, 3-4=-71/134, 4-5=-103/223, 5-6=-73/198, 6-7=-73/198, 7-8=-73/198, 8-9=-73/198, 9-10=-103/223, 10-11=-58/135, 11-12=-80/86, 12-13=0/61, 12-14=-168/102

BOT CHORD 24-25=-76/86, 23-24=-76/86, 22-23=-76/86, 21-22=-75/84, 20-21=-75/84, 19-20=-75/84,

18-19=-75/84, 17-18=-75/86, 15-17=-75/86, 14-15=-75/86

WEBS 7-20=-182/57. 6-21=-202/52. 5-22=-128/15. 4-23=-218/115. 3-24=-174/105.

8-19=-202/52, 9-18=-125/4, 10-17=-219/113,

11-15=-163/109

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) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 2-7-8, Corner(3R) 2-7-8 to 8-7-8, Exterior(2N) 8-7-8 to 10-7-8, Corner(3R) 10-7-8 to 16-7-8, Exterior(2N) 16-7-8 to 17-1-8, Corner(3E) 17-1-8 to 20-1-8 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
- 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.
- 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 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.

10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

Page: 1

- 11) Gable studs spaced at 2-0-0 oc.
- 12) 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.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 25, 61 lb uplift at joint 14, 24 lb uplift at joint 20, 30 lb uplift at joint 21, 73 lb uplift at joint 23, 107 lb uplift at joint 24, 31 lb uplift at joint 19, 73 lb uplift at joint 17 and 103 lb uplift at joint 15.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

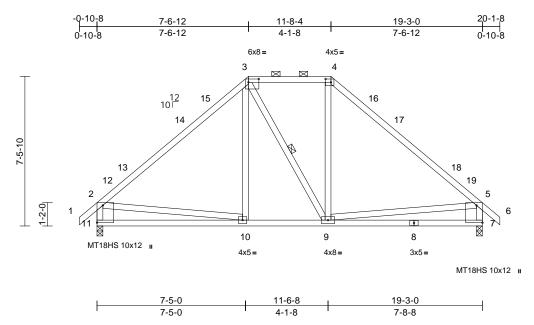
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	B02	Hip	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:13 ID:IqTKVJwjhvVgmgurDFTUx1z9Jxp-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:57.6

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

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	0.98	Vert(LL)	-0.10	7-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.19	7-9	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.02	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 124 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1 *Except* 3-4:2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3 *Except* 11-2,7-5:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-1 oc purlins, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 3-4.

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

bracing.

WEBS 1 Row at midpt 3-9

REACTIONS 7=0-3-8, 11=0-3-8 (size)

Max Horiz 11=-199 (LC 12) Max Uplift 7=-64 (LC 15), 11=-64 (LC 14)

Max Grav 7=1003 (LC 41), 11=1003 (LC 41)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/39, 2-3=-1002/133, 3-4=-651/173,

4-5=-999/135, 5-6=0/39, 2-11=-931/154,

5-7=-928/153

BOT CHORD 10-11=-294/655, 9-10=-47/583, 7-9=-210/591 WEBS 3-10=0/202, 3-9=-118/134, 4-9=-2/212,

2-10=-124/378, 5-9=-137/374

NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8. Interior (1) 2-1-8 to 4-6-12, Exterior(2R) 4-6-12 to 14-8-4, Interior (1) 14-8-4 to 17-1-8, Exterior(2E) 17-1-8 to 20-1-8 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.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- The Fabrication Tolerance at joint 2 = 4%, joint 5 = 4%
- 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.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 7. 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



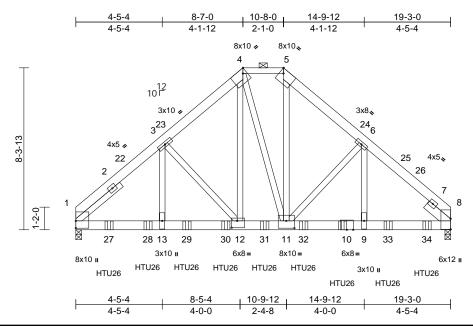
October 21,2024



Job	Truss	Truss Type	Qty	Ply	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	B03	Hip Girder	1	3	Job Reference (optional)

Run: 8.73 E May 9 2024 Print: 8.730 E May 9 2024 MiTek Industries, Inc. Mon Oct 21 09:38:16 ID:jghui9AGz21q9IQhOSqAIFz9JxV-s5sMwIFZmLhvSm3tusz8mo9TCuw4j7Xi2UB7NEyREyt

Page: 1



Scale = 1:59.2

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

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	0.62	Vert(LL)	-0.11	12-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.19	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 513 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 *Except* 4-5:2x4 SP No.2

2x6 SP 2400F 2.0E BOT CHORD

WEBS 2x4 SP No.3 SLIDER Left 2x4 SP No.3 -- 3-0-0, Right 2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.

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

bracing.

REACTIONS (lb/size) 1=10174/0-3-8, 8=10348/0-3-8

Max Horiz 1=-166 (LC 10)

Max Uplift 1=-251 (LC 12), 8=-388 (LC 13)

Max Grav 1=11603 (LC 42), 8=11719 (LC 42)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250

(lb) or less except when shown

TOP CHORD 1-2=-8734/201, 2-22=-13250/294

3-22=-13149/310, 3-23=-10029/283,

4-23=-10010/311, 4-5=-7576/275,

5-24=-10126/320, 6-24=-10145/288

6-25=-12666/341, 25-26=-12765/323,

7-26=-12803/322, 7-8=-9687/251

BOT CHORD 1-27=-270/9777, 27-28=-270/9777

13-28=-270/9777, 13-29=-270/9777, 29-30=-270/9777, 12-30=-270/9777,

12-31=-146/7486, 11-31=-146/7486,

11-32=-207/9515, 10-32=-207/9515,

9-10=-207/9515. 9-33=-207/9515.

33-34=-207/9515, 8-34=-207/9515

WEBS 3-13=-49/4619, 3-12=-3217/212, 4-12=-177/5973 4-11=-85/413

5-11=-178/6194, 6-11=-2695/249,

6-9=-89/3732

NOTES

- 1) 3-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, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 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; cantilever left and right exposed; end vertical left and right exposed; 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.
- 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.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 8. 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord
- 13) Use Simpson Strong-Tie HTU26 (20-16d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-4-0 oc max. starting at 1-8-8 from the left end to 16-0-8 to connect truss(es) to back face of bottom chord.
- 14) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent at 18-0-8 from the left end to connect truss(es) to back face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft)

Vert: 1-4=-58, 4-5=-58, 5-8=-58, 14-18=-19 Concentrated Loads (lb)



October 21,2024

Continued on page 2

Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the 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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	B03	Hip Girder	1	3	Job Reference (optional)

Run: 8.73 E May 9 2024 Print: 8.730 E May 9 2024 MiTek Industries, Inc. Mon Oct 21 09:38:16 ID:jghui9AGz21q9IQhOSqAIFz9JxV-s5sMwIFZmLhvSm3tusz8mo9TCuw4j7Xi2UB7NEyREyt

Page: 2

Vert: 10=-2134 (B), 27=-2151 (B), 28=-2134 (B), 29=-2134 (B), 30=-2134 (B), 31=-2134 (B), 32=-2134 (B), 33=-2134 (B), 34=-1938 (B)

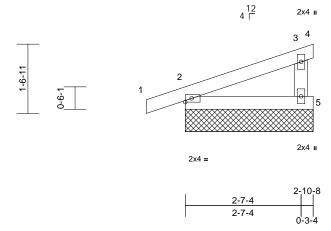


818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	C01	Monopitch Supported Gable	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:14 ID:IqTKVJwjhvVgmgurDFTUx1z9Jxp-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

-0-10-8	2-10-8
0-10-8	2-10-8



Scale = 1:25.9

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0			1							Weight: 12 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-10-8 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 2=2-10-8, 4=2-10-8, 5=2-10-8,

6=2-10-8

Max Horiz 2=46 (LC 13), 6=46 (LC 13) Max Uplift 2=-44 (LC 10), 4=-127 (LC 21),

5=-64 (LC 14), 6=-44 (LC 10) Max Grav 2=203 (LC 21), 4=35 (LC 14),

5=285 (LC 21), 6=203 (LC 21) (lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-2=0/23, 2-3=-93/51, 3-4=-47/37,

3-5=-257/241

BOT CHORD 2-5=-25/50

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) 1) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 2-10-8 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
- 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

- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc. 7)
- This truss has been designed for a 10.0 psf bottom 8) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 2, 127 lb uplift at joint 4, 64 lb uplift at joint 5 and 44 lb uplift at joint 2
- 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



October 21,2024

Page: 1

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

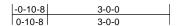
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

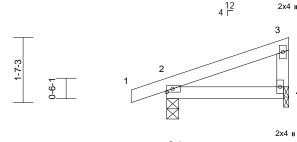


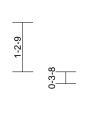
Job	Truss	Truss Type	Qty	Ply	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	C02	Monopitch	4	1	Job Reference (optional)

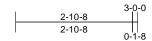
Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:14

Page: 1









Scale = 1:28.3

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	0.14	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 12 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 2=0-3-8, 4=0-1-8

Max Horiz 2=49 (LC 13)

Max Uplift 2=-51 (LC 10), 4=-20 (LC 14) Max Grav 2=236 (LC 21), 4=139 (LC 21)

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/24, 2-3=-83/60, 3-4=-101/81

BOT CHORD 2-4=-31/58

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 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.
- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. 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



October 21,2024

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)

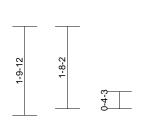


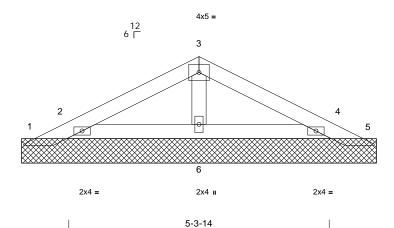
_	Job	Truss	Truss Type	Qty	Ply	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
2	24100107	PB01	Piggyback	11	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:15 ID:VQer1JnjGZ7RoF3MEcmiilz9L6u-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

-0-11-1	2-7-15	5-3-14	6-2-15
0-11-1	2-7-15	2-7-15	0-11-1





Scale = 1:23.5

Loading	(psf)	Spacing	2-0-0	CSI	2.44	DEFL	in	(loc)	l/defl		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 21 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=7-3-0, 2=7-3-0, 4=7-3-0, 5=7-3-0,

6=7-3-0, 7=7-3-0, 10=7-3-0

Max Horiz 1=26 (LC 14)

Max Uplift 1=-67 (LC 21), 2=-53 (LC 14), 4=-54 (LC 15), 5=-64 (LC 22),

7=-53 (LC 14), 10=-54 (LC 15)

Max Grav 1=28 (LC 14), 2=317 (LC 21),

4=303 (LC 22), 5=18 (LC 15), 6=179 (LC 22), 7=317 (LC 21),

10=303 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-35/61, 2-3=-72/59, 3-4=-72/58, 4-5=-16/60

BOT CHORD 2-6=-17/30 4-6=-18/30

WFBS 3-6=-95/45

NOTES

- Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 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.
- 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
- 5) Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 2, 54 lb uplift at joint 4, 67 lb uplift at joint 1, 64 lb uplift at joint 5, 53 lb uplift at joint 2 and 54 lb uplift at joint 4.
- 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.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



October 21,2024

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)

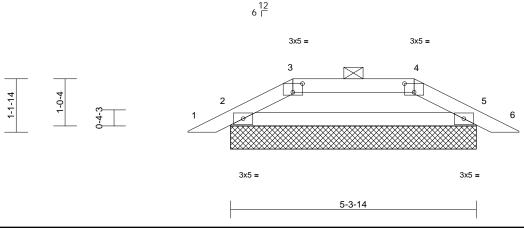


Job	Truss	Truss Type	Qty	Ply	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	PB02	Piggyback	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:15 ID:VQer1JnjGZ7RoF3MEcmiilz9L6u-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

-0-11-1	1-4-3	3-11-11	5-3-14	6-2-15
0-11-1	1-4-3	2-7-8	1-4-3	0-11-1



Scale = 1:24.9

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

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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 19 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.

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

bracing.

REACTIONS (size) 2=5-3-14, 5=5-3-14, 7=5-3-14,

11=5-3-14

Max Horiz 2=-16 (LC 19), 7=-16 (LC 19) Max Uplift 2=-22 (LC 14), 5=-16 (LC 15),

7=-22 (LC 14), 11=-16 (LC 15) Max Grav 2=297 (LC 21), 5=306 (LC 22),

7=297 (LC 21), 11=306 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/24, 2-3=-412/229, 3-4=-391/212,

4-5=-414/227, 5-6=0/24

BOT CHORD 2-5=-146/383

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) 0-4-3 to 2-3-12, Exterior(2R) 2-3-12 to 4-11-4, Exterior(2E) 4-11-4 to 6-10-13 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
- 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.
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- 10) 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.
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 15) 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



October 21,2024

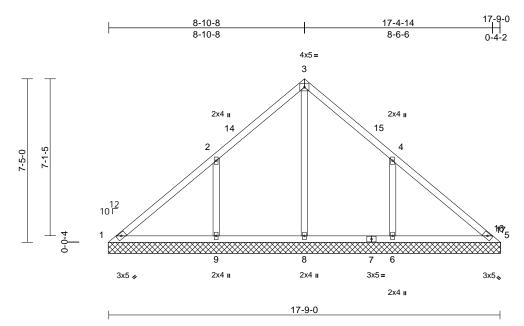
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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/TPII 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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	V01	Valley	1	1	I69004678 Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:15 ID:n01iifxLSCdWNqT1nz_jUEz9Jxo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:52.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 80 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=17-9-10, 5=17-9-10, 6=17-9-10, 8=17-9-10, 9=17-9-10

Max Horiz 1=169 (LC 11)

1=-21 (LC 10), 6=-193 (LC 15), Max Uplift

9=-197 (LC 14)

Max Grav 1=113 (LC 25), 5=80 (LC 21), 6=558 (LC 25), 8=541 (LC 24),

9=563 (LC 24)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-158/307, 2-3=-74/225, 3-4=-75/206,

4-5=-118/279

1-9=-175/145, 8-9=-175/145, 6-8=-175/145,

5-6=-175/145

3-8=-365/0, 2-9=-408/231, 4-6=-408/229

WEBS NOTES

BOT CHORD

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-10-13, Exterior(2R) 5-10-13 to 11-10-13, Interior (1) 11-10-13 to 14-4-12, Exterior(2E) 14-4-12 to 17-4-12 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.
- 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 5) design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1, 197 lb uplift at joint 9 and 193 lb uplift at joint 6.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.
- 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.

LOAD CASE(S) Standard



Page: 1

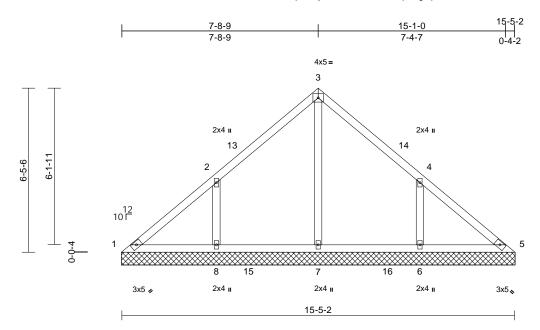
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	V02	Valley	1	1	I69004679 Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:15 ID:n01iifxLSCdWNqT1nz_jUEz9Jxo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:45.3

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)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 68 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=15-5-11, 5=15-5-11, 6=15-5-11, 7=15-5-11, 8=15-5-11

Max Horiz 1=-147 (LC 12)

1=-22 (LC 10), 6=-165 (LC 15), Max Uplift

8=-167 (LC 14)

Max Grav 1=125 (LC 25), 5=101 (LC 21),

6=474 (LC 21), 7=445 (LC 24),

8=474 (LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-153/185, 2-3=-148/148, 3-4=-148/127,

4-5=-123/148 **BOT CHORD**

1-8=-83/132, 7-8=-83/114, 6-7=-83/114,

5-6=-83/114 WEBS

3-7=-258/0. 2-8=-380/204. 4-6=-380/203

NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 4-8-14, Exterior(2R) 4-8-14 to 10-8-14, Interior (1) 10-8-14 to 12-5-11, Exterior(2E) 12-5-11 to 15-5-11 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.
- 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 5) design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1, 167 lb uplift at joint 8 and 165 lb uplift at joint 6.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.
- 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.

LOAD CASE(S) Standard



Page: 1

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

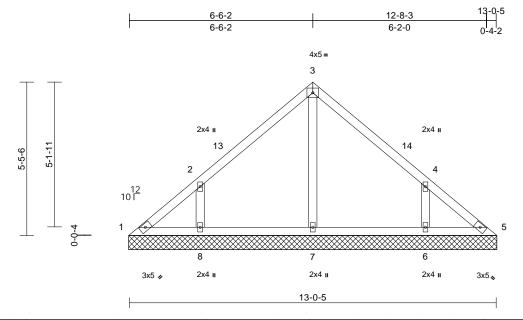
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	V03	Valley	1	1	I69004680 Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:15 ID:n01iifxLSCdWNqT1nz_jUEz9Jxo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:40.9

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	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0			1							Weight: 55 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=13-0-14, 5=13-0-14, 6=13-0-14, 7=13-0-14, 8=13-0-14

Max Horiz 1=-123 (LC 10)

Max Uplift 1=-27 (LC 10), 6=-141 (LC 15),

8=-144 (LC 14)

Max Grav 1=107 (LC 25), 5=85 (LC 24),

6=437 (LC 21), 7=276 (LC 21),

8=437 (LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-136/110, 2-3=-203/116, 3-4=-203/116,

4-5=-107/69

1-8=-41/101, 7-8=-41/82, 6-7=-41/82,

5-6=-41/83 WEBS

3-7=-191/0, 2-8=-380/198, 4-6=-380/198

NOTES

BOT CHORD

- 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) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 3-6-7, Exterior(2R) 3-6-7 to 9-6-7, Interior (1) 9-6-7 to 10-0-14, Exterior(2E) 10-0-14 to 13-0-14 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.
- 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 5) design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1, 144 lb uplift at joint 8 and 141 lb uplift at joint 6.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.
- 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.

LOAD CASE(S) Standard



October 21,2024

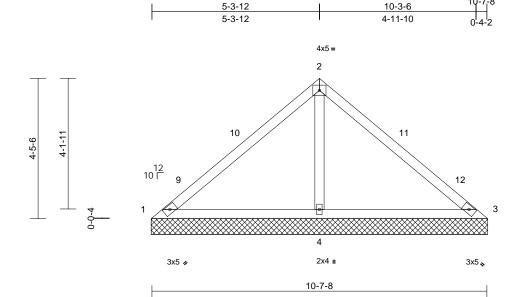
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	V04	Valley	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:15 ID:n01iifxLSCdWNqT1nz_jUEz9Jxo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36.5

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	0.56	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.49	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horiz(TL)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 41 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

10-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=10-8-2, 3=10-8-2, 4=10-8-2

Max Horiz 1=100 (LC 13)

Max Unlift 1=-77 (LC 21), 3=-77 (LC 20),

4=-135 (LC 14)

1=71 (LC 20), 3=71 (LC 21), 4=899 Max Grav

(LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-144/453, 2-3=-144/453 BOT CHORD

1-4=-306/198, 3-4=-306/198

WFBS 2-4=-767/314

NOTES

- Unbalanced roof live loads have been considered for 1) this design
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 7-8-2, Exterior(2E) 7-8-2 to 10-8-2 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

 * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 1, 77 lb uplift at joint 3 and 135 lb uplift at joint 4.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
- 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.

LOAD CASE(S) Standard



Page: 1

October 21,2024

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

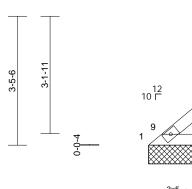
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

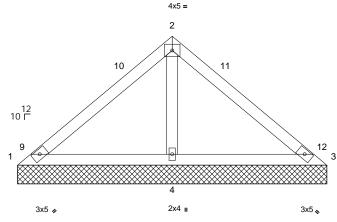


Job	Truss	Truss Type	Qty	Ply	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	V05	Valley	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:15 ID:paE_qTT6WXmsNpJ6_t6_3Lz90CP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1







8-2-11

Scale = 1:30.8

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	0.36	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 31 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

8-2-11 oc purlins.

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

bracing.

REACTIONS (size) 1=8-3-5, 3=8-3-5, 4=8-3-5

Max Horiz 1=-76 (LC 10)

1=-44 (LC 21), 3=-44 (LC 20), Max Uplift

4=-97 (LC 14)

1=87 (LC 20), 3=87 (LC 21), 4=662 Max Grav (LC 21)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-122/305, 2-3=-122/305 **BOT CHORD**

1-4=-237/182, 3-4=-237/182 2-4=-538/249

WEBS NOTES

- Unbalanced roof live loads have been considered for 1) this design
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 5-3-5, Exterior(2E) 5-3-5 to 8-3-5 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

 * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1, 44 lb uplift at joint 3 and 97 lb uplift at joint 4.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
- 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.

LOAD CASE(S) Standard



October 21,2024

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

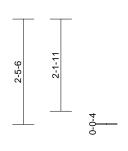
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

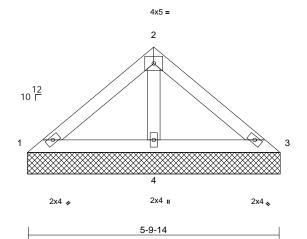


Job	Truss	Truss Type	Qty	Ply	Robie-M-CRAWL+9'FL+LFT-Roof-All Levels
24100107	V06	Valley	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:15 ID:HmnM1pUkHquj?zuIYbdDcZz90CO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1







Scale = 1:26.8

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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 21 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

5-9-14 oc purlins.

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

bracing.

REACTIONS (size) 1=5-10-8, 3=5-10-8, 4=5-10-8 Max Horiz 1=53 (LC 11)

Max Uplift 3=-4 (LC 15), 4=-48 (LC 14)

Max Grav 1=96 (LC 20), 3=96 (LC 21), 4=392

(LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-86/155, 2-3=-86/155

BOT CHORD 1-4=-125/118, 3-4=-125/118

WEBS 2-4=-300/144

NOTES

- Unbalanced roof live loads have been considered for
- 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 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 5) design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 3 and 48 lb uplift at joint 4.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
- 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.

LOAD CASE(S) Standard



October 21,2024

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

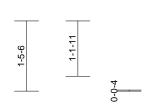
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

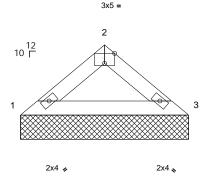


Job	Truss	Truss Type	Qty Ply Robie-M-CRAWL+9'FL+LFT-F		
24100107	V07	Valley	1	1	Job Reference (optional)

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Fri Oct 18 09:02:15 ID:HmnM1pUkHquj?zuIYbdDcZz90CO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1







3-5-2

Scale = 1:23.8

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

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 10 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

3-5-2 oc purlins.

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

bracing.

REACTIONS (size) 1=3-5-11, 3=3-5-11 Max Horiz 1=-30 (LC 10)

Max Uplift 1=-12 (LC 14), 3=-12 (LC 15)

Max Grav 1=162 (LC 20), 3=162 (LC 21)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-214/83, 2-3=-214/83

BOT CHORD 1-3=-51/157

NOTES

- Unbalanced roof live loads have been considered for 1)
- 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 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.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 12 lb uplift at joint 3.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
- 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.

LOAD CASE(S) Standard



October 21,2024

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)

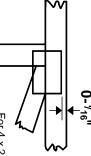


Symbols

PLATE LOCATION AND ORIENTATION



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



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

₹

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

* Plate location details available in MiTek software or upon request

PLATE SIZE

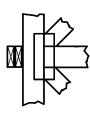
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



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

BEARING



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

ANSI/TPI1: Industry Standards:

National Design Specification for Metal Plate Connected Wood Trusses Installing, Restraining & Bracing of Metal Guide to Good Practice for Handling, Building Component Safety Information, Design Standard for Bracing. Plate Connected Wood Truss Construction.

DSB-22:

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

© 2023 MiTek® All Rights Reserved

MiTek



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

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other

'n

- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- œ Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. 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
- 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 project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.