

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

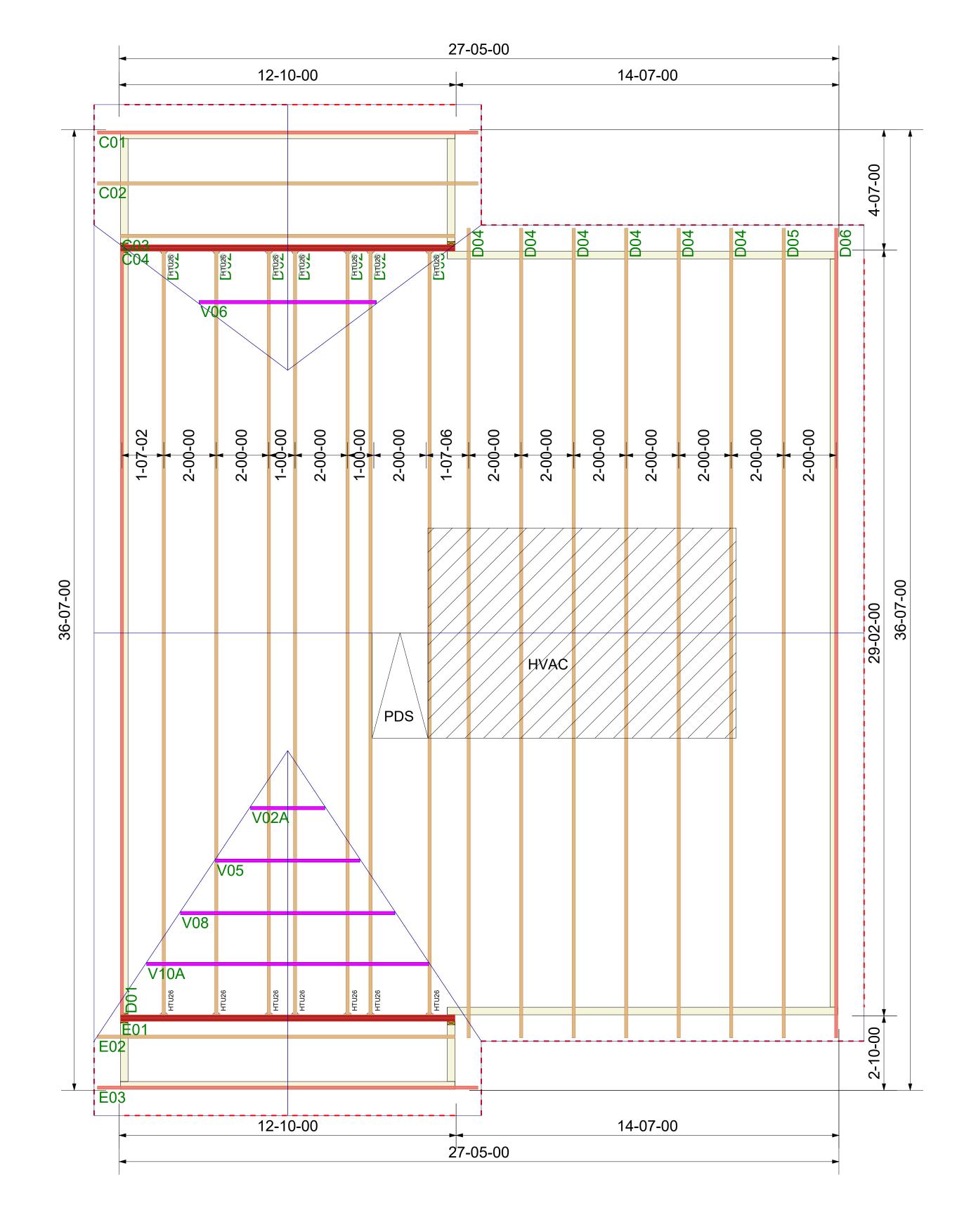
Phone #:919-775-1450

Builder:
Contractors
Hayes A Spring
Lake

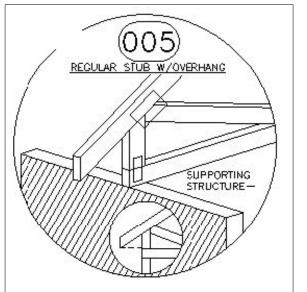


THE PLACEMENT PLAN NOTES:

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



Truss Drawing Left End Indicator



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

Revisions

00/00/00

Name

Name

COMPONEI ACEMENT

Castle

New

6/6/2024 Designer: Project Number: **24050164-A23110107** Sheet Number:



RE: 24050164 Hayes Rd A Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: New Castle Contractors Project Name: 24050164

Lot/Block: Model:

Address: 1 Hayes Rd Subdivision: City: Spring Lake State: NC

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

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

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

This package includes 31 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	162356808	V06	12/5/2023	21	162356828	B01	12/5/2023
2	162356809	V02A	12/5/2023	22	162356829	B02	12/5/2023
3	162356810	V05	12/5/2023	23	162356830	A02	12/5/2023
4	162356811	V08	12/5/2023	24	162356831	A01	12/5/2023
5	162356812	V10A	12/5/2023	25	162356832	V02	12/5/2023
6	162356813	C03	12/5/2023	26	162356833	V04	12/5/2023
7	162356814	C02	12/5/2023	27	162356834	V07	12/5/2023
8	162356815	C01	12/5/2023	28	162356835	V10	12/5/2023
9	162356816	E02	12/5/2023	29	162356836	V12	12/5/2023
10	162356817	E03	12/5/2023	30	162356837	V15	12/5/2023
11	162356818	D01	12/5/2023	31	162356838	V18	12/5/2023
12	162356819	D02	12/5/2023				
13	162356820	D03	12/5/2023				
14	162356821	E01	12/5/2023				
15	162356822	D04	12/5/2023				
16	162356823	D05	12/5/2023				
17	162356824	D06	12/5/2023				

12/5/2023

12/5/2023

12/5/2023

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)).

C04

PB04A

PB04

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

162356825

162356826

162356827

18

19

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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.



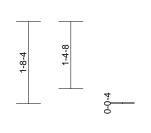
December 05, 2023

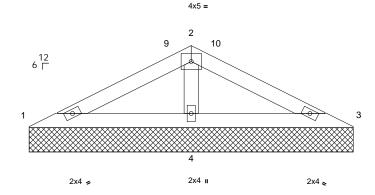
ſ	Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
	24050164	V06	Valley	1	1	Job Reference (optional)	162356808

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 16:00:01 ID:7iA?GrsyZElywua1edcC7EzHsFE-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1







6-8-0

Scale = 1:23.7

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	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	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%

ı	IM	ıR	F	R

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

6-8-0 oc purlins.

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

bracing.

REACTIONS (size) 1=6-8-0, 3=6-8-0, 4=6-8-0

Max Horiz 1=23 (LC 14)

Max Uplift 1=-10 (LC 14), 3=-15 (LC 15),

4=-31 (LC 14)

Max Grav 1=103 (LC 20), 3=103 (LC 21),

4=407 (LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-116/191, 2-3=-116/191 1-4=-139/116, 3-4=-139/116 BOT CHORD

2-4=-267/157

WFBS 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) 0-0-8 to 3-0-8, Exterior(2R) 3-0-8 to 3-8-8, Exterior(2E) 3-8-8 to 6-8-8 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.
- 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 10 lb uplift at joint 1, 15 lb uplift at joint 3 and 31 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.

LOAD CASE(S) Standard



December 5,2023

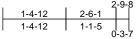
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

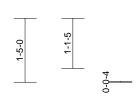
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

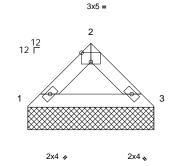


Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	V02A	Valley	1	1	Job Reference (optional)	162356809

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2-9-8

Scale = 1:25.5

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

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	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: 9 lb	FT = 20%

LUMBER

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

BRACING

Structural wood sheathing directly applied or TOP CHORD

2-9-8 oc purlins. BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 1=2-9-8, 3=2-9-8 Max Horiz 1=-28 (LC 12)

Max Uplift 1=-8 (LC 14), 3=-8 (LC 15)

Max Grav 1=130 (LC 20), 3=130 (LC 21)

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-150/70, 2-3=-150/70

BOT CHORD 1-3=-34/100

NOTES

FORCES

- 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) 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 desian.
- Gable requires continuous bottom chord bearing.

- 7) 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 8 lb uplift at joint 1 and 8 lb uplift at joint 3.
- 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



Page: 1

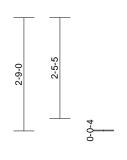
December 5,2023

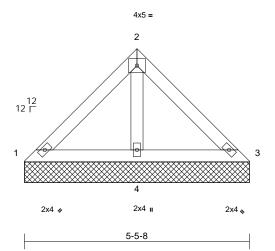
Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	V05	Valley	1	1	Job Reference (optional)	162356810

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Page: 1







Scale = 1:28

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0			1							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

5-5-8 oc purlins.

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

bracing.

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

Max Horiz 1=-60 (LC 10) Max Uplift 4=-56 (LC 14)

Max Grav 1=100 (LC 20), 3=100 (LC 21),

4=352 (LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-83/126, 2-3=-83/126

BOT CHORD 1-4=-99/123, 3-4=-99/123

WEBS 2-4=-227/139

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 56 lb uplift at joint
- 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



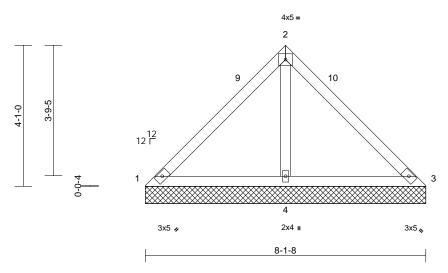
December 5,2023



Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	V08	Valley	1	1	Job Reference (optional)	162356811

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Scale = 1:33.4

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	0.36	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	0.14	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 33 lb	FT = 20%

LUMBER

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

BRACING

Structural wood sheathing directly applied or TOP CHORD

8-1-8 oc purlins.

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

bracing.

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

Max Horiz 1=91 (LC 11)

Max Uplift 1=-34 (LC 21), 3=-34 (LC 20),

4=-125 (LC 14)

1=87 (LC 20), 3=87 (LC 21), 4=637 Max Grav

(LC 21)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-132/272, 2-3=-132/272

1-4=-191/201, 3-4=-191/201 BOT CHORD

WFBS 2-4=-466/287

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) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 5-1-12, Exterior(2E) 5-1-12 to 8-1-12 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
- 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 34 lb uplift at joint 1, 34 lb uplift at joint 3 and 125 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.

LOAD CASE(S) Standard



Page: 1

December 5,2023

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

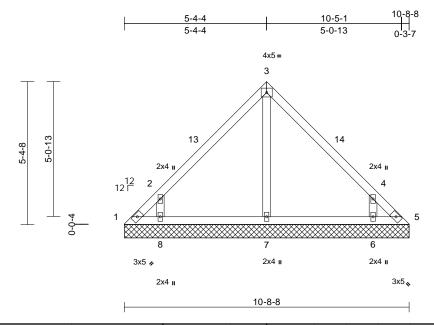
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	Hayes Rd A	
24050164	V10A	Valley	1	1	Job Reference (optional)	162356812

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Page: 1



Scale = 1:43.3

Loading	(psf)	Spacing	1-11-4	csı		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	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										Weight: 47 lb	FT = 20%

LUMBER

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

BRACING

Structural wood sheathing directly applied or TOP CHORD

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=10-8-8, 5=10-8-8, 6=10-8-8, 7=10-8-8, 8=10-8-8

Max Horiz 1=-118 (LC 10)

1=-73 (LC 12), 5=-43 (LC 13), Max Uplift

6=-165 (LC 15), 8=-171 (LC 14)

1=102 (LC 14), 5=82 (LC 15), Max Grav 6=461 (LC 21), 7=225 (LC 20),

8=461 (LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-183/130, 2-3=-252/122, 3-4=-252/122,

4-5=-161/98

1-8=-50/87, 7-8=-33/83, 6-7=-33/83,

5-6=-57/92 WEBS

3-7=-139/0. 2-8=-483/333. 4-6=-483/333

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) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 7-8-12, Exterior(2E) 7-8-12 to 10-8-12 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

- 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 73 lb uplift at joint 1, 43 lb uplift at joint 5, 171 lb uplift at joint 8 and 165 lb uplift at joint 6.
- 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



December 5,2023

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

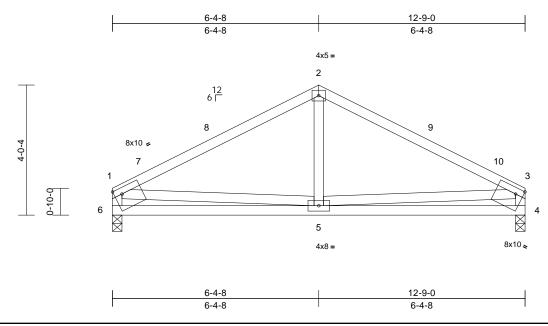
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	Hayes Rd A	
24050164	C03	Common	1	1	Job Reference (optional)	162356813

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:53 ID:M9h_a6lxRnl5yfzVAySKoYzHsFM-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:35.6

Plate Offsets (X, Y): [1:Edge,0-2-4], [4:Edge,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	0.87	Vert(LL)	-0.03	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.07	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 64 lb	FT = 20%

LUMBER

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

BRACING

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

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

bracing.

REACTIONS (size) 4=0-3-8, 6=0-3-8

Max Horiz 6=-57 (LC 10)

Max Uplift 4=-46 (LC 15), 6=-46 (LC 14) Max Grav 4=590 (LC 21), 6=590 (LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD $1\hbox{-}2\hbox{-}675/221,\ 2\hbox{-}3\hbox{-}675/221,\ 1\hbox{-}6\hbox{-}534/202,$

3-4=-534/202

BOT CHORD 5-6=-123/381, 4-5=-123/381 2-5=0/243, 1-5=0/350, 3-5=-1/350

WEBS 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) 0-1-12 to 3-1-12, Exterior (2R) 3-1-12 to 9-7-4, Exterior(2E) 9-7-4 to 12-7-4 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

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

LOAD CASE(S) Standard

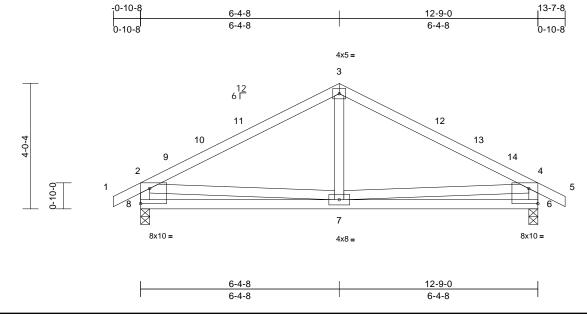


December 5,2023



Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	C02	Common	1	1	Job Reference (optional)	162356814

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:53 ID:bdCyvNfwKKHD?QMyiGJSTszHsFU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:37

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	0.73	Vert(LL)	-0.03	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.06	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 67 lb	FT = 20%

LUMBER

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

WEBS 2x4 SP No.3 *Except* 8-2,6-4:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

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

Max Horiz 8=-62 (LC 12)

Max Uplift 6=-66 (LC 15), 8=-66 (LC 14)

Max Grav 6=652 (LC 22), 8=652 (LC 21)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/27, 2-3=-672/208, 3-4=-672/208, 4-5=0/27, 2-8=-598/248, 4-6=-598/248

BOT CHORD 7-8=-173/545, 6-7=-166/545

WEBS 3-7=0/250, 2-7=-65/296, 4-7=-65/296

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) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-4-8, Exterior(2R) 3-4-8 to 9-4-8, Interior (1) 9-4-8 to 10-7-8, Exterior(2E) 10-7-8 to 13-7-8 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 DOI = 1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



December 5,2023

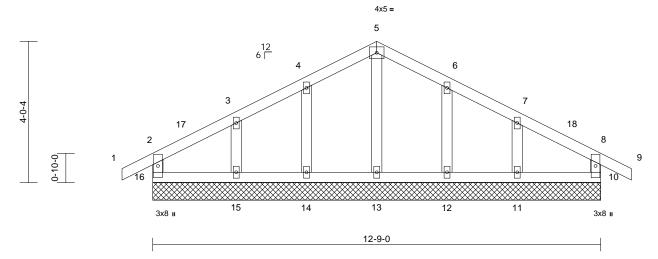


Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	C01	Common Supported Gable	1	1	Job Reference (optional)	162356815

Run: 8 63 S. Nov. 1 2023 Print: 8 630 S.Nov. 1 2023 MiTek Industries. Inc. Mon.Dec 04 15:59:53 ID:IGHJRzaXzAPDfMJcolhphNzHsFb-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:32.8

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0			1							Weight: 61 lb	FT = 20%

LUMBER

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

BRACING

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

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

bracing.

REACTIONS (size)

10=12-9-0, 11=12-9-0, 12=12-9-0, 13=12-9-0, 14=12-9-0, 15=12-9-0, 16=12-9-0

Max Horiz 16=-60 (LC 12)

Max Uplift 10=-23 (LC 15), 11=-56 (LC 15),

12=-41 (LC 15), 14=-41 (LC 14), 15=-59 (LC 14), 16=-24 (LC 15)

Max Grav 10=161 (LC 22), 11=233 (LC 22), 12=235 (LC 22), 13=144 (LC 22),

14=235 (LC 21), 15=233 (LC 21),

16=161 (LC 21)

FORCES (lb) - Maximum Compression/Maximum

Tension

2-16=-142/123, 1-2=0/27, 2-3=-47/48,

3-4=-57/113, 4-5=-75/172, 5-6=-75/172, 6-7=-57/113, 7-8=-44/48, 8-9=0/27,

8-10=-142/123

BOT CHORD 15-16=-19/50, 14-15=-19/50, 13-14=-19/50,

12-13=-19/50, 11-12=-19/50, 10-11=-19/50 **WEBS** 5-13=-104/0, 4-14=-198/109, 3-15=-188/123,

6-12=-198/109, 7-11=-188/123

NOTES

TOP 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 Corner(3E) -0-10-8 to 2-4-8, Exterior(2N) 2-4-8 to 3-4-8, Corner(3R) 3-4-8 to 9-4-8, Exterior(2N) 9-4-8 to 10-4-8, Corner(3E) 10-4-8 to 13-7-8 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.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 16, 23 lb uplift at joint 10, 41 lb uplift at joint 14, 59 lb uplift at joint 15, 41 lb uplift at joint 12 and 56 lb uplift at joint 11.

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

LOAD CASE(S) Standard



December 5,2023

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

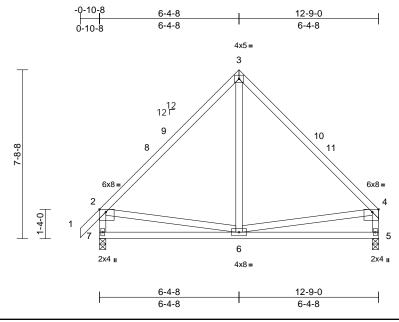
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	Hayes Rd A	
24050164	E02	Common	1	1	Job Reference (optional)	162356816

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:59 ID:V2cRIJYunfQjDdCGvC0MuLzHs5I-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:52.6

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

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	0.94	Vert(LL)	-0.03	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.06	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 79 lb	FT = 20%

LUMBER

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

WEBS 2x4 SP No.3 *Except* 7-2,5-4:2x4 SP No.2

BRACING

Structural wood sheathing directly applied, TOP CHORD except end verticals.

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

bracing.

REACTIONS (size) 5=0-3-8, 7=0-3-8

Max Horiz 7=201 (LC 11)

Max Uplift 5=-38 (LC 14), 7=-41 (LC 14) Max Grav 5=577 (LC 22), 7=642 (LC 21)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/43, 2-3=-555/154, 3-4=-543/144,

2-7=-586/178, 4-5=-521/136 **BOT CHORD** 6-7=-264/345, 5-6=-105/196

WEBS 3-6=0/250, 2-6=-133/282, 4-6=-81/199

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) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-4-8, Exterior(2R) 3-4-8 to 9-7-4, Exterior(2E) 9-7-4 to 12-7-4 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

- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



December 5,2023

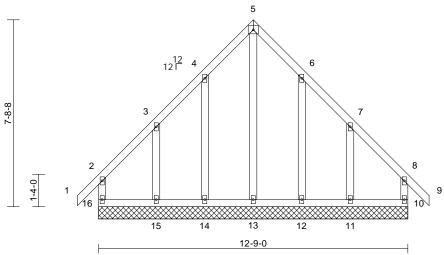


Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	E03	Common Supported Gable	1	1	Job Reference (optional)	162356817

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:59 ID:KCzi?MdfNVBsxYfQFT7m8czHs5C-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:47.5

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 88 lb	FT = 20%

LUMBER

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

BRACING

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc

bracing.

REACTIONS (size)

10=12-9-0, 11=12-9-0, 12=12-9-0, 13=12-9-0, 14=12-9-0, 15=12-9-0, 16=12-9-0

Max Horiz 16=-202 (LC 12)

Max Uplift 10=-86 (LC 11), 11=-159 (LC 15),

12=-76 (LC 15), 14=-75 (LC 14), 15=-161 (LC 14), 16=-96 (LC 10)

Max Grav 10=195 (LC 28), 11=238 (LC 29), 12=272 (LC 22), 13=274 (LC 15),

14=272 (LC 21), 15=242 (LC 28),

16=203 (LC 29)

FORCES (lb) - Maximum Compression/Maximum

Tension

2-16=-162/195, 1-2=0/42, 2-3=-133/133, TOP CHORD

3-4=-128/298, 4-5=-185/412, 5-6=-185/412, 6-7=-128/298, 7-8=-122/133, 8-9=0/42,

8-10=-155/195

BOT CHORD 15-16=-98/103, 14-15=-98/103,

13-14=-98/103, 12-13=-98/103, 11-12=-98/103, 10-11=-98/103

WEBS 5-13=-493/157, 4-14=-235/138,

3-15=-169/209, 6-12=-235/138,

7-11=-167/209

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 2-4-8, Exterior(2N) 2-4-8 to 3-4-8, Corner(3R) 3-4-8 to 9-4-8, Exterior(2N) 9-4-8 to 10-4-8, Corner(3E) 10-4-8 to 13-7-8 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.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 16, 86 lb uplift at joint 10, 75 lb uplift at joint 14, 161 lb uplift at joint 15, 76 lb uplift at joint 12 and 159 lb uplift at joint 11.

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

LOAD CASE(S) Standard



December 5,2023

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

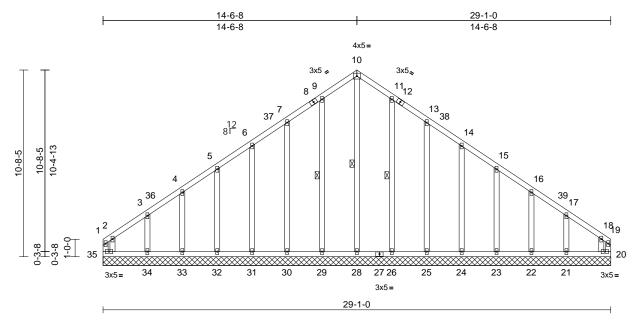
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	Hayes Rd A	
24050164	D01	Common Supported Gable	1	1	Job Reference (optional)	l62356818

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:54 ID:biJfAdUaJDra9tY1hYXPDCzHsEQ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



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	0.07	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.01	20	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 213 lb	FT = 20%

LUMBER TOP CHORD BOT CHORD WEBS		0.2	
OTHERS	2x4 SP N	o.3 *Exce	ept* 28-10:2x4 SP No.2
BRACING			
TOP CHORD			eathing directly applied or except end verticals.
BOT CHORD			ly applied or 10-0-0 oc
WEBS	1 Row at	midpt	10-28, 9-29, 11-26
REACTIONS	(size)	23=29-1	-0, 21=29-1-0, 22=29-1-0, -0, 24=29-1-0, 25=29-1-0, -0, 28=29-1-0, 29=29-1-0,
			-0, 20=29-1-0, 29=29-1-0, -0, 31=29-1-0, 32=29-1-0,
			-0, 34=29-1-0, 35=29-1-0
	Max Horiz	35=-244	(LC 12)
	Max Uplift		(LC 11), 21=-131 (LC 15),
			(LC 15), 23=-62 (LC 15),
			(LC 15), 25=-62 (LC 15),
			(LC 15), 29=-47 (LC 14),
			(LC 14), 31=-54 (LC 14), (LC 14), 33=-30 (LC 14),
			(LC 14), 35=-30 (LC 14), 2 (LC 14), 35=-94 (LC 10)
	Max Grav		(LC 23), 21=234 (LC 28),
	Max Olav		(LC 1), 23=168 (LC 24),
			(LC 24), 25=216 (LC 21),
			(LC 21), 28=256 (LC 15),
		29=249	(LC 20), 30=216 (LC 20),

31=162 (LC 27), 32=170 (LC 23),

33=148 (LC 1), 34=251 (LC 23),

35=191 (LC 24)

(lb) - Maximum Compression/Maximum

TOP CHORD 1-35=-113/109, 1-2=-26/17, 2-3=-192/164, 3-4=-147/123, 4-5=-146/135, 5-6=-133/168, 6-7=-145/201, 7-9=-179/257, 9-10=-206/304, 10-11=-206/304, 11-13=-179/257, 13-14=-145/201, 14-15=-115/148, 15-16=-110/111, 16-17=-118/79, 17-18=-141/110, 18-19=-24/17, 19-20=-88/84 BOT CHORD 34-35=-96/124, 33-34=-96/124, 32-33=-96/124, 31-32=-96/124, 30-31=-96/124, 29-30=-96/124, 28-29=-96/124, 26-28=-96/124, 25-26=-96/124, 24-25=-96/124, 23-24=-96/124, 22-23=-96/124 21-22=-96/124, 20-21=-96/124 **WEBS** 10-28=-275/134, 9-29=-210/71 7-30=-177/85, 6-31=-124/78, 5-32=-128/84,

4-33=-112/62, 3-34=-183/145,

2-35=-252/202, 11-26=-210/69, 13-25=-177/85, 14-24=-124/78, 15-23=-128/83, 16-22=-112/62, 17-21=-171/137, 18-20=-184/134

NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 11-6-8, Corner(3R) 11-6-8 to 17-6-8, Exterior (2N) 17-6-8 to 25-11-4, Corner(3E) 25-11-4 to 28-11-4 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 desian.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 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.



Continued on page 2

FORCES

Scale = 1:66

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	Hayes Rd A	
24050164	D01	Common Supported Gable	1	1	I623 Job Reference (optional)	56818

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12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 35, 51 lb uplift at joint 20, 47 lb uplift at joint 29, 62 lb uplift at joint 30, 54 lb uplift at joint 31, 62 lb uplift at joint 32, 30 lb uplift at joint 33, 142 lb uplift at joint 34, 46 lb uplift at joint 36, 154 lb uplift at joint 36, 46 l uplift at joint 26, 62 lb uplift at joint 25, 54 lb uplift at joint 24, 62 lb uplift at joint 23, 34 lb uplift at joint 22 and 131 lb uplift at joint 21.

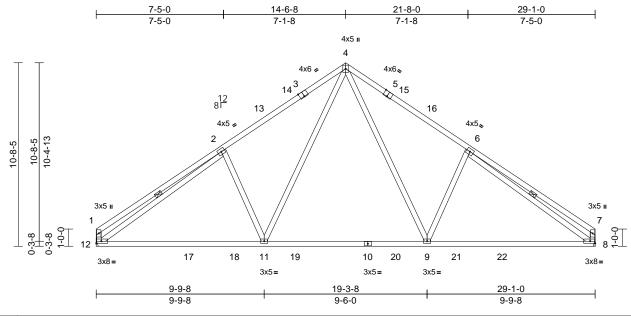
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	D02	Common	6	1	Job Reference (optional)	162356819

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Scale = 1:67.2

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

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	0.83	Vert(LL)	-0.20	8-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.38	8-9	>915	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 174 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.1

WEBS 2x4 SP No.3 *Except* 9-4,11-4:2x4 SP No.2

BRACING

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

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

WEBS 1 Row at midpt 2-12, 6-8

REACTIONS (size)

8= Mechanical, 12= Mechanical Max Horiz 12=244 (LC 13)

Max Uplift 8=-93 (LC 15), 12=-93 (LC 14)

Max Grav 8=1312 (LC 24), 12=1312 (LC 23)

(lb) - Maximum Compression/Maximum FORCES

Tension TOP CHORD

1-2=-581/144, 2-4=-1580/252,

4-6=-1580/252, 6-7=-581/144,

1-12=-458/138, 7-8=-458/138

BOT CHORD 11-12=-168/1461, 9-11=0/988, 8-9=-44/1307 WEBS 4-9=-148/797, 6-9=-380/277, 4-11=-148/797,

2-11=-380/277, 2-12=-1221/64, 6-8=-1220/63

NOTES

- 1) 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) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 11-6-8, Exterior(2R) 11-6-8 to 17-6-8, Interior (1) 17-6-8 to 25-11-4, Exterior(2E) 25-11-4 to 28-11-4 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

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- This truss has been designed for 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 12 and 93 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

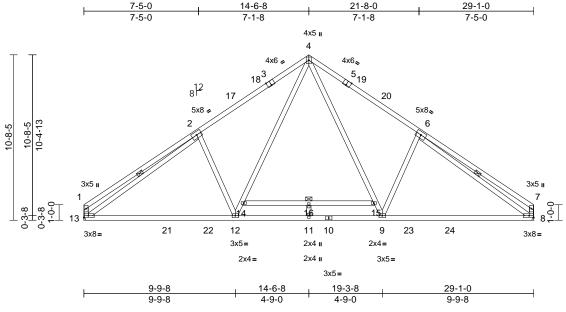
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	D03	Common	1	1	Job Reference (optional)	162356820

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Page: 1



Scale = 1:74.5 Plate Offsets (X, Y): [2:0-0-0,0-0-0], [3:0-3-0,Edge], [5:0-3-0,Edge]

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	0.83	Vert(LL)	-0.29	8-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.50	8-9	>687	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 188 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3 *Except* 9-4,12-4:2x4 SP No.2

BRACING

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

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

bracing.

WEBS 1 Row at midpt 2-13, 14-15, 6-8

8= Mechanical, 13= Mechanical REACTIONS (size)

Max Horiz 13=-244 (LC 10) Max Uplift 8=-93 (LC 15), 13=-93 (LC 14)

Max Grav 8=1269 (LC 24), 13=1269 (LC 23)

(lb) - Maximum Compression/Maximum FORCES

Tension TOP CHORD

1-2=-598/142, 2-4=-1501/252,

4-6=-1501/252, 6-7=-598/142, 1-13=-467/136, 7-8=-467/136

12-13=-169/1399, 11-12=0/969, 9-11=0/969,

BOT CHORD 8-9=-45/1244

WEBS 4-15=-149/750, 9-15=-150/733,

6-9=-380/276, 12-14=-150/734,

4-14=-149/750, 2-12=-380/276,

2-13=-1124/67, 14-16=-31/4, 15-16=-31/4,

6-8=-1124/66, 11-16=0/21

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) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 11-6-8, Exterior(2R) 11-6-8 to 17-6-8, Interior (1) 17-6-8 to 25-11-4, Exterior(2E) 25-11-4 to 28-11-4 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 13 and 93 lb uplift at joint 8.
- 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



December 5,2023



Job Truss Truss Type Qty Ply Haves Rd A 162356821 24050164 E01 Common Girder 2 Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:58 ID:8YIhZz4RzgWF2ejm6WpCp7zHs5v-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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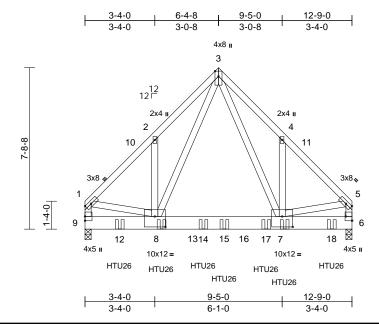


Plate Offsets (X, Y): [1:0-3-7,Edge], [5:0-3-7,Edge], [6:Edge,0-3-8], [7:0-6-0,0-6-0], [8:0-6-0,0-6-0]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.08	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.13	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.77	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 221 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No 2 BOT CHORD 2x8 SP 2400F 2.0E **WEBS** 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-6-9 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 6=0-3-8, 9=0-3-8

Max Horiz 9=174 (LC 11)

Max Uplift 6=-422 (LC 12), 9=-380 (LC 13) Max Grav 6=5257 (LC 21), 9=4769 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=-4818/417, 2-3=-4746/539, TOP CHORD

3-4=-4971/558, 4-5=-5047/436,

1-9=-4384/363, 5-6=-4595/380 **BOT CHORD** 8-9=-185/369, 7-8=-177/2117, 6-7=-49/242

WEBS 3-7=-446/3836, 4-7=-220/256,

3-8=-411/3413, 2-8=-226/253,

1-8=-224/3257, 5-7=-239/3424

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 OC.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.

Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 4-7 2x4 - 1 row at 0-6-0 oc, Except member 2-8 2x4 - 1 row at 0-6-0 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.

- 3) 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 DOI = 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 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) 9 and 6. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802 10 2 and referenced standard ANSI/TPI 1
- 11) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. starting at 1-7-14 from the left end to 11-9-6 to connect truss(es) to back face of bottom chord.
- 12) 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: 1-3=-58, 3-5=-58, 6-9=-19

Concentrated Loads (lb)

Vert: 7=-1106 (B), 8=-1106 (B), 12=-1106 (B), 14=-1106 (B), 15=-1106 (B), 17=-1106 (B), 18=-1107 (B)



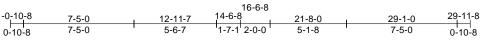
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

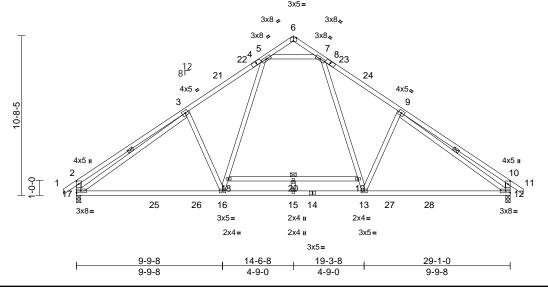
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	Hayes Rd A	
24050164	D04	Common	6	1	Job Reference (optional)	162356822

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:57 ID:HoQAe6VOR1L68Ig4K301MwzHsAW-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





Scale = 1:77.3

Plate Offsets (X, Y): [2:0-2-8,0-1-12], [6:0-2-8,Edge], [10:0-2-8,0-1-12]

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	0.85	Vert(LL)	-0.37	16-17	>928	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.56	16-17	>622	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.05	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 191 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No 2 **BOT CHORD** 2x4 SP No 1 **WEBS** 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-10-4 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing. WEBS

1 Row at midpt 3-17, 9-12, 18-19 12=0-3-8, 17=0-3-8 REACTIONS (size)

Max Horiz 17=268 (LC 13)

Max Uplift 12=-116 (LC 15), 17=-116 (LC 14)

Max Grav 12=1367 (LC 25), 17=1369 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/34, 2-3=-778/255, 3-5=-1523/234,

5-6=-133/70, 6-7=-133/70, 7-9=-1522/234,

9-10=-776/254, 10-11=0/34, 2-17=-647/230,

10-12=-646/230

BOT CHORD 16-17=-152/1430, 15-16=-3/1105, 13-15=-3/1105, 12-13=-17/1276

WEBS 7-19=-123/689, 13-19=-124/679,

9-13=-348/275, 16-18=-125/682,

5-18=-123/691, 3-16=-348/275,

3-17=-1040/5, 9-12=-1041/5, 5-7=-988/244, 18-20=-21/3, 19-20=-21/3, 15-20=0/18

NOTES

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 11-6-8, Exterior(2R) 11-6-8 to 17-6-8, Interior (1) 17-6-8 to 26-11-8, Exterior(2E) 26-11-8 to 29-11-8 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.
- 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) 17 and 12. This connection is for uplift only and does not consider lateral forces
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

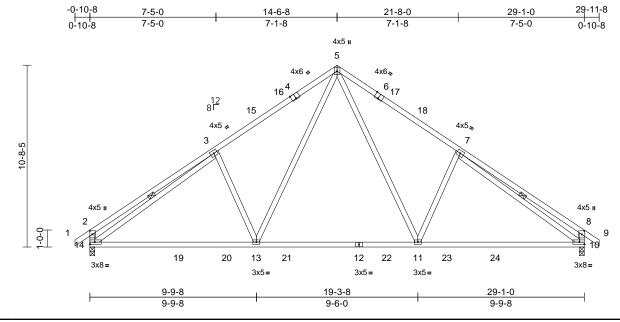
December 5,2023



Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	D05	Common	1	1	I6 Job Reference (optional)	62356823

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:57 ID:cxjo3tT3kIDL2yu9B0wUnazHs6h-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:67.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.21	13-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.40	13-14	>869	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 177 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.1

WEBS 2x4 SP No.3 *Except* 11-5,13-5:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied,

except end verticals.

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

bracing. WEBS 1 Row at midpt

3-14, 7-10 10=0-3-8, 14=0-3-8 REACTIONS (size)

Max Horiz 14=268 (LC 13)

Max Uplift 10=-116 (LC 15), 14=-116 (LC 14)

Max Grav 10=1414 (LC 25), 14=1414 (LC 24)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=0/34, 2-3=-719/222, 3-5=-1624/257,

5-7=-1624/257, 7-8=-718/222, 8-9=0/34,

2-14=-608/208, 8-10=-608/208 13-14=-161/1509, 11-13=0/1028,

BOT CHORD 10-11=-22/1351

5-11=-150/815, 7-11=-383/282, **WEBS**

5-13=-150/815, 3-13=-383/282,

3-14=-1174/25, 7-10=-1173/25

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) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 11-6-8, Exterior(2R) 11-6-8 to 17-6-8, Interior (1) 17-6-8 to 26-11-8, Exterior(2E) 26-11-8 to 29-11-8 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

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 10. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



December 5,2023

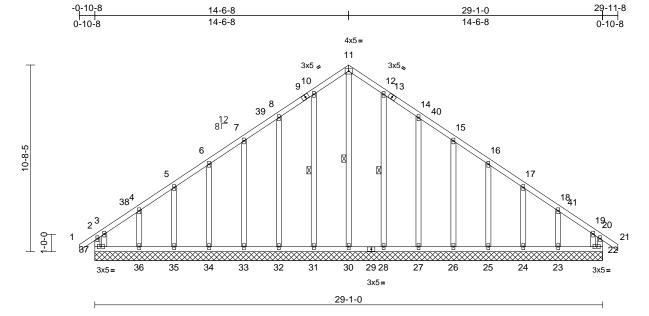
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	D06	Common Supported Gable	1	1	Job Reference (optional)	162356824

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:58 ID:cCFDdhgkkXMwaZhQh4jT_AzHs6Q-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



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	0.14	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	0.20	Horz(CT)	0.01	22	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 216 lb	FT = 20%

BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
OTHERS	2x4 SP N	o.3 *Except* 30-11:2x4 SP No.2
BRACING		
TOP CHORD	Structura	I wood sheathing directly applied or
	6-0-0 oc p	ourlins, except end verticals.
BOT CHORD	Rigid ceil	ing directly applied or 6-0-0 oc
	bracing.	
WEBS	1 Row at	midpt 11-30, 10-31, 12-28
REACTIONS	(size)	22=29-1-0, 23=29-1-0, 24=29-1-0,
		25=29-1-0, 26=29-1-0, 27=29-1-0,
		28=29-1-0, 30=29-1-0, 31=29-1-0,
		32=29-1-0, 33=29-1-0, 34=29-1-0,
		35=29-1-0, 36=29-1-0, 37=29-1-0
	Max Horiz	37=260 (LC 13)
	Max Uplift	22=-50 (LC 11), 23=-128 (LC 15),
		24=-35 (LC 15) 25=-61 (LC 15)

36=-140 (LC 14), 37=-93 (LC 10) 22=193 (LC 24), 23=223 (LC 29), Max Grav 24=151 (LC 22), 25=168 (LC 29), 26=162 (LC 29), 27=215 (LC 22), 28=249 (LC 22), 30=261 (LC 15), 31=249 (LC 21), 32=215 (LC 21), 33=162 (LC 24), 34=169 (LC 24),

26=-54 (LC 15), 27=-62 (LC 15),

28=-46 (LC 15), 31=-47 (LC 14),

32=-62 (LC 14), 33=-54 (LC 14),

34=-62 (LC 14), 35=-31 (LC 14),

35=151 (LC 21), 36=240 (LC 28),

37=227 (LC 25)

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-37=-161/144, 1-2=0/33, 2-3=-27/55 3-4=-188/171, 4-5=-142/128, 5-6=-135/141, 6-7=-117/173, 7-8=-138/205, 8-10=-172/261, 10-11=-199/308, 11-12=-199/308, 12-14=-172/261, 14-15=-138/204, 15-16=-108/152, 16-17=-92/114, 17-18=-94/82, 18-19=-133/113, 19-20=-27/55, 20-21=0/33, 20-22=-141/144 36-37=-105/131, 35-36=-105/131, BOT CHORD 34-35=-105/131, 33-34=-105/131,

32-33=-105/131, 31-32=-105/131, 30-31=-105/131, 28-30=-105/131, 27-28=-105/131, 26-27=-105/131, 25-26=-105/131, 24-25=-105/131, 23-24=-105/131, 22-23=-105/131 11-30=-278/127, 10-31=-211/71,

8-32=-177/85, 7-33=-124/78, 6-34=-128/84, 5-35=-115/64, 4-36=-174/143, 3-37=-255/212, 12-28=-211/69, 14-27=-177/85, 15-26=-124/78, 16-25=-127/83, 17-24=-115/64

18-23=-162/135, 19-22=-188/141

NOTES

WEBS

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 11-6-8, Corner(3R) 11-6-8 to 17-6-8, Exterior (2N) 17-6-8 to 26-11-8, Corner(3E) 26-11-8 to 29-11-8 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.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.



December 5,2023

Continued on page 2

FORCES

Scale = 1:66

LUMBER

TOP CHORD 2x4 SP No.2

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Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	D06	Common Supported Gable	1	1	I62 Job Reference (optional)	2356824

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:58 $ID: cCFDdhgkkXMwaZhQh4jT_AzHs6Q-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff$ Page: 2

13) Provide mechanical connection (by others) of truss to periode inechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 37, 50 lb uplift at joint 22, 47 lb uplift at joint 31, 62 lb uplift at joint 32, 54 lb uplift at joint 33, 62 lb uplift at joint 34, 31 lb uplift at joint 35, 140 lb uplift at joint 36, 46 lb uplift at joint 28, 62 lb uplift at joint 27, 54 lb uplift at joint 28, 62 lb uplift at joint 27, 54 lb uplift at joint 28, 62 lb uplift at joint 28, 62 lb uplift at joint 28, 62 lb uplift at joint 27, 54 lb uplift at joint 28, 62 lb uplift at joint 27, 54 lb uplift at joint 28, 62 lb uplift at joint 27, 54 lb uplift at joint 30, 62 26, 61 lb uplift at joint 25, 35 lb uplift at joint 24 and 128 lb uplift at joint 23.

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

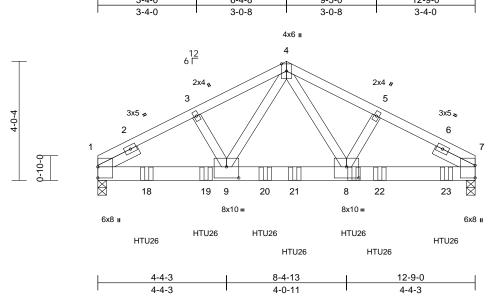
LOAD CASE(S) Standard

Ply Job Truss Truss Type Qty Haves Rd A 162356825 24050164 C04 Common Girder 2 Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:54 ID:Q25fkExLvOBzFzcNYbErvizHsF7-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





Scale = 1:38.9

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

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	0.70	Vert(LL)	-0.09	8-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.16	8-9	>970	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.02	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 146 lb	FT = 20%

LUMBER

2x4 SP No.2 TOP CHORD 2x6 SP 2400F 2.0E **BOT CHORD WEBS** 2x4 SP No.3

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

3-8-8 oc purlins.

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

bracing.

REACTIONS (size) 1=0-3-8, 7=0-3-8

1=49 (LC 16) Max Horiz

Max Uplift 1=-390 (LC 12), 7=-435 (LC 13) 1=4681 (LC 21), 7=5198 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-3=-6820/583, 3-4=-6778/597,

4-5=-7076/623, 5-7=-7117/608

BOT CHORD 1-9=-523/5994, 8-9=-357/4598, 7-8=-496/6231

WEBS 4-8=-322/3636, 5-8=-44/312, 4-9=-276/3088,

3-9=-43/304

NOTES

2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 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.

- 3) 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 DOI = 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802 10 2 and referenced standard ANSI/TPI 1
- 11) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. starting at 1-7-14 from the left end to 11-9-6 to connect truss(es) to front face of bottom chord.
- 12) 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, 4-7=-58, 10-14=-19

Concentrated Loads (lb)

Vert: 8=-1106 (F), 18=-1106 (F), 19=-1106 (F), 20=-1106 (F), 21=-1106 (F), 22=-1106 (F), 23=-1106

Page: 1



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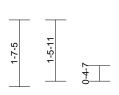


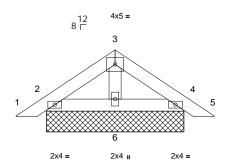
Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	PB04A	Piggyback	10	1	Job Reference (optional)	162356826

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 16:00:00 ID:xmQZFe639BUIUMr60cUgc9zHsGC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

-0-8-	12			
		1-7-14	3-3-12	4-0-8
0-8-	12	1-7-14	1-7-14	0-8-12





Scale = 1:27.7

I	3-3-12	

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDI	10.0										Weight: 15 lb	FT = 20%	

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-10-0 oc purlins.

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

bracing.

REACTIONS (size) 2=3-3-12, 4=3-3-12, 6=3-3-12,

7=3-3-12, 11=3-3-12

Max Horiz 2=33 (LC 13), 7=33 (LC 13) Max Uplift 2=-21 (LC 14), 4=-25 (LC 15), 6=-1

(LC 14), 7=-21 (LC 14), 11=-25 (LC

15)

Max Grav 2=139 (LC 21), 4=139 (LC 22),

6=119 (LC 1), 7=139 (LC 21),

11=139 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/23, 2-3=-43/41, 3-4=-43/41, 4-5=0/23

BOT CHORD 2-6=-5/35, 4-6=-5/35 WEBS 3-6=-52/9

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
- 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.
- 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.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) N/A
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



December 5,2023

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)

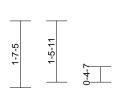


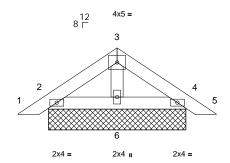
Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	PB04	Piggyback	1	1	Job Reference (optional)	162356827

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:59 ID:pG8fWBxvDBrbQMLcINIdaQzHsGP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

-0-8-12			
	1-7-14	3-3-12	4-0-8
0-8-12	1-7-14	1-7-14	0-8-12





Scale = 1:27.7

3-3-12	I
	1

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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0			1							Weight: 15 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

4-10-0 oc purlins.

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

bracing.

REACTIONS (size) 2=3-3-12, 4=3-3-12, 6=3-3-12,

7=3-3-12, 11=3-3-12

Max Horiz 2=32 (LC 13), 7=32 (LC 13) Max Uplift 2=-20 (LC 14), 4=-25 (LC 15), 6=-1

(LC 14), 7=-20 (LC 14), 11=-25 (LC

15)

Max Grav 2=135 (LC 21), 4=135 (LC 22),

6=115 (LC 1), 7=135 (LC 21),

11=135 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/23, 2-3=-42/40, 3-4=-42/40, 4-5=0/23

BOT CHORD 2-6=-5/34, 4-6=-5/34

WEBS 3-6=-50/9

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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) N/A
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

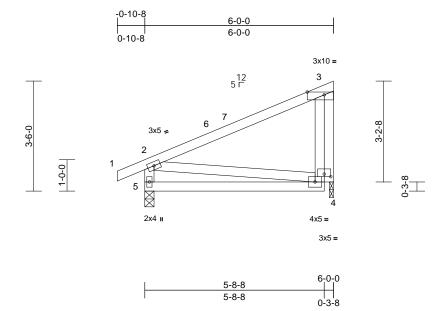


December 5,2023



Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	B01	Monopitch	7	1	Job Reference (optional)	162356828

Run: 8 63 S. Nov. 1 2023 Print: 8 630 S.Nov. 1 2023 MiTek Industries. Inc. Mon.Dec 04 15:59:52 ID:a495mkFbKt?2wClQj7iU5hzHsG0-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:36.7

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

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	0.91	Vert(LL)	-0.06	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.11	4-5	>581	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 37 lb	FT = 20%

LUMBER

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

BRACING

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

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

REACTIONS (size) 4=0-1-8, 5=0-3-8

Max Horiz 5=125 (LC 13)

Max Uplift 4=-48 (LC 14), 5=-42 (LC 14) Max Grav 4=307 (LC 21), 5=380 (LC 21)

(lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-2=0/24, 2-3=-89/77, 3-4=-251/135,

2-5=-324/181

BOT CHORD 4-5=-122/0 WEBS 2-4=-12/130

NOTES

- 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) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-8-8, Exterior(2E) 2-8-8 to 5-8-8 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 DOI = 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

- 4) 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) 5 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



Page: 1

December 5,2023

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

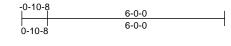
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

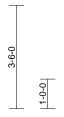
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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)

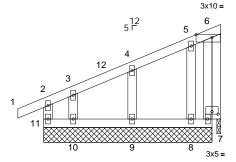


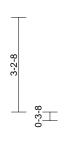
Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	B02	Monopitch Supported Gable	1	1	Job Reference (optional)	162356829

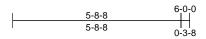
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Scale = 1:39.1

Plate Offsets (X, Y): [6:0-6-8,Edge], [7:0-2-8,0-1-0]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	0.00	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 37 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc

BOT CHORD

REACTIONS (size) 7=5-8-8, 8=5-8-8, 9=5-8-8, 10=5-8-8. 11=5-8-8

11=121 (LC 13) Max Horiz Max Uplift 7=-37 (LC 13), 8=-10 (LC 14), 9=-37 (LC 14), 10=-92 (LC 11)

Max Grav 7=7 (LC 21), 8=169 (LC 21), 9=238 (LC 21), 10=136 (LC 21), 11=142

(LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

2-11=-109/31, 1-2=0/23, 2-3=-130/18, 3-4=-63/38, 4-5=-55/31, 5-6=-53/66,

6-7=-10/18

BOT CHORD 10-11=-50/57, 9-10=-50/57, 8-9=-50/57,

7-8=-50/57

4-9=-196/180, 3-10=-111/171, 5-8=-134/93

WEBS NOTES

TOP CHORD

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 2-8-8, Corner(3E) 2-8-8 to 5-8-8 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

- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face). see Standard Industry Gable End Details as applicable or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads
- All plates are 2x4 MT20 unless otherwise indicated. Truss to be fully sheathed from one face or securely
- braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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) N/A
- 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



December 5,2023

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Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	A02	Piggyback Base	10	1	Job Reference (optional)	162356830

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:52 ID:LL6itg8yS6sKLqZhhk2NEozHsG9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i

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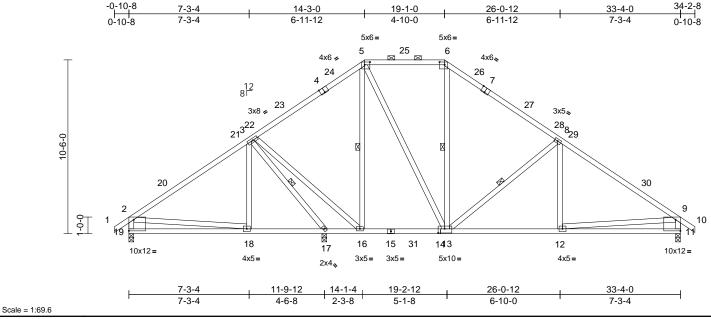


Plate Offsets (X, Y): [4:0-3-0,Edge], [5:0-3-12,0-2-0], [6:0-3-12,0-2-0], [7:0-3-0,Edge], [11:Edge,0-8-2], [13:0-4-12,0-3-0], [19:Edge,0-8-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.07	18-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.14	18-19	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.03	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 230 lb	FT = 20%

LUMBER

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

WEBS 2x4 SP No.3 *Except* 13-5:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-11-14 oc purlins, except end verticals, and

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

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

bracing, Except:

6-0-0 oc bracing: 16-17. **WEBS** 1 Row at midpt

3-17, 5-16, 6-13, 8-13 11=0-3-8, 17=0-3-8, 19=0-3-8 REACTIONS (size)

Max Horiz 19=-264 (LC 12)

Max Uplift 11=-130 (LC 15), 17=-115 (LC 14),

19=-66 (LC 14)

11=1186 (LC 49), 17=1336 (LC 47),

19=769 (LC 47)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/34, 2-3=-814/90, 3-5=-642/177.

> 5-6=-649/219, 6-8=-927/194, 8-9=-1425/165, 9-10=0/34, 2-19=-676/105, 9-11=-1070/168

18-19=-263/527, 17-18=-111/731,

16-17=-489/195, 13-16=-50/455,

12-13=-24/1091, 11-12=-120/354

3-18=0/245, 3-17=-1565/179, 3-16=-25/999,

5-16=-583/64, 5-13=-103/601, 6-13=-41/178,

8-13=-689/209, 8-12=0/249, 2-18=-55/405,

NOTES

WEBS

BOT CHORD

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-5-8, Interior (1) 2-5-8 to 9-6-7, Exterior(2R) 9-6-7 to 23-9-9, Interior (1) 23-9-9 to 30-10-8, Exterior(2E) 30-10-8 to 34-2-8 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.
- 8) * 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) 19, 17, and 11. 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



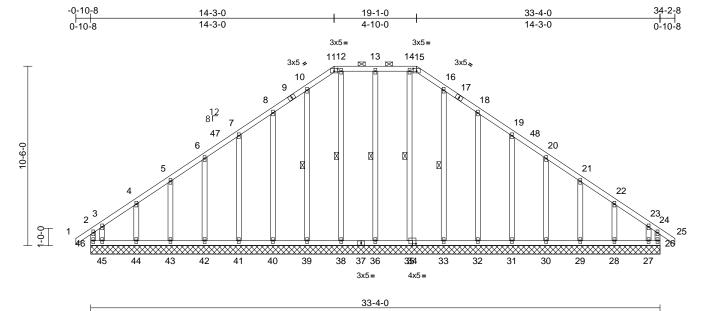
December 5,2023

Job Truss Truss Type Qtv Ply Haves Rd A 162356831 24050164 A01 Piggyback Base Supported Gable Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 15:59:48 ID:mfGPxtzAlp6JfgV?soo5frzHsGN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:67.5

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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	26	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 259 lb	FT = 20%

LUMBER TOP CHORD

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

2x4 SP No 2

BRACING TOP CHORD

Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-15.

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

bracing.

WEBS 1 Row at midpt 13-36, 12-38, 10-39,

14-35, 16-33

REACTIONS (size) 26=33-4-0, 27=33-4-0, 28=33-4-0, 29=33-4-0, 30=33-4-0, 31=33-4-0, 32=33-4-0, 33=33-4-0, 35=33-4-0,

36=33-4-0, 38=33-4-0, 39=33-4-0, 40=33-4-0, 41=33-4-0, 42=33-4-0, 43=33-4-0, 44=33-4-0, 45=33-4-0,

46=33-4-0

Max Horiz 46=-256 (LC 12)

Max Uplift 26=-165 (LC 13), 27=-237 (LC 15), 28=-53 (LC 15), 29=-57 (LC 15),

30=-56 (LC 15), 31=-55 (LC 15), 32=-66 (LC 15), 33=-27 (LC 15), 36=-40 (LC 10), 39=-31 (LC 14), 40=-64 (LC 14), 41=-55 (LC 14),

42=-56 (LC 14), 43=-57 (LC 14), 44=-52 (LC 14), 45=-281 (LC 14),

46=-283 (LC 12)

Max Grav 26=254 (LC 15), 27=224 (LC 13), 28=167 (LC 49), 29=163 (LC 29), 30=188 (LC 49), 31=221 (LC 39), 32=219 (LC 39), 33=218 (LC 39), 35=208 (LC 22), 36=232 (LC 38), 38=208 (LC 21), 39=218 (LC 39), 40=219 (LC 39), 41=221 (LC 39),

42=187 (LC 47), 43=163 (LC 24), 44=165 (LC 47), 45=309 (LC 12),

46=353 (LC 11)

(lb) - Maximum Compression/Maximum

Tension TOP CHORD

FORCES

2-46=-217/164, 1-2=0/33, 2-3=-247/220, 3-4=-162/159, 4-5=-141/137, 5-6=-125/133, 6-7=-119/155, 7-8=-109/186, 8-10=-143/244,

10-11=-163/277, 11-12=-142/253, 12-13=-142/253, 13-14=-142/253,

14-15=-142/253, 15-16=-163/277, 16-18=-143/244, 18-19=-109/185,

19-20=-78/132, 20-21=-70/90, 21-22=-84/77, 22-23=-111/96, 23-24=-195/135, 24-25=0/33,

24-26=-158/93 **BOT CHORD**

45-46=-107/134, 44-45=-107/134, 43-44=-107/134, 42-43=-107/134, 41-42=-107/134, 40-41=-107/134, 39-40=-107/134, 38-39=-107/134,

36-38=-107/134, 35-36=-107/134, 33-35=-107/134, 32-33=-107/134,

31-32=-107/134, 30-31=-107/134, 29-30=-107/134, 28-29=-107/134,

27-28=-107/134, 26-27=-107/134

WEBS 13-36=-193/68, 12-38=-169/28,

10-39=-179/54, 8-40=-180/88, 7-41=-183/78, 6-42=-149/80, 5-43=-124/79, 4-44=-129/82,

3-45=-149/164, 14-35=-169/10, 16-33=-179/50. 18-32=-180/89.

19-31=-183/78, 20-30=-149/80, 21-29=-124/79, 22-28=-129/82,

23-27=-110/144

NOTES

- Unbalanced roof live loads have been considered for 1) this design
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-8-0, Exterior(2N) 2-8-0 to 10-8-0, Corner(3R) 10-8-0 to 22-8-0, Exterior (2N) 22-8-0 to 30-8-0, Corner(3E) 30-8-0 to 34-2-8 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



December 5,2023

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	A01	Piggyback Base Supported Gable	1	1	Job Reference (optional)	162356831

Run: 8 63 S. Nov. 1 2023 Print: 8 630 S.Nov. 1 2023 MiTek Industries. Inc. Mon.Dec 04 15:59:48 ID:mfGPxtzAlp6JfgV?soo5frzHsGN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

- 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 283 lb uplift at joint 46, 165 lb uplift at joint 26, 40 lb uplift at joint 36, 31 lb uplift at joint 39, 64 lb uplift at joint 40, 55 lb uplift at joint 41, 56 lb uplift at joint 42, 57 lb uplift at joint 43, 52 Ib uplift at joint 44, 281 Ib uplift at joint 45, 27 Ib uplift at joint 33, 66 lb uplift at joint 32, 55 lb uplift at joint 31, 56 Ib uplift at joint 30, 57 lb uplift at joint 29, 53 lb uplift at joint 28 and 237 lb uplift at joint 27.
- 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

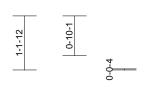
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	V02	Valley	1	1	Job Reference (optional)	162356832

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 16:00:00 ID: PF boh? SNpuCRY liRbgKAmSzHs2r-RfC? PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC? for the property of the prope







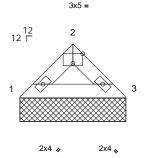


Plate Offsets (X, Y): [2:0-2-8,Edge]

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	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: 7 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

2-3-0 oc purlins.

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

bracing.

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

Max Horiz 1=-22 (LC 10) Max Uplift 1=-7 (LC 14), 3=-7 (LC 15)

Max Grav 1=102 (LC 20), 3=102 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-114/59, 2-3=-114/59

BOT CHORD 1-3=-26/76

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.

- 7) 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 7 lb uplift at joint 1 and 7 lb uplift at joint 3.
- 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



Page: 1

December 5,2023

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

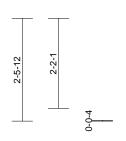
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

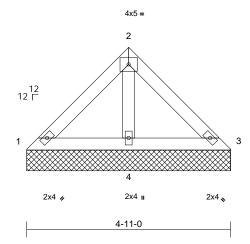


Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	V04	Valley	1	1	Job Reference (optional)	162356833

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 16:00:01 ID:6BBZoPZfSyT0IITMBnWW9ZzHs2h-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







Scale = 1:27.8

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	0.10	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	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0	1									Weight: 19 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

4-11-0 oc purlins.

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

bracing.

REACTIONS (size) 1=4-11-0, 3=4-11-0, 4=4-11-0

Max Horiz 1=-53 (LC 10) Max Uplift 4=-45 (LC 14)

Max Grav 1=94 (LC 20), 3=94 (LC 21), 4=303

(LC 21)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-80/103, 2-3=-80/103

BOT CHORD 1-4=-83/107, 3-4=-83/107

WEBS 2-4=-187/114

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

- 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 45 lb uplift at joint
- 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



December 5,2023

Page: 1

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

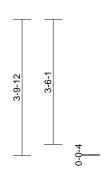


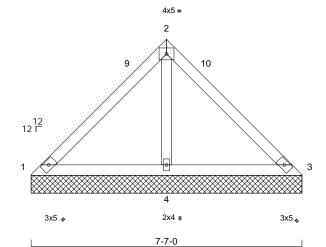
Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	V07	Valley	1	1	Job Reference (optional)	162356834

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 16:00:01 ID:xKZr2TeP1oDATDwWX1cwPqzHs2b-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1







Scale = 1:32.3

Loading	(psf)	Spacing	2-0-0	CSI	0.00	DEFL	in	(loc)	l/defl		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	3	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

Structural wood sheathing directly applied or TOP CHORD

7-7-0 oc purlins.

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

bracing.

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

Max Horiz 1=-85 (LC 12)

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

4=-108 (LC 14)

1=88 (LC 20), 3=88 (LC 21), 4=570 Max Grav

(LC 21)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=-113/237, 2-3=-113/237

TOP CHORD 1-4=-171/184, 3-4=-171/184 BOT CHORD

WFBS 2-4=-409/255

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) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 4-7-4, Exterior(2E) 4-7-4 to 7-7-4 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.
- 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 21 lb uplift at joint 1, 21 lb uplift at joint 3 and 108 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.

LOAD CASE(S) Standard



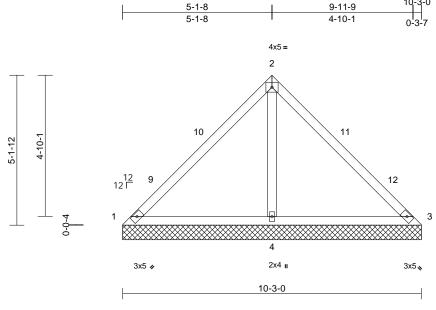
December 5,2023



Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	V10	Valley	1	1	Job Reference (optional)	162356835

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 16:00:02 ID:HIMk6AiYsLsSa_pTKaC56uzHs2W-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:39.5

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	0.53	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	0.29	Horiz(TL)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 42 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=10-3-0, 3=10-3-0, 4=10-3-0 Max Horiz 1=-116 (LC 10)

Max Unlift 1=-54 (LC 21), 3=-54 (LC 20),

4=-163 (LC 14)

1=88 (LC 20), 3=88 (LC 21), 4=832 Max Grav

(LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-170/394, 2-3=-170/394 BOT CHORD

1-4=-228/216, 3-4=-228/216

WFBS 2-4=-643/356

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) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 7-3-4, Exterior(2E) 7-3-4 to 10-3-4 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.
- 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 54 lb uplift at joint 1, 54 lb uplift at joint 3 and 163 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.

LOAD CASE(S) Standard

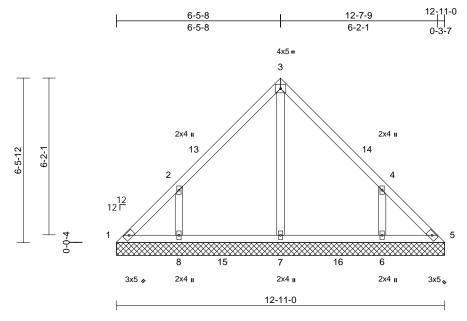


December 5,2023



Job	Truss	Truss Type	Qty	Ply	Hayes Rd A	
24050164	V12	Valley	1	1	Job Reference (optional)	162356836

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 16:00:03 ID:xmQZFe639BUIUMr60cUgc9zHsGC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:45.4

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	0.34	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	0.12	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 59 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=12-11-0, 5=12-11-0, 6=12-11-0, 7=12-11-0, 8=12-11-0

Max Horiz 1=-147 (LC 12)

Max Uplift 1=-43 (LC 10), 5=-9 (LC 11),

6=-179 (LC 15), 8=-184 (LC 14)

Max Grav 1=130 (LC 24), 5=104 (LC 27), 6=448 (LC 21), 7=352 (LC 23),

8=448 (LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-151/131, 2-3=-239/135, 3-4=-239/135, 4-5=-129/89

BOT CHORD 1-8=-53/110, 7-8=-53/110, 6-7=-53/110,

5-6=-53/110 WEBS

3-7=-173/0, 2-8=-392/250, 4-6=-392/250

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) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 3-5-12, Exterior(2R) 3-5-12 to 9-5-12, Interior (1) 9-5-12 to 9-11-4, Exterior(2E) 9-11-4 to 12-11-4 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 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 43 lb uplift at joint 1, 9 lb uplift at joint 5, 184 lb uplift at joint 8 and 179 lb uplift at joint 6.
- 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



December 5,2023

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

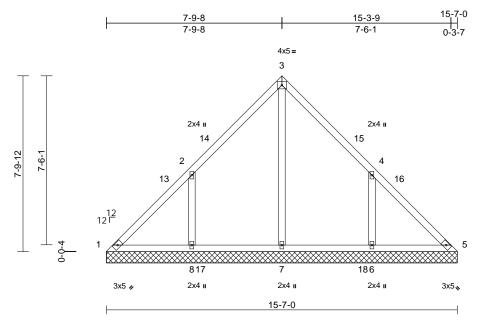
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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	Hayes Rd A	
24050164	V15	Valley	1	1	Job Reference (optional)	162356837

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 16:00:03 ID:xmQZFe639BUIUMr60cUgc9zHsGC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:51.2

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	0.33	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	0.26	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 75 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=15-7-0, 5=15-7-0, 6=15-7-0, 7=15-7-0, 8=15-7-0

Max Horiz 1=-179 (LC 12)

Max Uplift 1=-38 (LC 10), 6=-213 (LC 15),

8=-217 (LC 14)

Max Grav 1=151 (LC 24), 5=124 (LC 26), 6=498 (LC 6), 7=437 (LC 23),

8=498 (LC 5)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-174/200, 2-3=-186/150, 3-4=-186/125,

4-5=-152/160

BOT CHORD 1-8=-96/154, 7-8=-96/154, 6-7=-96/154,

5-6=-96/154

3-7=-244/0. 2-8=-392/252. 4-6=-392/250

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) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 4-9-12, Exterior(2R) 4-9-12 to 10-9-12, Interior (1) 10-9-12 to 12-7-4, Exterior(2E) 12-7-4 to 15-7-4 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 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 38 lb uplift at joint 1, 217 lb uplift at joint 8 and 213 lb uplift at joint 6.
- 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



December 5,2023

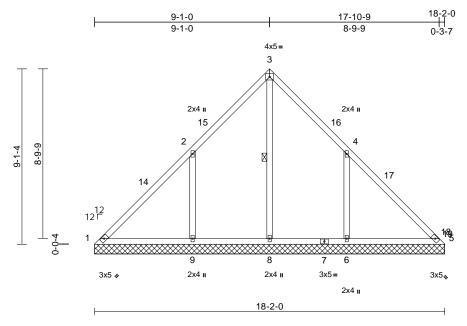
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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	Hayes Rd A	
24050164	V18	Valley	1	1	Job Reference (optional)	162356838

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Dec 04 16:00:03 ID:Pz_xS_6hwVcc5WPJZJ?v8NzHsGB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



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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	0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 90 lb	FT = 20%

LUMBER

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

BRACING

Structural wood sheathing directly applied or TOP CHORD

6-0-0 oc purlins.

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

bracing

WFBS 1 Row at midpt

1=18-2-0, 5=18-2-0, 6=18-2-0, REACTIONS (size)

8=18-2-0, 9=18-2-0 Max Horiz 1=202 (LC 11)

Max Uplift 1=-40 (LC 12), 5=-4 (LC 13),

6=-248 (LC 15), 9=-253 (LC 14)

Max Grav 1=141 (LC 25), 5=108 (LC 26), 6=574 (LC 28), 8=521 (LC 27),

9=580 (LC 23)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-217/323, 2-3=-109/214, 3-4=-110/196,

4-5=-177/277

BOT CHORD 1-9=-161/194, 8-9=-161/194, 6-8=-161/194,

5-6=-161/194

WEBS 3-8=-356/0 2-9=-412/282 4-6=-412/280

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) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 6-1-4, Exterior(2R) 6-1-4 to 12-1-4, Interior (1) 12-1-4 to 14-10-4, Exterior(2E) 14-10-4 to 17-10-4 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
- 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, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 1, 4 lb uplift at joint 5, 253 lb uplift at joint 9 and 248 lb uplift at joint 6.
- 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



December 5,2023

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Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 × 4

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

LATERAL BRACING LOCATION



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

BEARING



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

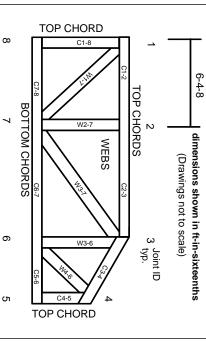
Industry Standards:

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

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

ANSI/TPI1: DSB-22:

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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MiTek



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

▲ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

'n

- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.