

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

Phone #:919-775-1450



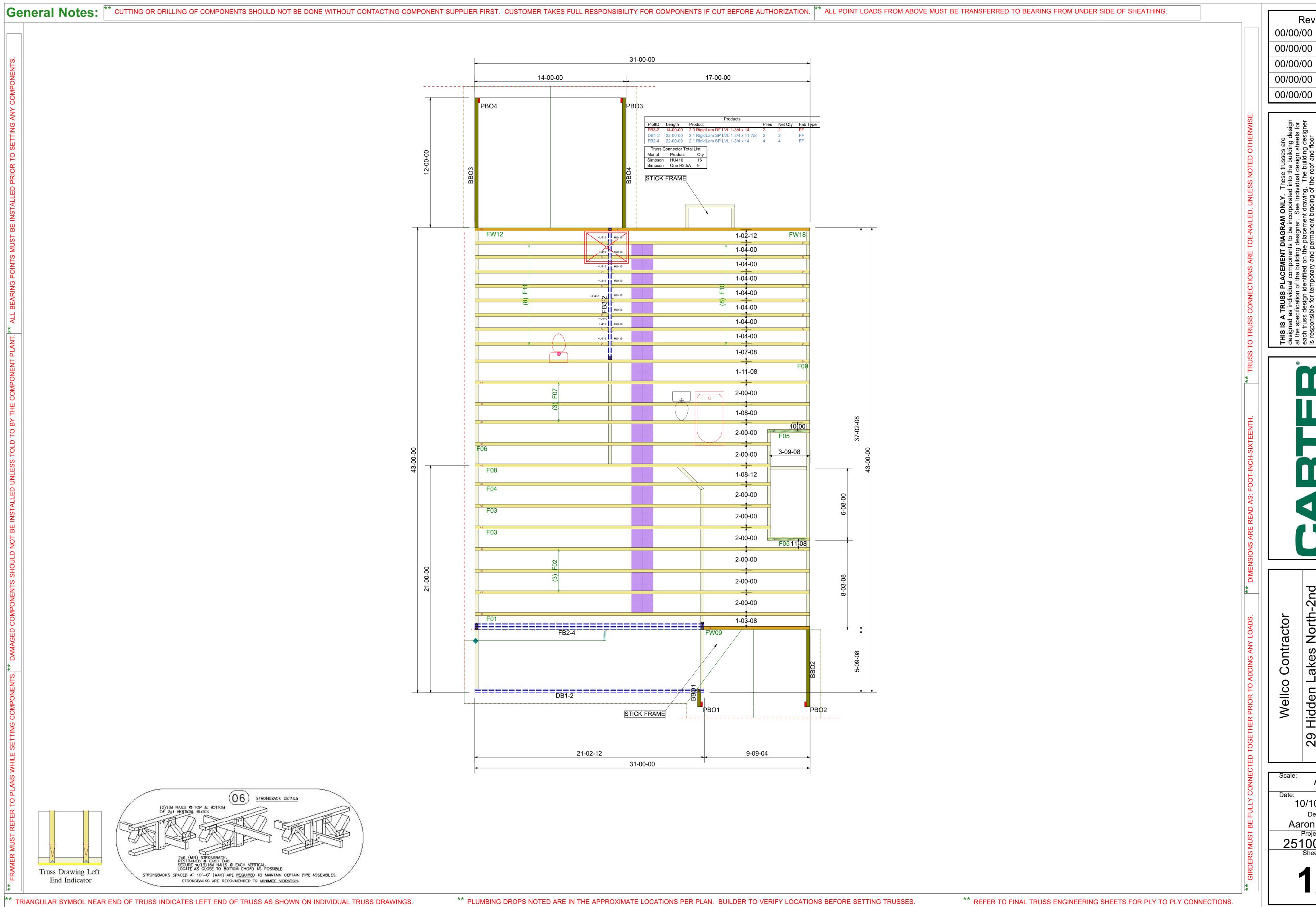
Model: 127 Hidden Lakes - Plan 10 GLH



THE PLACEMENT PLAN NOTES:

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

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



Revisions 00/00/00 Name 00/00/00 Name 00/00/00 Name 00/00/00 Name

Name

Hidden Lakes North Floor-Plan 10 GLH

PLACEMENT

FLOOR 10/10/2025 Designer: Aaron Rogers
Project Number:
25100038-A



RE: 25100038-A

29 Hidden Lakes North-2nd Floor-Plan 10 GLH

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Wellco Contractor Project Name: 25100038-A Lot/Block: 29 Model:

Address: Subdivision: Hidden Lakes North

City: State:

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

Design Code: IRC2021/TPI2014 Design Program: MiTek 20/20 8.7

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

This package includes 14 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	170700750	F01	1/13/2025
2	170700751	F02	1/13/2025
3	170700752	F03	1/13/2025
4	170700753	F04	1/13/2025
5	170700754	F05	1/13/2025
6	170700755	F06	1/13/2025
7	170700756	F07	1/13/2025
8	170700757	F08	1/13/2025
9	170700758	F09	1/13/2025
10	170700759	F10	1/13/2025
11	170700760	F11	1/13/2025
12	170700761	FW09	1/13/2025
13	170700762	FW12	1/13/2025
14	170700763	FW18	1/13/2025

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

Truss Engineering Co. under my direct supervision

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

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2025

North Carolina COA: C-0844

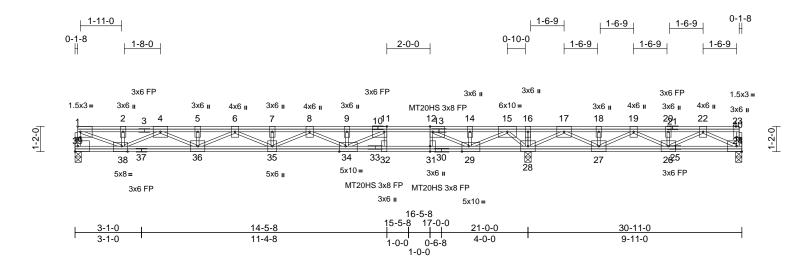
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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



January 13, 2025

Job	Truss	Truss Type	Qty	Ply	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F01	Floor	1	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:37 ID:LzpTTEzOVRJI4PL9deHypFzwi?H-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:53.4

Plate Offsets (X, Y): [1:0-1-8,0-0-8], [11:0-1-8,Edge], [12:0-1-8,Edge], [29:0-3-12,Edge], [31:0-3-0,Edge], [34:0-3-8,Edge], [38:0-3-4,Edge], [40:0-1-8,0-0-8]

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.82	Vert(LL)	-0.35	34-35	>711	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.48	34-35	>520	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.04	28	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 242 lb	FT = 20%F, 11%E

LUMBER

2x4 SP No.2(flat) TOP CHORD

2x4 SP No.2(flat) *Except* 37-30,33-25:2x4 **BOT CHORD**

SP No.1(flat)

2x4 SP No.3(flat) *Except* **WEBS**

34-11,38-1,29-15:2x4 SP No.2(flat)

OTHERS 2x4 SP No.3(flat)

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 24=0-3-8, 28=0-3-8, 39=0-3-8 (size)

Max Uplift 24=-210 (LC 3)

24=402 (LC 4), 28=2246 (LC 1), Max Grav

39=982 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-39=-964/0, 23-24=-68/0, 1-2=-1987/0,

2-4=-1986/0, 4-5=-4074/0, 5-6=-4074/0, 6-7=-4727/0, 7-8=-4727/0, 8-9=-4135/0,

9-11=-4135/0, 11-12=-2256/0, 12-14=0/974, 14-15=0/974, 15-16=0/3866, 16-17=0/3866,

17-18=-347/2119, 18-19=-347/2119, 19-20=-802/878, 20-22=-802/878, 22-23=0/0

38-39=0/0, 36-38=0/3192, 35-36=0/4570,

34-35=0/4542, 32-34=0/2256, 31-32=0/2256,

29-31=0/2256, 28-29=-2644/0,

27-28=-2858/0, 26-27=-1471/721

24-26=-407/560

WEBS 11-32=-627/0, 12-31=0/663, 16-28=-219/0,

11-34=0/2230, 9-34=-466/0, 8-34=-518/0,

8-35=0/274, 7-35=-176/0, 6-35=0/178, 6-36=-561/0, 5-36=-163/0, 4-36=0/998

4-38=-1365/0, 2-38=-188/0, 1-38=0/2159,

12-29=-3120/0, 14-29=-69/285, 15-29=0/2158, 15-28=-1724/0,

17-28=-1550/0, 17-27=0/1279, 18-27=-170/0,

19-27=-930/0, 19-26=0/683, 20-26=-151/0,

22-26=-542/279, 22-24=-644/468

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x6 MT20 unless otherwise indicated.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 24. This connection is for uplift only and does not consider lateral forces.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



BOT CHORD

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F02	Floor	3	1	Job Reference (optional)

5x8=

3-1-0

3-1-0

3x6 FP

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:38 ID:7JtmrPhPcZINfTLVaXroihzwi_M-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

6x8=

21-0-0

4-0-0

0-10-0 1-6-9 1-6-9 1-8-0 _1-6-9_{_1} 0-1-8 1-11-0 2-0-0 1-6-9 6x8= MT20HS 3x8 FP 6x8= 3x6 FP 4x6 II 4x6 II 6x8= 6x10= 6x8= 4x6 II 4x6 II 3x6 FP 3x6 FP 1.5x3 = 2 4 5 6 8 9 15 16 17 18 19 291 22 3 1011 12/13 <u>2</u>3 2 36 35 3332 ∑ 28 \aleph 34 3130 38 28 27 6x8= 5x10 = MT20HS 3x8 FP

> 16-5-8 17-0-0

0-6-8 1-0-0

Scale = 1:53.4

1-2-0

Plate Offsets (X, Y): [11:0-1-8,Edge], [12:0-1-8,Edge], [29:0-3-12,Edge], [31:0-3-0,Edge], [34:0-3-8,Edge], [38:0-3-4,Edge], [40:0-1-8,0-0-8]

5x6 II

14-5-8

11-4-8

		ı			-							
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.82	Vert(LL)	-0.35	34-35	>710	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.48	34-35	>520	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.04	28	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH		l ' '					Weight: 242 lb	FT = 20%F. 11%E

LUMBER

2x4 SP No.2(flat) TOP CHORD

2x4 SP No.2(flat) *Except* 37-30,33-25:2x4 **BOT CHORD**

SP No.1(flat)

2x4 SP No.3(flat) *Except* **WEBS**

34-11,38-1,29-15:2x4 SP No.2(flat) **OTHERS** 2x4 SP No.3(flat)

BRACING TOP CHORD

BOT 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 24=0-3-8, 28=0-3-8, 39=0-3-8 (size)

Max Uplift 24=-210 (LC 3)

24=402 (LC 4), 28=2246 (LC 1), Max Grav

39=982 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-39=-963/0, 23-24=-68/0, 1-2=-1985/0,

2-4=-1985/0, 4-5=-4074/0, 5-6=-4074/0, 6-7=-4727/0, 7-8=-4727/0, 8-9=-4135/0,

9-11=-4135/0, 11-12=-2256/0, 12-14=0/975, 14-15=0/975, 15-16=0/3867, 16-17=0/3867,

17-18=-347/2119, 18-19=-347/2119,

19-20=-802/878, 20-22=-802/878, 22-23=0/0

38-39=0/0, 36-38=0/3192, 35-36=0/4570,

34-35=0/4542, 32-34=0/2256, 31-32=0/2256,

29-31=0/2256, 28-29=-2644/0, 27-28=-2859/0, 26-27=-1472/721

24-26=-407/560

WEBS 11-32=-627/0, 12-31=0/663, 16-28=-219/0,

MT20HS 3x8 FP

11-34=0/2230, 9-34=-466/0, 8-34=-518/0,

8-35=0/274, 7-35=-176/0, 6-35=0/178, 6-36=-561/0, 5-36=-163/0, 4-36=0/998

4-38=-1366/0, 2-38=-206/0, 1-38=0/2165,

12-29=-3120/0, 14-29=-69/285, 15-29=0/2158, 15-28=-1724/0,

17-28=-1550/0, 17-27=0/1279, 18-27=-170/0,

19-27=-930/0, 19-26=0/683, 20-26=-151/0,

22-26=-542/279, 22-24=-644/468

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated. 2)
- All plates are 3x6 MT20 unless otherwise indicated.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 24. This connection is for uplift only and does not consider lateral forces.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



6x8 =

3x6 FP

6x8 =

30-11-0

9-11-0

January 13,2025

Page: 1

6x8 =

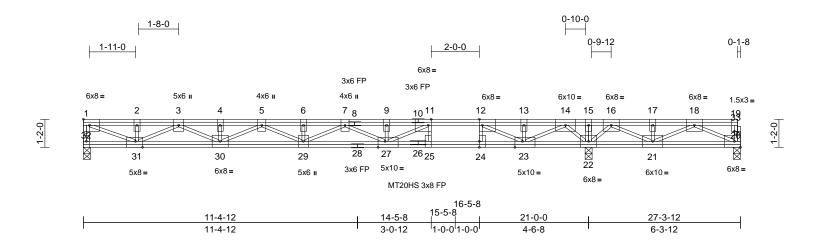
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F03	Floor	2	1	Job Reference (optional)

Run: 8.73 S. Dec. 5.2024 Print: 8.730 S.Dec. 5.2024 MiTek Industries. Inc. Fri. Jan 10.17:18:38 ID:BkLI79H83cwQ1?bwyKDHB0zwhzb-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:47.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.88	Vert(LL)	-0.35	27-29	>725	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.47	27-29	>528	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.04	22	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 214 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)

2x4 SP No.2(flat) *Except* 28-20,26-20:2x4 BOT CHORD

SP No.1(flat)

WFBS 2x4 SP No.3(flat) *Except*

27-11,31-1,23-14:2x4 SP No.2(flat) OTHERS 2x4 SP No.3(flat)

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, Except:

6-0-0 oc bracing: 22-23,21-22,20-21. 20=0-3-8, 22=0-3-8, 32=0-3-8

REACTIONS (size) Max Uplift 20=-522 (LC 3)

Max Grav

20=152 (LC 4), 22=2296 (LC 1),

32=968 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-32=-949/0, 19-20=-71/0, 1-2=-1953/0,

2-3=-1953/0, 3-4=-3990/0, 4-5=-3990/0, 5-6=-4590/0, 6-7=-4590/0, 7-9=-3944/0, 9-11=-3944/0, 11-12=-2019/0, 12-13=0/1038,

13-14=0/1038, 14-15=0/3997, 15-16=0/3997, 16-17=0/2128, 17-18=0/2128, 18-19=0/0

BOT CHORD 31-32=0/0 30-31=0/3132 29-30=0/4454

> 27-29=0/4374, 25-27=0/2019, 24-25=0/2019, 23-24=0/2019, 22-23=-2754/0

21-22=-3305/0, 20-21=-1029/121

WFBS 11-25=-630/0, 12-24=0/669, 15-22=-163/0,

11-27=0/2239, 9-27=-468/0, 7-27=-523/0, 7-29=-3/287, 6-29=-181/0, 5-29=0/154, 5-30=-525/0, 4-30=-167/0, 3-30=0/972 3-31=-1334/0, 2-31=-207/0, 1-31=0/2131,

12-23=-3142/0, 13-23=-69/286, 14-23=0/2163, 14-22=-1730/0,

18-20=-137/1165, 18-21=-1244/0, 17-21=-166/0, 16-21=0/1562, 16-22=-1183/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 522 lb uplift at joint 20.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



Page: 1

January 13,2025

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

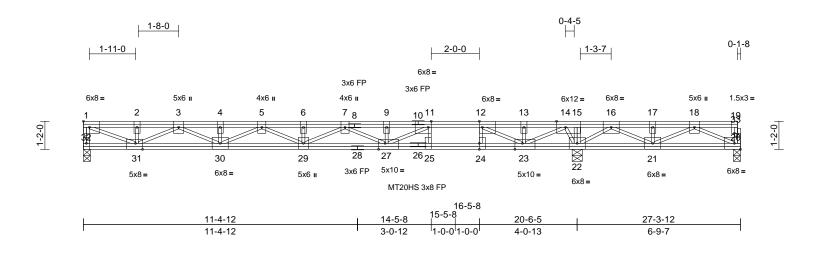
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F04	Floor	1	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:38 ID:JW9eQQey?qiAdcuhidlJPLzwhz7-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:47.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.94	Vert(LL)	-0.33	27-29	>739	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.45	27-29	>538	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.03	22	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 214 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.2(flat) *Except* 28-20,26-20:2x4

SP No 1(flat)

WFBS 2x4 SP No.3(flat) *Except* 27-11,23-14:2x4 SP No.2(flat)

OTHERS 2x4 SP No.3(flat)

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, Except:

6-0-0 oc bracing: 22-23,21-22,20-21. REACTIONS (size) 20=0-3-8, 22=0-5-1, 32=0-3-8

Max Uplift 20=-428 (LC 3)

> 20=200 (LC 4), 22=2201 (LC 1), Max Grav

32=952 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-32=-932/0, 19-20=-72/0, 1-2=-1913/0,

2-3=-1913/0, 3-4=-3893/0, 4-5=-3893/0, 5-6=-4432/0, 6-7=-4432/0, 7-9=-3729/0,

9-11=-3729/0, 11-12=-1752/0, 12-13=0/1328, 13-14=0/1328, 14-15=0/3690, 15-16=0/3690, 16-17=-59/1775, 17-18=-59/1775, 18-19=0/0

BOT CHORD 31-32=0/0, 30-31=0/3064, 29-30=0/4327,

27-29=0/4185, 25-27=0/1752, 24-25=0/1752,

23-24=0/1752, 22-23=-3081/0

21-22=-2802/0, 20-21=-854/211 WFBS 11-25=-642/0, 12-24=0/686, 15-22=-182/0,

11-27=0/2291, 9-27=-473/0, 7-27=-550/0, 7-29=0/316, 6-29=-181/0, 5-29=0/119, 5-30=-491/0, 4-30=-167/0, 3-30=0/938 3-31=-1303/0, 2-31=-205/0, 1-31=0/2086,

12-23=-3217/0, 13-23=-58/301, 14-23=0/2139, 14-22=-1341/0,

18-20=-238/967, 18-21=-1043/0, 17-21=-176/0, 16-21=0/1357, 16-22=-1357/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x6 MT20 unless otherwise indicated. 3)
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 428 lb uplift at joint 20.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



January 13,2025

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

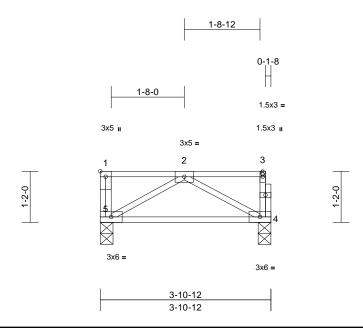
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F05	Floor	2	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:38 ID:NPZJaYqMTRb2wwXZ4GXrWWzwhyu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:26.3

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

				1	-		-				i	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.55	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.27	Vert(CT)	-0.03	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 22 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-12 oc purlins, except end verticals.

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

bracing.

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

Max Grav 4=458 (LC 1), 5=474 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-5=-171/0, 3-4=-171/0, 1-2=0/0, 2-3=-10/0

BOT CHORD 4-5=0/490

2-5=-567/0, 2-4=-550/0 WFBS

NOTES

- 1) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (lb/ft)

Vert: 4-5=-10, 1-3=-250 (F=-150)

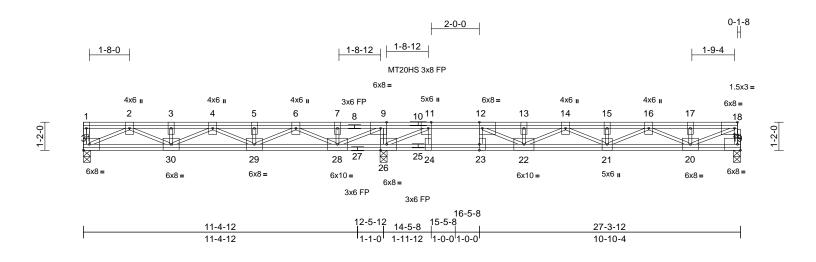


January 13,2025



Job	Truss	Truss Type	Qty	Ply	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F06	Floor	1	1	Job Reference (optional)

Run: 8.73 S. Dec. 5.2024 Print: 8.730 S.Dec. 5.2024 MiTek Industries. Inc. Fri. Jan 10.17:18:38 ID: FisgYYHCW6NfUmRtJFCl2Wzwhyl-RfC? PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC? full fill for the first of the Page: 1



Scale = 1:47.9

Plate Offsets (X, Y): [9:0-3-0,Edge], [11:0-3-0,Edge], [12:0-1-8,Edge], [18:0-1-8,Edge], [18:0-1-8,0-0-8], [23:0-3-0,Edge], [26:0-3-0,Edge]

	/ 0		2.2.2			5		(1)	1/1 (1		DI 4750	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	ın	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.84	Vert(LL)	-0.17	22-23	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.24	22-23	>741	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.02	19	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 214 lb	FT = 20%F, 11%E

LUMBER

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

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 19=0-3-8, 26=0-3-8, 31=0-3-8 (size)

19=734 (LC 4), 26=1739 (LC 1), Max Grav

31=595 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-31=-78/0, 18-19=-721/0, 1-2=0/0,

2-3=-1543/0, 3-4=-1543/0, 4-5=-1608/49, 5-6=-1608/49, 6-7=-248/658, 7-9=-248/658,

9-11=0/1795, 11-12=-1077/354,

12-13=-2487/0, 13-14=-2487/0, 14-15=-2562/0, 15-16=-2562/0, 16-17=-1350/0, 17-18=-1351/0

BOT CHORD 30-31=0/974, 29-30=0/1744,

28-29=-320/1096, 26-28=-1795/0, 24-26=-354/1077, 23-24=-354/1077, 22-23=-354/1077 21-22=0/2640

20-21=0/2114, 19-20=0/0

9-26=-792/0, 11-24=0/481, 12-23=-487/0, WEBS

2-31=-1094/0. 2-30=0/644. 3-30=-161/0. 4-30=-228/90, 4-29=-262/0, 5-29=-166/0, 6-29=0/687, 6-28=-1063/0, 7-28=-196/0, 9-28=0/1650, 11-26=-2620/0, 12-22=0/1759, 13-22=-434/0, 14-22=-256/0, 14-21=-88/96, 15-21=-181/0, 16-21=0/507, 16-20=-865/0,

17-20=-186/0, 18-20=0/1484

NOTES

Unbalanced floor live loads have been considered for this design.

- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x6 MT20 unless otherwise indicated.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



January 13,2025

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

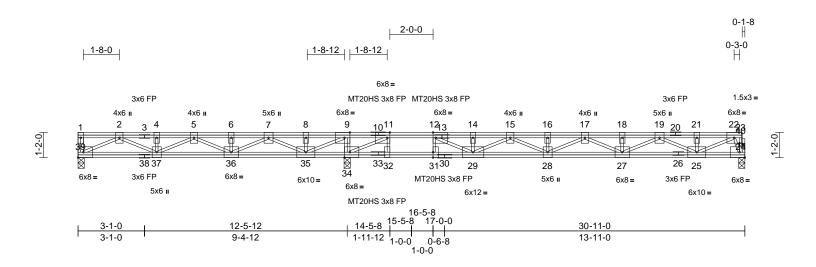
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F07	Floor	3	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:39 ID: ZPPSs? OvrOzbXuTYiasKnwzwhws-RfC? PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC? for the property of the propert Page: 1



Scale = 1:53.4

Plate Offsets (X, Y):	[9:0-3-0,Edge], [11:0-1-8,Edge	e], [12:0-1-8,Edge], [31:0-3-	-0,Edge], [34:0-3-0,Edge],	[40:0-1-8,0-0-8]
-----------------------	--------------------------------	-------------------------------	----------------------------	------------------

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.95	Vert(LL)	-0.28	28-29	>789		MT20	244/190
TCDL	10.0	Lumber DOL	1.00	вс	0.94	Vert(CT)	-0.38	28-29	>582	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.03	24	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 242 lb	FT = 20%F, 11%E

LUMBER 2x4 SP No.2(flat) *Except* 10-20,3-13:2x4 SP TOP CHORD

No.1(flat)

BOT CHORD 2x4 SP No.2(flat)

2x4 SP No.3(flat) *Except* 29-12:2x4 SP **WEBS**

No.2(flat) 2x4 SP No.3(flat) **OTHERS**

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 24=0-3-8, 34=0-3-8, 39=0-3-8 (size)

24=888 (LC 4), 34=2045 (LC 1), Max Grav

39=576 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-39=-78/0, 23-24=0/83, 1-2=0/0,

2-4=-1473/133, 4-5=-1473/133, 5-6=-1471/670, 6-7=-1471/670,

7-8=-42/1583, 8-9=-42/1583, 9-11=0/2874,

11-12=-727/435, 12-14=-2926/0,

14-15=-2926/0, 15-16=-3821/0,

16-17=-3821/0, 17-18=-3491/0,

18-19=-3491/0, 19-21=-1722/0,

21-22=-1722/0, 22-23=0/0

37-39=-29/938, 36-37=-366/1639, 35-36=-1094/923. 34-35=-2874/0.

32-34=-435/727, 31-32=-435/727,

29-31=-435/727, 28-29=0/3458, 27-28=0/3815, 25-27=0/2773, 24-25=0/326 **WEBS**

9-34=-794/0, 11-32=0/616, 12-31=-633/0,

2-39=-1054/32, 2-37=-118/605, 4-37=-162/0,

5-37=-188/263, 5-36=-429/0, 6-36=-167/0, 7-36=0/855, 7-35=-1227/0, 8-35=-205/0,

9-35=0/1860, 11-34=-3441/0, 12-29=0/2604,

14-29=-560/0, 15-29=-664/0, 15-28=0/480,

16-28=-190/0, 17-28=-67/7, 17-27=-367/0, 18-27=-169/0, 19-27=0/813, 19-25=-1190/0,

21-25=-159/0, 22-25=0/1580, 22-24=-1010/0

NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- All plates are MT20 plates unless otherwise indicated. All plates are 3x6 MT20 unless otherwise indicated.
- Recommend 2x6 strongbacks, on edge, spaced at
- 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



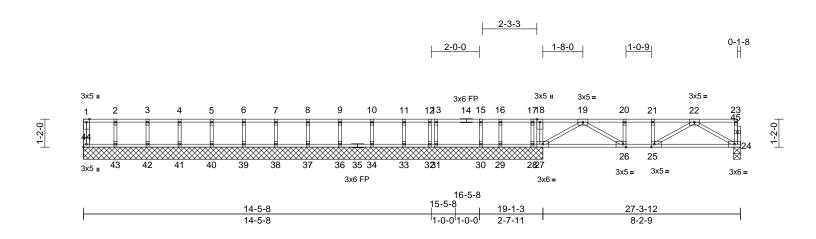
January 13,2025

BOT CHORD

Job	Truss	Truss Type	Qty	Ply	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F08	Floor	1	1	Job Reference (optional)

Run: 8.73 S. Dec. 5.2024 Print: 8.730 S.Dec. 5.2024 MiTek Industries. Inc. Fri. Jan 10.17:18:39 ID:tNVfkGjHBti75fJVbzJuivzwhv9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:47.9

Plate Offsets (X, Y): [25:0-1-8,Edge], [26:0-1-8,Edge], [44:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	-0.02	25-26	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.04	24-25	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	24	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 123 lb	FT = 20%F, 11%E

LUMBER TOP CHORD 2x4 SP No.2(flat) **BOT CHORD** 2x4 SP No.2(flat) 2x4 SP No.3(flat) WEBS 2x4 SP No.3(flat) OTHERS

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) 24=0-3-8, 27=19-1-3, 28=19-1-3, 29=19-1-3, 30=19-1-3, 31=19-1-3,

32=19-1-3, 33=19-1-3, 34=19-1-3, 36=19-1-3, 37=19-1-3, 38=19-1-3, 39=19-1-3, 40=19-1-3, 41=19-1-3,

42=19-1-3, 43=19-1-3, 44=19-1-3 Max Uplift 28=-141 (LC 4), 32=-16 (LC 1)

24=439 (LC 4), 27=627 (LC 4), Max Grav 28=70 (LC 3), 29=100 (LC 1),

30=161 (LC 3), 31=202 (LC 1), 32=-6 (LC 4), 33=137 (LC 1), 34=149 (LC 3), 36=146 (LC 1), 37=147 (LC 3), 38=147 (LC 1), 39=147 (LC 1), 40=147 (LC 1), 41=147 (LC 1), 42=145 (LC 1),

43=156 (LC 1), 44=52 (LC 1) **FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-44=-47/0. 23-24=-68/0. 1-2=0/0. 2-3=0/0. 3-4=0/0, 4-5=0/0, 5-6=0/0, 6-7=0/0, 7-8=0/0,

8-9=0/0, 9-10=0/0, 10-11=0/0, 11-12=0/0, 12-13=0/0, 13-15=0/0, 15-16=0/0, 16-17=0/0, 17-18=0/0, 18-19=0/0, 19-20=-865/0, 20-21=-865/0, 21-22=-865/0, 22-23=-4/0

BOT CHORD 43-44=0/0, 42-43=0/0, 41-42=0/0, 40-41=0/0, 39-40=0/0, 38-39=0/0, 37-38=0/0, 36-37=0/0,

34-36=0/0, 33-34=0/0, 32-33=0/0, 31-32=0/0, 30-31=0/0, 29-30=0/0, 28-29=0/0, 27-28=0/0, 26-27=0/585, 25-26=0/865, 24-25=0/615 12-32=0/12, 15-30=-147/0, 18-27=-205/0, 19-27=-677/0, 22-24=-707/0, 19-26=0/327, 22-25=0/292, 20-26=-152/0, 21-25=-123/0,

2-43=-142/0, 3-42=-131/0, 4-41=-134/0, 5-40=-133/0, 6-39=-133/0, 7-38=-133/0 8-37=-134/0, 9-36=-133/0, 10-34=-136/0 11-33=-124/0, 13-31=-181/0, 16-29=-89/0,

17-28=-103/89

NOTES

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are 1.5x3 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 1-4-0 oc.
- 5) N/A
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



January 13,2025

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

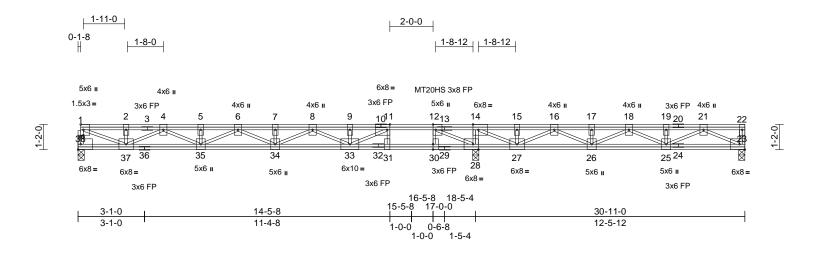
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F09	Floor	1	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:39 ID:twYWtv7cAK_JAtv1a6ws44zwhud-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:53.4

Plate Offsets (X, Y): [1:0-1-8,0-0-8], [11:0-1-8,Edge], [12:0-3-0,Edge], [14:0-3-0,Edge], [28:0-3-0,Edge], [30:0-3-0,Edge]

Loading	(psf)	Spacing	1-4-0	csı		DEFL	in	(loc)	l/defl	I /d	PLATES	GRIP
		-						(/			_	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.80	Vert(LL)	-0.20	33-34	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.27	33-34	>827	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.02	28	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 242 lb	FT = 20%F, 11%E

LUMBER

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

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.

23=0-3-8, 28=0-3-8, 38=0-3-8 REACTIONS (size)

23=384 (LC 4), 28=1367 (LC 1), Max Grav

38=593 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-38=-581/0, 22-23=-52/0, 1-2=-1184/0,

2-4=-1184/0, 4-5=-2350/0, 5-6=-2350/0, 6-7=-2557/0, 7-8=-2557/0, 8-9=-1948/0,

9-11=-1948/0, 11-12=-479/289, 12-14=0/1936, 14-15=-27/1069, 15-16=-27/1069, 16-17=-979/457, 17-18=-979/457, 18-19=-981/93, 19-21=-981/93, 21-22=0/0

37-38=0/0, 35-37=0/1874, 34-35=0/2562, BOT CHORD

33-34=0/2315, 31-33=-289/479, 30-31=-289/479, 28-30=-289/479, 27-28=-1936/0, 26-27=-742/615, 25-26=-252/1093, 23-25=-22/625

WFBS 11-31=-450/0, 12-30=0/440, 14-28=-532/0,

12-28=-2311/0, 21-23=-702/24,

21-25=-81/403, 19-25=-107/0, 18-25=-126/179, 18-26=-289/0, 17-26=-111/0, 16-26=0/572, 16-27=-818/0, 15-27=-138/0, 14-27=0/1249, 11-33=0/1738, 9-33=-357/0, 8-33=-456/0, 8-34=0/320, 7-34=-123/0,

6-34=-53/0, 6-35=-240/0, 5-35=-112/0,

4-35=0/539, 4-37=-781/0, 2-37=-126/0, 1-37=0/1286

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



January 13,2025

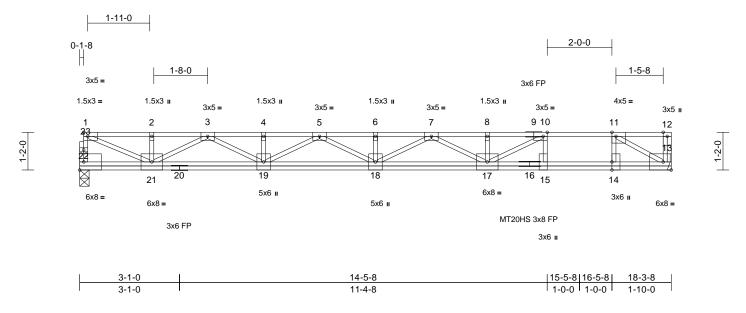
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F10	Floor	8	1	Job Reference (optional)

Run: 8.73 S. Dec. 5.2024 Print: 8.730 S.Dec. 5.2024 MiTek Industries. Inc. Fri. Jan 10.17:18:39 Page: 1



Scale = 1:35.6

Plate Offsets (X, Y): [10:0-1-8,Edge], [11:0-1-8,Edge], [14:0-3-0,Edge]

	, ,								.,, .			
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	ın	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.66	Vert(LL)	-0.28	17-18	>774	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.38	17-18	>562	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.03	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 118 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)

2x4 SP No.2(flat) *Except* 20-13,16-13:2x4 BOT CHORD SP No.1(flat)

WFBS 2x4 SP No.3(flat) OTHERS 2x4 SP No.3(flat)

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) 13= Mechanical, 22=0-3-8

Max Grav 13=662 (LC 1), 22=657 (LC 1) (lb) - Maximum Compression/Maximum

FORCES

Tension TOP CHORD 1-22=-644/0, 12-13=-24/45, 1-2=-1260/0,

2-3=-1260/0, 3-4=-2588/0, 4-5=-2588/0,

5-6=-3009/0, 6-7=-3009/0, 7-8=-2660/0, 8-10=-2660/0, 10-11=-1523/0, 11-12=0/0

BOT CHORD 21-22=0/41, 19-21=0/2026, 18-19=0/2911, 17-18=0/2933, 15-17=0/1523, 14-15=0/1523,

13-14=0/1523

WEBS 10-15=-644/0, 11-14=0/659, 10-17=0/1313,

8-17=-170/0. 7-17=-321/0. 7-18=-14/95. 6-18=-105/0, 5-18=0/113, 5-19=-371/0, 4-19=-105/0. 3-19=0/645. 3-21=-881/0.

2-21=-139/0, 1-21=0/1352, 11-13=-1772/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



January 13,2025

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

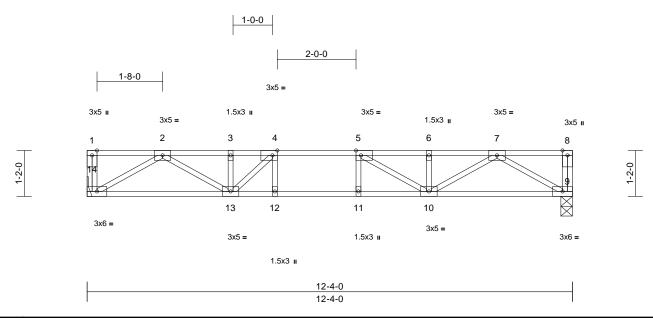
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	F11	Floor	8	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:39 ID:4Cx4j9vpZUWSJTeIhU3KX4zwhsK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:29.3

		ı		1	-						i	
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.34	Vert(LL)	-0.07	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.10	10-11	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 64 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat) 2x4 SP No.2(flat) BOT CHORD 2x4 SP No.3(flat) WEBS

BRACING

FORCES

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) 9=0-3-8, 14= Mechanical Max Grav 9=443 (LC 1), 14=443 (LC 1)

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-14=-48/0, 8-9=-50/0, 1-2=0/0, 2-3=-1065/0,

3-4=-1065/0, 4-5=-1258/0, 5-6=-1081/0,

6-7=-1081/0, 7-8=0/0

BOT CHORD 13-14=0/662, 12-13=0/1258, 11-12=0/1258, 10-11=0/1258, 9-10=0/661

WEBS 7-9=-764/0, 2-14=-765/0, 7-10=0/491,

2-13=0/471, 6-10=-140/7, 3-13=-100/54, 5-10=-330/0, 4-13=-380/0, 4-12=-36/83,

5-11=-51/41

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are 3x5 MT20 unless otherwise indicated. Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



January 13,2025

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

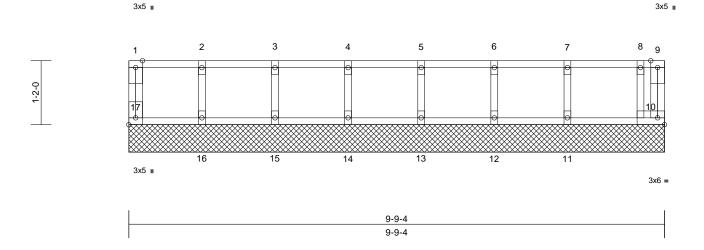
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	FW09	Floor Supported Gable	1	1	I70700761 Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:39 ID:vAtehfba7?hMfDVFXyahL5zwhrR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:21

Plate Offsets	(X,	Y):	[17:Edge,0-1-	8
---------------	-----	-----	---------------	---

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 44 lb	FT = 20%F, 11%E

LUMBER LOAD CASE(S) Standard

TOP CHORD 2x4 SP No.2(flat) BOT CHORD 2x4 SP No.2(flat) 2x4 SP No.3(flat) WEBS 2x4 SP No.3(flat) OTHERS

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)

10=9-9-4, 11=9-9-4, 12=9-9-4, 13=9-9-4, 14=9-9-4, 15=9-9-4,

16=9-9-4, 17=9-9-4

10=95 (LC 1), 11=161 (LC 1), Max Grav

12=143 (LC 1), 13=148 (LC 1), 14=146 (LC 1), 15=150 (LC 1), 16=134 (LC 1), 17=70 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-17=-60/0, 9-10=0/4, 1-2=-17/0, 2-3=-17/0,

3-4=-17/0, 4-5=-17/0, 5-6=-17/0, 6-7=-17/0,

7-8=-17/0, 8-9=0/0

BOT CHORD 16-17=0/17, 15-16=0/17, 14-15=0/17,

13-14=0/17, 12-13=0/17, 11-12=0/17,

10-11=0/17

WEBS 2-16=-126/0, 3-15=-135/0, 4-14=-133/0,

5-13=-134/0, 6-12=-131/0, 7-11=-143/0,

8-10=-96/0

NOTES

- 1) All plates are 1.5x3 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 1-4-0 oc.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 13,2025

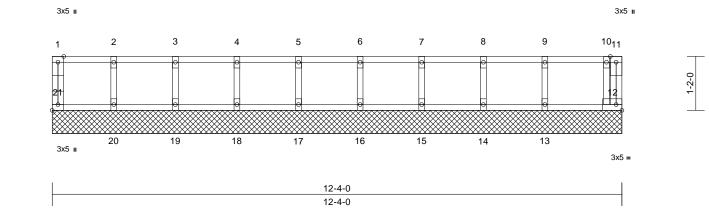
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	FW12	Floor Supported Gable	1	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:39 ID:JIZmJgdSQw3xWhEqC48OzkzwhrO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:24.9

Plate Offsets	(X,	Y):	[21:Edge,0-1-8]
---------------	-----	-----	-----------------

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 54 lb	FT = 20%F, 11%E

(0.131" X 3") nails. Strongbacks to be attached to walls

Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d

at their outer ends or restrained by other means.

LOAD CASE(S) Standard

LUMBER

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

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)

12=12-4-0, 13=12-4-0, 14=12-4-0, 15=12-4-0, 16=12-4-0, 17=12-4-0, 18=12-4-0, 19=12-4-0, 20=12-4-0,

21=12-4-0

Max Grav 12=86 (LC 1), 13=159 (LC 1),

14=143 (LC 1), 15=148 (LC 1), 16=146 (LC 1), 17=147 (LC 1), 18=146 (LC 1), 19=149 (LC 1),

20=136 (LC 1), 21=68 (LC 1) (lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-21=-59/0, 11-12=0/13, 1-2=-15/0,

2-3=-15/0, 3-4=-15/0, 4-5=-15/0, 5-6=-15/0, 6-7=-15/0, 7-8=-15/0, 8-9=-15/0, 9-10=-15/0,

10-11=-3/0

BOT CHORD 20-21=0/15, 19-20=0/15, 18-19=0/15,

17-18=0/15, 16-17=0/15, 15-16=0/15, 14-15=0/15, 13-14=0/15, 12-13=0/15

WEBS 2-20=-127/0, 3-19=-135/0, 4-18=-133/0,

5-17=-133/0, 6-16=-133/0, 7-15=-134/0, 8-14=-131/0, 9-13=-142/0, 10-12=-94/0

NOTES

- 1) All plates are 1.5x3 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 1-4-0 oc.



January 13,2025

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

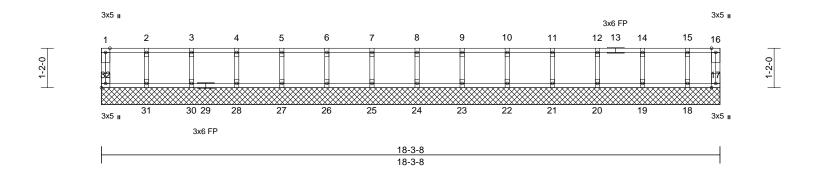
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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	29 Hidden Lakes North-2nd Floor-Plan 10 GLH
25100038-A	FW18	Floor Supported Gable	1	1	Job Reference (optional)

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Fri Jan 10 17:18:39 ID:CWoH92gzU9aM?IXbRwCL7azwhrK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:34.1

Plate Offsets (X, Y): [32:Edg	je,0-1-8]	
-------------------------------	-----------	--

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 78 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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)

17=18-3-8, 18=18-3-8, 19=18-3-8, 20=18-3-8, 21=18-3-8, 22=18-3-8, 23=18-3-8, 24=18-3-8, 25=18-3-8, 26=18-3-8, 27=18-3-8, 28=18-3-8, 30=18-3-8, 31=18-3-8, 32=18-3-8

Max Grav

17=40 (LC 1), 18=120 (LC 1), 19=152 (LC 1), 20=145 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 30=147 (LC 1), 31=147 (LC 1),

32=59 (LC 1) **FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-32=-55/0, 16-17=-34/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0, 7-8=-7/0, 8-9=-7/0, 9-10=-7/0, 10-11=-7/0, 11-12=-7/0, 12-14=-7/0, 14-15=-7/0,

15-16=-7/0

BOT CHORD 31-32=0/7, 30-31=0/7, 28-30=0/7, 27-28=0/7,

26-27=0/7, 25-26=0/7, 24-25=0/7, 23-24=0/7, 22-23=0/7, 21-22=0/7, 20-21=0/7, 19-20=0/7,

18-19=0/7, 17-18=0/7

WFBS 2-31=-132/0, 3-30=-134/0, 4-28=-133/0,

5-27=-133/0, 6-26=-133/0, 7-25=-133/0, 8-24=-133/0, 9-23=-133/0, 10-22=-133/0, 11-21=-134/0, 12-20=-132/0, 14-19=-138/0,

15-18=-112/0

NOTES

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing. 2)
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



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

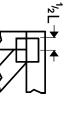
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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

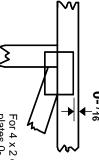


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

* Plate location details available in MiTek software or upon request

PLATE SIZE

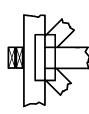
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



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

BEARING



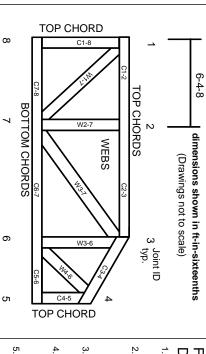
Min size shown is for crushing only number/letter where bearings occur reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

Industry Standards:

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

DSB-22: ANSI/TPI1:

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

© 2023 MiTek® All Rights Reserved

MiTek



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

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

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

'n

- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- œ Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.



Client: Project: Address: 10/10/2025

Input by:

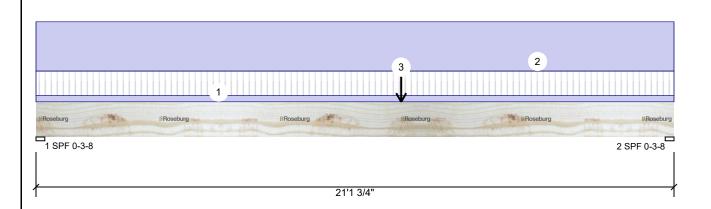
Job Name: 25100038 - A

Project #:

2.1E RigidLam LVL SP FB2-4

1.750" X 14.000" 4-Ply - PASSED

Level: Level





Const

Wind

Page 1 of 2

٧л	OΜ	hor	Intori	mation

Type:	Girder
Plies:	4
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application: Floor Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: Yes Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift) Direction Live Dead Snow

1	Vertical	423	4236	0	0	0
2	Vertical	423	5272	0	0	0

Bearings

Bearing	Length	Dir.	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	45%	4236 / 423	4659	L	D+L
2 - SPF	3.500"	Vert	55%	5272 / 423	5695	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	41614 ft-lb	12'1 1/4"	53613 ft-lb	78%	D	Uniform
Unbraced	43707 ft-lb	12'1 1/4"	43947 ft-lb	99%	D+L	L
Shear	5111 lb	19'8 1/4"	17052 lb	30%	D	Uniform
LL Defl inch	0.051 (L/4826)	10'6 15/16"	0.517 (L/480)	10%	L	L
TL Defl inch	0.884 (L/281)	11'1 1/8"	1.034 (L/240)	85%	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 4'3 7/8" o.c.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-0-0	Near Face	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	standard
2	Uniform			Тор	80 PLF	0 PLF	0 PLF	0 PLF	0 PLF	wall
3	Point	12-1-4		Тор	7000 lb	0 lb	0 lb	0 lb	0 lb	girder above
	Bearing Length	0-3-8								
	Self Weight				29 PLF					

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 2 Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Roseburg Forest Products 3661 Gateway Street Springfield, OR 97477 (541) 679-3311 www.roseburg.com APA: PR-L289, ICC-ES: ESR-1210

This design is valid until 2/14/2027

isDesign

Client: Project: Address: 10/10/2025

Input by:

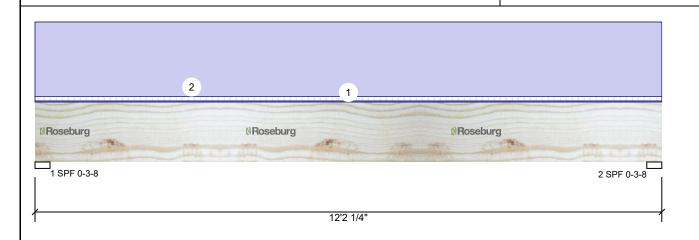
Job Name: 25100038 - A

Project #:

FB3-2 2.1E RigidLam LVL SP

1.750" X 14.000" 2-Ply - PASSED

Level: Level





Page 2 of 2

vı	em	ber	Into	rmation

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F

Application: Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift) Brg Direction Live Snow Wind Const Dead 244 4414 0 Vertical n 0 1 2 Vertical 244 4414 0 0 0

Bearings

Bearing	Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	89%	4414 / 244	4657	L	D+L
2 - SPF	3 500"	Vert	89%	4414 / 244	4657	1	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	12455 ft-lb	6'1 1/8"	25775 ft-lb	48%	D	Uniform
Unbraced	13143 ft-lb	6'1 1/8"	13160 ft-lb	100%	D+L	L
Shear	3357 lb	10'8 3/4"	8526 lb	39%	D	Uniform
LL Defl inch	0.012 (L/12056)	6'1 1/8"	0.293 (L/480)	4%	L	L
TL Defl inch	0.223 (L/631)	6'1 1/8"	0.586 (L/240)	38%	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 7'9 3/4" o.c.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

II	D	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1		Uniform		1-0-0	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF		
2	2	Uniform			Тор	700 PLF	0 PLF	0 PLF	0 PLF	0 PLF		
		Self Weight				14 PLF						

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used
- For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/14/2027

Manufacturer Info Roseburg Forest Products 3661 Gateway Street Springfield, OR 97477 (541) 679-3311 www.roseburg.com APA: PR-L289, ICC-ES: ESR-1210

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- Version 24.20.909 Powered by iStruct™ Dataset: 24070801.3993