



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

RE: 3698553 - Fischer Residence 2 Story

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

Customer Info: Jeff Fischer Project Name: n/a Model: Fischer Residence 2 Story
Lot/Block: 5 Subdivision: Hermitage
Address: Lot 5 Hermitage, n/a
City: High Springs State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 55 individual, Truss Design Drawings and 0 Additional Drawings.

With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T32659340	A01	1/18/24	23	T32659362	F11	1/18/24
2	T32659341	A02	1/18/24	24	T32659363	FG01	1/18/24
3	T32659342	A03	1/18/24	25	T32659364	GF1	1/18/24
4	T32659343	A04	1/18/24	26	T32659365	M01	1/18/24
5	T32659344	B01	1/18/24	27	T32659366	M02	1/18/24
6	T32659345	B02	1/18/24	28	T32659367	PB01A	1/18/24
7	T32659346	B03	1/18/24	29	T32659368	PB01B	1/18/24
8	T32659347	C01	1/18/24	30	T32659369	PB01V	1/18/24
9	T32659348	C02	1/18/24	31	T32659370	PB02A	1/18/24
10	T32659349	D01	1/18/24	32	T32659371	PB02B	1/18/24
11	T32659350	D02	1/18/24	33	T32659372	PB02V	1/18/24
12	T32659351	D03	1/18/24	34	T32659373	PB03B	1/18/24
13	T32659352	F01	1/18/24	35	T32659374	V01	1/18/24
14	T32659353	F02	1/18/24	36	T32659375	V01D	1/18/24
15	T32659354	F03	1/18/24	37	T32659376	V01DG	1/18/24
16	T32659355	F04	1/18/24	38	T32659377	V02	1/18/24
17	T32659356	F05	1/18/24	39	T32659378	V02D	1/18/24
18	T32659357	F06	1/18/24	40	T32659379	V2D	1/18/24
19	T32659358	F07	1/18/24	41	T32659380	V03	1/18/24
20	T32659359	F08	1/18/24	42	T32659381	V03D	1/18/24
21	T32659360	F09	1/18/24	43	T32659382	V3D	1/18/24
22	T32659361	F10	1/18/24	44	T32659383	V04	1/18/24



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Julius Lee
Professional Engineer License No.

PX2707

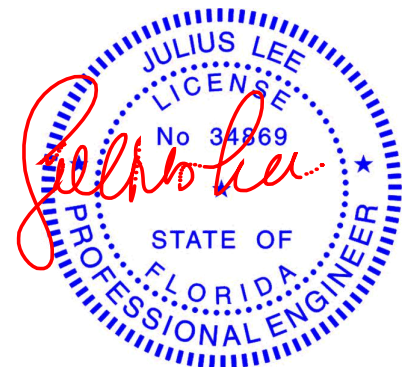
01/27/2024

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc.
under my direct supervision based on the parameters
provided by Builders FirstSource-Jacksonville.

Truss Design Engineer's Name: Lee, Julius

My license renewal date for the state of Florida is February 28, 2025.

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 MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or 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.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024



RE: 3698553 - Fischer Residence 2 Story

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

Customer Info: Jeff Fischer Project Name: n/a Model: Fischer Residence 2 Story
Lot/Block: 5 Subdivision: Hermitage
Address: Lot 5 Hermitage, n/a
City: High Springs State: FL

No.	Seal#	Truss Name	Date
45	T32659384	V04D	1/18/24
46	T32659385	V05	1/18/24
47	T32659386	V05D	1/18/24
48	T32659387	V5D	1/18/24
49	T32659388	V06	1/18/24
50	T32659389	V06D	1/18/24
51	T32659390	V07	1/18/24
52	T32659391	V08	1/18/24
53	T32659392	V09	1/18/24
54	T32659393	V10	1/18/24
55	T32659394	V11	1/18/24



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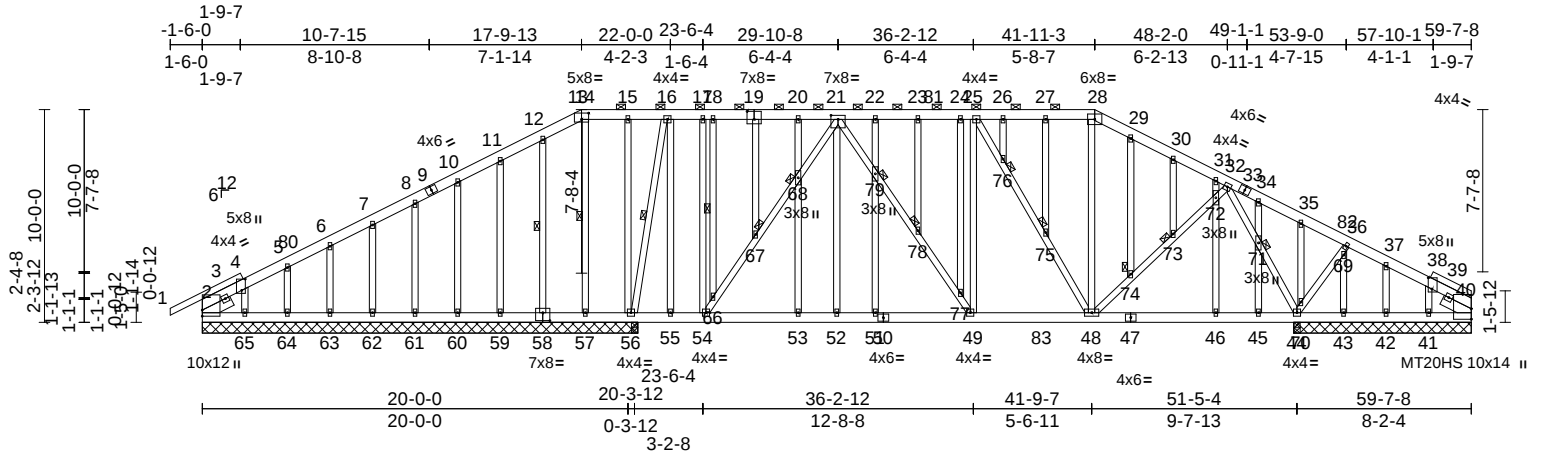
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659340
3698553	A01	Piggyback Base Structural Gable	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:23

Page: 1

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Scale = 1:108.3

Plate Offsets (X, Y): [4:0-6-6,0-2-0], [13:0-4-0,0-3-8], [19:0-4-0,0-4-8], [21:0-4-0,0-2-4], [38:0-6-6,0-2-0], [58:0-4-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.51	Vert(LL)	-0.10	53-54	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.50	Vert(CT)	-0.19	53-54	>999	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.03	44	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.06	53-54	>999	240	Weight: 673 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 *Except* 1-4,38-40:2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

Max Grav 2=372 (LC 1), 40=83 (LC 12),
41=533 (LC 18), 42=109 (LC 18),
43=40 (LC 12), 44=2239 (LC 18),
56=1487 (LC 18), 57=60 (LC 12),
58=222 (LC 17), 59=187 (LC 17),
60=193 (LC 17), 61=190 (LC 17),
62=191 (LC 17), 63=191 (LC 17),
64=203 (LC 17), 65=53 (LC 10)

BRACING

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 13-28.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 12-58, 14-57, 18-66, 16-56
JOINTS 1 Brace at Jt(s): 67, 68, 71, 73, 74, 75, 76, 78, 79

FORCES

(lb) - Maximum Compression/Tension
TOP CHORD 1-2=0/21, 2-4=-322/55, 4-5=-265/46, 5-6=-274/37, 6-7=-267/66, 7-8=-258/111, 8-10=-250/156, 10-11=-242/262, 11-12=-236/250, 12-13=-225/284, 13-14=-179/276, 14-15=-179/276, 15-16=-181/276, 16-17=-480/341, 17-18=-480/341, 18-20=-480/341, 20-21=-479/341, 21-22=-1103/454, 22-23=-1103/454, 23-24=-1103/454, 24-25=-1103/454, 25-26=-880/392, 26-27=-880/392, 27-28=-880/392, 28-29=-930/382, 29-30=-985/377, 30-31=-1020/362, 31-32=-990/323, 32-34=-44/637, 34-35=-55/607, 35-36=-110/645, 36-37=-91/520, 37-38=-113/477, 38-40=-179/560
BOT CHORD 2-65=0/221, 64-65=0/198, 63-64=0/198, 62-63=0/198, 61-62=0/198, 60-61=0/198, 59-60=0/198, 57-59=0/198, 56-57=0/198, 55-56=0/481, 54-55=0/492, 53-54=-78/1036, 52-53=-78/1036, 51-52=-78/1036, 49-51=-78/1036, 48-49=-78/1081, 46-48=0/261, 45-46=0/261, 44-45=0/261, 43-44=-453/186, 42-43=-453/186, 41-42=-453/186, 40-41=-504/207

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Examiner-License No. PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

Continued on page 2

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

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

MiTek®

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story
3698553	A01	Piggyback Base Structural Gable	1	1	T32659340
					Job Reference (optional)

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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WEBS 17-54=-17/390, 54-66=-1022/222,
66-67=-1015/212, 67-68=-985/203,
21-68=-1075/226, 21-79=-14/107,
78-79=-14/117, 77-78=-14/98, 49-77=-11/120,
25-49=0/164, 25-76=-512/121,
75-76=-515/123, 48-75=-518/124,
28-48=0/151, 48-74=-104/812,
73-74=-101/790, 72-73=-114/805,
32-72=-114/986, 32-71=-1829/389,
44-71=-1793/381, 44-70=-385/219,
69-70=-209/125, 36-69=-134/115,
4-65=-59/103, 5-64=-140/109, 6-63=-122/84,
7-62=-121/85, 8-61=-121/84, 10-60=-120/85,
11-59=-126/92, 12-58=-117/62, 14-57=-53/49,
15-56=0/114, 16-55=-143/758, 18-66=-14/12,
19-67=-37/10, 20-68=0/121, 53-68=-59/79,
38-41=-278/170, 37-42=-16/86,
43-69=-15/114, 35-70=-195/105,
34-71=-39/14, 45-71=-67/15, 31-72=-130/73,
46-72=0/165, 30-73=-31/19, 29-74=-5/33,
27-75=-8/4, 26-76=-7/2, 24-77=0/35,
23-78=-24/7, 22-79=-10/74, 51-79=-24/67,
21-52=-60/319, 16-56=-1633/361

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=60ft; eave=2ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Corner(3E) -1-6-0 to
4-5-9, Exterior(2N) 4-5-9 to 17-9-13, Corner(3R) 17-9-13
to 23-6-4, Exterior(2N) 23-6-4 to 41-11-3, Corner(3R)
41-11-3 to 47-7-8, Exterior(2N) 47-7-8 to 59-4-10
zone;C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members, with BCDL = 10.0psf.
- 11) All bearings are assumed to be SP No.2 .
- 12) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 430 lb uplift at joint
40, 241 lb uplift at joint 44, 21 lb uplift at joint 2, 45 lb
uplift at joint 65, 28 lb uplift at joint 64, 31 lb uplift at joint
63, 32 lb uplift at joint 62, 31 lb uplift at joint 61, 32 lb
uplift at joint 60, 35 lb uplift at joint 59, 19 lb uplift at joint
58, 104 lb uplift at joint 57, 127 lb uplift at joint 56, 93 lb
uplift at joint 41, 11 lb uplift at joint 42 and 158 lb uplift at
joint 43.
- 13) This truss design requires that a minimum of 7/16"
structural wood sheathing be applied directly to the top
chord and 1/2" gypsum sheetrock be applied directly to
the bottom chord.
- 14) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

LOAD CASE(S) Standard



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Lawrence Powell
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01/27/2024

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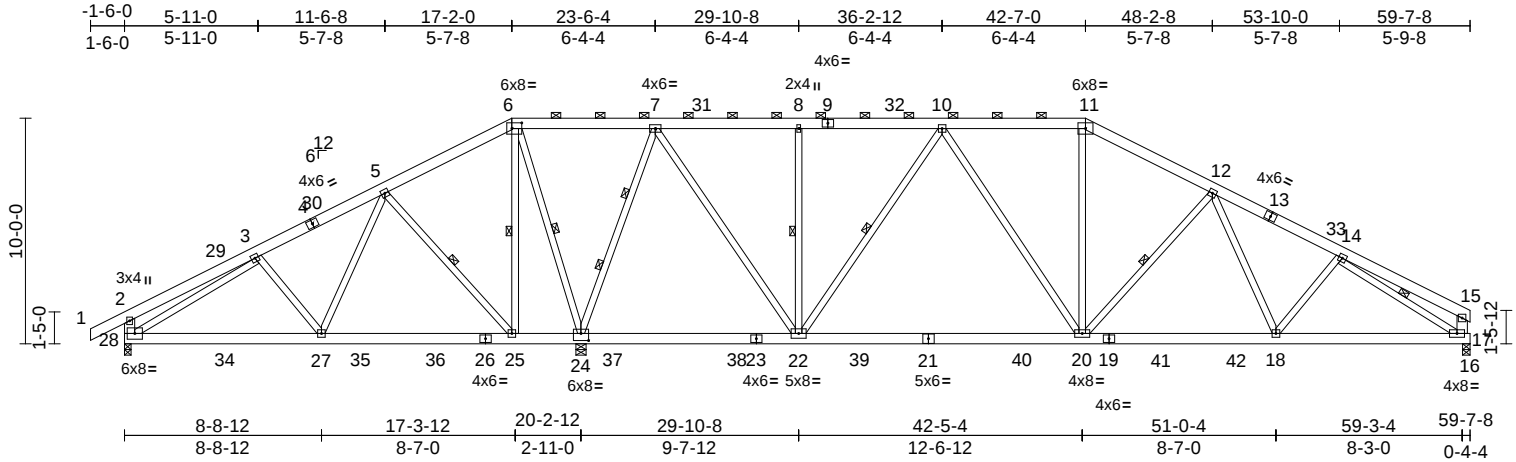
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story
3698553	A02	Piggyback Base	12	1	Job Reference (optional)
					T32659341

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Scale = 1:102.1

Plate Offsets (X, Y): [6:0-5-4,0-3-0], [24:0-4-0,0-3-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.26	20-22	>999	360	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	-0.44	20-22	>999	240	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.04	17	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.08	25-27	>999	240	Weight: 491 lb FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 28-2,17-15:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-10-0 max.): 6-11.

BOT CHORD Rigid ceiling directly applied.

WEBS 1 Row at midpt 5-25, 6-25, 6-24, 8-22, 10-22, 12-20, 14-17

WEBS 2 Rows at 1/3 pts 7-24

REACTIONS (size) 17=0-4-0, 24=0-5-8, 28=0-3-8
Max Horiz 28=223 (LC 11)
Max Uplift 17=129 (LC 12), 24=541 (LC 12), 28=284 (LC 12)
Max Grav 17=1645 (LC 18), 24=3371 (LC 2), 28=574 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/46, 2-3=-261/332, 3-5=-300/623, 5-6=0/706, 6-7=-110/925, 7-8=-816/155, 8-10=-816/155, 10-11=-1573/262, 11-12=-1807/252, 12-14=-2250/268, 14-15=-599/75, 2-28=-351/313, 15-17=-421/89

BOT CHORD 27-28=-517/363, 25-27=-334/33, 24-25=-650/155, 22-24=-306/264, 20-22=0/1249, 18-20=-106/1810, 17-18=-190/1886, 16-17=0/0

WEBS
3-27=-301/121, 5-27=-519/604, 5-25=-669/539, 6-25=-722/646, 6-24=-1267/848, 7-24=-2007/323, 7-22=-191/1858, 8-22=-361/125, 10-22=-891/225, 10-20=-34/482, 11-20=0/476, 12-20=-515/183, 12-18=-7/249, 14-18=-18/140, 3-28=-256/291, 14-17=-1786/201

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; B=45ft; L=60ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 4-5-9, Interior (1) 4-5-9 to 17-2-0, Exterior(2R) 17-2-0 to 25-7-3, Interior (1) 25-7-3 to 42-7-0, Exterior(2R) 42-7-0 to 51-0-3, Interior (1) 51-0-3 to 59-3-4 zone; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- All plates are 4x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 541 lb uplift at joint 24, 284 lb uplift at joint 28 and 129 lb uplift at joint 17.

- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

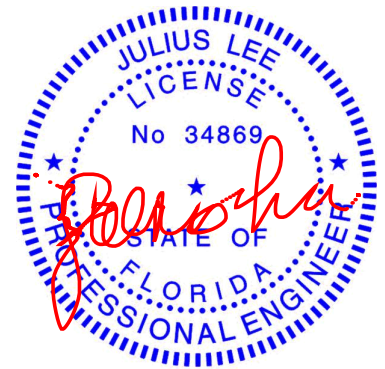
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Examiner-License No.

01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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MiTek®

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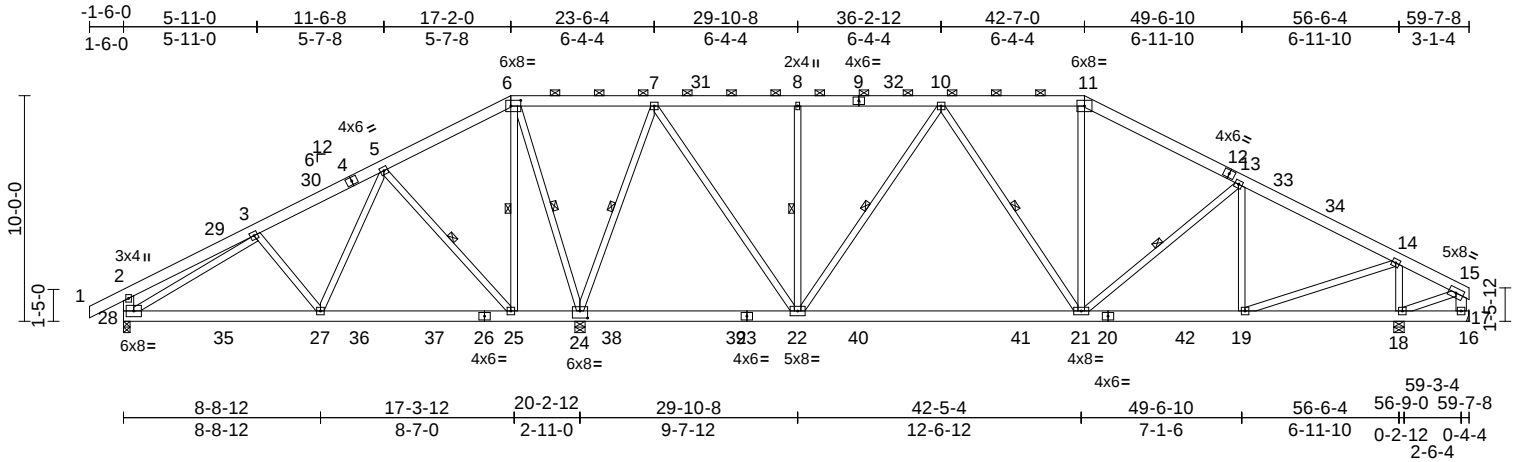
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659342
3698553	A03	Piggyback Base	3	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:27

Page: 1

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Scale = 1:102.1

Plate Offsets (X, Y): [6:0-5-4,0-3-0], [24:0-4-0,0-3-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.30	Vert(LL)	-0.26	21-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	-0.43	21-22	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.02	18	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.09	25-27	>999	240	Weight: 492 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 28-2,17-15:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-11.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-25, 6-25, 6-24, 7-24, 8-22, 10-22, 10-21, 13-21

REACTIONS (size) 17= Mechanical, 18=0-5-8, 24=0-5-8, 28=0-3-8
Max Horiz 28=223 (LC 11)
Max Uplift 17=-157 (LC 25), 18=-169 (LC 12), 24=-515 (LC 12), 28=-294 (LC 12)
Max Grav 17=24 (LC 12), 18=1970 (LC 18), 24=3087 (LC 2), 28=634 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/46, 2-3=-284/336, 3-5=-421/641, 5-6=0/518, 6-7=-84/725, 7-8=-839/158, 8-10=-839/158, 10-11=-1335/244, 11-13=-1557/224, 13-14=-1593/201, 14-15=-56/215, 2-28=-361/315, 15-17=-34/126
BOT CHORD 27-28=-535/451, 25-27=-280/131, 24-25=-462/138, 22-24=-153/249, 21-22=0/1144, 19-21=-62/1308, 18-19=-146/62, 17-18=-71/24, 16-17=0/0

WEBS
3-27=-277/118, 5-27=-516/578, 5-25=-655/537, 6-25=-722/642, 6-24=-1169/835, 7-24=-1800/304, 7-22=-166/1625, 8-22=-363/126, 10-22=-648/199, 10-21=-18/251, 11-21=0/336, 13-21=-90/135, 13-19=-361/110, 14-19=-107/1548, 14-18=-1640/274, 3-28=-340/306, 15-18=-100/41

NOTES

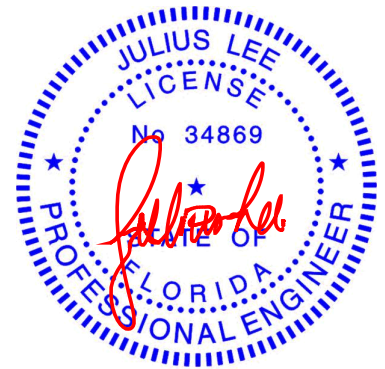
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust); Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=60ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 4-5-9, Interior (1) 4-5-9 to 17-2-0, Exterior(2R) 17-2-0 to 25-7-3, Interior (1) 25-7-3 to 42-7-0, Exterior(2R) 42-7-0 to 51-0-3, Interior (1) 51-0-3 to 59-3-4 zone; cantilever right exposed ; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- All plates are 4x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearings are assumed to be: Joint 28 SP No.2 , Joint 24 SP No.2 , Joint 18 SP No.2 .
- Refer to girder(s) for truss to truss connections.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 515 lb uplift at joint 24, 169 lb uplift at joint 18, 294 lb uplift at joint 28 and 157 lb uplift at joint 17.

11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

12) 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
PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

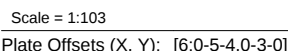
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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MiTek®

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Jan 18 17:32:52 Page: 1
ID:WVFAC j?P?Jy5eX ckm7yS9NU-vGvNSxEPUZWvaYVs?pClueieoEMELBF69fEiCzuE6g



LUMBER		BOT CHORD	26-27=105/426, 26-34=298/123, 34-35=298/123, 25-35=298/123, 24-25=298/123, 23-24=641/211, 23-36=346/179, 36-37=346/179, 22-37=346/179, 21-22=346/179, 21-38=10/1246, 38-39=10/1246, 20-39=10/1246, 19-20=132/1837, 19-40=132/1837, 40-41=132/1837, 18-41=132/1837, 17-18=191/1042	8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 308 lb uplift at joint 23, 107 lb uplift at joint 27 and 207 lb uplift at joint 17.
TOP CHORD	2x6 SP No.2			
BOT CHORD	2x6 SP No.2			
WEBS	2x4 SP No.3 *Except* 27-2,17-15:2x6 SP No.2			9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
BRACING				
TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-10-4 max.): 6-11.			10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
BOT CHORD	Rigid ceiling directly applied.	WEBS	3-26=290/149, 5-26=7/650, 5-759/188, 6-24=70/710, 6-23=1376/186, 7-23=2032/301, 7-21=150/1886, 8-21=360/126, 10-21=920/178, 10-20=8/511, 11-20=0/472, 12-20=546/181, 12-18=0/287, 14-17=1767/221	
WEBS	1 Row at midpt 5-24, 6-23, 8-21, 10-21, 12-20, 14-17			
WEBS	2 Rows at 1/3 pts 7-23			
REACTIONS				
(lb/size)	17=1470/0-5-8, 23=2982/0-5-8,			

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCFL=4.2psf; BCFL=6.0psf; h=25ft;
B=45ft; L=60ft; eave=7ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) -1-6-0 to
4-5-11, Interior (1) 4-5-11 to 17-2-0, Exterior(2R) 17-2-0
to 25-7-6, Interior (1) 25-7-6 to 42-7-0, Exterior(2R)
42-7-0 to 51-0-6, Interior (1) 51-0-6 to 61-3-0 zone; C-C
for members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 4x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members, with BCFL = 10.0psf.

10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom edge.

LOAD CASE(S) Standard
PX2707

[Signature] 01/27/2024

WORLDWIDE ENGINEERING, INC.



January 18, 2024

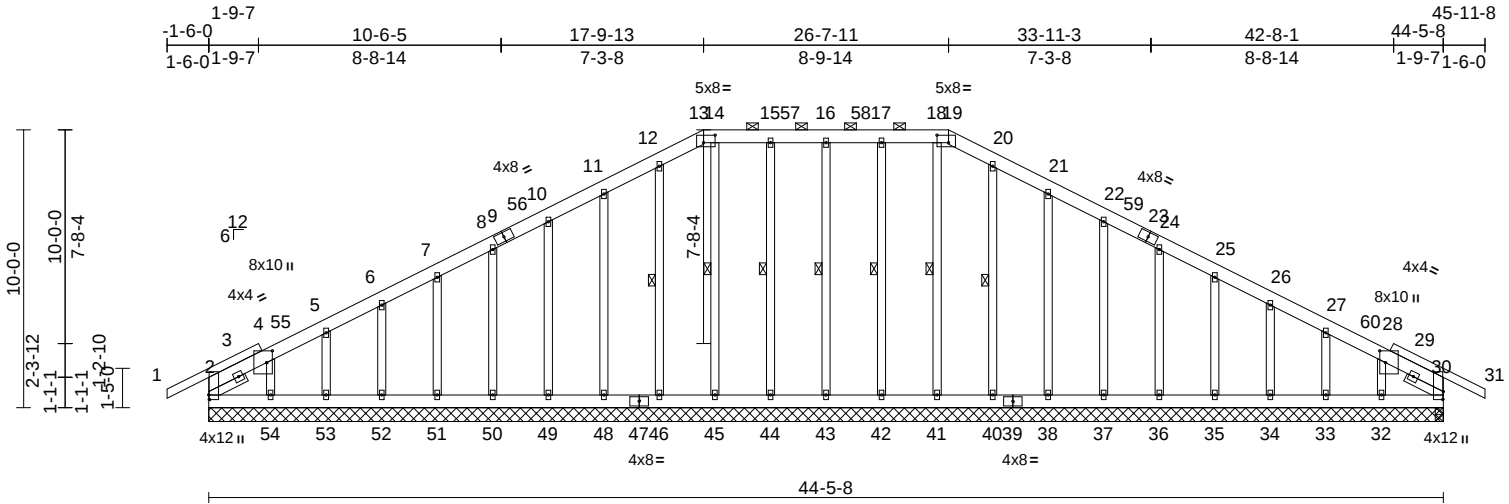


Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.tpinstitute.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcsccomponents.com)

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Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story
3698553	B01	Piggyback Base Supported Gable	1	1	T32659344
					Job Reference (optional)

ID:KJ0AeKrbILN5is4cKjrjuG9yS9jG-RfC?PsB70Hq3NSgPqgL8w3uITXbGKwKCDoi7J4zJC?i



Scale = 1:83

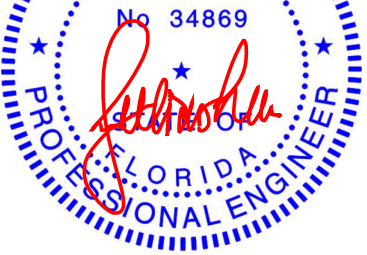
Plate Offsets (X, Y): [2:0-2,0,0-0-4], [4:0-5-2,0-2-8], [13:0-5-0,0-3-4], [19:0-5-0,0-3-4], [28:0-5-2,0-2-8], [30:0-3-7,0-0-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	0.00	30-32	>999	360	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.02	Vert(CT)	0.00	30-32	>999	240	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	30	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.00	2	>999	240	Weight: 416 lb FT = 20%

LUMBER		Max Grav	2=219 (LC 1), 30=219 (LC 1), 32=155 (LC 18), 33=165 (LC 1), 34=160 (LC 1), 35=160 (LC 24), 36=160 (LC 24), 37=160 (LC 1), 38=161 (LC 1), 40=158 (LC 24), 41=154 (LC 24), 42=162 (LC 23), 43=162 (LC 23), 44=162 (LC 24), 45=154 (LC 23), 46=160 (LC 17), 48=161 (LC 1), 49=160 (LC 1), 50=160 (LC 23), 51=160 (LC 23), 52=160 (LC 1), 53=160 (LC 1), 54=146 (LC 17)	WEBS	16-43=-122/58, 15-44=-122/48, 14-45=-114/0, 12-46=-120/42, 11-48=-121/76, 10-49=-120/67, 8-50=-120/56, 7-51=-120/55, 6-52=-120/55, 5-53=-125/54, 4-54=-119/61, 17-42=-122/48, 18-41=-114/0, 20-40=-118/43, 21-38=-121/76, 22-37=-120/67, 24-36=-120/56, 25-35=-120/55, 26-34=-120/55, 27-33=-125/54, 28-32=-107/62
TOP CHORD	2x6 SP No.2 *Except* 1-4,28-31:2x4 SP No.2				
BOT CHORD	2x6 SP No.2				
OTHERS	2x4 SP No.3				
SLIDER	Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0				

BRACING		FORCES	(lb) - Maximum Compression	NOTES
TOP CHORD	Structural wood sheathing directly applied, except			1) Unbalanced roof live loads have been considered for this design. PX2707 01/27/2024
BOT CHORD	Rigid ceiling directly applied.			2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-11-6, Interior (1) 2-11-6 to 17-9-13, Exterior(2R) 17-9-13 to 24-2-12, Interior (1) 24-2-12 to 26-7-11, Exterior(2R) 26-7-11 to 32-11-2, Interior (1) 32-11-2 to 45-11-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
WEBS	1 Row at midpt			

REACTIONS	(size)	TOP CHORD	BOT CHORD
Max Horiz	2=44-5-8, 30=44-5-8, 32=44-5-8, 33=44-5-8, 34=44-5-8, 35=44-5-8, 36=44-5-8, 37=44-5-8, 38=44-5-8, 40=44-5-8, 41=44-5-8, 42=44-5-8, 43=44-5-8, 44=44-5-8, 45=44-5-8, 46=44-5-8, 48=44-5-8, 49=44-5-8, 50=44-5-8, 51=44-5-8, 52=44-5-8, 53=44-5-8, 54=44-5-8	1-2=0/21, 2-4=-158/136, 4-5=-128/117, 5-6=-126/113, 6-7=-115/103, 7-8=-105/92, 8-10=-97/100, 10-11=-89/133, 11-12=-95/166, 12-13=-106/186, 13-14=-102/183, 14-15=-102/183, 15-16=-102/183, 16-17=-102/183, 17-18=-102/183, 18-19=-102/183, 19-20=-106/188, 20-21=-95/168, 21-22=-75/134, 22-24=-58/102, 24-25=-47/70, 25-26=-51/38, 26-27=-59/30, 27-28=-58/37, 28-30=-93/50, 30-31=0/21	2-54=-57/112, 53-54=-50/103, 52-53=-50/103, 51-52=-50/103, 50-51=-50/103, 49-50=-50/103, 48-49=-50/103, 46-48=-50/103, 45-46=-50/103, 44-45=-50/103, 43-44=-50/103, 42-43=-50/103, 41-42=-50/103, 40-41=-50/103, 38-40=-50/103, 37-38=-50/103, 36-37=-50/103, 35-36=-50/103, 34-35=-50/103, 33-34=-50/103, 32-33=-50/103, 30-32=-55/110
Max Uplift	2=-181 (LC 10), 2=-18 (LC 8), 30=-16 (LC 12), 32=-50 (LC 12), 33=-29 (LC 12), 34=-31 (LC 12), 35=-32 (LC 12), 36=-31 (LC 12), 37=-32 (LC 12), 38=-36 (LC 12), 40=-6 (LC 12), 42=-13 (LC 9), 43=-22 (LC 12), 44=-12 (LC 12), 46=-6 (LC 12), 48=-36 (LC 12), 49=-32 (LC 12), 50=-31 (LC 12), 51=-32 (LC 12), 52=-31 (LC 12), 53=-29 (LC 12), 54=-50 (LC 12)		



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

Continued on page 2

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

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MiTek®

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story
3698553	B01	Piggyback Base Supported Gable	1	1	T32659344
					Job Reference (optional)

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:28

Page: 2

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- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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) All bearings are assumed to be SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 2, 16 lb uplift at joint 30, 22 lb uplift at joint 43, 12 lb uplift at joint 44, 6 lb uplift at joint 46, 36 lb uplift at joint 48, 32 lb uplift at joint 49, 31 lb uplift at joint 50, 32 lb uplift at joint 51, 31 lb uplift at joint 52, 29 lb uplift at joint 53, 50 lb uplift at joint 54, 13 lb uplift at joint 42, 6 lb uplift at joint 40, 36 lb uplift at joint 38, 32 lb uplift at joint 37, 31 lb uplift at joint 36, 32 lb uplift at joint 35, 31 lb uplift at joint 34, 29 lb uplift at joint 33 and 50 lb uplift at joint 32.
- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



Review for Code Compliance
Universal Engineering Science

Lauren Powell
Examiner-License No.

PX2707

01/27/2024

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

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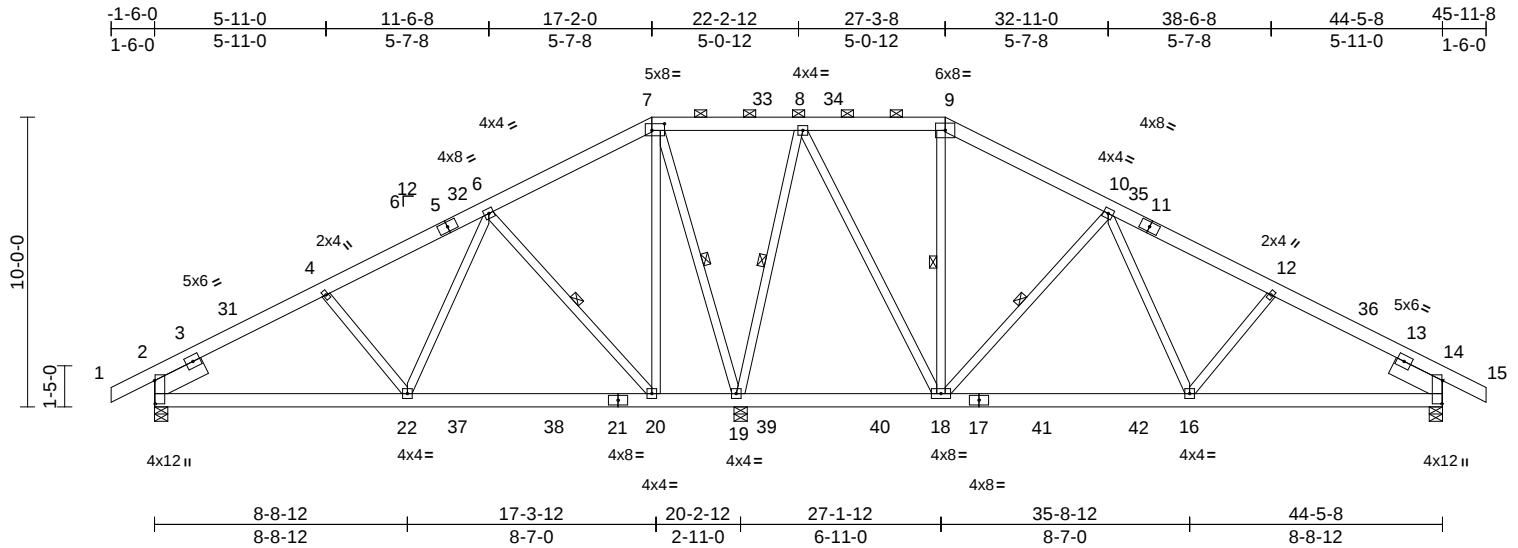
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659345
3698553	B02	Piggyback Base	11	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1

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Scale = 1:79.5

Plate Offsets (X, Y): [2:0-9-10,0-0-4], [7:0-5-4,0-2-12], [14:0-9-10,0-0-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.29	Vert(LL)	-0.07	16-18	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.36	Vert(CT)	-0.13	16-18	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.03	16-18	>999	240	Weight: 367 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x8 SP 2400F 2.0E -- 1-11-12, Right 2x8 SP 2400F 2.0E -- 1-11-12

BRACING

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-20, 7-19, 8-19, 9-18, 10-18

REACTIONS

(size)	2=0-5-8, 14=0-5-8, 19=0-5-8
Max Horiz	2=-183 (LC 10)
Max Uplift	2=-111 (LC 12), 14=-133 (LC 12), 19=-238 (LC 12)
Max Grav	2=723 (LC 17), 14=987 (LC 18), 19=2548 (LC 17)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/40, 2-4=-722/117, 4-6=-583/114, 6-7=0/354, 7-8=0/603, 8-9=-241/167, 9-10=-345/148, 10-12=-985/160, 12-14=-1134/161, 14-15=0/40
BOT CHORD	2-22=-70/691, 20-22=-75/299, 19-20=-320/176, 18-19=-350/176, 16-18=0/650, 14-16=-68/929
WEBS	4-22=-262/134, 6-22=0/601, 6-20=-739/178, 7-20=-52/740, 7-19=-1198/140, 8-19=-1310/220, 8-18=-100/1117, 9-18=-213/55, 10-18=-706/178, 10-16=0/501, 12-16=-203/125

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 2-11-6, Interior (1) 2-11-6 to 17-2-0, Exterior(2R) 17-2-0 to 23-5-7, Interior (1) 23-5-7 to 27-3-8, Exterior(2R) 27-3-8 to 33-6-15, Interior (1) 33-6-15 to 45-11-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * 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.
- 7) All bearings are assumed to be SP No.2.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 2, 238 lb uplift at joint 19 and 133 lb uplift at joint 14.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

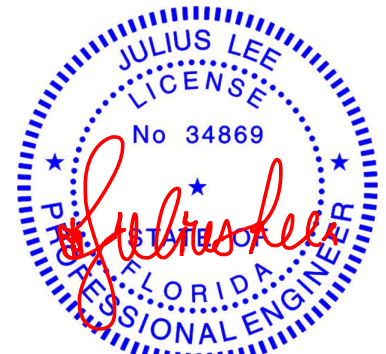
LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Examiner-License No.

PX2707

01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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

MiTek®

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

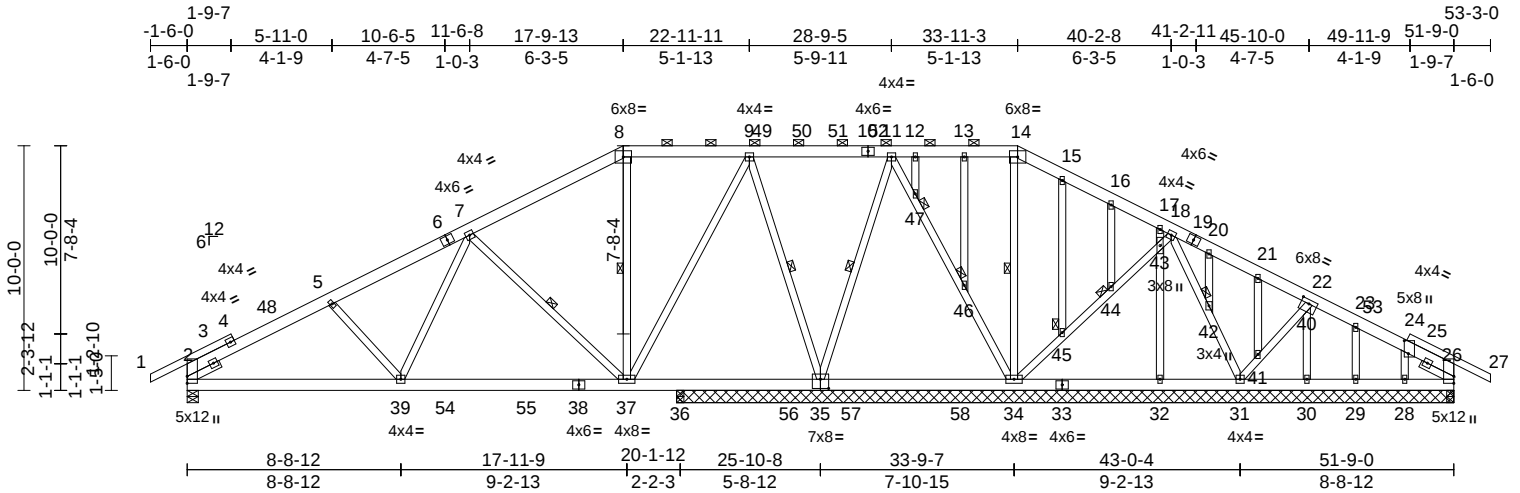
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story
3698553	B03	Piggyback Base Structural Gable	1	1	Job Reference (optional)
					T32659346

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Jan 18 17:26:01

Page: 1

ID:95R?ADV_LqkHa8DRvo12PwyS7Dc-RBa?CPFbgHkDmOatQ?KNkzAPEZ6?YKudfzb_oXzuED5



Scale = 1:94.1

Plate Offsets (X, Y): [22:0-4-0-0-2-0], [24:0-6-6-0-2-0], [26:0-0-0-Edge], [35:0-4-0-0-4-8]

Loading	(psf)	Spacing	2-6-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.29	Vert(LL)	-0.11	37-39	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.20	37-39	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.02	36	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS		Wind(LL)	0.04	37-39	>999	240	Weight: 465 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2 *Except* 1-4,24-27:2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 8-14.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 2-39,37-39.
WEBS 1 Row at midpt 7-37, 8-37, 9-35, 11-35, 14-34

JOINTS
1 Brace at Jt(s): 42, 44, 45, 46, 47

REACTIONS
All bearings 31-9-0. except 2=0-5-8, 36=0-3-8
(lb) - Max Horiz 2=-233 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 26, 28, 29, 31, 32, 34, 36 except 2=-194 (LC 12), 35=-182 (LC 12)
Max Grav All reactions 250 (lb) or less at joint (s) 28, 29, 30 except 2=1370 (LC 18), 26=268 (LC 25), 31=313 (LC 19), 32=475 (LC 19), 34=897 (LC 19), 35=2182 (LC 18), 36=284 (LC 18)

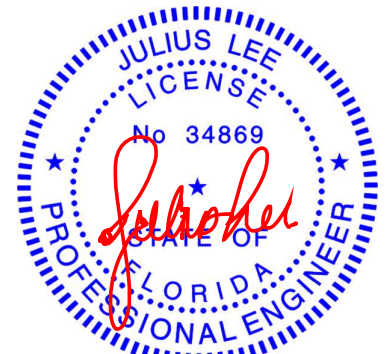
FORCES
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD
2-3=-1851/253, 3-4=-1759/227, 4-48=-1808/250, 5-48=-1771/262, 5-6=-1612/246, 6-7=-1466/250, 7-8=-606/225, 8-9=-441/247, 9-49=0/509, 49-50=0/509, 50-51=0/509, 10-51=0/509, 10-52=0/509, 11-52=0/509, 11-12=0/332, 12-13=0/332, 13-14=0/332, 14-15=0/425, 15-16=0/373, 16-17=0/330, 17-18=0/310
BOT CHORD
2-39=-159/1795, 39-54=-59/1207, 54-55=-59/1207, 38-55=-59/1207, 37-38=-59/1207, 35-57=-320/100, 57-58=-320/188, 34-58=-320/188
WEBS
5-39=-421/169, 7-39=0/740, 7-39=0/740, 9-37=-98/1139, 9-35=-1429/247, 11-35=-482/138, 14-34=-479/102, 18-43=-264/135, 32-43=-309/175

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=52ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 3-8-2, Interior (1) 3-8-2 to 17-9-13, Exterior(2R) 17-9-13 to 25-1-10, Interior (1) 25-1-10 to 33-11-3, Exterior(2R) 33-11-3 to 41-3-0, Interior (1) 41-3-0 to 53-3-0 zone; 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 34, 31, 28, 29, 32, 26, 36 except (jt=lb) 2=193, 35=182.
- 11) Gable purlin presentation does not depict the size or the orientation of the purlin along the top and/or bottom chord. PX2707 01/27/2024
- LOAD CASE(S)** Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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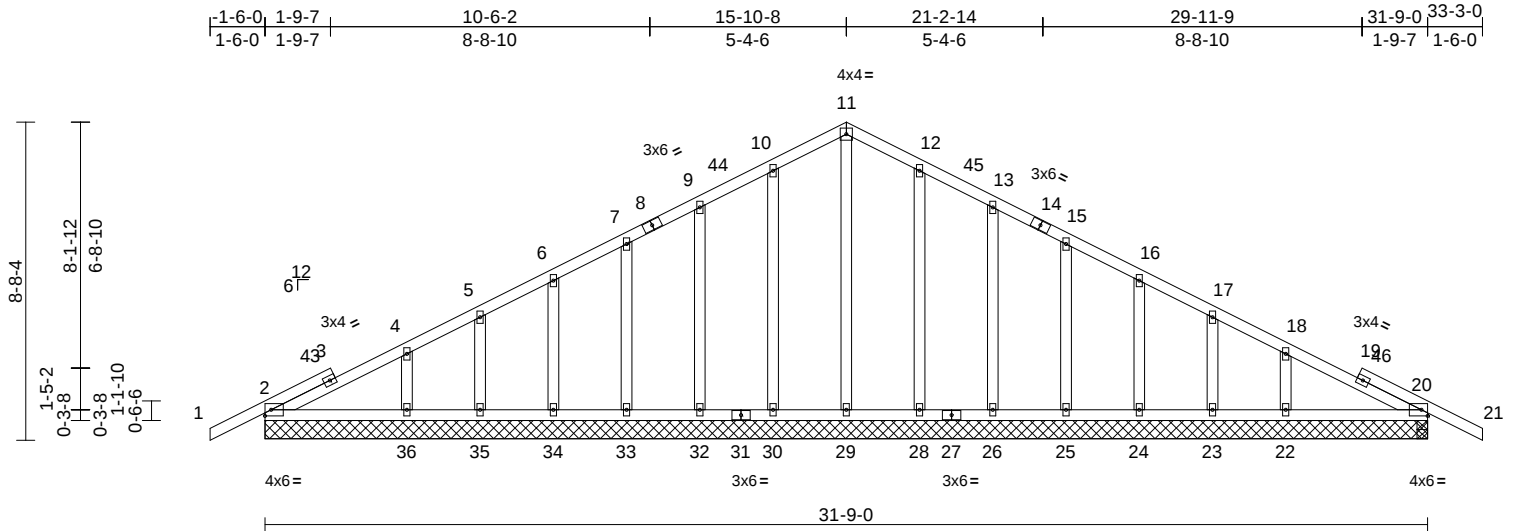
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659347
3698553	C01	Common Supported Gable	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:30

Page: 1

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	0.00	36-39	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	-0.01	36-39	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	40	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.00	36-39	>999	240	Weight: 195 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size)
2=31-9-0, 20=31-9-0, 22=31-9-0,
23=31-9-0, 24=31-9-0, 25=31-9-0,
26=31-9-0, 28=31-9-0, 29=31-9-0,
30=31-9-0, 32=31-9-0, 33=31-9-0,
34=31-9-0, 35=31-9-0, 36=31-9-0,
37=31-9-0, 40=31-9-0
Max Horiz 2=-151 (LC 10), 37=-151 (LC 10)
Max Uplift 2=-58 (LC 12), 20=-64 (LC 12),
22=-30 (LC 12), 23=-33 (LC 12),
24=-31 (LC 12), 25=-31 (LC 12),
26=-34 (LC 12), 28=-25 (LC 12),
30=-25 (LC 12), 32=-34 (LC 12),
33=-31 (LC 12), 34=-31 (LC 12),
35=-31 (LC 12), 36=-34 (LC 12),
37=-58 (LC 12), 40=-64 (LC 12)
Max Grav 2=245 (LC 1), 20=255 (LC 1),
22=253 (LC 1), 23=126 (LC 1),
24=168 (LC 1), 25=158 (LC 24),
26=160 (LC 1), 28=166 (LC 24),
29=151 (LC 17), 30=166 (LC 23),
32=160 (LC 1), 33=158 (LC 23),
34=170 (LC 1), 35=118 (LC 23),
36=272 (LC 1), 37=245 (LC 1),
40=255 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-4=-107/116, 4-5=-103/88,
5-6=-86/85, 6-7=-79/75, 7-9=-70/103,
9-10=-77/137, 10-11=-94/166, 11-12=-94/170,
12-13=-77/141, 13-15=-58/107,
15-16=-41/76, 16-17=-37/43, 17-18=-52/26,
18-20=-104/67, 20-21=0/44

BOT CHORD 2-36=-55/110, 35-36=-47/103,
34-35=-47/103, 33-34=-47/103,
32-33=-47/103, 30-32=-47/103,
29-30=-47/103, 28-29=-47/103,
26-28=-47/103, 25-26=-47/103,
24-25=-47/103, 23-24=-47/103,
22-23=-47/103, 20-22=-47/106
WEBS 11-29=-111/28, 10-30=-126/78, 9-32=-120/63,
7-33=-119/55, 6-34=-126/57, 5-35=-95/52,
4-36=-193/74, 12-28=-126/78,
13-26=-120/62, 15-25=-119/57,
16-24=-125/57, 17-23=-99/54, 18-22=-182/73

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-8-2, Interior (1) 1-8-2 to 15-10-8, Exterior(2R) 15-10-8 to 19-0-10, Interior (1) 19-0-10 to 33-3-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- All bearings are assumed to be SP No.2 .

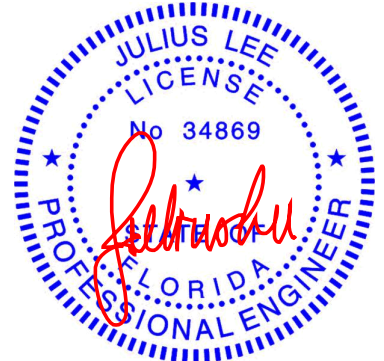
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 2, 64 lb uplift at joint 20, 25 lb uplift at joint 30, 34 lb uplift at joint 32, 31 lb uplift at joint 33, 31 lb uplift at joint 34, 31 lb uplift at joint 35, 34 lb uplift at joint 36, 25 lb uplift at joint 28, 34 lb uplift at joint 26, 31 lb uplift at joint 25, 31 lb uplift at joint 24, 33 lb uplift at joint 23, 30 lb uplift at joint 22, 58 lb uplift at joint 2 and 64 lb uplift at joint 20.

- This truss design requires that a minimum of 7/16" steel plate be applied directly to the top and bottom chord.



Review for Code Compliance
Universal Engineering Sciences

LOAD CASE(S) Standard
Examiner-License No. 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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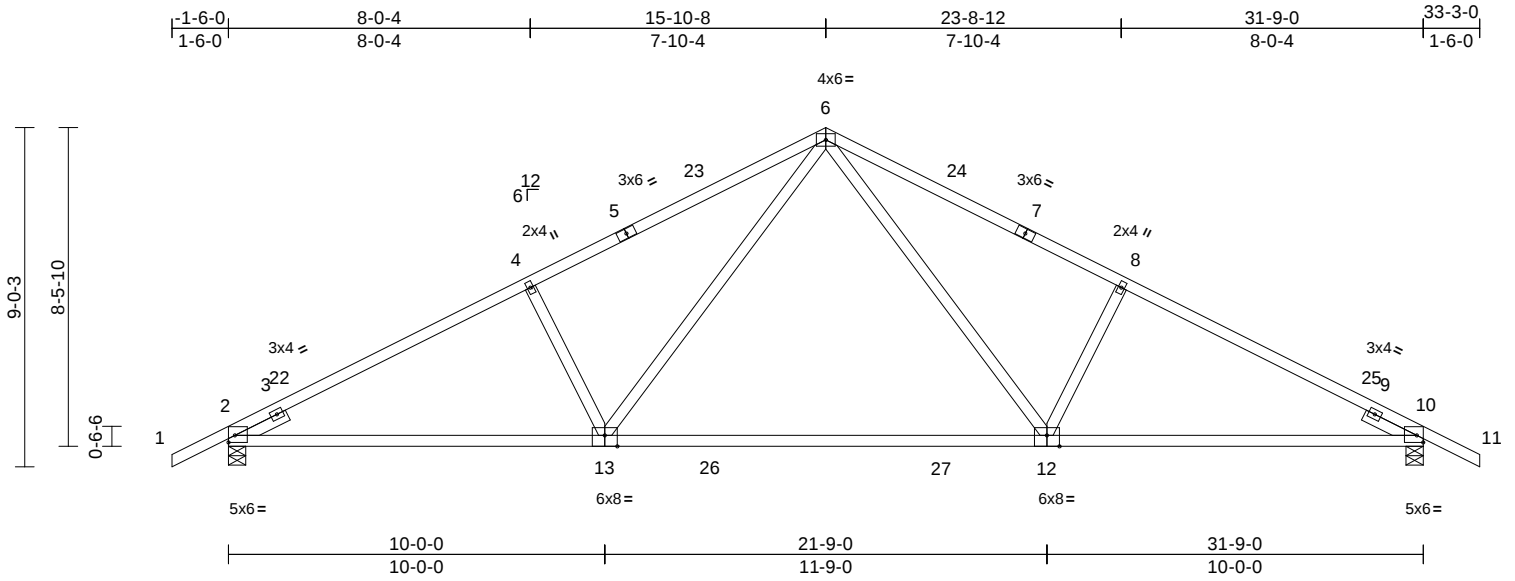
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659348
3698553	C02	Common	4	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:30
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Page: 1



Scale = 1:61.2

Plate Offsets (X, Y): [2:Edge,0-2-4], [10:Edge,0-2-4], [12:0-4-0,Edge], [13:0-4-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	-0.65	12-13	>581	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.92	Vert(CT)	-1.02	12-13	>370	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.09	12-13	>999	240	Weight: 152 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except* 12-13:2x4 SP 2850F
2.0E or 2x4 SP M 31
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 2=0-5-8, 10=0-5-8
Max Horiz 2=156 (LC 11)
Max Uplift 2=-193 (LC 12), 10=-193 (LC 12)
Max Grav 2=1497 (LC 17), 10=1497 (LC 18)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/46, 2-4=-2318/282, 4-6=-2174/314, 6-8=-2174/314, 8-10=-2318/282, 10-11=0/46
BOT CHORD 2-10=-162/2109
WEBS 6-12=-61/962, 8-12=-420/203, 6-13=-61/962, 4-13=-420/203

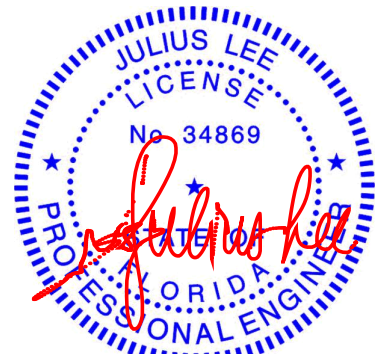
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-8-2, Interior (1) 1-8-2 to 15-10-8, Exterior(2R) 15-10-8 to 19-0-10, Interior (1) 19-0-10 to 33-3-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- All bearings are assumed to be SP No.1 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 193 lb uplift at joint 2 and 193 lb uplift at joint 10.
- This truss design requires that a minimum 1/2" gypsum sheetrock be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science
Lawrence Powell PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659349
3698553	D01	Scissor	2	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Jan 18 17:27:26
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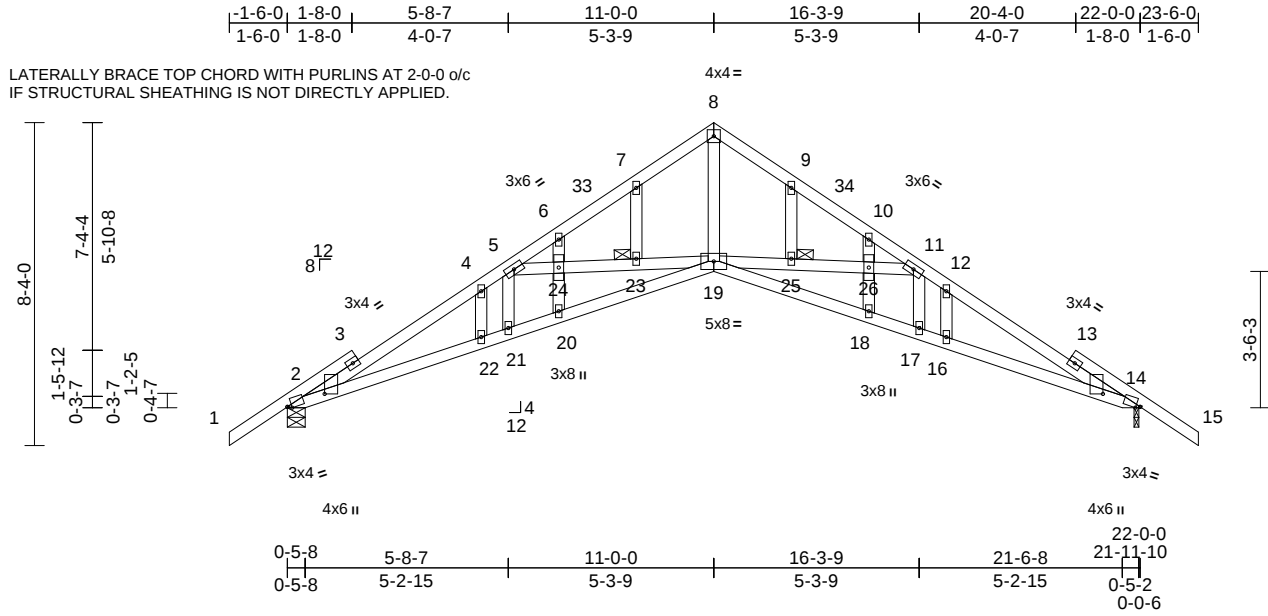


Plate Offsets (X, Y): [2:0-1-5,Edge], [2:0-4-0,0-11-8], [14:0-1-5,Edge], [14:0-4-0,0-11-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.58	Vert(LL)	-0.16	18-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.33	18-19	>789	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.27	14	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.10	18-19	>999	240	Weight: 124 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.
BOT CHORD	Rigid ceiling directly applied.
JOINTS	1 Brace at Jt(s): 23, 25

REACTIONS

(lb/size)	2=971/0-5-8, 14=962/0-1-8
Max Horiz	2=160 (LC 11)
Max Uplift	2=-153 (LC 12), 14=-147 (LC 12)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250	
(lb) or less except when shown.	
TOP CHORD	2-3=-2373/162, 3-4=-2482/195, 4-5=-2463/245, 5-6=-1674/62, 6-33=-1639/99, 7-33=-1610/103, 7-8=-1610/129, 8-9=-1610/124, 9-34=-1610/91, 10-34=-1639/88, 10-11=-1678/51, 11-12=-2521/268, 12-13=-2546/217, 13-14=-2422/183
BOT CHORD	2-22=-82/2186, 21-22=-96/2236, 20-21=-61/2155, 19-20=-84/2191, 18-19=-118/2247, 17-18=-95/2209, 16-17=-131/2298, 14-16=-117/2246
WEBS	8-19=-51/1551, 19-25=-793/204, 25-26=-793/204, 11-26=-792/203, 11-17=-104/308, 5-24=-743/197, 23-24=-744/197, 19-23=-744/197, 5-21=-101/287

NOTES

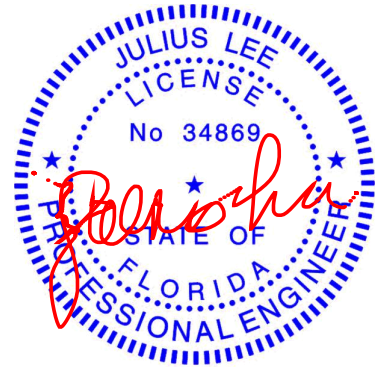
- 1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-5-7, Interior (1) 1-5-7 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior (1) 14-0-0 to 23-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2'-0" o/c.
- 7) 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'-0"-0" tall by 2'-0"-0" wide will fit between the bottom chord and any other members.
- 9) Bearing at joint(s) 2, 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 14.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 2 and 147 lb uplift at joint 14.
- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Signature: [Signature] PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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

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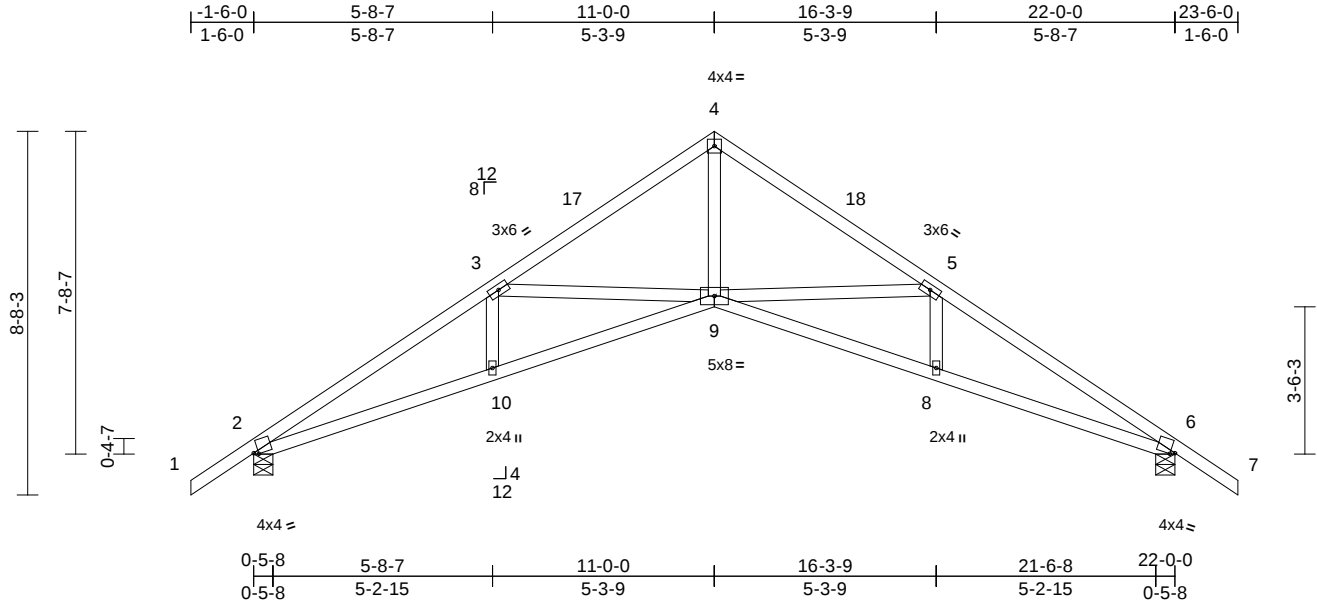
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 3698553	Truss D02	Truss Type Scissor	Qty 13	Ply 1	Fischer Residence 2 Story Job Reference (optional)	T32659350
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Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1



Scale = 1:55

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.35	Vert(LL)	-0.13	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	-0.27	8-9	>971	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.23	6	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.07	8-9	>999	240	Weight: 106 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 2=0-5-8, 6=0-5-8
Max Horiz 2=166 (LC 11)
Max Uplift 2=-146 (LC 12), 6=-146 (LC 12)
Max Grav 2=970 (LC 1), 6=970 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/50, 2-3=-2237/183, 3-4=-1611/122,
4-5=-1611/113, 5-6=-2237/195, 6-7=0/50
BOT CHORD 2-10=-65/1885, 9-10=-65/1894,
8-9=-88/1892, 6-8=-87/1881
WEBS 4-9=-3/1364, 5-9=-550/179, 5-8=0/203,
3-9=-549/180, 3-10=0/203

NOTES

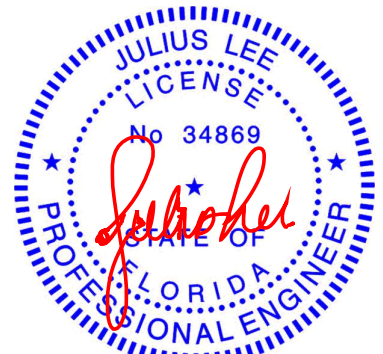
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 14-0-0, Interior (1) 1-6-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior (1) 14-0-0 to 23-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- All bearings are assumed to be SP No.2 .
- Bearing at joint(s) 2, 6 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 capable of withstanding 146 ft at joint 2 and 146 lb uplift at joint 6.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Signature: *Julius Lee* PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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

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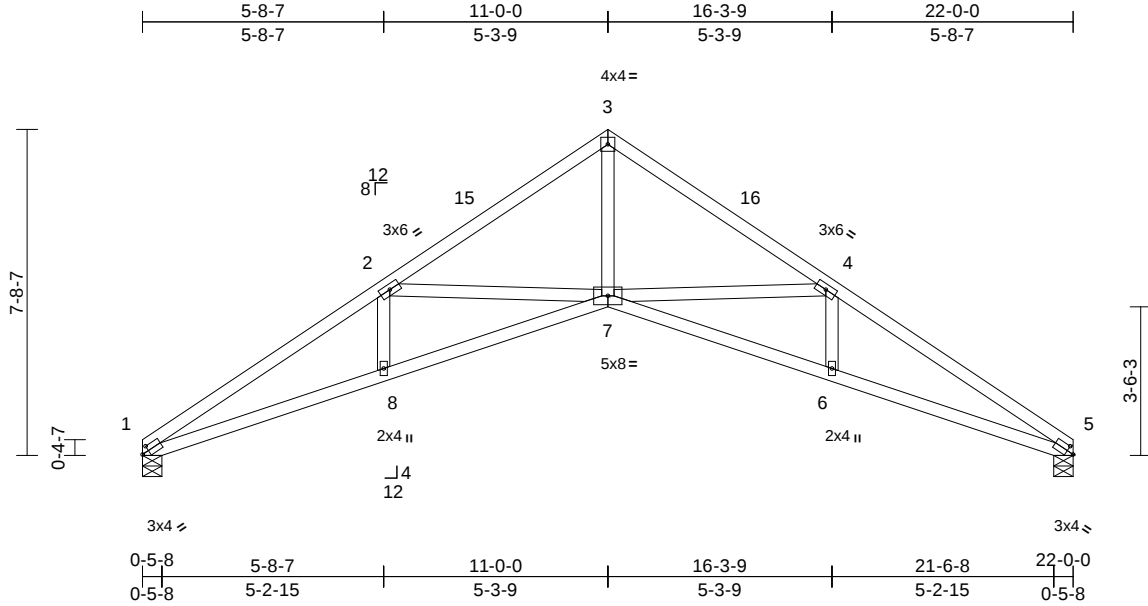
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659351
3698553	D03	Scissor	19	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1



Scale = 1:54.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.31	Vert(LL)	-0.13	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.27	6-7	>978	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.23	5	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.08	6-7	>999	240	Weight: 100 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 1=0-5-8, 5=0-5-8
Max Horiz 1=-146 (LC 10)
Max Uplift 1=-93 (LC 12), 5=-93 (LC 12)
Max Grav 1=880 (LC 1), 5=880 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2281/253, 2-3=-1631/165,
3-4=-1631/174, 4-5=-2281/252
BOT CHORD 1-8=-176/1925, 7-8=-176/1933,
6-7=-162/1933, 5-6=-162/1925
WEBS 3-7=-62/1389, 4-7=-573/186, 4-6=0/206,
2-7=-573/185, 2-8=0/206

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior (1) 14-0-0 to 22-0-0 zone;C-C for members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- All bearings are assumed to be SP No.2 .
- Bearing at joint(s) 1, 5 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 capable of withstanding 93 lb at joint 1 and 93 lb uplift at joint 5.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

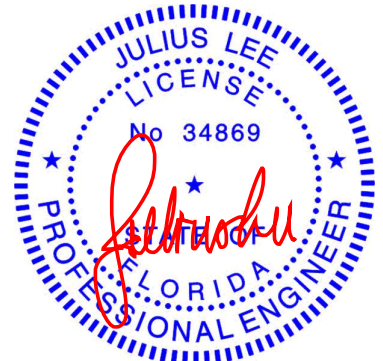
LOAD CASE(S) Standard



Review for Code Compliance
Universal Engineering Science

Examiner-License No.

PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

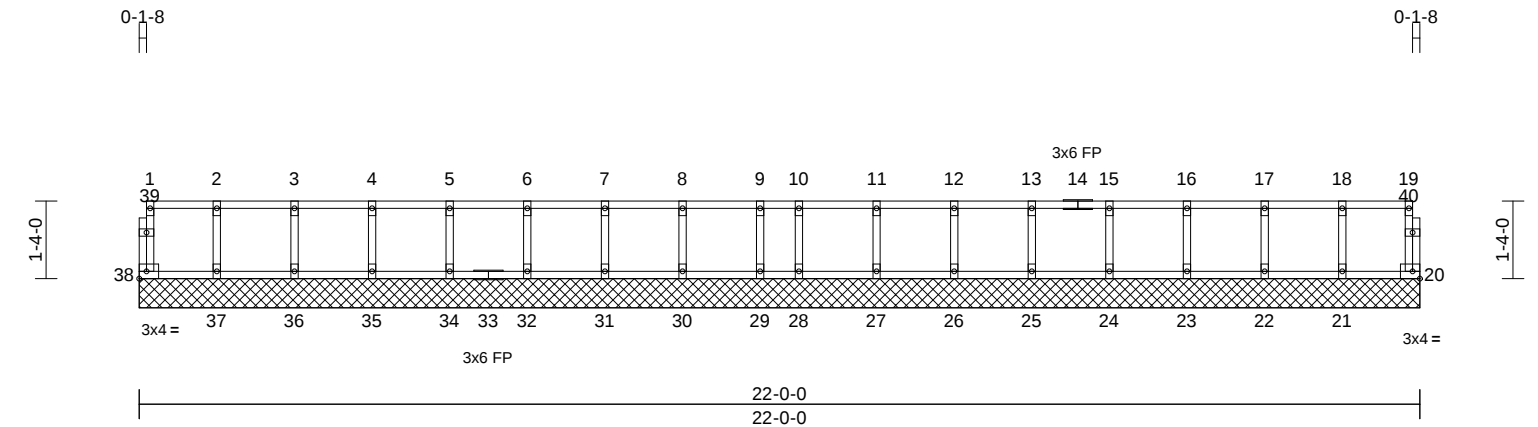
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

MiTek®

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659352
3698553	F01	Floor Supported Gable	1	1	Job Reference (optional)	

ID:ldh6B1G1_8EEWXXU6FTKtyS8Sg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDdi7J4zJC?f



Scale = 1:39.6

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	20	n/a		
BCDL	5.0	Code	FBC2020/TPI2014	Matrix-MR						Weight: 97 lb	FT = 20%F, 11%E

LUMBER		WEBS	2-37=-130/0, 3-36=-134/0, 4-35=-133/0, 5-34=-133/0, 6-32=-134/0, 7-31=-132/0, 8-30=-139/0, 9-29=-95/0, 18-21=-130/0, 17-22=-134/0, 16-23=-133/0, 15-24=-133/0, 13-25=-134/0, 12-26=-132/0, 11-27=-139/0, 10-28=-95/0
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)	20=22-0-0, 21=22-0-0, 22=22-0-0, 23=22-0-0, 24=22-0-0, 25=22-0-0, 26=22-0-0, 27=22-0-0, 28=22-0-0, 29=22-0-0, 30=22-0-0, 31=22-0-0, 32=22-0-0, 34=22-0-0, 35=22-0-0, 36=22-0-0, 37=22-0-0, 38=22-0-0
Max Grav		20=56 (LC 1), 21=143 (LC 1), 22=148 (LC 1), 23=146 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=145 (LC 1), 27=153 (LC 1), 28=105 (LC 1), 29=105 (LC 1), 30=153 (LC 1), 31=145 (LC 1), 32=147 (LC 1), 34=147 (LC 1), 35=146 (LC 1), 36=148 (LC 1), 37=143 (LC 1), 38=56 (LC 1)

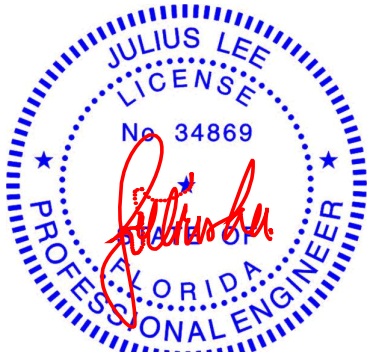
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-38=-51/0, 19-20=-51/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-12=-8/0, 12-13=-8/0, 13-15=-8/0, 15-16=-8/0, 16-17=-8/0, 17-18=-8/0, 18-19=-8/0
BOT CHORD	37-38=0/8, 36-37=0/8, 35-36=0/8, 34-35=0/8, 32-34=0/8, 31-32=0/8, 30-31=0/8, 29-30=0/8, 28-29=0/8, 27-28=0/8, 26-27=0/8, 25-26=0/8, 24-25=0/8, 23-24=0/8, 22-23=0/8, 21-22=0/8, 20-21=0/8

- NOTES**
- 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. diag web).
 - Gable studs spaced at 1-4-0 oc.
 - All bearings are assumed to be SP No.2.
 - Recommend 2x6 strongbacks, on edge, spaced 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

Review for Code Compliance
Universal Engineering Science

Signature: [Signature]
PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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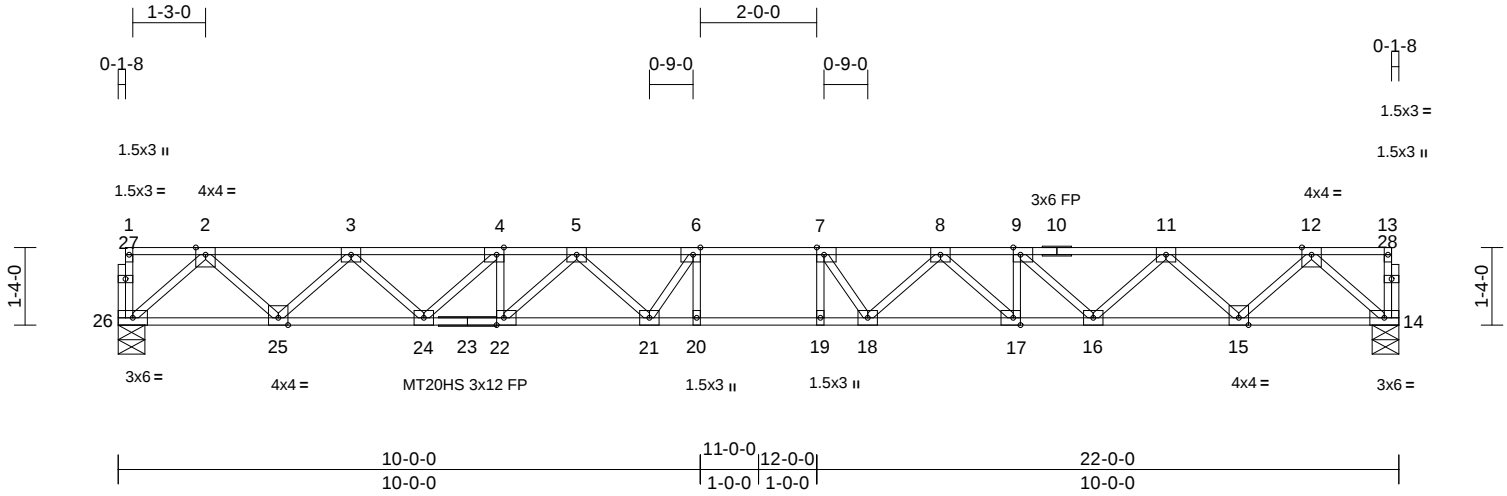
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659353
3698553	F02	Floor	4	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:32
ID:VeYGTUraM5co7WKw6PbybHyS8Qe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:39.6												
Plate Offsets (X, Y): [4:0-1-8,Edge], [6:0-1-8,Edge], [7:0-1-8,Edge], [9:0-1-8,Edge], [17:0-1-8,Edge], [22:0-1-8,Edge]												
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.44	Vert(LL)	-0.34	19-20	>757	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.48	19-20	>549	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.08	14	n/a	n/a		
BCDL	5.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 116 lb	FT = 20%F, 11%E

LUMBER		
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP No.2(flat) *Except* 23-14:2x4 SP No.1(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)	14=0-5-8, 26=0-5-8	
Max Grav	14=793 (LC 1), 26=793 (LC 1)	
FORCES		
(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-26=-26/0, 13-14=-26/0, 1-2=-1/0, 2-3=-1505/0, 3-4=-2560/0, 4-5=-3002/0, 5-6=-3461/0, 6-7=-3564/0, 7-8=-3461/0, 8-9=-3003/0, 9-11=-2560/0, 11-12=-1505/0, 12-13=-1/0	
BOT CHORD	25-26=0/865, 24-25=0/2126, 22-24=0/3002, 21-22=0/3290, 20-21=0/3564, 19-20=0/3564, 18-19=0/3564, 17-18=0/3290, 16-17=0/3003, 15-16=0/2126, 14-15=0/865	
WEBS	6-20=-187/202, 7-19=-186/202, 3-25=-863/0, 2-26=-1150/0, 2-25=0/891, 3-24=0/604, 4-24=-601/0, 4-22=0/276, 5-22=-391/0, 5-21=0/368, 6-21=-438/132, 12-14=-1150/0, 12-15=0/891, 11-15=-863/0, 11-16=0/603, 9-16=-602/0, 9-17=0/277, 8-17=-390/0, 8-18=0/368, 7-18=-439/132	

- NOTES**
- Unbalanced floor live loads have been considered for this design.
 - All plates are MT20 unless otherwise indicated.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - Bearings are assumed to be: Joint 26 SP No.2, Joint 14 SP No.1.

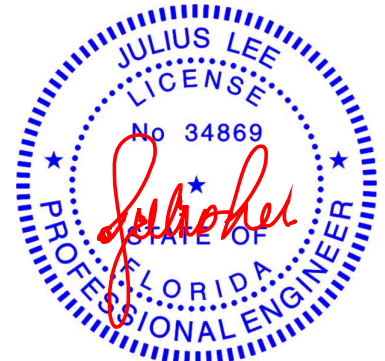
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- LOAD CASE(S)** Standard



Review for Code Compliance
Universal Engineering Science

Lawrence Powell
Examiner-License No.

PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024

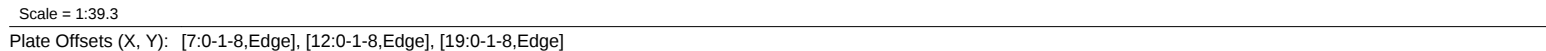
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

MiTek®

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:33 Page: 1
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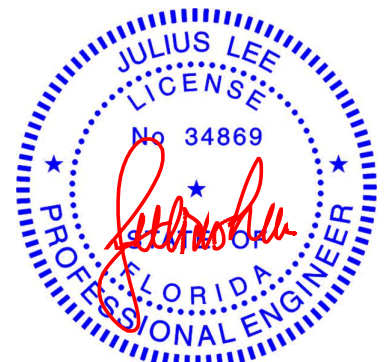


LUMBER		5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP No.2(flat) *Except* 21-13:2x4 SP No.1(flat)	
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	
		LOAD CASE(S) Standard

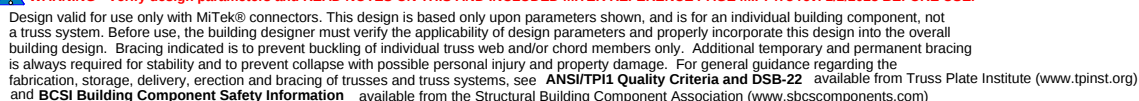
BRACING			
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
REACTIONS	(size) 13=0-5-8, 24=0-3-8 Max Grav 13=787 (LC 1), 24=787 (LC 1)		
FORCES	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-24=-25/0, 12-13=-786/0, 1-2=-1/0, 2-3=-1491/0, 3-4=-2540/0, 4-5=-3200/0, 5-6=-3508/0, 6-7=-3508/0, 7-8=-3347/0, 8-10=-2816/0, 10-11=-1902/0, 11-12=-605/0		
BOT CHORD	23-24=0/859, 22-23=0/2103, 20-22=0/2959, 19-20=0/3433, 18-19=0/3508, 17-18=0/3508, 16-17=0/3172, 15-16=0/2443, 14-15=0/1344, 13-14=0/41		
WEBS	6-19=-252/62, 7-18=-126/130, 7-17=-443/75, 8-17=0/355, 8-16=-495/0, 10-16=0/518, 10-15=-752/0, 11-15=0/777, 11-14=-1028/0, 12-14=0/921, 2-24=-1142/0, 2-23=0/878, 3-23=-852/0, 3-22=0/608, 4-22=-583/0, 4-20=0/336, 5-20=-384/0, 5-19=-170/445		

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x4 MT20 unless otherwise indicated.
- 4) Bearings are assumed to be: Joint 24 SP No.2 , Joint 13 SP No.1 .

Lawrence Parnell PX2707 01/27/2024
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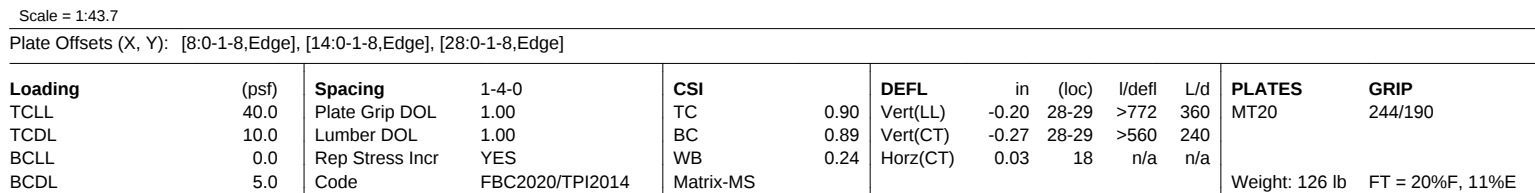


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Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:33 Page: 1
ID:qR3iXtZeC64qI2PeIY3ejavS8JG-RfC?PsB70Hg3NSoPanL8w3uITXBGKwRCDoI7J4zJC?f



NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) Bearings are assumed to be: Joint 32 SP No.1 , Joint 26 SP No.1 , Joint 20 SP No.2 .
- 6) Provide mechanical connection (by others)                   

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January 18, 2024



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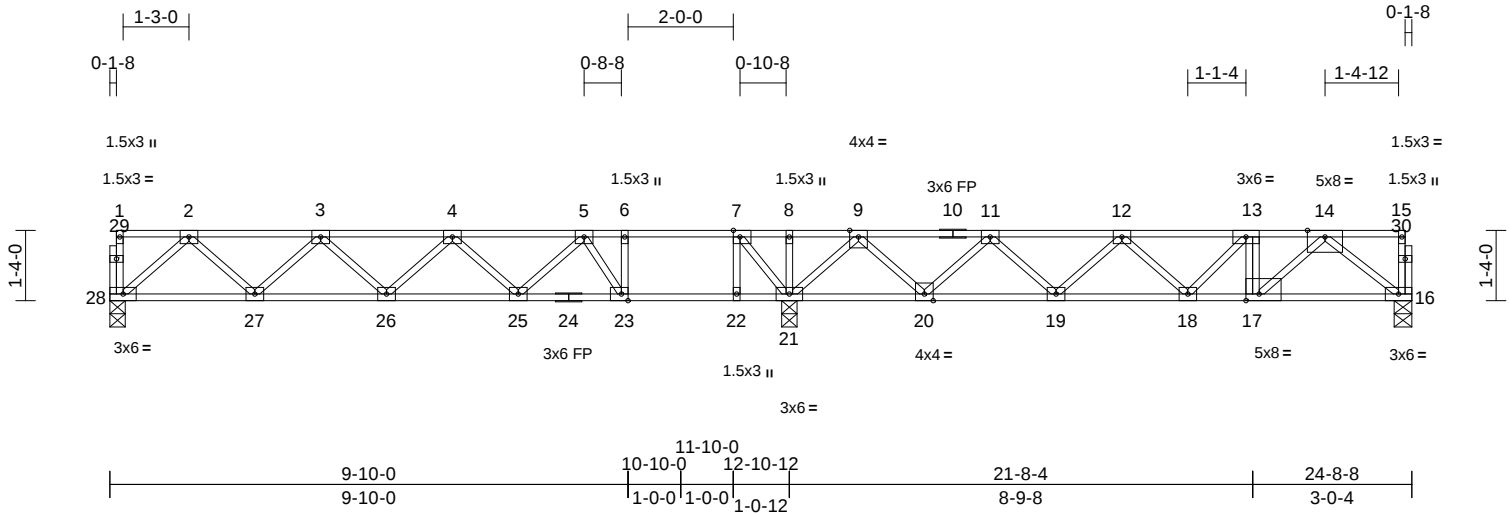
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659356
3698553	F05	Floor	13	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:33

Page: 1

ID:wZsXxavme7hJg13rGuAb9yS8PG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:43.7									
Plate Offsets (X, Y): [7:0-1-8,Edge], [17:0-3-0,Edge], [23:0-1-8,Edge]									
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL	40.0	Plate Grip DOL	1.00	TC	0.68	Vert(LL)	-0.19 23-25	>821	360
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.27 23-25	>567	240
BCLL	0.0	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.03 16	n/a	n/a
BCDL	5.0	Code	FBC2020/TPI2014	Matrix-MS					
						PLATES		GRIP	
						MT20		244/190	
						Weight: 130 lb FT = 20%F, 11%E			

LUMBER	
TOP CHORD	2x4 SP No.2(flat) *Except* 10-1:2x4 SP 2850F 2.0E or 2x4 SP M 31(flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 24-16:2x4 SP No.1(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 6-0-0 oc bracing.
REACTIONS	
(size)	16=0-4-0, 21=0-3-8, 28=0-3-8
Max Grav	16=1248 (LC 15), 21=1172 (LC 4), 28=452 (LC 5)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-28=-25/0, 15-16=-42/0, 1-2=-1/0, 2-3=-767/0, 3-4=-1114/0, 4-5=-1124/126, 5-6=-550/470, 6-7=-550/470, 7-8=0/790, 8-9=0/790, 9-11=-800/0, 11-12=-1806/0, 12-13=-2524/0, 13-14=-2791/0, 14-15=-2/0
BOT CHORD	27-28=0/479, 26-27=0/1030, 25-26=-46/1199, 23-25=-268/940, 22-23=-470/550, 21-22=-470/550, 20-21=-64/293, 19-20=0/1358, 18-19=0/2238, 17-18=0/2791, 16-17=0/1514
WEBS	6-23=0/461, 7-22=0/333, 8-21=0/284, 7-21=-1203/0, 13-17=-1112/0, 9-21=-1090/0, 9-20=0/871, 11-20=-840/0, 11-19=0/650, 12-19=-627/0, 12-18=0/564, 13-18=-540/0, 14-17=0/1699, 14-16=-1932/0, 2-28=-636/0, 2-27=0/400, 3-27=-367/11, 3-26=-63/116, 4-26=-119/74, 4-25=-146/0, 5-25=0/303, 5-23=-797/0

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

- All plates are 3x4 MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 28 SP No.2, Joint 21 SP No.1, Joint 16 SP No.1.
- Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 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

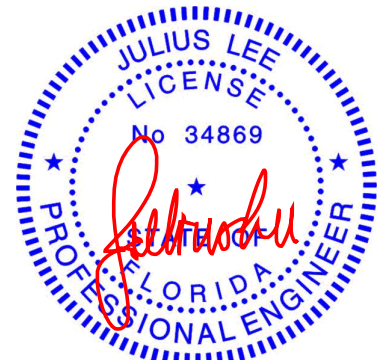
- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 16-28=-7, 1-15=-67
Concentrated Loads (lb)
Vert: 13=-779
- Dead + Roof Live (balanced): Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 16-28=-7, 1-15=-13
Concentrated Loads (lb)
Vert: 13=-1446



Review for Code Compliance
Universal Engineering Science

Lawrence Powell
Examiner-License No.

PX2707 01/27/2024



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MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024

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

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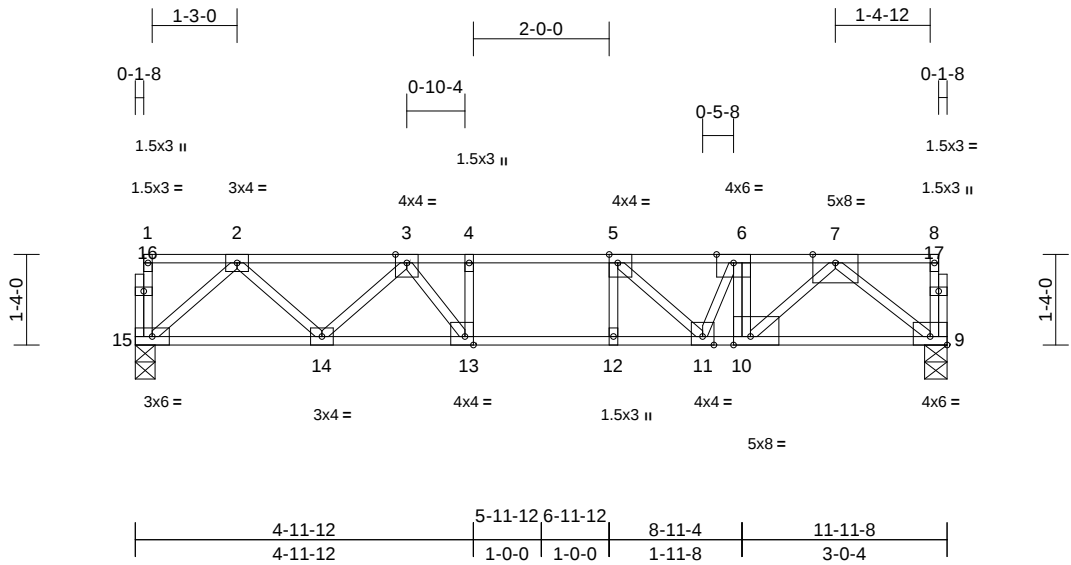
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	
3698553	F06	Floor	9	1	Job Reference (optional)	T32659357

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:34
ID:L3J3DUWJonWEEPt9xotTX4yS8AH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.9

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

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.10	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.88	Vert(CT)	-0.21	11-12	>659	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 66 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP 2850F 2.0E or 2x4 SP M 31(flat)
BOT CHORD 2x4 SP 2850F 2.0E or 2x4 SP M 31(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) 9=0-4-0, 15=0-3-8
Max Grav 9=1311 (LC 4), 15=664 (LC 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-19/3, 8-9=-47/0, 1-2=-1/0, 2-3=-1227/0, 3-4=-2365/0, 4-5=-2365/0, 5-6=-2876/0, 6-7=-2968/0, 7-8=-2/0
BOT CHORD 14-15=0/720, 13-14=0/1815, 12-13=0/2365, 11-12=0/2365, 10-11=0/2968, 9-10=0/1584
WEBS 4-13=-528/0, 5-12=-352/0, 5-11=0/929, 2-15=-957/0, 2-14=0/706, 3-14=-817/0, 3-13=0/1009, 6-10=-1309/0, 7-10=0/1842, 7-9=-2020/0, 6-11=-351/0

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All bearings are assumed to be SP 2850F 2.0E or M 31 .
 - 3) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - 4) 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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

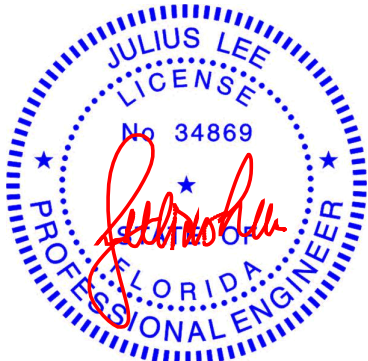
Uniform Loads (lb/ft)
Vert: 9-15=-7, 1-8=-67
Concentrated Loads (lb)
Vert: 6=-779
3) Dead + Roof Live (balanced): Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 9-15=-7, 1-8=-13
Concentrated Loads (lb)
Vert: 6=-1446



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PX2707 01/27/2024



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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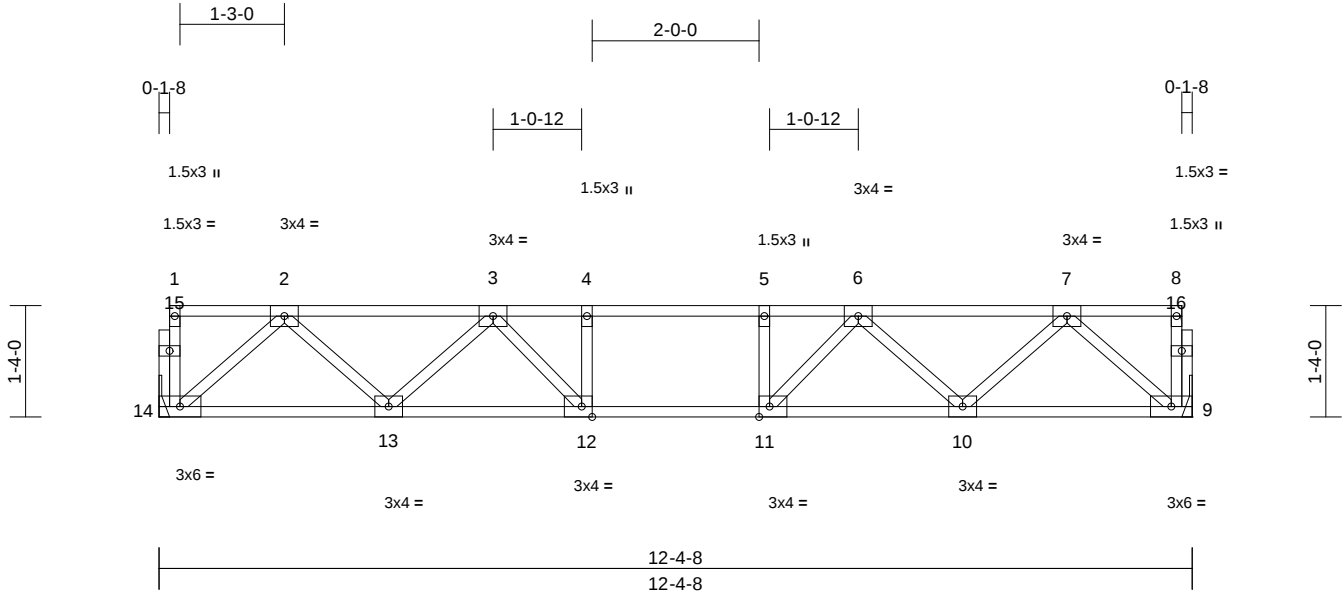
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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659358
3698553	F07	Floor	3	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:34
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Page: 1



Scale = 1:27.6									
Plate Offsets (X, Y): [11:0-1-8,Edge], [12:0-1-8,Edge]									
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl
TCLL	40.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	-0.06	12-13	>999
TCDL	10.0	Lumber DOL	1.00	BC	0.37	Vert(CT)	-0.07	12-13	>999
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.02	9	n/a
BCDL	5.0	Code	FBC2020/TPI2014	Matrix-MS					
						PLATES		GRIP	
						MT20		244/190	
						Weight: 65 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) 9= Mechanical, 14= Mechanical
Max Grav 9=440 (LC 1), 14=440 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-14=-23/0, 8-9=-23/0, 1-2=-1/0, 2-3=-737/0,
3-4=-1093/0, 4-5=-1093/0, 5-6=-1093/0,
6-7=-737/0, 7-8=-1/0

BOT CHORD 13-14=0/469, 12-13=0/987, 11-12=0/1093,
10-11=0/987, 9-10=0/469

WEBS 2-14=-622/0, 7-9=-622/0, 2-13=0/374,
7-10=0/374, 3-13=-347/0, 6-10=-347/0,
3-12=0/285, 6-11=0/285, 4-12=-161/0,
5-11=-161/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss connections.
- 4) 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

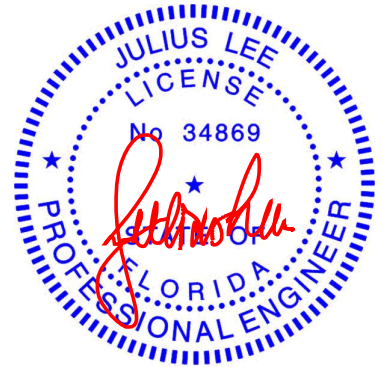


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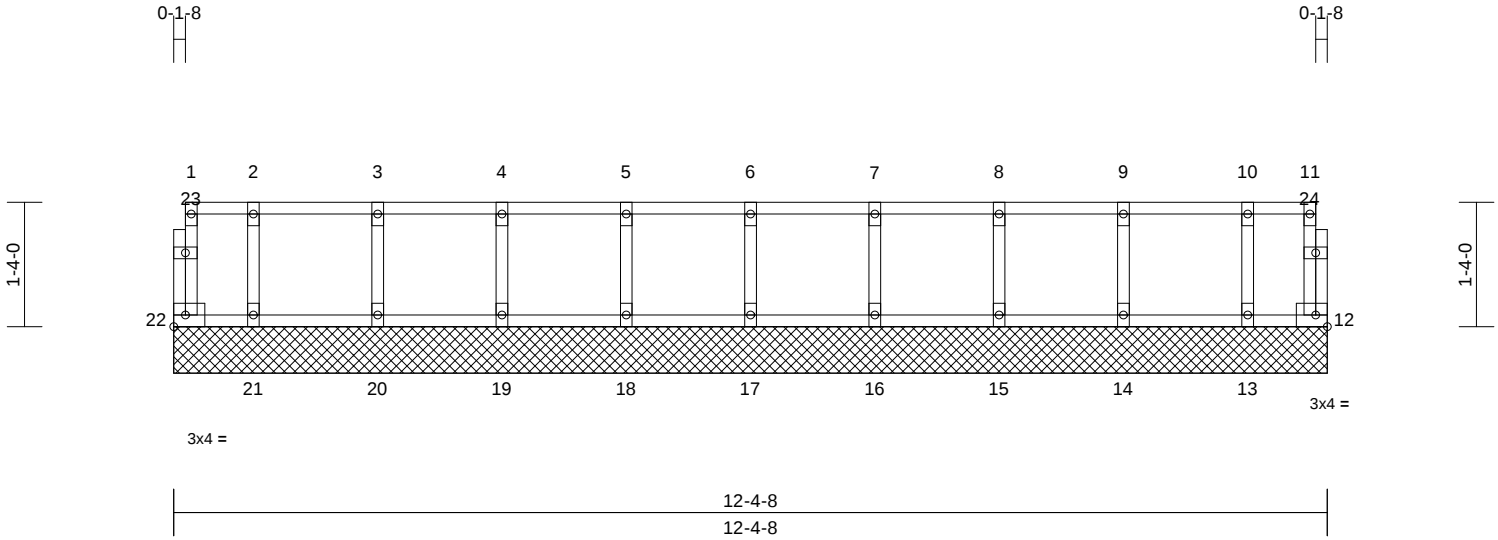
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659359
3698553	F08	Floor Supported Gable	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:35
ID:ruy?ICE040qvgWV0wJV0vRyS8DD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCD0i7J4zJC?f

Page: 1



Scale = 1:24.7

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	12	n/a		
BCDL	5.0	Code	FBC2020/TPI2014	Matrix-MR						Weight: 57 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)

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.

LOAD CASE(S) Standard

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=12-4-8, 13=12-4-8, 14=12-4-8, 15=12-4-8, 16=12-4-8, 17=12-4-8, 18=12-4-8, 19=12-4-8, 20=12-4-8, 21=12-4-8, 22=12-4-8
Max Grav 12=13 (LC 1), 13=82 (LC 1), 14=101 (LC 1), 15=97 (LC 1), 16=98 (LC 1), 17=98 (LC 1), 18=98 (LC 1), 19=97 (LC 1), 20=101 (LC 1), 21=82 (LC 1), 22=13 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-12/0, 11-12=-12/0, 1-2=-1/0, 2-3=-1/0, 3-4=-1/0, 4-5=-1/0, 5-6=-1/0, 6-7=-1/0, 7-8=-1/0, 8-9=-1/0, 9-10=-1/0, 10-11=-1/0
BOT CHORD 21-22=0/1, 20-21=0/1, 19-20=0/1, 18-19=0/1, 17-18=0/1, 16-17=0/1, 15-16=0/1, 14-15=0/1, 13-14=0/1, 12-13=0/1
WEBS 6-17=-89/0, 5-18=-89/0, 4-19=-88/0, 3-20=-92/0, 2-21=-75/0, 7-16=-89/0, 8-15=-88/0, 9-14=-92/0, 10-13=-75/0

NOTES

- 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.
- All bearings are assumed to be SP No.2 .

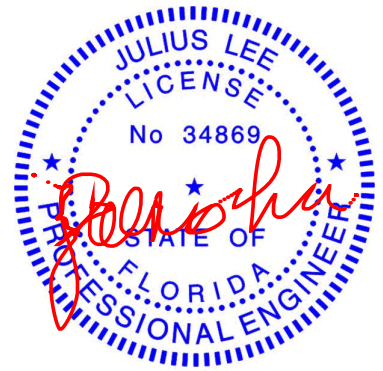


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01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

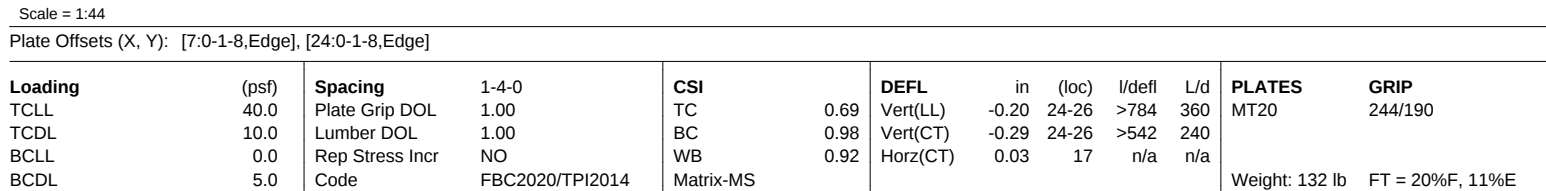
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:35 Page: 1
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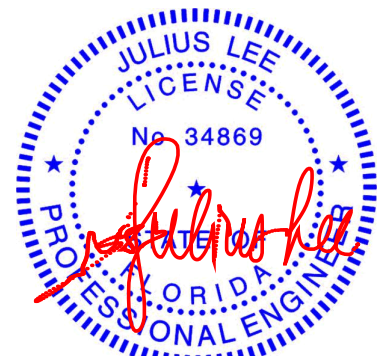


- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Bearings are assumed to be: Joint 29 SP No.2 , Joint 22 SP No.1 , Joint 17 SP No.1 .
- 4) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" on center and fastened to each truss with 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.

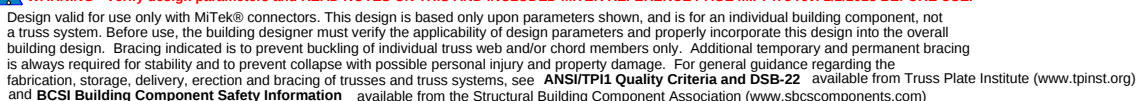
LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 17-29=-7, 1-16=-67
Concentrated Loads (lb)
Vert: 14=-779
- 3) Dead + Roof Live (balanced): Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (lb/ft)
Vert: 17-29=-7, 1-16=-13
Concentrated Loads (lb)
Vert: 14=-1446

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NOTES 16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: January 18, 2024



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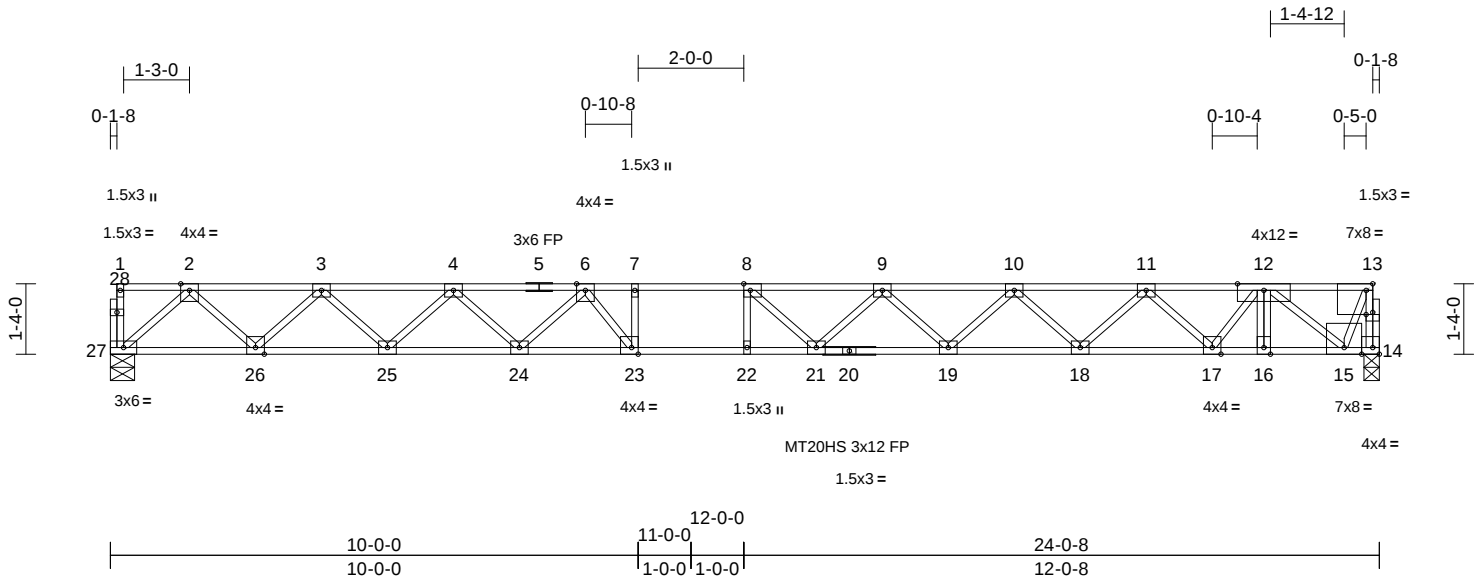
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story
3698553	F10	Floor	14	1	T32659361
					Job Reference (optional)

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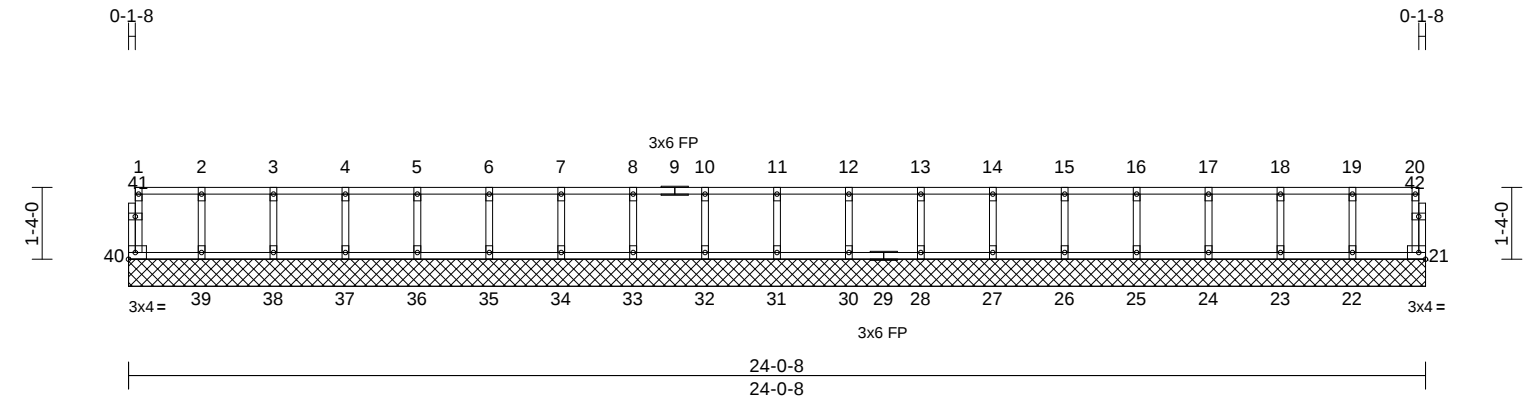
Page: 1

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Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659362
3698553	F11	Floor Supported Gable	1	1	Job Reference (optional)	

ID:mLF8A8ZZaA7mwo8kAGA32hyS7HP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:42.7

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	21	n/a	n/a		
BCDL	5.0	Code	FBC2020/TPI2014	Matrix-MR							Weight: 104 lb	FT = 20%F, 11%E

LUMBER		WEBS	
TOP CHORD	2x4 SP No.2(flat)	11-31=-133/0, 10-32=-133/0, 8-33=-133/0,	
BOT CHORD	2x4 SP No.2(flat)	7-34=-133/0, 6-35=-133/0, 5-36=-133/0,	
WEBS	2x4 SP No.3(flat)	4-37=-133/0, 3-38=-134/0, 2-39=-131/0,	
OTHERS	2x4 SP No.3(flat)	12-30=-133/0, 13-28=-133/0, 14-27=-133/0,	
		15-26=-133/0, 16-25=-133/0, 17-24=-133/0,	
		18-23=-134/0, 19-22=-131/0	

BRACING		NOTES	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	1) All plates are 1.5x3 MT20 unless otherwise indicated.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	2) Gable requires continuous bottom chord bearing.	
REACTIONS	(size)	3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diag web).	
	21=24-0-8, 22=24-0-8, 23=24-0-8,	4) Gable studs spaced at 1-4-0 oc.	
	24=24-0-8, 25=24-0-8, 26=24-0-8,	5) All bearings are assumed to be SP No.2.	
	27=24-0-8, 28=24-0-8, 30=24-0-8,	6) Recommend 2x6 strongbacks, on edge, spaced 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.	
	31=24-0-8, 32=24-0-8, 33=24-0-8,		
	34=24-0-8, 35=24-0-8, 36=24-0-8,		
	37=24-0-8, 38=24-0-8, 39=24-0-8,		
	40=24-0-8		
Max Grav	21=57 (LC 1), 22=144 (LC 1),		
	23=148 (LC 1), 24=146 (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=147 (LC 1), 33=147 (LC 1),		
	34=147 (LC 1), 35=147 (LC 1),		
	36=147 (LC 1), 37=146 (LC 1),		
	38=148 (LC 1), 39=144 (LC 1),		
	40=57 (LC 1)		

FORCES	(lb) - Maximum Compression/Maximum Tension	LOAD CASE(S)	Standard
TOP CHORD	1-40=-52/0, 20-21=-52/0, 1-2=-9/0, 2-3=-9/0, 3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0, 7-8=-9/0, 8-10=-9/0, 10-11=-9/0, 11-12=-9/0, 12-13=-9/0, 13-14=-9/0, 14-15=-9/0, 15-16=-9/0, 16-17=-9/0, 17-18=-9/0, 18-19=-9/0, 19-20=-9/0		
BOT CHORD	39-40=0/9, 38-39=0/9, 37-38=0/9, 36-37=0/9, 35-36=0/9, 34-35=0/9, 33-34=0/9, 32-33=0/9, 31-32=0/9, 30-31=0/9, 28-30=0/9, 27-28=0/9, 26-27=0/9, 25-26=0/9, 24-25=0/9, 23-24=0/9, 22-23=0/9, 21-22=0/9		

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PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

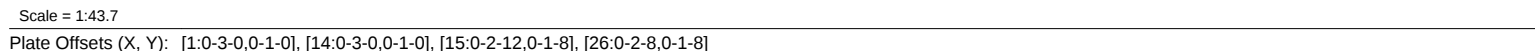
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Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:36 Page: 1
ID:aB8SH1vKR?GNK61xW6b4BwyS7kfRfC?PsB70Hg3NSaQanL8w3uITXBGKWCrD0i7J4zJC?f



LUMBER		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: 2x4 - 1 row at 0-7-0 oc. Web connected as follows: 2x4 - 1 row at 0-9-0 oc.	1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (lb/ft) Vert: 15-26=-7, 1-14=-67 Concentrated Loads (lb) Vert: 12=-779, 27=-436 (B), 28=-436 (B), 29=-436 (B)
TOP CHORD	2x4 SP No.2		
BOT CHORD	2x4 SP No.2		
WEBS	2x4 SP No.3		
OTHERS	2x4 SP No.3		
BRACING			
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.		
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.		
REACTIONS	(size) 15=0-4-0, 20=0-3-8, 26=0-3-8 Max Grav 15=1238 (LC 10), 20=1674 (LC 1), 26=1376 (LC 5)	2) 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 floor live loads have been considered for this design. 4) All plates are 3x4 MT20 unless otherwise indicated. 5) The Fabrication Tolerance at joint 21 = 11%, joint 6 = 11% 6) N/A	3) Dead + Roof Live (balanced): Lumber Increase=0.90, Plate Increase=0.90 Uniform Loads (lb/ft) Vert: 15-26=-7, 1-14=-13 Concentrated Loads (lb) Vert: 12=-1446, 27=-116 (B), 28=-116 (B), 29=-116 (B)
FORCES	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-26=-94/0, 14-15=-87/0, 1-2=-162/0, 2-3=-2700/0, 3-4=-2430/17, 4-5=-1425/204, 5-7=-33/522, 7-8=0/1846, 8-9=0/1846, 9-10=-1027/333, 10-11=-2134/0, 11-12=-2965/0, 12-13=-2965/0, 13-14=-66/0		
BOT CHORD	25-26=0/1621, 24-25=0/2665, 23-24=-92/2026, 22-23=-340/833, 20-22=-1087/0, 19-20=-869/304, 18-19=0/2134, 17-18=0/2134, 16-17=0/2134, 15-16=0/1724		
WEBS	8-20=-235/0, 10-18=0/484, 11-17=-376/0, 2-26=-1762/0, 2-25=0/1404, 3-25=-191/327, 3-24=-373/0, 4-24=0/594, 4-23=-825/0, 5-23=0/817, 5-22=-1090/0, 7-22=0/1081, 7-20=-1067/0, 9-20=-1377/0, 9-19=0/1087, 10-19=-1609/0, 13-15=-2001/0, 13-16=0/1651, 11-16=0/1250, 12-16=-1571/0		
NOTES		7) All bearings are assumed to be SP No.2 . 8) Load case(s) 1, 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss. 9) 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. 10) CAUTION, Do not erect truss backwards. 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 436 lb down at 1-5-4, and 436 lb down at 2-9-4, and 436 lb down at 4-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.	



January 18, 2024

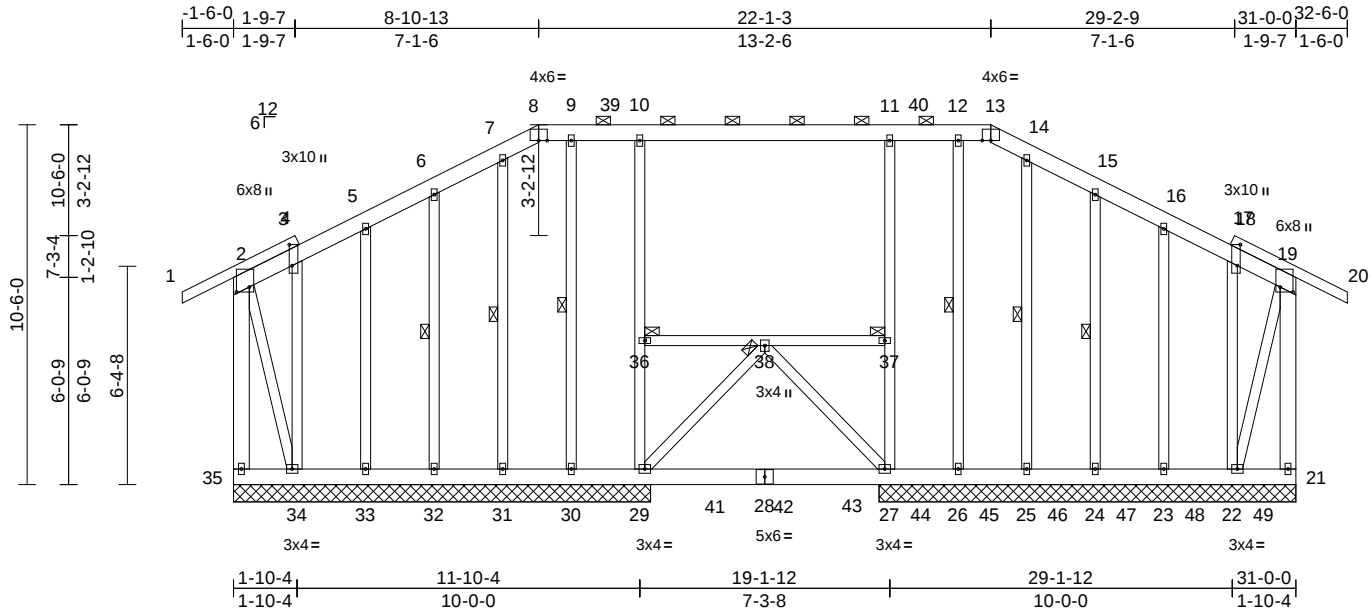
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story
3698553	GF1	Piggyback Base Girder	1	1	T32659364
					Job Reference (optional)

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Page: 1

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Scale = 1:67.2

Plate Offsets (X, Y): [2:0-1-12,0-4-8], [3:0-7-6,0-1-0], [18:0-7-6,0-1-0], [19:0-1-12,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.23	Vert(LL)	-0.05	27-29	>999	360	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.08	27-29	>999	240	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.24	Horz(CT)	-0.01	21	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS		Wind(LL)	0.07	27-29	>999	240	Weight: 376 lb FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2 *Except* 1-4,17-20:2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 35-2,21-19:2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 8-13.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 9-30, 7-31, 6-32, 12-26, 14-25, 15-24

JOINTS 1 Brace at Jt(s): 36, 37, 38

REACTIONS (size)
21=12-2-0, 22=12-2-0, 23=12-2-0, 24=12-2-0, 25=12-2-0, 26=12-2-0, 27=12-2-0, 29=12-2-0, 30=12-2-0, 31=12-2-0, 32=12-2-0, 33=12-2-0, 34=12-2-0, 35=12-2-0
Max Horiz 35=278 (LC 6)
Max Uplift 21=263 (LC 5), 22=369 (LC 4), 23=177 (LC 8), 24=167 (LC 8), 25=208 (LC 4), 26=68 (LC 31), 27=786 (LC 8), 29=732 (LC 8), 30=52 (LC 30), 31=208 (LC 5), 32=168 (LC 8), 33=178 (LC 8), 34=398 (LC 5), 35=291 (LC 6)
Max Grav 21=421 (LC 13), 22=614 (LC 14), 23=453 (LC 1), 24=432 (LC 20), 25=538 (LC 1), 26=228 (LC 24), 27=1268 (LC 19), 29=1288 (LC 20), 30=204 (LC 24), 31=539 (LC 1), 32=432 (LC 19), 33=455 (LC 1), 34=637 (LC 13), 35=385 (LC 7)

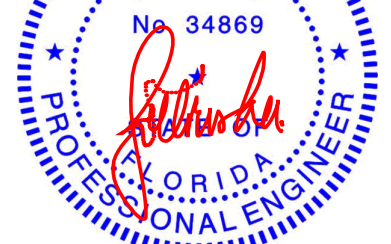
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/39, 2-3=63/115, 3-5=67/116, 5-6=54/150, 6-7=44/185, 7-8=34/190, 8-9=30/190, 9-10=30/190, 10-11=30/190, 11-12=30/190, 12-13=30/190, 13-14=33/190, 14-15=34/185, 15-16=39/150, 16-18=50/116, 18-19=51/116, 19-20=0/39, 2-35=350/259, 19-21=298/207
BOT CHORD 34-35=252/199, 33-34=164/113, 32-33=164/113, 31-32=164/113, 30-31=164/113, 29-30=164/113, 27-29=163/113, 26-27=163/113, 25-26=163/113, 24-25=163/113, 23-24=163/113, 22-23=163/113, 21-22=78/69
WEBS 29-36=378/133, 10-36=378/133, 27-37=378/133, 11-37=378/133, 9-30=45/5, 7-31=116/11, 6-32=125/64, 5-33=119/58, 3-34=69/23, 12-26=45/4, 14-25=116/8, 15-24=125/64, 16-23=118/58, 18-22=68/21, 36-38=2/2, 37-38=2/2, 29-38=3/2, 27-38=3/2, 2-34=371/330, 19-22=323/278

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=31ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- Provide adequate drainage to prevent water ponding.
- 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 members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 291 lb uplift at joint 35, 263 lb uplift at joint 21, 732 lb uplift at joint 29, 786 lb uplift at joint 27, 52 lb uplift at joint 30, 208 lb uplift at joint 31, 168 lb uplift at joint 32, 178 lb uplift at joint 33, 398 lb uplift at joint 34, 68 lb uplift at joint 26, 208 lb uplift at joint 25, 167 lb uplift at joint 24, 177 lb uplift at joint 23 and 369 lb uplift at joint 22.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Date:

January 18,2024

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story
3698553	GF1	Piggyback Base Girder	1	1	T32659364
					Job Reference (optional)

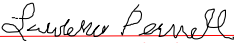
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 291 lb down and 146 lb up at 2-0-12, 291 lb down and 146 lb up at 4-0-12, 291 lb down and 146 lb up at 6-0-12, 291 lb down and 146 lb up at 8-0-12, 291 lb down and 146 lb up at 10-0-12, 291 lb down and 134 lb up at 12-0-12, 32 lb down and 177 lb up at 14-0-12, 291 lb down and 126 lb up at 14-0-12, 32 lb down and 177 lb up at 16-0-12, 291 lb down and 126 lb up at 16-0-12, 32 lb down and 177 lb up at 18-0-12, 291 lb down and 126 lb up at 18-0-12, 291 lb down and 145 lb up at 20-0-12, 291 lb down and 146 lb up at 22-0-12, 291 lb down and 146 lb up at 24-0-12, 291 lb down and 146 lb up at 26-0-12, and 291 lb down and 146 lb up at 28-0-12, and 294 lb down and 144 lb up at 30-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-8=-60, 8-13=-60, 13-19=-60, 19-20=-60, 21-35=-20
Concentrated Loads (lb)
Vert: 29=-291 (F), 30=-291 (F), 31=-291 (F), 32=-291 (F), 33=-291 (F), 34=-291 (F), 41=-209 (F=-291, B=82), 42=-209 (F=-291, B=82), 43=-209 (F=-291, B=82), 44=-291 (F), 45=-291 (F), 46=-291 (F), 47=-291 (F), 48=-291 (F), 49=-294 (F)



Review for Code Compliance
Universal Engineering Science



PX2707
01/27/2024

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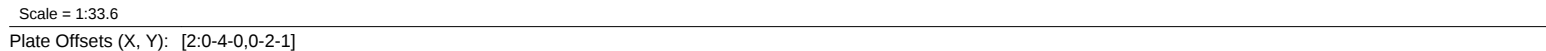
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:37 Page: 1
ID:aEMQk6kZR35mWm8Ls4LA3EyS9Tw-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCrD0i7J4zJC?f



NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Corner(3E) -1-6-0 to
1-6-0, Exterior(2N) 1-6-0 to 8-0-0 zone; 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.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634



January 18, 2024

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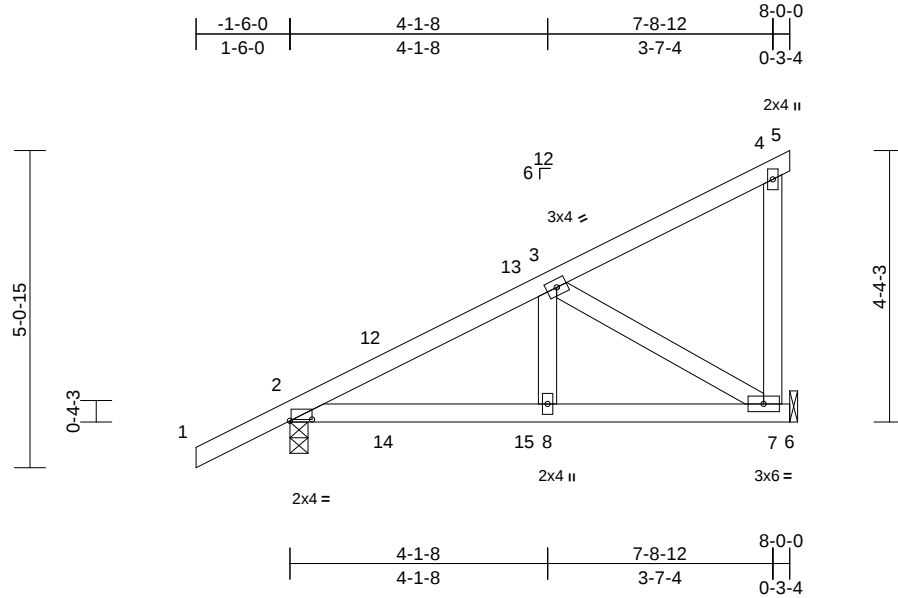
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659366
3698553	M02	Jack-Partial	15	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:37

Page: 1

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Scale = 1:36.9

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	-0.01	8-11	>999	360	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.16	Vert(CT)	-0.02	8-11	>999	240	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	7	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS		Wind(LL)	0.02	7-8	>999	240	Weight: 42 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 2=0-3-8, 7= Mechanical
Max Horiz 2=147 (LC 12)
Max Uplift 2=-139 (LC 12), 7=-134 (LC 12)
Max Grav 2=408 (LC 1), 7=311 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-401/318, 3-4=-62/29, 4-5=-2/0
BOT CHORD 2-8=-437/323, 7-8=-437/323, 6-7=0/0
WEBS 3-7=-374/506, 3-8=-230/176, 4-7=-90/105

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior (1) 1-6-0 to 8-0-0 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * 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.
- 5) Bearings are assumed to be: Joint 2 SP No.2 .
- 6) Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 139 lb uplift at joint 2 and 134 lb uplift at joint 7.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

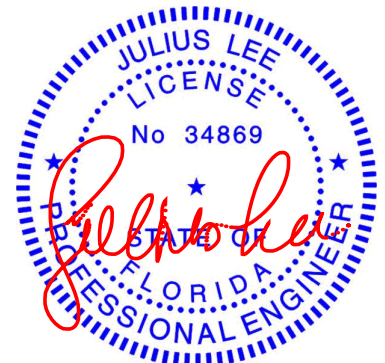


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Universal Engineering Science

Lawrence Powell
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PX2707

01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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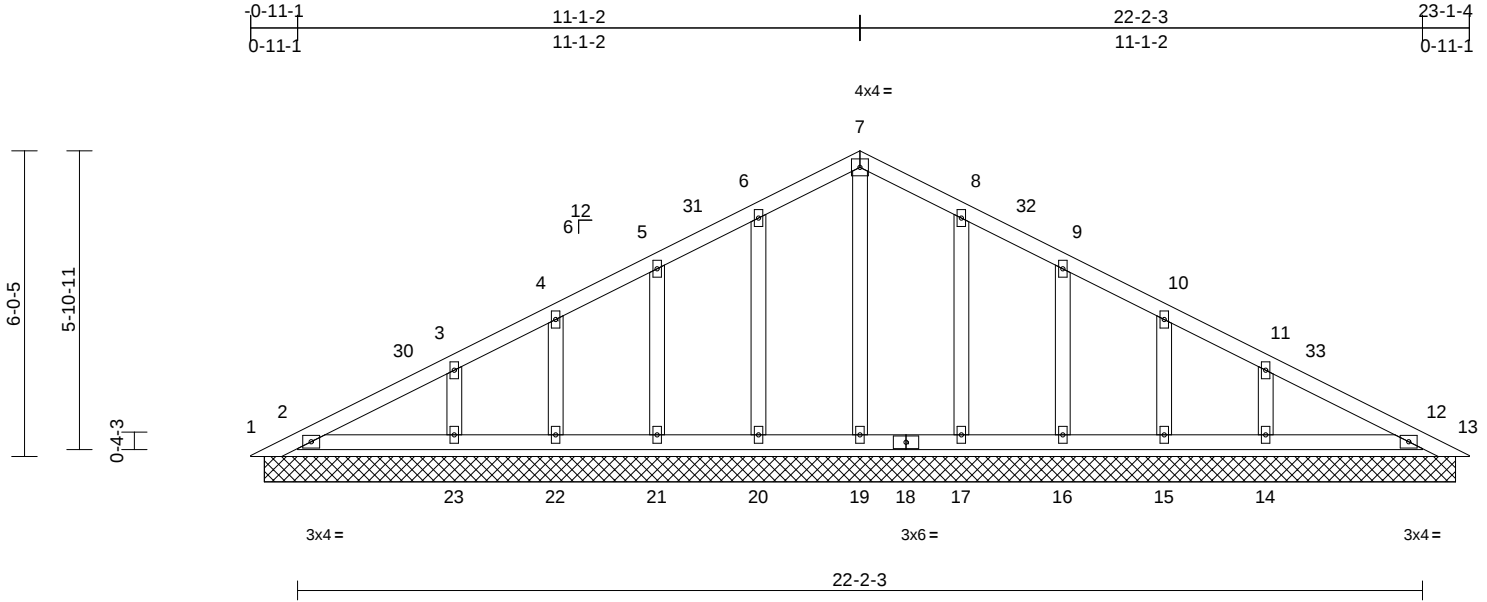
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659367
3698553	PB01A	Piggyback	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:38

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 115 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size)
1=23-5-14, 2=23-5-14, 12=23-5-14,
13=23-5-14, 14=23-5-14,
15=23-5-14, 16=23-5-14,
17=23-5-14, 19=23-5-14,
20=23-5-14, 21=23-5-14,
22=23-5-14, 23=23-5-14,
24=23-5-14, 27=23-5-14

Max Horiz 1=97 (LC 10)
Max Uplift 1=94 (LC 17), 2=8 (LC 12),
12=16 (LC 12), 13=60 (LC 24),
14=44 (LC 12), 15=27 (LC 12),
16=34 (LC 12), 17=28 (LC 12),
20=28 (LC 12), 21=34 (LC 12),
22=27 (LC 12), 23=44 (LC 12),
24=16 (LC 12), 27=8 (LC 12)
Max Grav 1=23 (LC 11), 2=256 (LC 1),
12=242 (LC 1), 13=13 (LC 12),
14=221 (LC 24), 15=139 (LC 24),
16=165 (LC 1), 17=165 (LC 24),
19=139 (LC 1), 20=165 (LC 23),
21=165 (LC 1), 22=139 (LC 23),
23=222 (LC 23), 24=242 (LC 1),
27=256 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=96/136, 2-3=87/70, 3-4=79/54,
4-5=67/61, 5-6=59/100, 6-7=69/135,
7-8=69/133, 8-9=53/97, 9-10=43/59,
10-11=48/24, 11-12=57/35, 12-13=9/49
BOT CHORD 2-23=30/71, 22-23=29/71, 21-22=29/71,
20-21=29/71, 19-20=29/71, 17-19=29/71,
16-17=29/71, 15-16=29/71, 14-15=29/71,
12-14=29/71

WEBS
7-19=99/8, 6-20=126/81, 5-21=122/71,
4-22=108/61, 3-23=156/85, 8-17=126/81,
9-16=122/71, 10-15=108/61, 11-14=156/85

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 1-0-0 to 4-0-0, Interior (1) 4-0-0 to 12-8-8, Exterior (2) 2-8-8 to 15-8-8, Interior (1) 15-8-8 to 24-5-0 zone; C-C 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-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'-0"-0" tall by 2'-0"-0" wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 12, 28 lb uplift at joint 20, 34 lb uplift at joint 21, 27 lb uplift at joint 22, 44 lb uplift at joint 23, 28 lb uplift at joint 17, 34 lb uplift at joint 16, 27 lb uplift at joint 15, 44 lb uplift at joint 14, 94 lb uplift at joint 1, 60 lb uplift at joint 13, 8 lb uplift at joint 2, 16 lb uplift at joint 12 and 8 lb uplift at joint 2.

- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

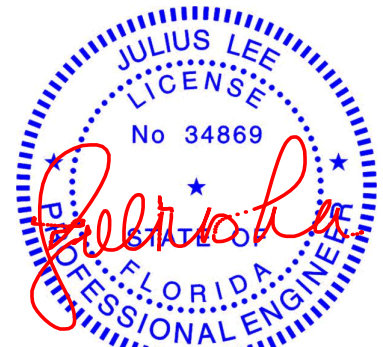
LOAD CASE(S) Standard

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PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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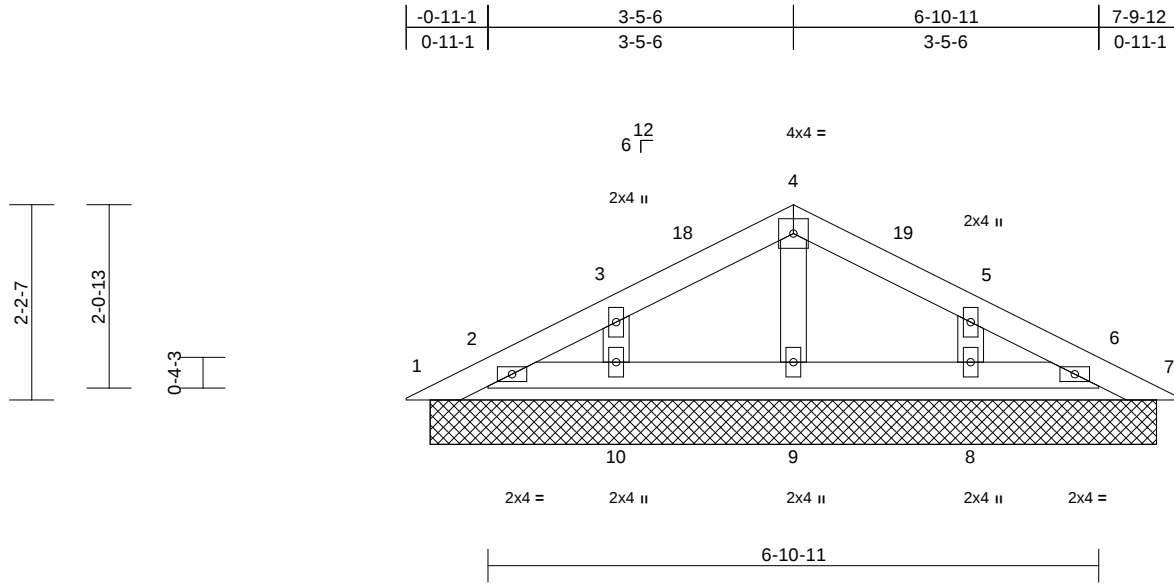
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659368
3698553	PB01B	Piggyback	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Scale = 1:26

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.05	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.03	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	7	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							
										Weight: 29 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS

(size)	1=8-2-6, 2=8-2-6, 6=8-2-6, 7=8-2-6, 8=8-2-6, 9=8-2-6, 10=8-2-6, 11=8-2-6, 14=8-2-6
Max Horiz	1=34 (LC 11)
Max Uplift	1=6 (LC 10), 6=-2 (LC 12), 7=-3 (LC 12), 8=-38 (LC 12), 10=-36 (LC 12), 14=-2 (LC 12)
Max Grav	1=24 (LC 18), 2=92 (LC 1), 6=81 (LC 1), 7=17 (LC 1), 8=164 (LC 1), 9=128 (LC 1), 10=166 (LC 1), 11=92 (LC 1), 14=81 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-38/45, 2-3=-27/27, 3-4=-44/76, 4-5=-44/69, 5-6=-20/17, 6-7=-6/15
BOT CHORD	2-10=-12/46, 9-10=-12/46, 8-9=-12/46, 6-8=-12/46
WEBS	4-9=-87/32, 3-10=-128/169, 5-8=-127/170

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 1-0-0 to 4-0-0, Interior (1) 4-0-0 to 5-0-12, Exterior(2R) 5-0-12 to 7-11-10, Interior (1) 7-11-10 to 9-1-8 zone; 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 loads.
- * This truss has been designed for a live load of 20.0 psf 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 6, 36 lb uplift at joint 10, 38 lb uplift at joint 8, 6 lb uplift at joint 1, 3 lb uplift at joint 7 and 2 lb uplift at joint 6.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

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PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024

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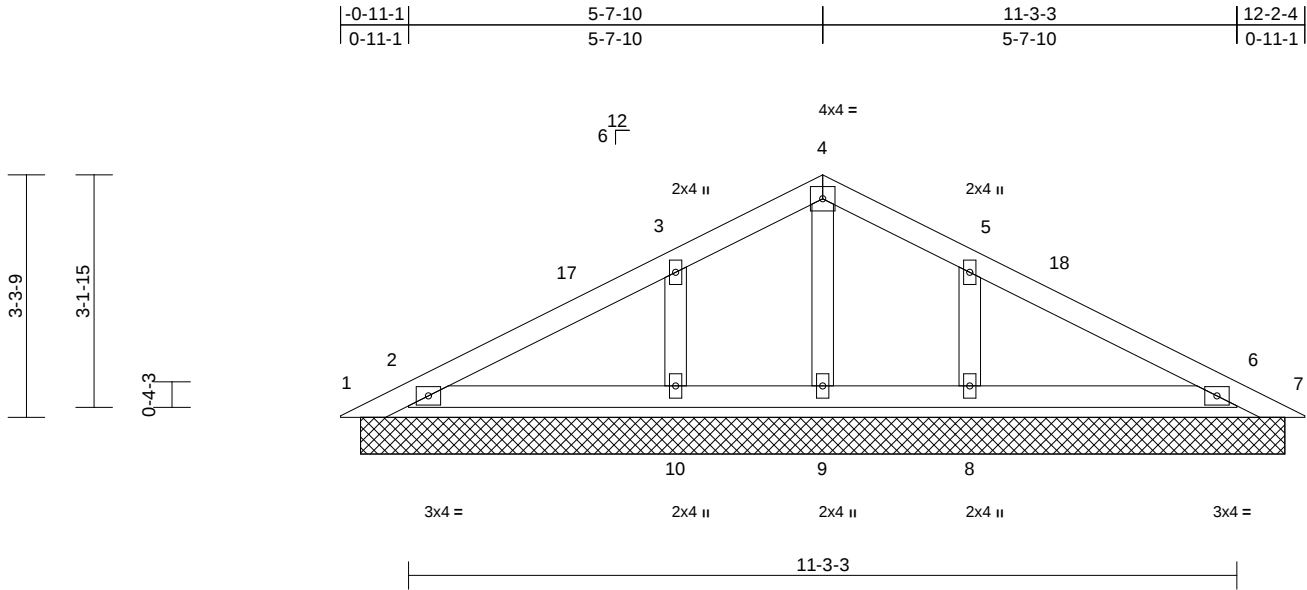
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659369
3698553	PB01V	Piggyback	1	1	Job Reference (optional)	

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Scale = 1:31.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.16	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	6	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS						Weight: 47 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 1=12-6-14, 2=12-6-14, 6=12-6-14,
7=12-6-14, 8=12-6-14, 9=12-6-14,
10=12-6-14, 11=12-6-14,
14=12-6-14
Max Horiz 1=52 (LC 11)
Max Uplift 1=-115 (LC 17), 2=-34 (LC 12),
6=-43 (LC 12), 7=-98 (LC 24),
8=-51 (LC 12), 10=-50 (LC 12),
11=-34 (LC 12), 14=-43 (LC 12)
Max Grav 1=19 (LC 12), 2=318 (LC 1), 6=304
(LC 1), 7=21 (LC 12), 8=260 (LC
24), 9=71 (LC 1), 10=261 (LC 23),
11=318 (LC 1), 14=304 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-40/106, 2-3=-68/50, 3-4=-59/104,
4-5=-59/100, 5-6=-57/41, 6-7=-23/67
BOT CHORD 2-10=-44/52, 9-10=-12/52, 8-9=-12/52,
6-8=-46/52
WEBS 4-9=-59/2, 3-10=-185/174, 5-8=-184/171

NOTES

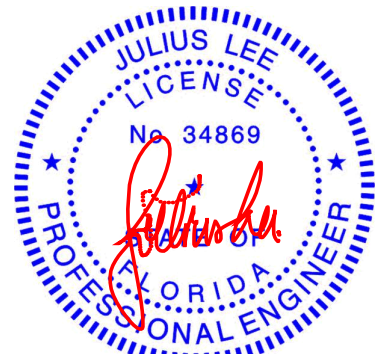
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 1-0-0 to
4-0-0, Interior (1) 4-0-0 to 7-3-0, Exterior(2R) 7-3-0 to
10-3-0, Interior (1) 10-3-0 to 13-6-0 zone;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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 loads.
- * This truss has been designed for a live load of 20.0 psf 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 2, 43 lb uplift at joint 6, 115 lb uplift at joint 1, 98 lb uplift at joint 7, 50 lb uplift at joint 10, 51 lb uplift at joint 8, 34 lb uplift at joint 2 and 43 lb uplift at joint 6.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Examiner-License No. PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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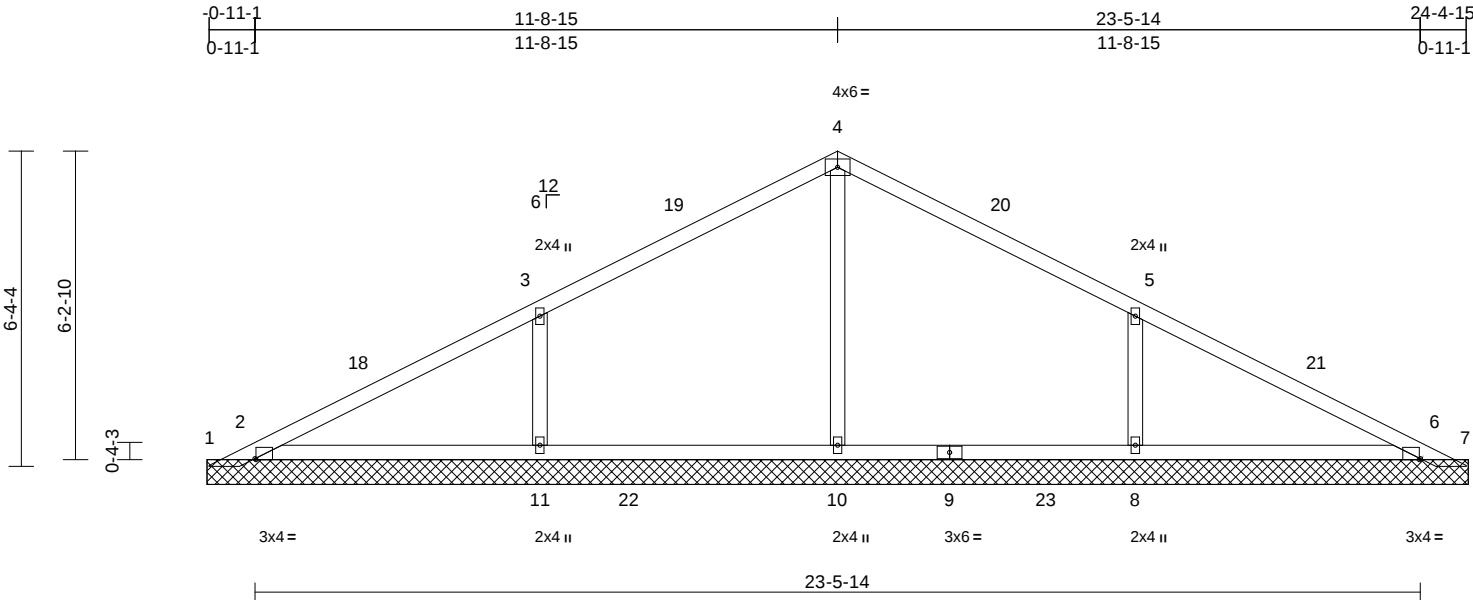
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659370
3698553	PB02A	Piggyback	17	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:39

Page: 1

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Scale = 1:46.4									
Plate Offsets (X, Y): [2:0-0-4,Edge], [6:0-0-4,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	PLATES
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.37	Vert(LL)	n/a	-	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(TL)	n/a	-	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.00	6	244/190
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS					Weight: 93 lb
									FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
REACTIONS (size)	
	1=25-5-0, 2=25-5-0, 6=25-5-0, 7=25-5-0, 8=25-5-0, 10=25-5-0, 11=25-5-0, 12=25-5-0, 15=25-5-0
Max Horiz	1=-102 (LC 10)
Max Uplift	1=-327 (LC 17), 2=-65 (LC 12), 6=-74 (LC 12), 7=-288 (LC 18), 8=-102 (LC 12), 11=-101 (LC 12), 12=-65 (LC 12), 15=-74 (LC 12)
Max Grav	1=47 (LC 12), 2=627 (LC 17), 6=590 (LC 18), 7=49 (LC 12), 8=588 (LC 18), 10=552 (LC 17), 11=588 (LC 17), 12=627 (LC 17), 15=590 (LC 18)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-67/235, 2-3=-144/157, 3-4=-140/133, 4-5=-140/129, 5-6=-114/138, 6-7=-32/149
BOT CHORD	2-11=-145/69, 10-11=-15/69, 8-10=-15/69, 6-8=-160/69
WEBS	4-10=-289/54, 3-11=-383/205, 5-8=-382/205

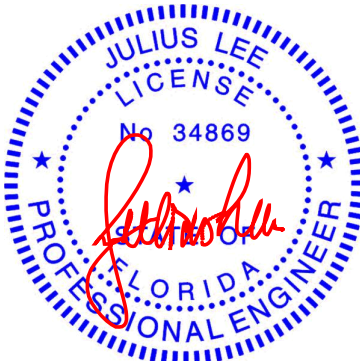
- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-3 to 3-4-3, Interior (1) 3-4-3 to 12-8-8, Exterior(2R) 12-8-8 to 15-8-8, Interior (1) 15-8-8 to 25-0-13 zone; 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 6-0-0 oc.
- This truss has been designed for a 10.0 psf dead load 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 rectangular 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 2, 74 lb uplift at joint 6, 327 lb uplift at joint 1, 288 lb uplift at joint 7, 101 lb uplift at joint 11, 102 lb uplift at joint 8, 65 lb uplift at joint 2 and 74 lb uplift at joint 6.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

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Signature: *Julius Lee* PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

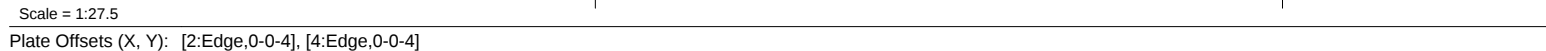
January 18,2024

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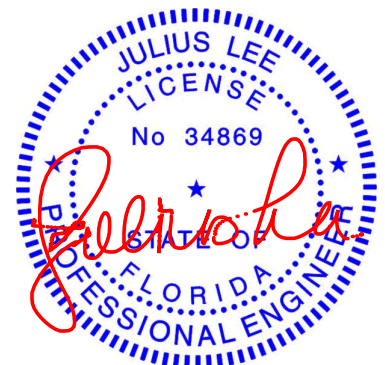
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Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:39 Page: 1
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LUMBER		4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.	
TOP CHORD	2x4 SP No.2	5) Gable requires continuous bottom chord bearing.	
BOT CHORD	2x4 SP No.2	6) Gable studs spaced at 6-0-0 oc.	
OTHERS	2x4 SP No.3	7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
BRACING		8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rafter tie 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.	
TOP CHORD	Structural wood sheathing directly applied.	9) All bearings are assumed to be SP No.2 .	
BOT CHORD	Rigid ceiling directly applied.	10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 2, 55 lb uplift at joint 4, 3 lb uplift at joint 6, 55 lb uplift at joint 2 and 55 lb uplift at joint 4.	
REACTIONS	(size)	11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.	
	2=8-2-6, 4=8-2-6, 6=8-2-6, 7=8-2-6, 11=8-2-6	12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.	
	Max Horiz		
	2=-39 (LC 10), 7=-39 (LC 10)		
	Max Uplift		
	2=-55 (LC 12), 4=-55 (LC 12), 6=-3 (LC 12), 7=-55 (LC 12), 11=-55 (LC 12)		
	Max Grav		
	2=213 (LC 1), 4=213 (LC 1), 6=304 (LC 1), 7=213 (LC 1), 11=213 (LC 1)		
FORCES	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=0/17, 2-3=-113/103, 3-4=-113/99, 4-5=0/17		
BOT CHORD	2-6=-30/61, 4-6=-27/59		
WEBS	3-6=-145/81		

NOTES	LOAD CASE(S) Standard	
1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-3 to 3-4-3, Interior (1) 3-4-3 to 5-0-12, Exterior(2R) 5-0-12 to 8-0-12, Interior (1) 8-0-12 to 9-9-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.		Julius Lee PE No. 34869 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024



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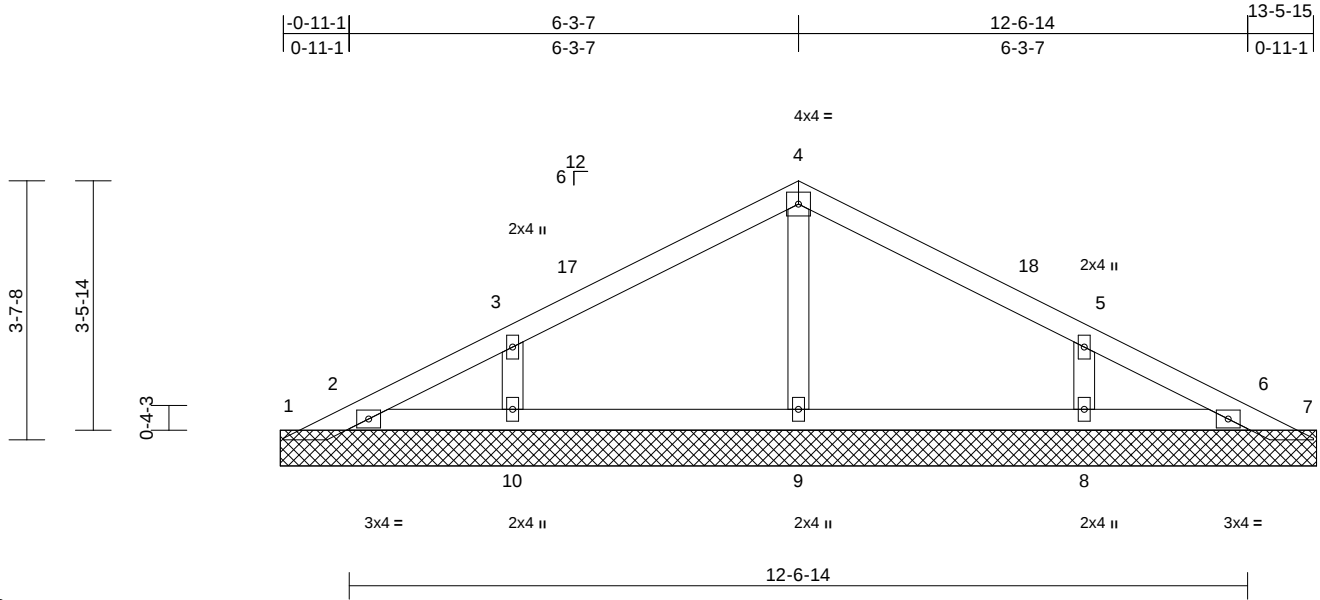
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659372
3698553	PB02V	Piggyback	2	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1

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Scale = 1:32.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.12	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	7	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							
										Weight: 50 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 1=14-6-0, 2=14-6-0, 6=14-6-0,
7=14-6-0, 8=14-6-0, 9=14-6-0,
10=14-6-0, 11=14-6-0, 14=14-6-0
Max Horiz 1=-57 (LC 10)
Max Uplift 1=-17 (LC 10), 6=-2 (LC 12), 7=-3
(LC 12), 8=-59 (LC 12), 10=-59 (LC
12), 14=-2 (LC 12)
Max Grav 1=29 (LC 18), 2=116 (LC 1), 6=103
(LC 1), 7=20 (LC 24), 8=297 (LC
24), 9=294 (LC 1), 10=298 (LC 23),
11=116 (LC 1), 14=103 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-63/70, 2-3=-54/43, 3-4=-85/96,
4-5=-85/91, 5-6=-36/25, 6-7=-7/15
BOT CHORD 2-10=-10/43, 9-10=-10/43, 8-9=-10/43,
6-8=-10/43
WEBS 4-9=-209/89, 3-10=-231/191, 5-8=-230/191

NOTES

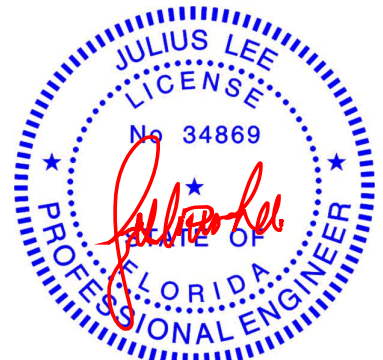
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 0-4-3 to
3-3-0, Interior (1) 3-3-0 to 7-3-0, Exterior(2R) 7-3-0 to
10-3-0, Interior (1) 10-3-0 to 14-1-13 zone; 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 loads.
- * This truss has been designed for a live load of 20.0 psf 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 6, 17 lb uplift at joint 1, 3 lb uplift at joint 7, 59 lb uplift at joint 10, 59 lb uplift at joint 8 and 2 lb uplift at joint 6.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

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Examiner-License No. PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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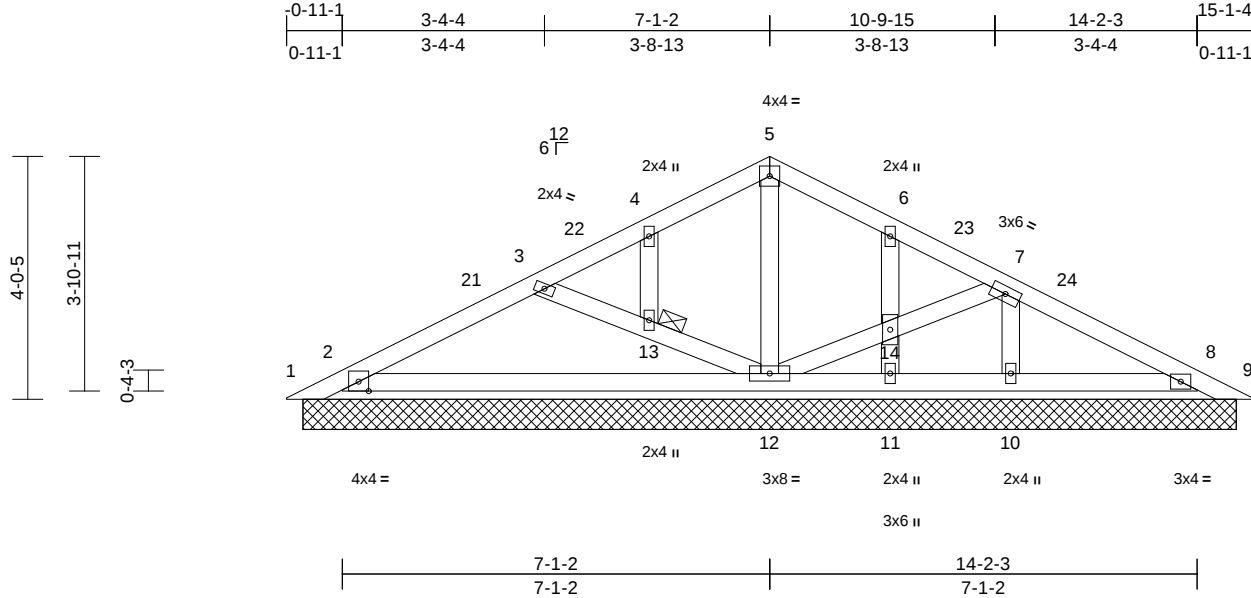
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659373
3698553	PB03B	Piggyback	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1



Scale = 1:38.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.31	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.28	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	12	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							
										Weight: 72 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.
BOT CHORD	Rigid ceiling directly applied.
JOINTS	1 Brace at Jt(s): 13

REACTIONS (size)	1=15-5-14, 2=15-5-14, 8=15-5-14, 9=15-5-14, 10=15-5-14, 11=15-5-14, 12=15-5-14, 15=15-5-14, 18=15-5-14
	Max Horiz 1=64 (LC 11)
Max Uplift	1=-232 (LC 3), 8=-33 (LC 12), 9=-61 (LC 24), 11=-40 (LC 12), 12=-51 (LC 12), 18=-33 (LC 12)
	Max Grav 1=-38 (LC 12), 2=476 (LC 1), 8=242 (LC 24), 9=15 (LC 12), 10=204 (LC 24), 11=92 (LC 24), 12=505 (LC 1), 15=476 (LC 1), 18=242 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-19/143, 2-3=-226/115, 3-4=-26/85, 4-5=-8/116, 5-6=-5/104, 6-7=-31/92, 7-8=-42/47, 8-9=-13/50
BOT CHORD	2-12=-122/197, 11-12=-17/45, 10-11=-17/45, 8-10=-29/47
WEBS	5-12=-228/104, 12-14=-68/86, 7-14=-67/85, 3-13=-267/182, 12-13=-284/198, 4-13=-42/40, 6-14=-107/92, 11-14=-106/88, 7-10=-127/47

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 1-0-0 to 4-0-0, Interior (1) 4-0-0 to 8-8-8, Exterior(2R) 8-8-8 to 11-8-8, Interior (1) 11-8-8 to 16-5-0 zone; 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 and consult qualified building designer as per ASCE 7-16 or consult qualified building designer as per ASCE 7-16
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- * 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 8, 51 lb uplift at joint 12, 40 lb uplift at joint 11, 232 lb uplift at joint 1, 61 lb uplift at joint 9 and 33 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

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Examiner-License No. PX2707 01/27/2024



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Date:

January 18, 2024

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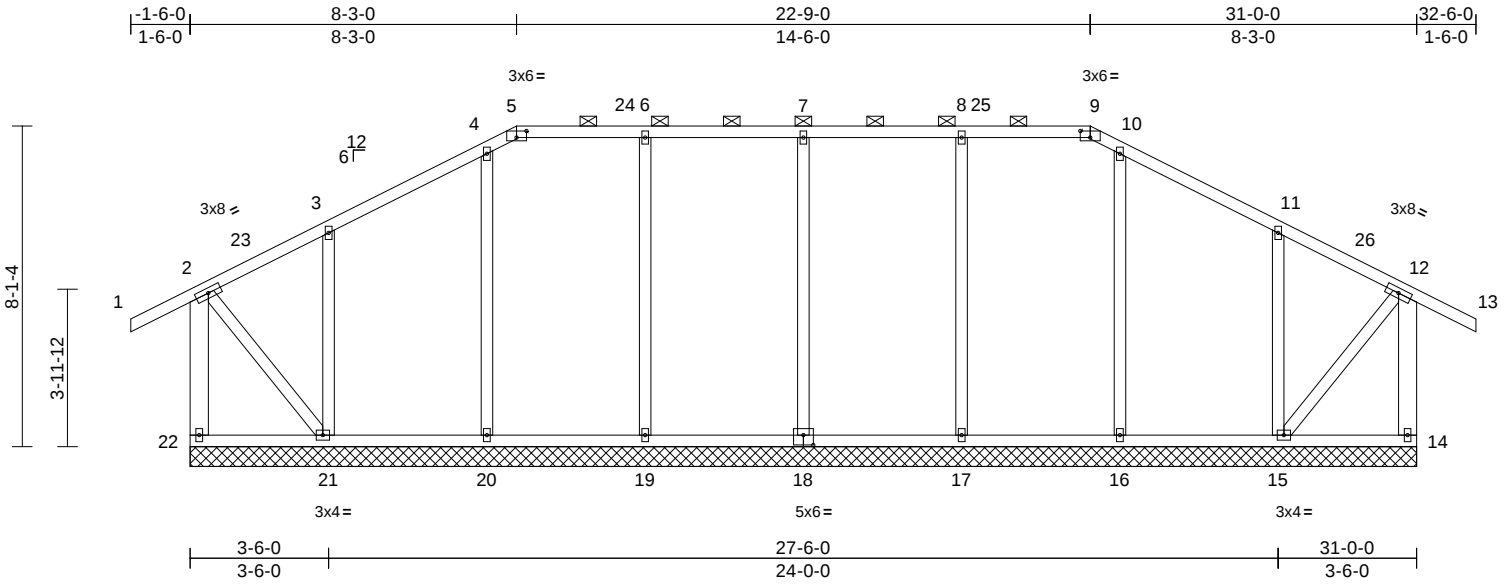
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659374
3698553	V01	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Jan 18 17:30:16
ID:nwXl6MrP2SQfTjKvkq6l3yS9sJ-yR2nwxMAOx_uUk94QmwP6ynBAMB1WdpIWocXnhzuE95

Page: 1



Scale = 1:58.2

Plate Offsets (X, Y): [5:0-3-0,0-2-0], [9:0-3-0,0-2-0], [18:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.17	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.01	14	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 201 lb FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x6 SP No.2 *Except* 2-21,15-12:2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS

All bearings	31-0-0.
(lb) - Max Horiz	22=210 (LC 11)
Max Uplift	All uplift 100 (lb) or less at joint(s) 14, 16, 17, 18, 19, 20, 22 except 15=-147 (LC 12), 21=-147 (LC 12)
Max Grav	All reactions 250 (lb) or less at joint (s) except 14=278 (LC 24), 15=408 (LC 18), 16=414 (LC 18), 17=402 (LC 17), 18=406 (LC 18), 19=402 (LC 26), 20=429 (LC 17), 21=441 (LC 17), 22=307 (LC 18)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces	250
(lb) or less except when shown.	
TOP CHORD	2-22=-261/164, 12-14=-250/93
WEBS	2-21=-154/251

NOTES

- Unbalanced roof live loads have been considered for this design.

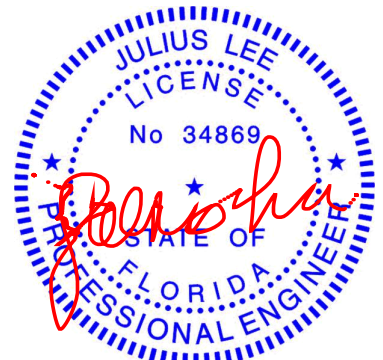
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=31ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-6-0 to 1-7-3, Exterior(2N) 1-7-3 to 8-3-0, Corner(3R) 8-3-0 to 11-6-0, Exterior(2N) 11-6-0 to 22-9-0, Corner(3R) 22-9-0 to 25-10-3, Exterior(2N) 25-10-3 to 32-6-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 22, 14, 18, 19, 20, 17, 16 except (jt=lb) 21=147, 15=147.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

- 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

Review for Code Compliance
Universal Engineering Science

Signature: *Julius Lee* PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

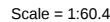
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

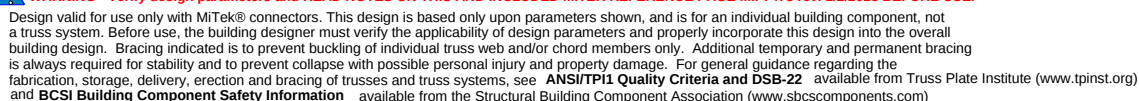
MiTek®

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:42 Page: 1
ID! suYzoHf7ecThzXSaPaSgySA0i-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKwRCdoi7J4zJC?f

LOAD CASE(S) Standard

January 18, 2024



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Chesterfield, MO 63017
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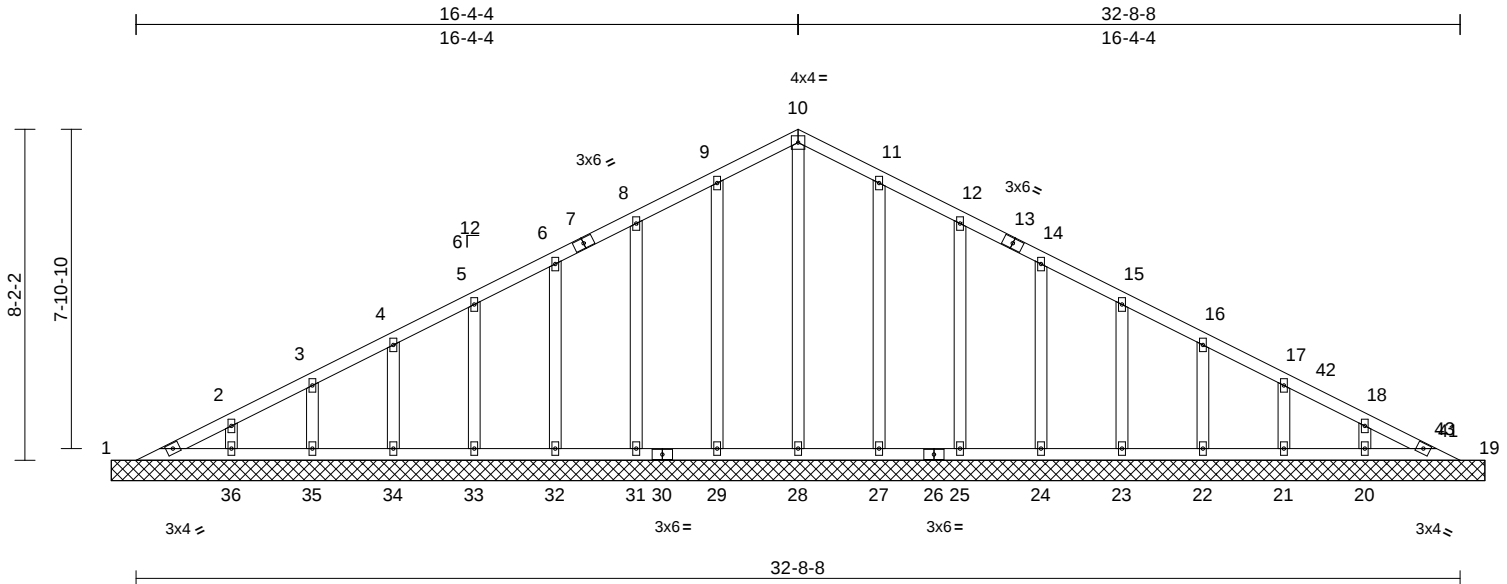
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659376
3698553	V01DG	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:42

Page: 1

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Scale = 1:56.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.07	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	19	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							
Weight: 188 lb FT = 20%											

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
REACTIONS (size)	
1=33-11-3, 19=33-11-3,	
20=33-11-3, 21=33-11-3,	
22=33-11-3, 23=33-11-3,	
24=33-11-3, 25=33-11-3,	
27=33-11-3, 28=33-11-3,	
29=33-11-3, 31=33-11-3,	
32=33-11-3, 33=33-11-3,	
34=33-11-3, 35=33-11-3,	
36=33-11-3	
Max Horiz	1=139 (LC 11)
Max Uplift	20=10 (LC 12), 21=38 (LC 12),
	22=30 (LC 12), 23=32 (LC 12),
	24=31 (LC 12), 25=34 (LC 12),
	27=25 (LC 12), 29=25 (LC 12),
	31=34 (LC 12), 32=31 (LC 12),
	33=32 (LC 12), 34=30 (LC 12),
	35=35 (LC 12), 36=19 (LC 12)
Max Grav	1=100 (LC 18), 19=45 (LC 17),
	20=208 (LC 24), 21=146 (LC 1),
	22=164 (LC 24), 23=159 (LC 1),
	24=160 (LC 24), 25=159 (LC 1),
	27=167 (LC 24), 28=163 (LC 17),
	29=167 (LC 23), 31=159 (LC 1),
	32=161 (LC 23), 33=159 (LC 1),
	34=166 (LC 23), 35=139 (LC 1),
	36=232 (LC 23)
FORCES (lb) - Maximum Compression/Maximum Tension	

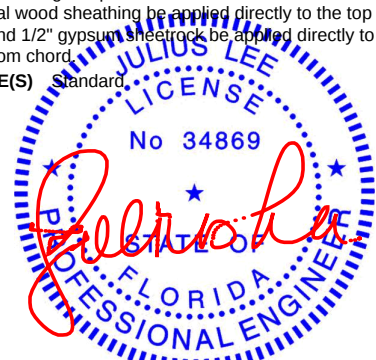
TOP CHORD	
1-2=-184/121, 2-3=-97/108, 3-4=-83/101,	
4-5=-73/92, 5-6=-62/94, 6-8=-51/139,	
8-9=-67/186, 9-10=-84/227, 10-11=-84/227,	
11-12=-67/186, 12-14=-48/139,	
14-15=-30/94, 15-16=-22/49, 16-17=-30/52,	
17-18=-64/57, 18-19=-105/68	
BOT CHORD	
1-36=-47/151, 35-36=-47/113, 34-35=-47/113,	
33-34=-47/113, 32-33=-47/113,	
31-32=-47/113, 29-31=-47/113,	
28-29=-47/113, 27-28=-47/113,	
25-27=-47/113, 24-25=-47/113,	
23-24=-47/113, 22-23=-47/113,	
21-22=-47/113, 20-21=-47/113,	
19-20=-47/113	
WEBS	
10-28=-127/20, 9-29=-127/76, 8-31=-119/69,	
6-32=-120/84, 5-33=-120/85, 4-34=-122/84,	
3-35=-112/88, 2-36=-145/92, 11-27=-127/76,	
12-25=-119/89, 14-24=-120/84,	
15-23=-120/85, 16-22=-121/83,	
17-21=-115/97, 18-20=-135/106	

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=30ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-0-8 to 3-0-1, Exterior(2N) 3-0-1 to 17-0-1, Corner(3R) 17-0-1 to 20-0-1, Exterior(2N) 20-0-1 to 32-8-15 zone; 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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.
- * 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 35, 19 lb uplift at joint 36, 25 lb uplift at joint 27, 34 lb uplift at joint 25, 31 lb uplift at joint 24, 32 lb uplift at joint 22, 38 lb uplift at joint 21 and 10 lb uplift at joint 20.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 19.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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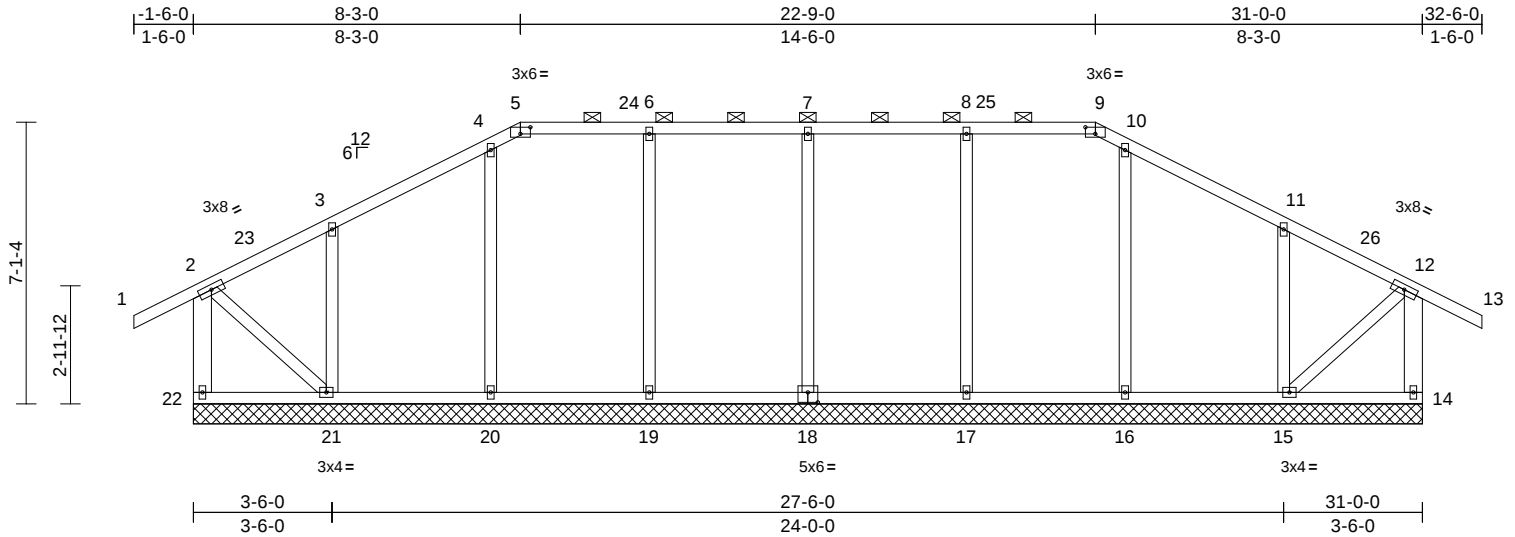
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659377
3698553	V02	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1



Scale = 1:58.1

Plate Offsets (X, Y): [5:0-3-0,0-2-0], [9:0-3-0,0-2-0], [18:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 184 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x6 SP No.2 *Except* 12-15,2-21:2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS

All bearings	31-0-0.
(lb) - Max Horiz	22=178 (LC 11)
Max Uplift	All uplift 100 (lb) or less at joint(s) 14, 16, 17, 18, 19, 20, 22 except 15=-124 (LC 12), 21=-124 (LC 12)
Max Grav	All reactions 250 (lb) or less at joint (s) except 14=278 (LC 24), 15=390 (LC 18), 16=413 (LC 18), 17=402 (LC 17), 18=406 (LC 18), 19=401 (LC 17), 20=427 (LC 17), 21=413 (LC 17), 22=282 (LC 18)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces	250
(lb) or less except when shown.	

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=31ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-6-0 to 1-7-3, Exterior(2N) 1-7-3 to 8-3-0, Corner(3R) 8-3-0 to 11-6-0, Exterior(2N) 11-6-0 to 22-9-0, Corner(3R) 22-9-0 to 25-10-3, Exterior(2N) 25-10-3 to 32-6-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

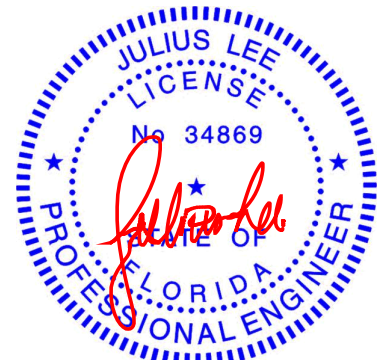
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bracing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 22, 14, 18, 19, 20, 17, 16 except (jt=lb) 15=123, 21=123.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 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

Review for Code Compliance
Universal Engineering Science

Julius Lee
Examiner-License No.

PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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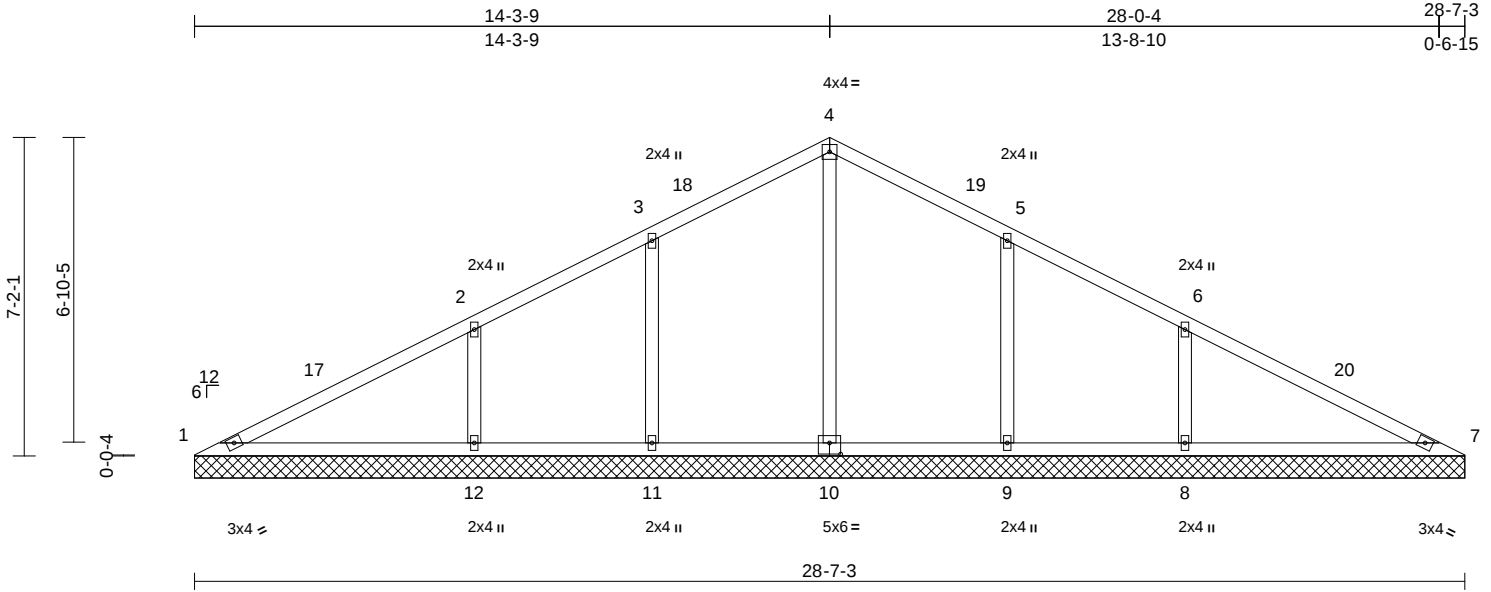
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659378
3698553	V02D	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1



Scale = 1:51.9

Plate Offsets (X, Y): [10:0-3-0-0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.36	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.30	Vert(TL)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.40	Horiz(TL)	0.01	12	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS						Weight: 119 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=28-7-3, 7=28-7-3, 8=28-7-3,
9=28-7-3, 10=28-7-3, 11=28-7-3,
12=28-7-3
Max Horiz 1=-116 (LC 10)
Max Uplift 8=-92 (LC 12), 9=-55 (LC 12),
11=-55 (LC 12), 12=-92 (LC 12)
Max Grav 1=139 (LC 23), 7=139 (LC 24),
8=560 (LC 18), 9=331 (LC 18),
10=655 (LC 17), 11=331 (LC 17),
12=560 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-206/369, 2-3=0/310, 3-4=0/311,
4-5=0/299, 5-6=0/273, 6-7=-206/330
BOT CHORD 1-12=-235/190, 11-12=-235/109,
9-11=-235/109, 8-9=-235/109, 7-8=-235/180
WEBS 4-10=-442/30, 3-11=-220/127,
2-12=-341/147, 5-9=-220/127, 6-8=-341/147

NOTES

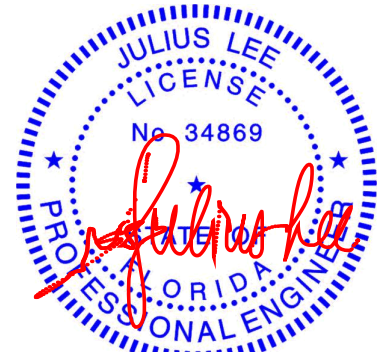
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 14-4-1, Exterior(2R) 14-4-1 to 17-4-1, Interior (1) 17-4-1 to 28-7-11 zone; 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bracing.
- Gable studs spaced at 4'-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 20.0 psf 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 11, 92 lb uplift at joint 12, 55 lb uplift at joint 9 and 92 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Examiner-License No. PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024

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

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MiTek®

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:40 Page: 1
ID:pFz7CM71?1ifNh6csrivKQyS9o3-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWRcDoi7J4zC?i



LUMBER		3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.	Review for Code Compliance Universal Engineering Science	Pamell PX2707 01/27/2024
TOP CHORD	2x4 SP No.2			
BOT CHORD	2x4 SP No.2			
OTHERS	2x4 SP No.3			
BRACING		4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.	Review for Code Compliance Universal Engineering Science	Pamell PX2707 01/27/2024
TOP CHORD	Structural wood sheathing directly applied.			
BOT CHORD	Rigid ceiling directly applied.			
REACTIONS (size)		5) All plates are 2x4 MT20 unless otherwise indicated.	Review for Code Compliance Universal Engineering Science	Pamell PX2707 01/27/2024
	1=28-7-3, 7=28-7-3, 8=28-7-3, 9=28-7-3, 10=28-7-3, 11=28-7-3, 12=28-7-3	6) Gable requires continuous bottom chord bracing.		
Max Horiz	1=-116 (LC 10)	7) Gable studs spaced at 4-0-0 oc.		
Max Uplift	8=-92 (LC 12), 9=-55 (LC 12), 11=-55 (LC 12), 12=-92 (LC 12)	8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	Review for Code Compliance Universal Engineering Science	Pamell PX2707 01/27/2024
Max Grav	1=139 (LC 23), 7=139 (LC 24), 8=560 (LC 18), 9=331 (LC 18), 10=655 (LC 17), 11=331 (LC 17), 12=560 (LC 17)	9) * 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) All bearings are assumed to be SP No.2 .		
FORCES (lb) - Maximum Compression/Maximum Tension		11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 11, 92 lb uplift at joint 12, 55 lb uplift at joint 9 and 92 lb uplift at joint 8.	Review for Code Compliance Universal Engineering Science	Pamell PX2707 01/27/2024
TOP CHORD	1-2=-206/369, 2-3=0/310, 3-4=0/311, 4-5=0/299, 5-6=0/273, 6-7=-206/330	12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.		
BOT CHORD	1-12=-235/190, 11-12=-235/109, 9-11=-235/109, 8-9=-235/109, 7-8=-235/180			
WEBS	4-10=-442/30, 3-11=-220/127, 2-12=-341/147, 5-9=-220/127, 6-8=-341/147		Review for Code Compliance Universal Engineering Science	Pamell PX2707 01/27/2024

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 0-0.8 to
3-0-8, Interior (1) 3-0-8 to 14-4-1, Exterior(2R) 14-4-1 to
17-4-1, Interior (1) 17-4-1 to 28-7-11 zone; C-C for
members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

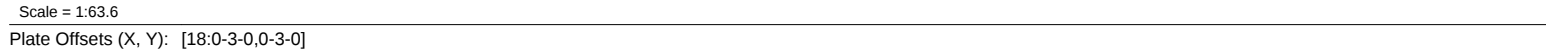
January 18, 2024



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MiTek®
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Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Jan 18 17:31:41 Page: 1
ID:U6gVnbAlhlgQU1tW_vpSulyS9nu-yohvm0OVN2hgAo8Pv6xL2u0jj1cwxf8p3XiXGGZGue7m



LUMBER		3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.	 Review for Code Compliance Universal Engineering Science
TOP CHORD	2x4 SP No.2	4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.	
BOT CHORD	2x4 SP No.2	5) All plates are 2x4 MT20 unless otherwise indicated.	
WEBS	2x6 SP No.2 *Except* 12-15,2-21:2x4 SP No.3	6) Gable requires continuous bottom chord bracing.	
OTHERS		7) Truss to be fully sheathed from one face of bottom chord braced against lateral movement (i.e. diagonal web).	 PX2707 Examiner-License No. 01/27/2024
BRACING		8) Gable studs spaced at 4-0-0 oc.	
TOP CHORD	Structural wood sheathing directly applied, except end verticals.	9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
BOT CHORD	Rigid ceiling directly applied.	10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.	
WEBS	1 Row at midpt 7-18	11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 22, 14, 19, 20, 21, 17, 16, 15.	
REACTIONS		12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.	
(lb) - Max Horiz	22=211 (LC 11)		
Max Uplift	All uplift 100 (lb) or less at joint(s) 14, 15, 16, 17, 19, 20, 21, 22		
Max Grav	All reactions 250 (lb) or less at joint (s) except 14=254 (LC 1), 15=377 (LC 18), 16=438 (LC 18), 17=441 (LC 18), 18=392 (LC 17), 19=441 (LC 17), 20=438 (LC 17), 21=401 (LC 17), 22=284 (LC 18)		
FORCES			
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			
WEBS	6-19=-255/135, 8-17=-255/135		

NOTES 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-6-0 to 1-8-9, Interior (1) 1-8-9 to 15-6-0, Exterior(2R) 15-6-0 to 18-8-9, Interior (1) 18-8-9 to 32-6-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60	LOAD CASE(S) Standard	 Julius Lee PE No. 34869 MiTek Inc. DBA MiTek USA FL Cert 6634
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January 18, 2024

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 Chesterfield, MO 63017
 314.434.1200 / MiTek@JSC.com

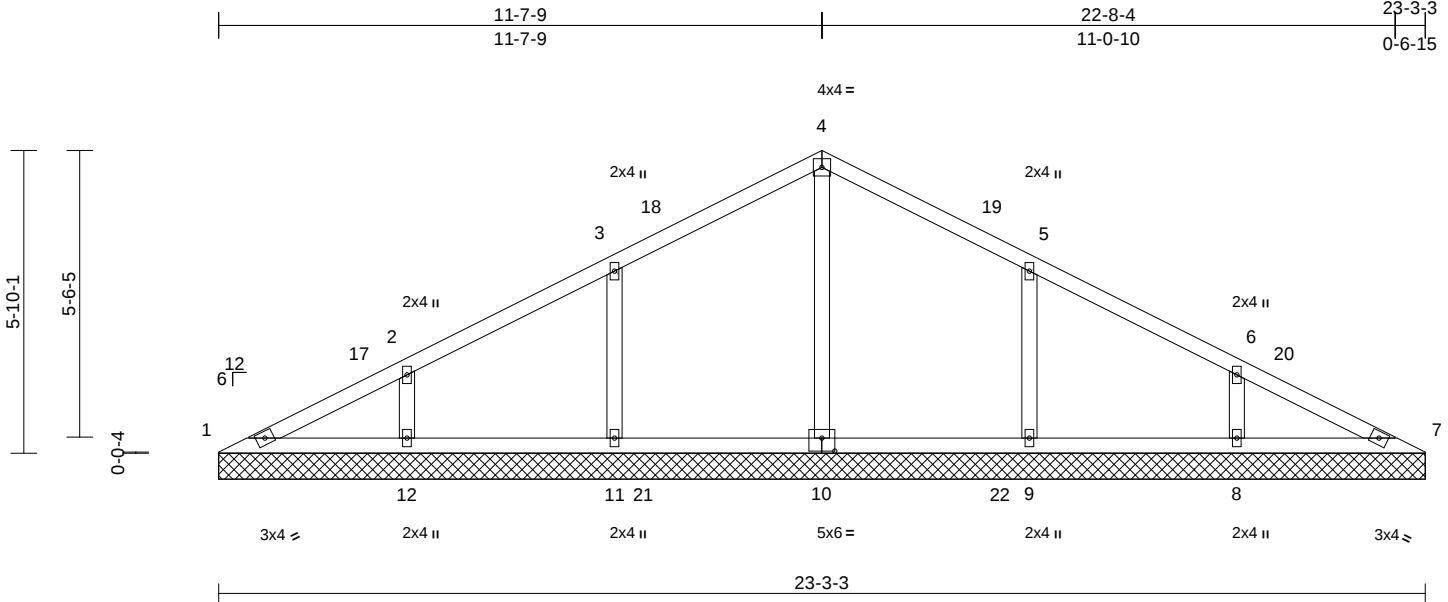
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659381
3698553	V03D	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:44

Page: 1

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Scale = 1:44.4

Plate Offsets (X, Y): [10:0-3-0,0-3-0]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 93 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
REACTIONS (size)	
	1=23-3-3, 7=23-3-3, 8=23-3-3, 9=23-3-3, 10=23-3-3, 11=23-3-3, 12=23-3-3
Max Horiz	1=-94 (LC 10)
Max Uplift	8=-59 (LC 12), 9=-67 (LC 12), 11=-67 (LC 12), 12=-59 (LC 12)
Max Grav	1=106 (LC 18), 7=105 (LC 24), 8=373 (LC 18), 9=395 (LC 18), 10=438 (LC 17), 11=395 (LC 17), 12=374 (LC 17)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-166/126, 2-3=-48/116, 3-4=-45/118, 4-5=-45/115, 5-6=-28/85, 6-7=-149/95
BOT CHORD	1-12=-49/154, 11-12=-49/66, 9-11=-49/66, 8-9=-49/66, 7-8=-49/127
WEBS	4-10=-251/13, 3-11=-258/151, 2-12=-234/120, 5-9=-258/151, 6-8=-234/120

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 11-8-1, Exterior(2R) 11-8-1 to 14-8-1, Interior (1) 14-8-1 to 23-3-11 zone; 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bracing.
- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 11, 59 lb uplift at joint 12, 67 lb uplift at joint 9 and 59 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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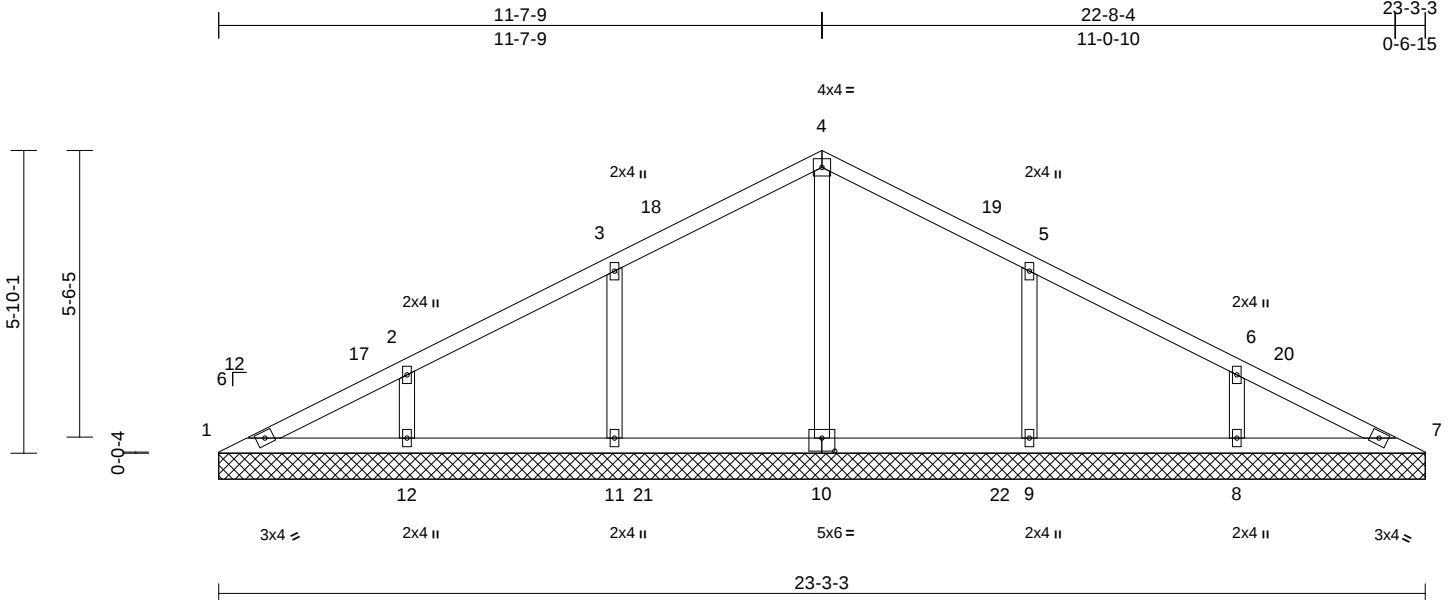
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659382
3698553	V3D	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:41

Page: 1

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Scale = 1:44.4

Plate Offsets (X, Y): [10:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.17	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	7	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							
										Weight: 93 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 1=23-3-3, 7=23-3-3, 8=23-3-3,
9=23-3-3, 10=23-3-3, 11=23-3-3,
12=23-3-3
Max Horiz 1=-94 (LC 10)
Max Uplift 8=-59 (LC 12), 9=-67 (LC 12),
11=-67 (LC 12), 12=-59 (LC 12)
Max Grav 1=106 (LC 18), 7=105 (LC 24),
8=373 (LC 18), 9=395 (LC 18),
10=438 (LC 17), 11=395 (LC 17),
12=374 (LC 17)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-166/126, 2-3=-48/116, 3-4=-45/118,
4-5=-45/115, 5-6=-28/85, 6-7=-149/95
BOT CHORD 1-12=-49/154, 11-12=-49/66, 9-11=-49/66,
8-9=-49/66, 7-8=-49/127
WEBS 4-10=-251/13, 3-11=-258/151,
2-12=-234/120, 5-9=-258/151, 6-8=-234/120

NOTES

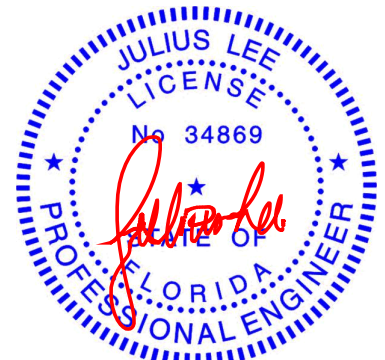
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 11-8-1, Exterior(2R) 11-8-1 to 14-8-1, Interior (1) 14-8-1 to 23-3-11 zone; 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bracing.
- 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 20.0 psf 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 11, 59 lb uplift at joint 12, 67 lb uplift at joint 9 and 59 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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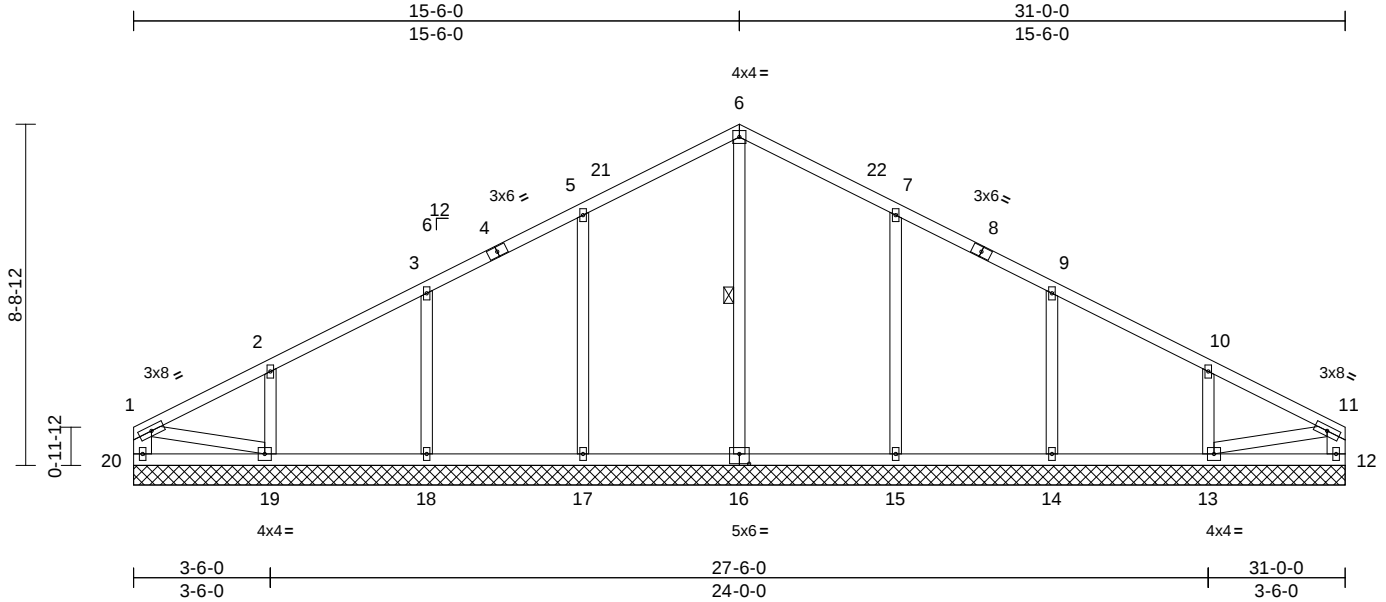
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659383
3698553	V04	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:44

Page: 1

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Scale = 1:59
Plate Offsets (X, Y): [16'-0" 3'-0" 0'-3" 0'-0"]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.17	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.00	12	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							
Weight: 159 lb FT = 20%											

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x6 SP No.2 *Except* 11-13,1-19:2x4 SP No.3
OTHERS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-16
REACTIONS (size)	
	12=31-0-0, 13=31-0-0, 14=31-0-0, 15=31-0-0, 16=31-0-0, 17=31-0-0, 18=31-0-0, 19=31-0-0, 20=31-0-0
Max Horiz	20=163 (LC 11)
Max Uplift	13=80 (LC 12), 14=63 (LC 12), 15=65 (LC 12), 17=65 (LC 12), 18=63 (LC 12), 19=80 (LC 12)
Max Grav	12=143 (LC 17), 13=368 (LC 18), 14=403 (LC 18), 15=446 (LC 18), 16=378 (LC 17), 17=446 (LC 17), 18=402 (LC 17), 19=378 (LC 17), 20=170 (LC 18)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-20=-118/24, 1-2=-136/99, 2-3=-132/81, 3-5=-116/108, 5-6=-110/172, 6-7=-110/160, 7-9=-85/89, 9-10=-92/33, 10-11=-95/45, 11-12=-94/0
BOT CHORD	19-20=-129/172, 18-19=-51/92, 17-18=-51/92, 15-17=-51/92, 14-15=-51/92, 13-14=-51/92, 12-13=-23/59
WEBS	6-16=-197/0, 5-17=-255/136, 3-18=-241/111, 2-19=-230/117, 7-15=-255/136, 9-14=-241/111, 10-13=-230/118, 11-13=-74/86, 1-19=-111/100

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-2-12 to 3-6-0, Interior (1) 3-6-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-8-9, Interior (1) 18-8-9 to 30-9-4 zone; end vertical left and right exposed; C-C for members and plates & MWFRS for reactions shown; Lumber DOL = 1.25 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 4'-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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 17, 63 lb uplift at joint 18, 80 lb uplift at joint 19, 65 lb uplift at joint 15, 63 lb uplift at joint 14 and 80 lb uplift at joint 13.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Julius Lee
PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024

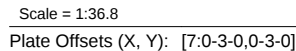
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

MiTek®

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:44 Page: 1
ID:xlG1wplAx0KpRgB665RyM9yS9ns-RfC?PsB70Hg3NSgPqnL8w3uITxbGKWrcDoi7J4Cz?i



NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 9-0-1, Exterior(2R) 9-0-1 to 12-0-1, Interior (1) 12-0-1 to 17-11 zone;C for members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4'-0" oc.
- 7) 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 20.0 psf on the bottom chord in all areas where a  3'-0" x 6'-0" tall by 2'-0" x 0'-0" wide will fit between  bottom chord and any other members.
- 9) All bearings are assumed to be SP No.2.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 1, 80 lb uplift at joint 8 and 80 lb uplift at joint 6.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

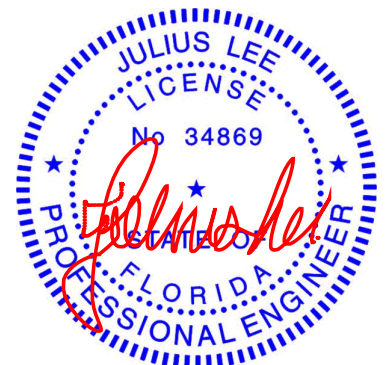
LOAD CASE(S) Standard



For trust to
lb uplift at joint

PX2707 01/27/2024

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024



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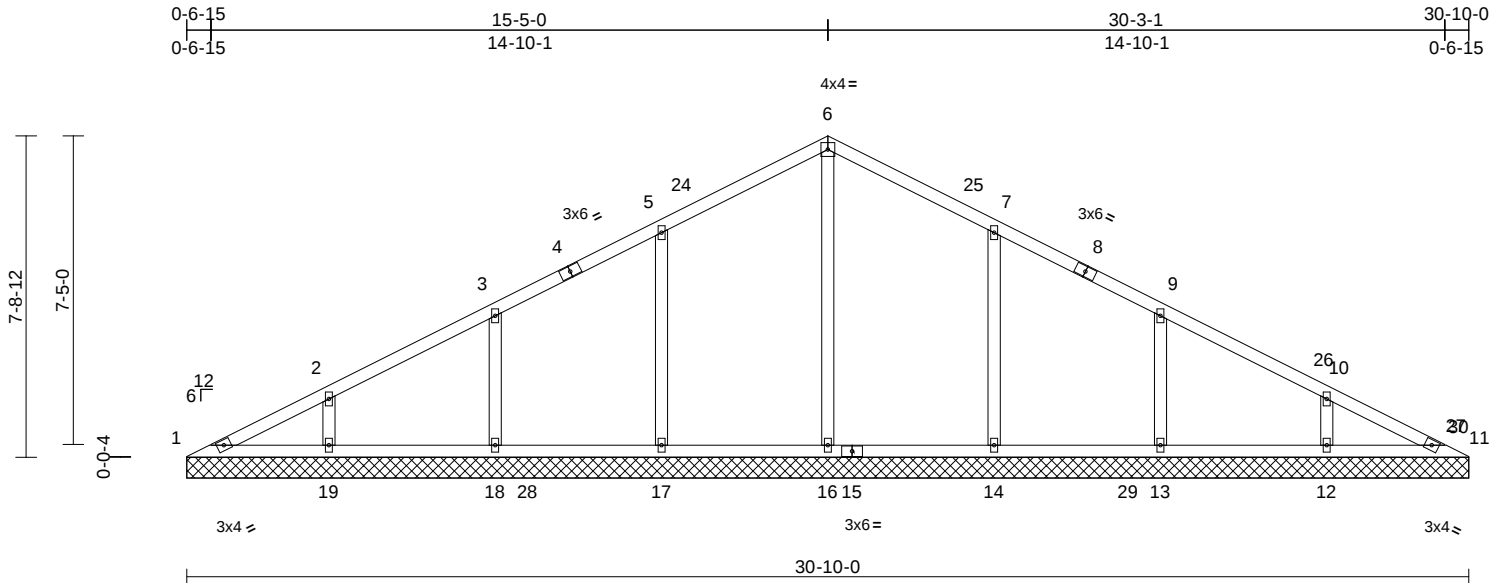
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659385
3698553	V05	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:45

Page: 1

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.16	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.24	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 134 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size)
1=30-10-0, 11=30-10-0,
12=30-10-0, 13=30-10-0,
14=30-10-0, 16=30-10-0,
17=30-10-0, 18=30-10-0,
19=30-10-0
Max Horiz 1=135 (LC 11)
Max Uplift 12=54 (LC 12), 13=64 (LC 12),
14=65 (LC 12), 17=65 (LC 12),
18=64 (LC 12), 19=56 (LC 12)
Max Grav 1=117 (LC 18), 11=74 (LC 17),
12=366 (LC 18), 13=389 (LC 18),
14=446 (LC 18), 16=414 (LC 17),
17=447 (LC 17), 18=387 (LC 17),
19=372 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=190/126, 2-3=95/114, 3-5=78/101,
5-6=77/153, 6-7=77/149, 7-9=47/86,
9-10=51/71, 10-11=130/82
BOT CHORD 1-19=45/165, 18-19=45/71, 17-18=45/71,
16-17=45/71, 14-16=45/71, 13-14=45/71,
12-13=45/71, 11-12=45/116
WEBS 6-16=-230/0, 5-17=-256/136, 3-18=-240/113,
2-19=-233/106, 7-14=-256/135,
9-13=-240/114, 10-12=-231/108

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) -0-1-8 to
3-3-8, Interior (1) 3-3-8 to 15-3-8, Exterior(2R) 15-3-8 to
18-6-1, Interior (1) 18-6-1 to 30-1-9 zone;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 and applicable
or consult qualified building designer as per ANSI/TPI
Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 65 lb uplift at joint
17, 64 lb uplift at joint 18, 56 lb uplift at joint 19, 65 lb
uplift at joint 14, 64 lb uplift at joint 13 and 54 lb uplift at
joint 12.
- This truss design requires that a minimum of 7/16"
structural wood sheathing be applied directly to the top
chord and 1/2" gypsum sheetrock be applied directly to
the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Signature: [Signature]
Examiner-License No. PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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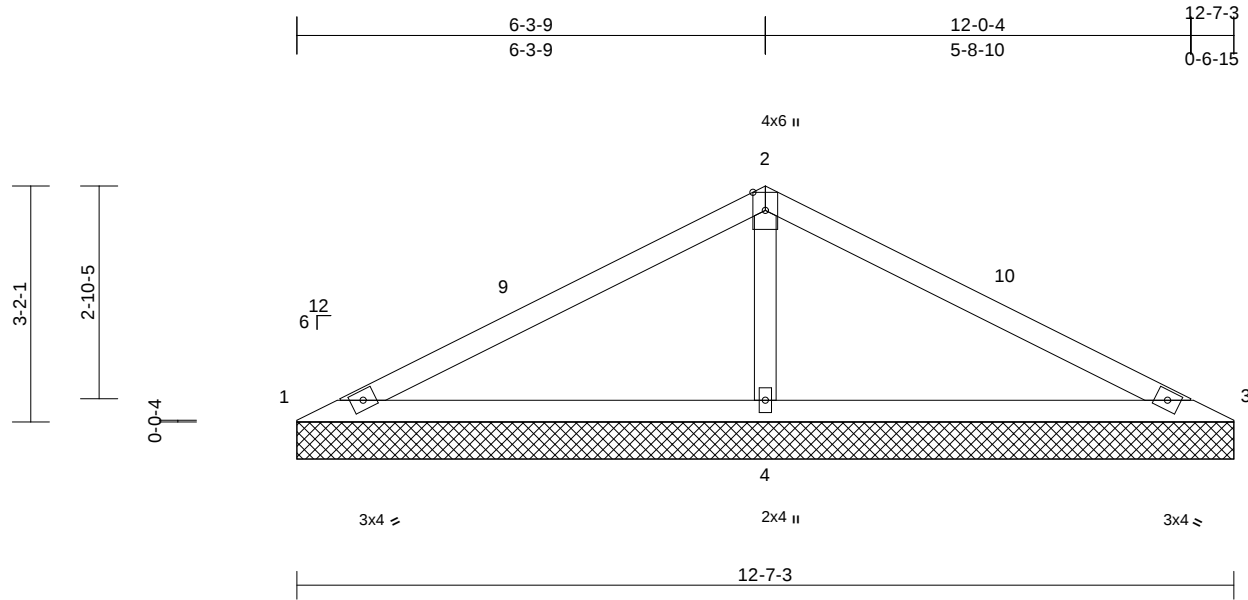
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659386
3698553	V05D	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:45

Page: 1

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Scale = 1:31

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.32	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 42 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 1=12-7-3, 3=12-7-3, 4=12-7-3
Max Horiz 1=-50 (LC 10)
Max Uplift 1=-37 (LC 24), 3=-37 (LC 23),
4=-115 (LC 12)
Max Grav 1=89 (LC 23), 3=89 (LC 24), 4=938
(LC 1)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-175/502, 2-3=-164/502
BOT CHORD 1-4=-376/213, 3-4=-376/213
WEBS 2-4=-741/362

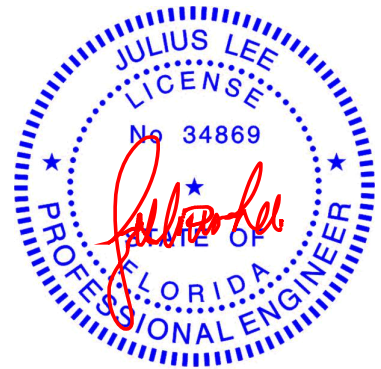
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 0-0-8 to
3-0-8, Interior (1) 3-0-8 to 6-4-1, Exterior(2R) 6-4-1 to
9-4-1, Interior (1) 9-4-1 to 12-7-11 zone;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.
- Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 37 lb uplift at joint
1, 37 lb uplift at joint 3 and 115 lb uplift at joint 4.
- This truss design requires that a minimum 6" structural wood sheathing be applied directly to the top
chord and 1/2" gypsum sheetrock be applied directly to
the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science
Lawrence Powell PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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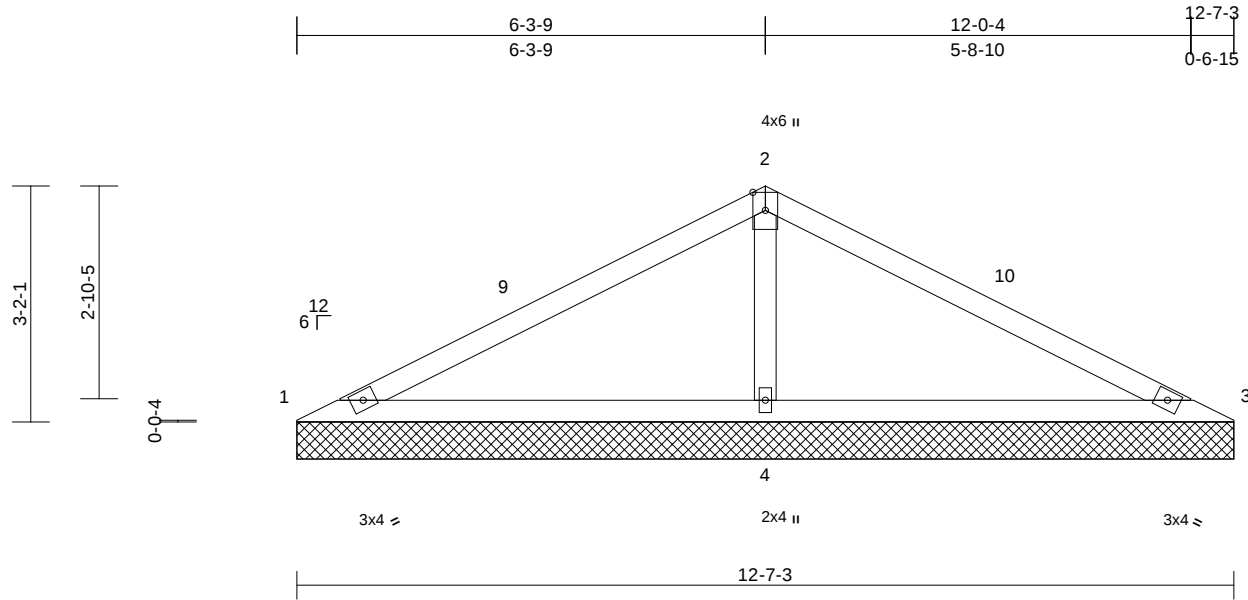
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659387
3698553	V5D	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1



Scale = 1:31

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.32	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 42 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 1=12-7-3, 3=12-7-3, 4=12-7-3
Max Horiz 1=-50 (LC 10)
Max Uplift 1=-37 (LC 24), 3=-37 (LC 23),
4=-115 (LC 12)
Max Grav 1=89 (LC 23), 3=89 (LC 24), 4=938
(LC 1)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-175/502, 2-3=-164/502
BOT CHORD 1-4=-376/213, 3-4=-376/213
WEBS 2-4=-741/362

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 0-0-8 to
3-0-8, Interior (1) 3-0-8 to 6-4-1, Exterior(2R) 6-4-1 to
9-4-1, Interior (1) 9-4-1 to 12-7-11 zone;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.
- Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 37 lb uplift at joint
1, 37 lb uplift at joint 3 and 115 lb uplift at joint 4.
- This truss design requires that a minimum 6" structural wood sheathing be applied directly to the top
chord and 1/2" gypsum sheetrock be applied directly to
the bottom chord.

LOAD CASE(S) Standard

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Universal Engineering Science
Lawrence Powell PX2707 01/27/2024
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Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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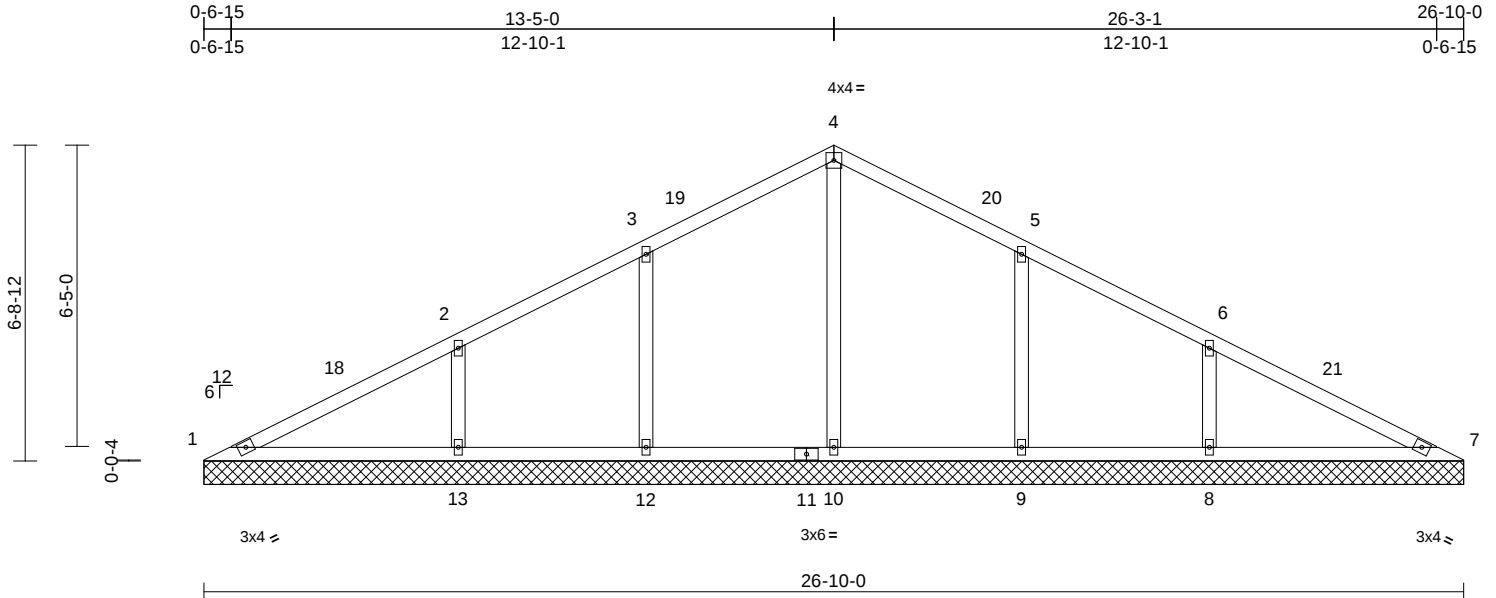
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659388
3698553	V06	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horiz(TL)	0.00	13	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 111 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 1=26-10-0, 7=26-10-0, 8=26-10-0,
9=26-10-0, 10=26-10-0,
12=26-10-0, 13=26-10-0
Max Horiz 1=117 (LC 11)
Max Uplift 8=-80 (LC 12), 9=-60 (LC 12),
12=-60 (LC 12), 13=-80 (LC 12)
Max Grav 1=133 (LC 23), 7=133 (LC 24),
8=498 (LC 18), 9=366 (LC 18),
10=572 (LC 17), 12=365 (LC 17),
13=499 (LC 17)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-199/280, 2-3=0/237, 3-4=0/228,
4-5=0/216, 5-6=0/198, 6-7=-199/241
BOT CHORD 1-13=-165/196, 12-13=-165/94,
10-12=-165/94, 9-10=-165/94, 8-9=-165/94,
7-8=-165/173
WEBS 4-10=-366/22, 3-12=-236/137,
2-13=-300/137, 5-9=-236/137, 6-8=-300/137

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=31ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) -0-1-8 to
2-11-7, Interior (1) 2-11-7 to 13-3-8, Exterior(2R) 13-3-8
to 16-4-7, Interior (1) 16-4-7 to 26-8-8 zone;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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf chord live load nonconcurrent with any other loads 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 12, 80 lb uplift at joint 13, 60 lb uplift at joint 9 and 80 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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MiTek®

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314.434.1200 / MiTek-US.com

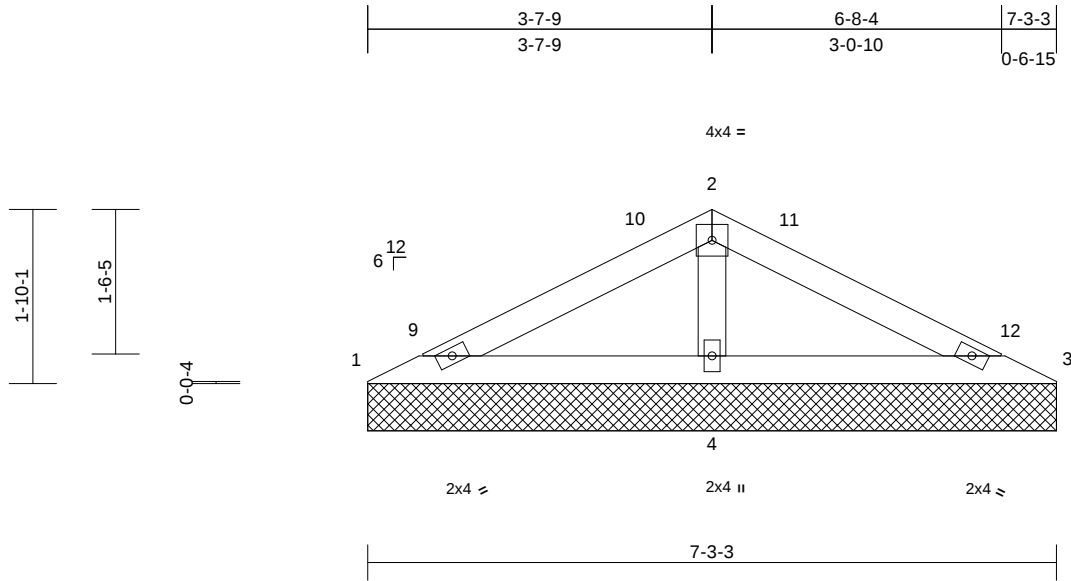
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659389
3698553	V06D	Valley	2	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:46

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Scale = 1:24.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.13	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.14	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							
										Weight: 23 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS

(size)	1=7-3-3, 3=7-3-3, 4=7-3-3
Max Horiz	1=28 (LC 11)
Max Uplift	1=-4 (LC 12), 3=-4 (LC 12), 4=-53 (LC 12)
Max Grav	1=80 (LC 23), 3=80 (LC 24), 4=466 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-114/214, 2-3=-105/214
BOT CHORD	1-4=-168/162, 3-4=-168/162
WEBS	2-4=-316/215

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 3-8-1, Exterior(2R) 3-8-1 to 6-8-1, Interior (1) 6-8-1 to 7-3-11 zone;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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1, 4 lb uplift at joint 3 and 53 lb uplift at joint 4.
- This truss design requires that a minimum 6" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

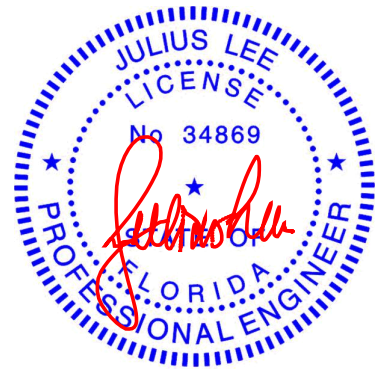
LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Lawrence Parnell
Examiner-License No.

PX2707

01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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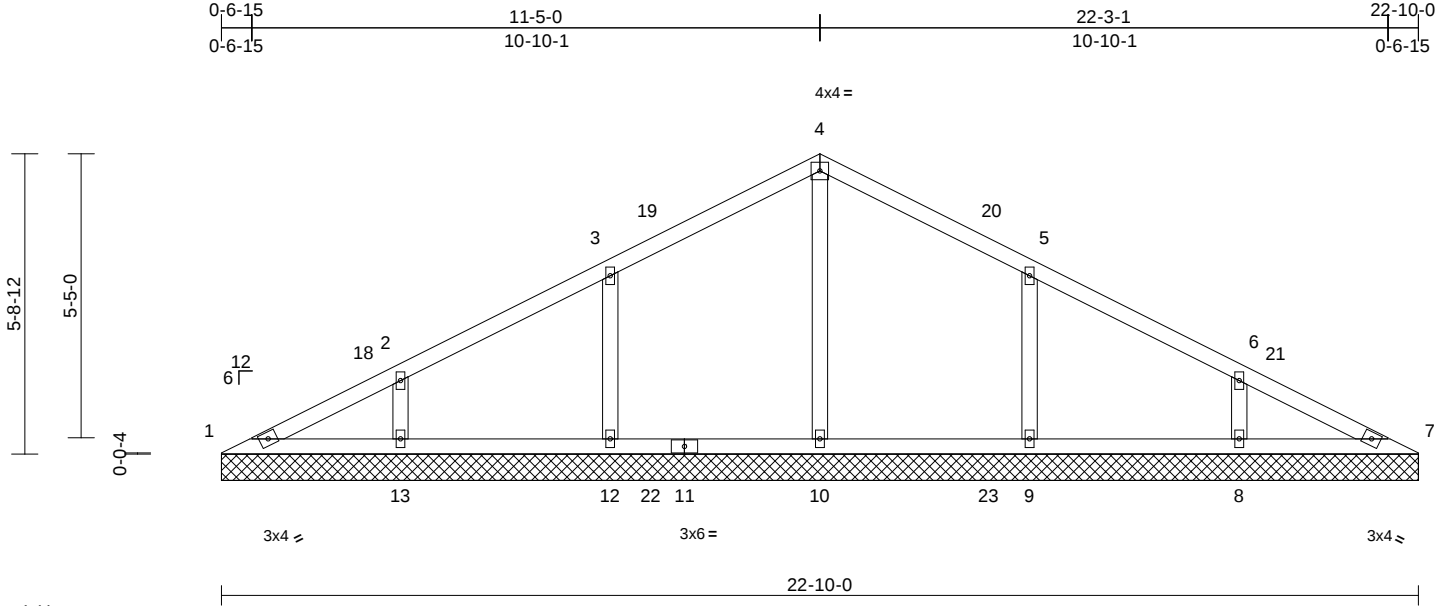
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659390
3698553	V07	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Scale = 1:44

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.17	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	7	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 91 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=22-10-0, 7=22-10-0, 8=22-10-0,
9=22-10-0, 10=22-10-0,
12=22-10-0, 13=22-10-0
Max Horiz 1=95 (LC 11)
Max Uplift 8=57 (LC 12), 9=67 (LC 12),
12=67 (LC 12), 13=57 (LC 12)
Max Grav 1=103 (LC 18), 7=100 (LC 24),
8=363 (LC 18), 9=398 (LC 18),
10=426 (LC 17), 12=398 (LC 17),
13=364 (LC 17)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-159/114, 2-3=-58/106, 3-4=-48/119,
4-5=-48/116, 5-6=-35/75, 6-7=-139/83
BOT CHORD 1-13=-40/146, 12-13=-40/64, 10-12=-40/64,
9-10=-40/64, 8-9=-40/64, 7-8=-40/118
WEBS 4-10=-240/13, 3-12=-259/153,
2-13=-228/120, 5-9=-259/153, 6-8=-228/120

NOTES

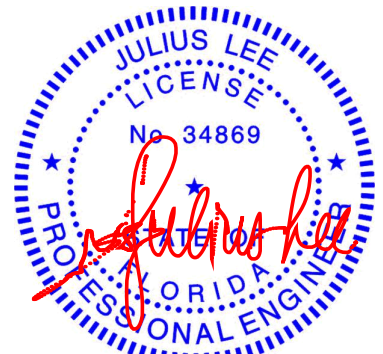
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=27ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) -0-1-8 to 2-10-8, Interior (1) 2-10-8 to 11-3-8, Exterior(2R) 11-3-8 to 14-3-8, Interior (1) 14-3-8 to 22-8-8 zone;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.

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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 bottom chord and any other members, with BCDL 6.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 12, 57 lb uplift at joint 13, 67 lb uplift at joint 9 and 57 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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Universal Engineering Science

PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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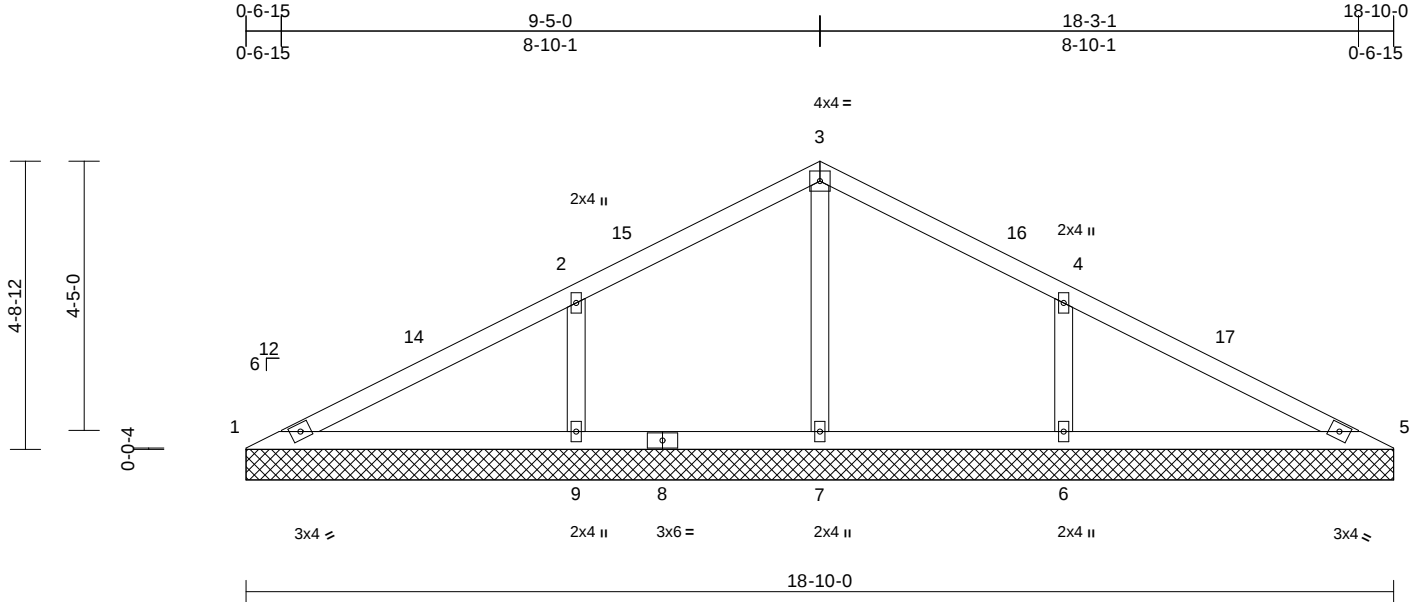
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659391
3698553	V08	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Scale = 1:37.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.21	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	9	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 70 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS

(size) 1=18-10-0, 5=18-10-0, 6=18-10-0,
7=18-10-0, 9=18-10-0
Max Horiz 1=-75 (LC 10)
Max Uplift 1=-2 (LC 12), 5=-2 (LC 12), 6=-86
(LC 12), 9=-86 (LC 12)
Max Grav 1=113 (LC 23), 5=113 (LC 24),
6=455 (LC 24), 7=421 (LC 1),
9=455 (LC 23)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-156/283, 2-3=0/251, 3-4=0/251,
4-5=-156/283
BOT CHORD 1-9=-187/134, 7-9=-187/106, 6-7=-187/106,
5-6=-187/134
WEBS 3-7=-376/79, 2-9=-319/185, 4-6=-319/185

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) -0-1-8 to
2-10-8, Interior (1) 2-10-8 to 9-3-8, Exterior(2R) 9-3-8 to
12-3-8, Interior (1) 12-3-8 to 18-8-8 zone; 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.

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 1, 2 lb uplift at joint 5, 86 lb uplift at joint 9 and 86 lb uplift at joint 6.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

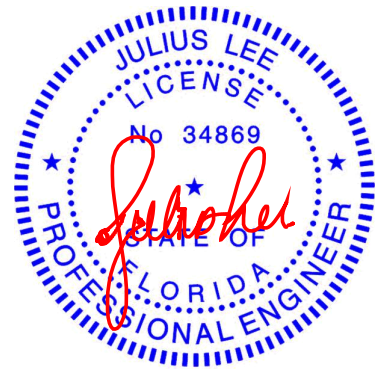
LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science



Signature: *Julius Lee*
Examiner-License No.

PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingle Ridge Rd. Chesterfield, MO 63017
Date:

January 18, 2024

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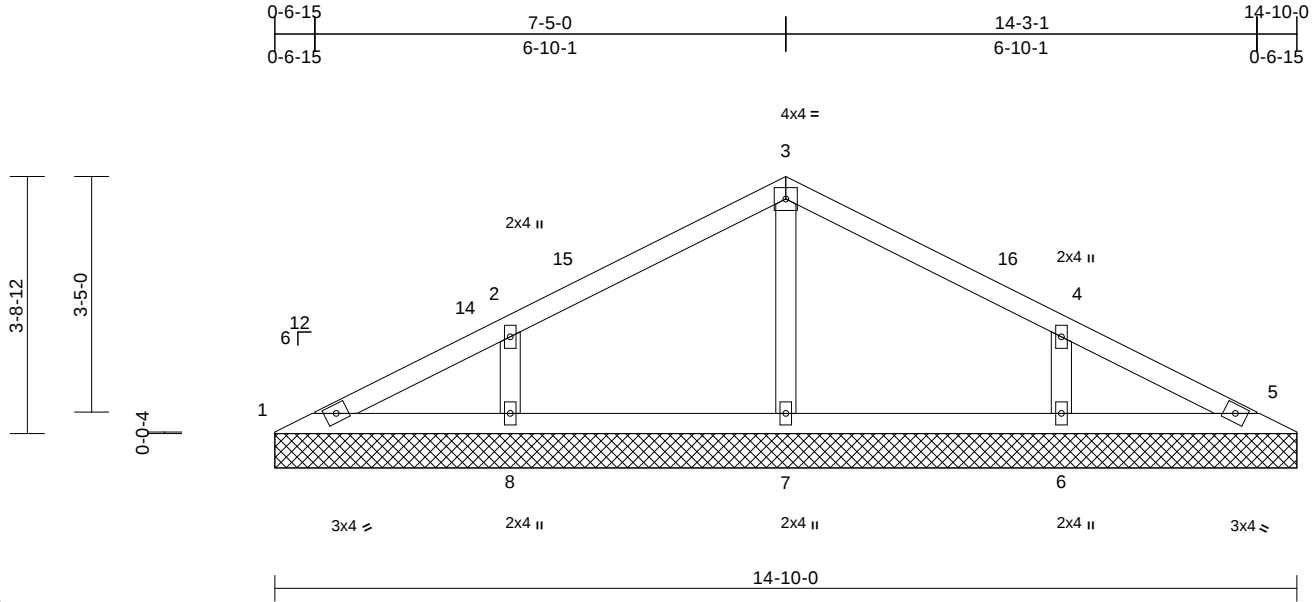
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659392
3698553	V09	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1



Scale = 1:33.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.11	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 53 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS

(size)	1=14-10-0, 5=14-10-0, 6=14-10-0, 7=14-10-0, 8=14-10-0, 13=14-10-0
Max Horiz	1=58 (LC 11)
Max Uplift	1=-4 (LC 12), 6=-64 (LC 12), 8=-64 (LC 12)
Max Grav	1=72 (LC 23), 6=339 (LC 24), 7=437 (LC 1), 8=338 (LC 23)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-81/202, 2-3=0/203, 3-4=0/202, 4-5=-67/202
BOT CHORD	1-8=-136/69, 7-8=-136/69, 6-7=-136/69, 5-6=-136/69
WEBS	3-7=-363/114, 2-8=-248/176, 4-6=-249/176

NOTES

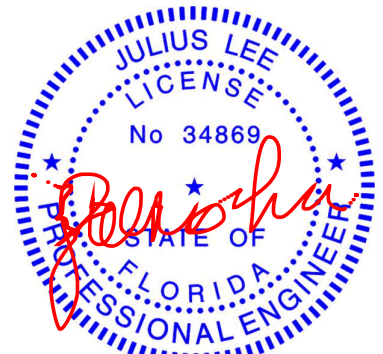
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-1-8 to 2-10-8, Interior (1) 2-10-8 to 7-3-8, Exterior(2R) 7-3-8 to 10-3-8, Interior (1) 10-3-8 to 14-1-9 zone;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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4'-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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb at joint 1, 64 lb uplift at joint 8 and 64 lb uplift at joint 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Signature: *Julius Lee* PX2707 01/27/2024
Examiner-License No.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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

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

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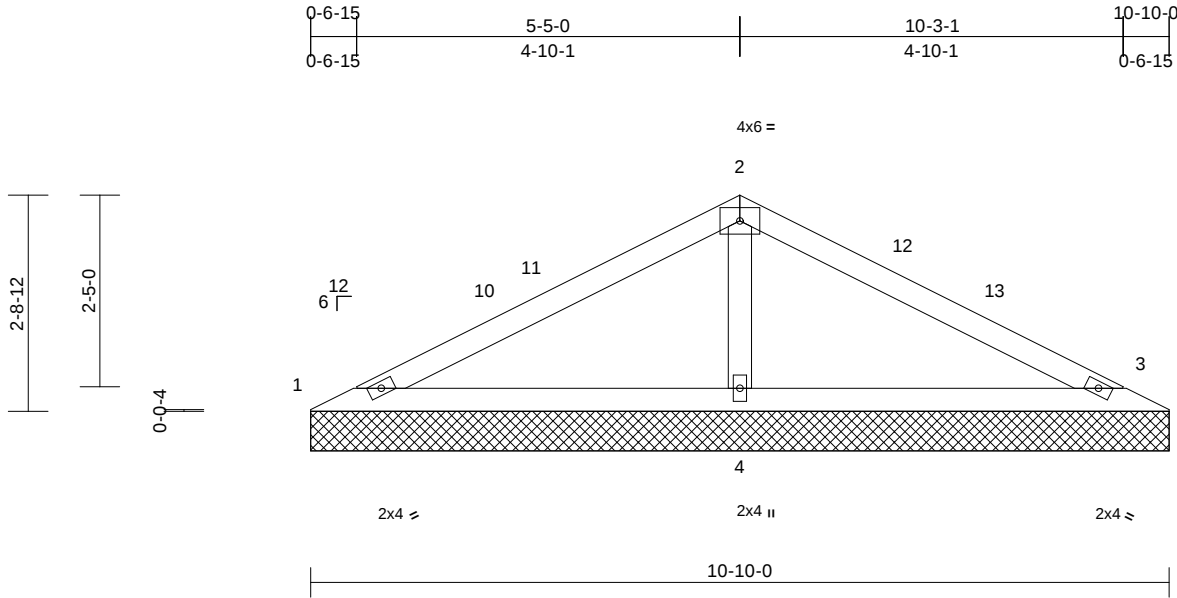
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659393
3698553	V10	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

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Page: 1



Scale = 1:29.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.27	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	-0.01	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							Weight: 35 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS

(size)	1=10-10-0, 3=10-10-0, 4=10-10-0, 9=10-10-0
Max Horiz	1=41 (LC 11)
Max Uplift	1=-67 (LC 24), 4=-82 (LC 12)
Max Grav	1=129 (LC 23), 3=3 (LC 24), 4=777 (LC 1), 9=3 (LC 24)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-188/411, 2-3=-229/434
BOT CHORD	1-4=-332/167, 3-4=-332/167
WEBS	2-4=-610/313

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-1-8 to 2-10-8, Interior (1) 2-10-8 to 5-3-8, Exterior(2R) 5-3-8 to 8-3-8, Interior (1) 8-3-8 to 10-1-9 zone;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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 1 and 82 lb uplift at joint 4.
- This truss design requires that a minimum 6" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Review for Code Compliance
Universal Engineering Science

Lawrence Powell
Examiner-License No.

PX2707

01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 18,2024

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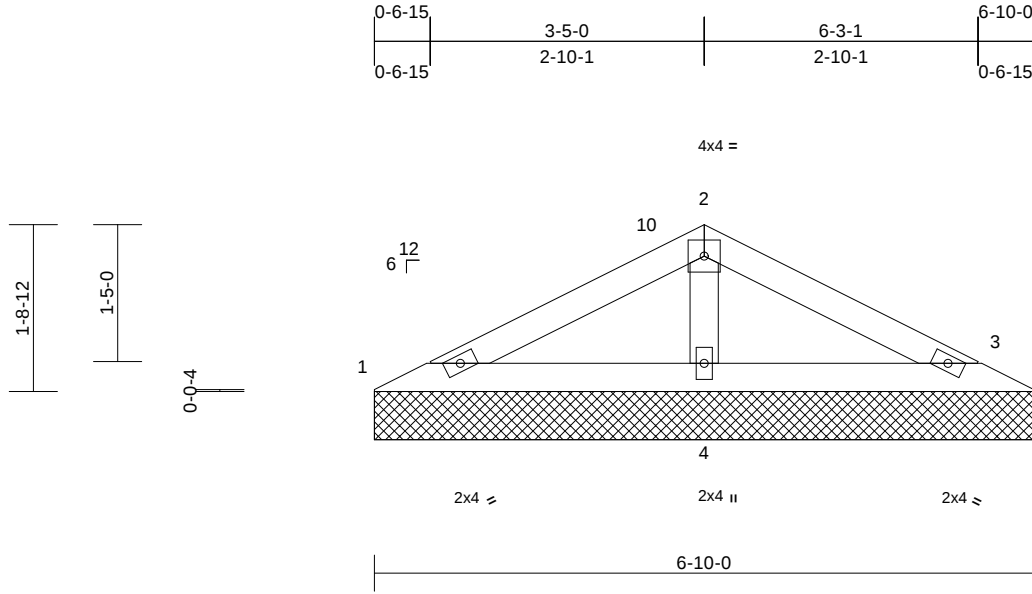
Job	Truss	Truss Type	Qty	Ply	Fischer Residence 2 Story	T32659394
3698553	V11	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

Run: 8.73 S Jan 4 2024 Print: 8.730 S Jan 4 2024 MiTek Industries, Inc. Wed Jan 17 13:35:47

Page: 1

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Scale = 1:23.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.12	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.13	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-AS							
										Weight: 21 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS	(size)	1=6-10-0, 3=6-10-0, 4=6-10-0, 9=6-10-0
	Max Horiz	1=25 (LC 11)
	Max Uplift	1=27 (LC 24), 4=48 (LC 12)
	Max Grav	1=89 (LC 23), 3=1 (LC 24), 4=458 (LC 1), 9=1 (LC 24)

FORCES	(lb) - Maximum Compression/Maximum Tension
--------	--

TOP CHORD	1-2=-111/238, 2-3=-154/249
BOT CHORD	1-4=-201/140, 3-4=-201/140
WEBS	2-4=-324/208

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-1-8 to 2-10-8, Interior (1) 2-10-8 to 3-3-8, Exterior(2E) 3-3-8 to 6-1-9 zone;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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

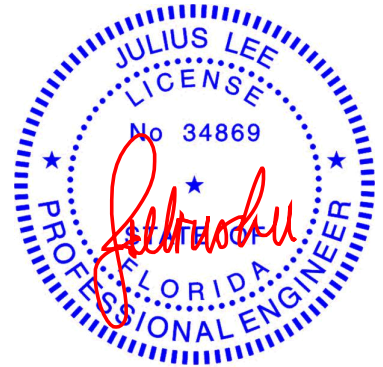
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1 and 48 lb uplift at joint 4.
- This truss design requires that a minimum 6" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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Universal Engineering Science

Lawrence Powell
Examiner-License No.

PX2707 01/27/2024



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

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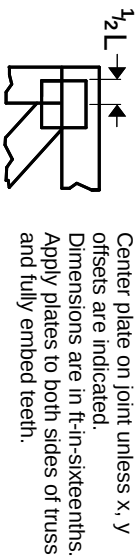
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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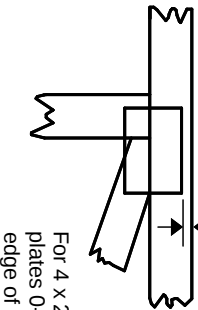
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Symbols

PLATE LOCATION AND ORIENTATION



0- $\frac{1}{16}$ "



For 4 x 2 orientation, locate plates 0- $\frac{3}{16}$ " 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 X 4

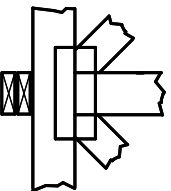
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

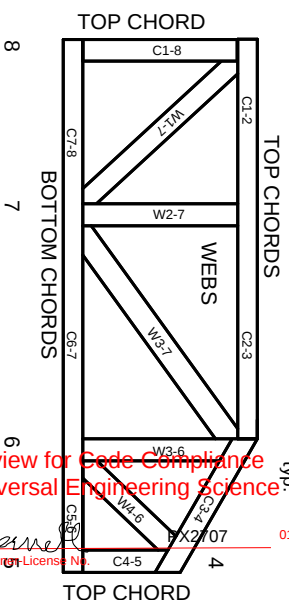
6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)

1

2

3 Joint ID typ.

01/27/2024



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOOSELY 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/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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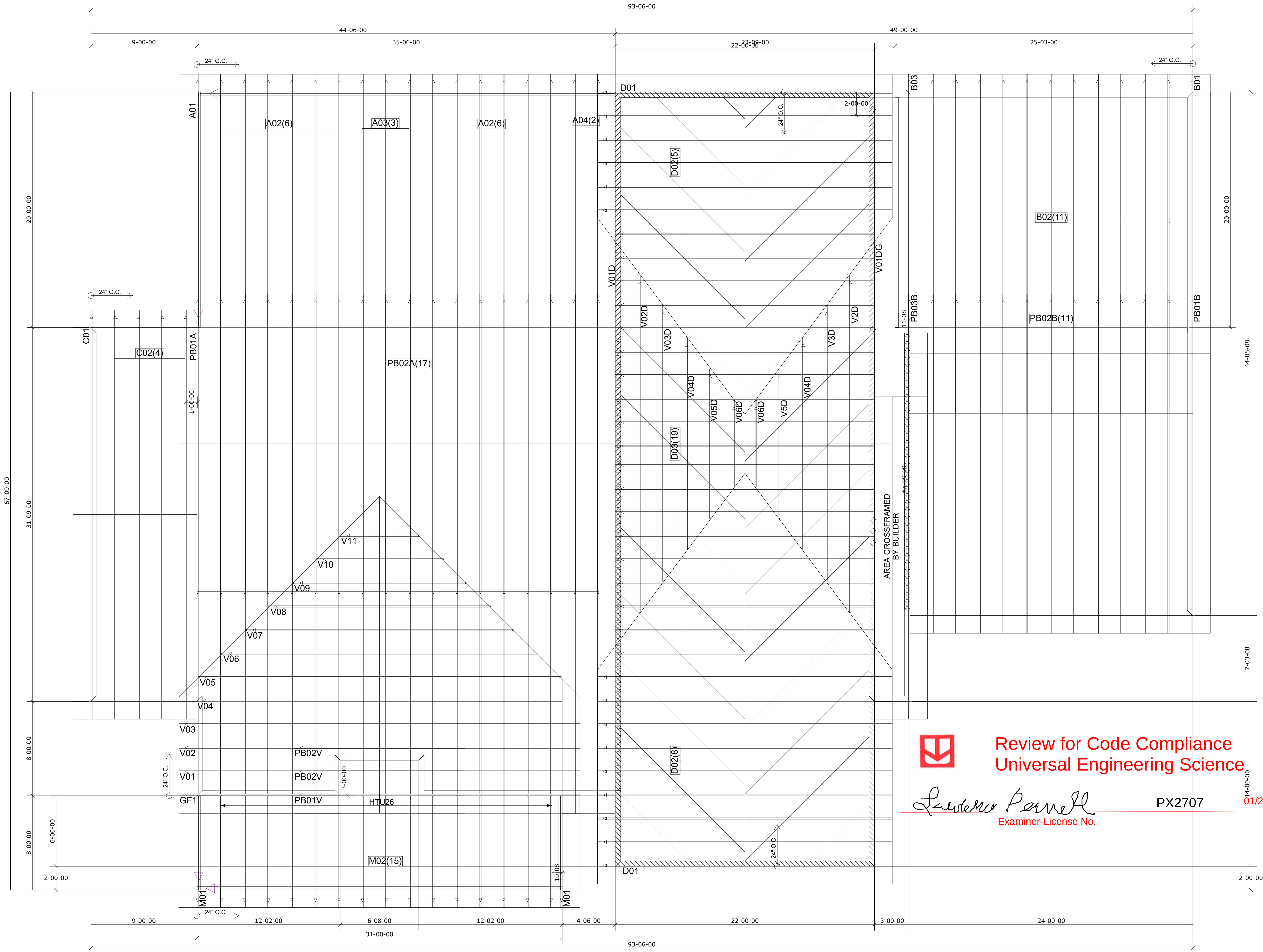
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MITek Engineering Reference Sheet: MIL-7473 rev. 1/12/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. 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.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. 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.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. 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.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.



HATCH LEGEND	
	10' 1-1/8"
	4/12 Vlt. Clg.
	6'-0" Kneewall
	Interior Brg. Wall

General Notes:

- Per ANSI/TPI 1-2002 all " Truss to Wall" connections are the responsibility of the Building Designer, not the Truss Manufacturer.
- Use Manufacturer's specifications for all hanger connections unless noted otherwise.
- Trusses are to be 24" o.c. U.N.O.
- All hangers are to be Simpson or equivalent U.N.O.
- Use 10d x 1 1/2" Nails in hanger connections to single ply girder trusses.
- Trusses are not designed to support brick U.N.O.
- Dimensions are Feet-Inches- Sixteenths

Notes:

No back charges will be accepted by Builders FirstSource unless approved in writing first.

ACQ lumber is corrosive to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. scabbed on tails) must have an approved barrier applied first.

Refer to BCSI-B1 Summary Sheet-Guide for handling, Installing and Bracing of Metal Plate Connected Wood Truss prior to and during truss installation.

It is the responsibility of the Contractor to ensure of the proper orientation of the truss placement plans as to the construction documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builders FirstSource.

It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, ect..., so the trusses do not interfere with these type of items.

All common framed roof or floor systems must be designed as to NOT impose any loads on the floor trusses below. The floor trusses have not been designed to carry any additional loads from above.

This truss placement plan was not created by an engineer, but rather by the Builders FirstSource staff and is solely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the truss design drawings which may be sealed by the truss design engineer.

Gable end trusses require continuous bottom chord bearing. Refer to local codes for wall framing requirements.

Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans for proper orientation and placement.



Freeport
PHONE: 850-835-4541
FAX: 850-835-4532

Jacksonville
PHONE: 904-772-6100
FAX: 904-772-1973

Tampa
PHONE: 813-621-9831
FAX: 813-628-8956

Builder:
Jeff Fischer

Legal Address:
Hermitage Lot 5

Model:
FIsher Residence 2 Story

Date: 01/16/24	Drawn By: EAZ	Original Ref #: 3698553
--------------------------	-------------------------	-----------------------------------

Floor 1 Job #: 3698554	Floor 2 Job #: N/A	Roof Job #: N/A
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MITEK PRODUCT APPROVAL #'S FL2197-R6, WEYERHAEUSER PRODUCT #'S LVL FL6527-R10, TJI FL1630-R10



Review for Code Compliance
Universal Engineering Science

Lawrence Parnell
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PX2707

01/27/2024