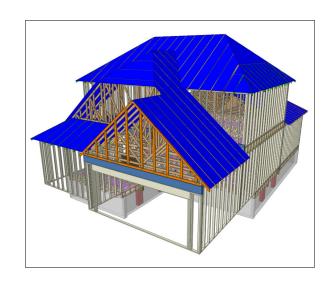


Carter Sanford Component Plant 298 Harvey Faulk Rd Sanford, NC 27332

Phone #:919-775-1450

**Builder:** HH Hunt Homes Raleigh

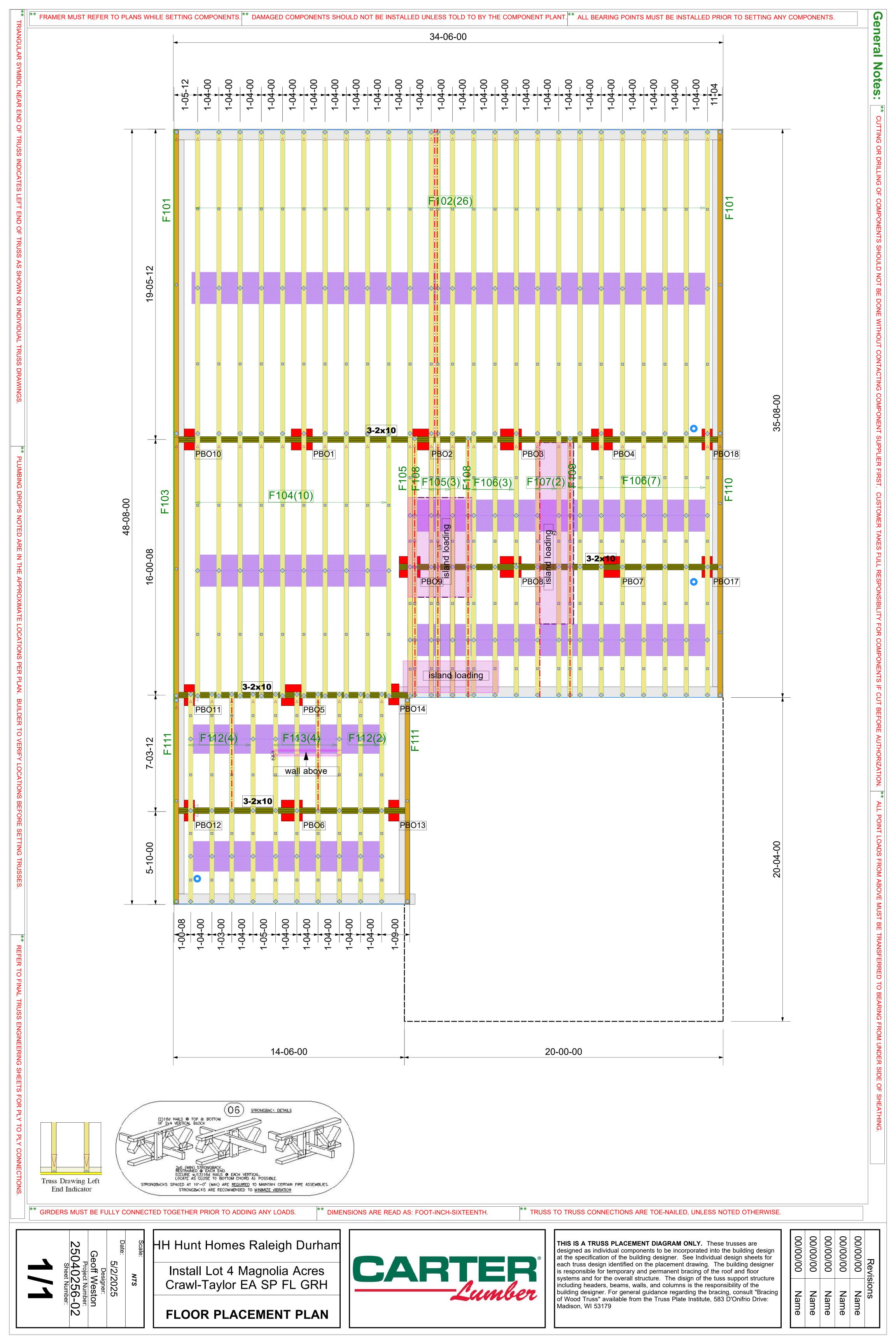
Model: Taylor EA SP FL GRH



### THE PLACEMENT PLAN NOTES:

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

Approved By:	Date:
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Trenco 818 Soundside Rd Edenton, NC 27932

Re: 25040256-02

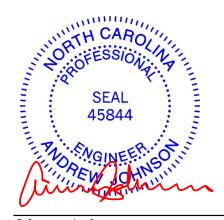
Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Sanford, NC)).

Pages or sheets covered by this seal: I73189750 thru I73189762

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

North Carolina COA: C-0844



May 2,2025

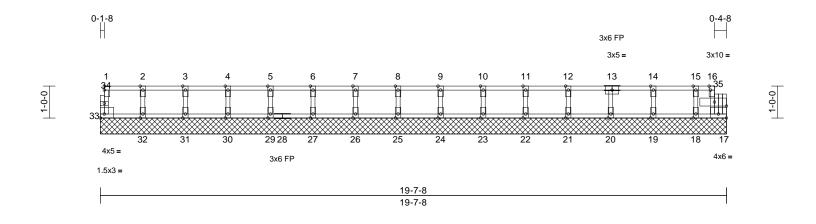
Johnson, Andrew

**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.

Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F101	Floor Supported Gable	2	1	I73189750 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri May 02 06:19:44 

Page: 1



### Scale = 1:36.1

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	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 79 lb	FT = 11%F, 11%E

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

**BRACING** TOP CHORD

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

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

bracing.

REACTIONS (size)

17=19-7-8, 18=19-7-8, 19=19-7-8, 20=19-7-8, 21=19-7-8, 22=19-7-8, 23=19-7-8, 24=19-7-8, 25=19-7-8, 26=19-7-8, 27=19-7-8, 29=19-7-8, 30=19-7-8, 31=19-7-8, 32=19-7-8,

33=19-7-8

17=15 (LC 1), 18=70 (LC 1), Max Grav 19=100 (LC 1), 20=96 (LC 1),

21=100 (LC 1), 22=97 (LC 1), 23=98 (LC 1), 24=98 (LC 1), 25=98 (LC 1), 26=98 (LC 1), 27=98 (LC 1), 29=98 (LC 1), 30=98 (LC 1), 31=97 (LC 1), 32=100 (LC 1),

33=33 (LC 1)

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

Tension

TOP CHORD 1-33=-32/0, 16-17=-11/0, 1-2=-3/0, 2-3=-3/0,

3-4=-3/0, 4-5=-3/0, 5-6=-3/0, 6-7=-3/0, 7-8=-3/0, 8-9=-3/0, 9-10=-3/0, 10-11=-3/0, 11-12=-3/0, 12-14=-8/0, 14-15=-8/0,

15-16=-8/0

BOT CHORD 32-33=0/3, 31-32=0/3, 30-31=0/3, 29-30=0/3,

27-29=0/3, 26-27=0/3, 25-26=0/3, 24-25=0/3, 23-24=0/3, 22-23=0/3, 21-22=0/3, 20-21=0/3,

19-20=0/8, 18-19=0/8, 17-18=0/8

**WEBS** 2-32=-89/0, 3-31=-89/0, 4-30=-89/0,

5-29=-89/0, 6-27=-89/0, 7-26=-89/0, 8-25=-89/0, 9-24=-89/0, 10-23=-89/0, 11-22=-88/0, 12-21=-91/0, 13-20=-88/0,

14-19=-91/0, 15-18=-69/0

### NOTES 1)

- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing. 2)
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web). Gable studs spaced at 1-4-0 oc.
- All bearings are assumed to be SP No.2 .
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



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

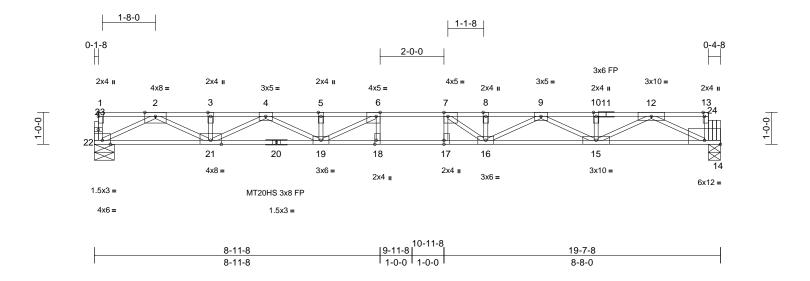
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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



Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F102	Floor	26	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries. Inc. Fri May 02 06:19:45 



Scale = 1:36.1

Plate Offsets (X, Y):	[6:0-1-8,Edge], [7:0-	1-8,Edge], [13:0-1	I-8,Edge], [14:Edge,0-	-1-8], [17:0-1	I-8,Edge], [18:0-1-8,E	∃dge]
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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	0.70	Vert(LL)	-0.42	17-18	>554	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.98	Vert(CT)	-0.58	17-18	>401	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.08	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 97 lb	FT = 11%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)

2x4 SP No.2(flat) \*Except\* 20-14:2x4 SP BOT CHORD

No.1(flat)

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

5-10-10 oc purlins, except end verticals.

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

bracing

REACTIONS (size) 14=0-4-8, 22=0-7-8

Max Grav 14=1069 (LC 1), 22=705 (LC 1)

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

Tension

TOP CHORD 1-22=-49/0, 13-14=-449/0, 1-2=-3/0, 2-3=-2345/0, 3-4=-2345/0, 4-5=-3615/0,

5-6=-3615/0, 6-7=-3874/0, 7-8=-3650/0, 8-9=-3650/0, 9-10=-2456/0, 10-12=-2456/0,

12-13=-96/0

BOT CHORD 21-22=0/1325, 19-21=0/3096, 18-19=0/3874,

17-18=0/3874, 16-17=0/3874, 15-16=0/3179,

14-15=0/1470

WEBS 2-22=-1471/0, 2-21=0/1143, 3-21=-113/0,

4-21=-842/0, 4-19=0/582, 5-19=-157/31, 6-19=-602/87, 12-14=-1515/0, 12-15=0/1105. 10-15=-110/0. 9-15=-810/0. 9-16=0/528. 8-16=-139/68, 7-16=-578/110, 6-18=-87/96,

7-17=-93/129

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 22 SP No.2, Joint 14 SP No.1.

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

Dead + Floor Live (balanced): Lumber Increase=1.00,

Plate Increase=1.00 Uniform Loads (lb/ft) Vert: 14-22=-7, 1-13=-67 Concentrated Loads (lb)

Vert: 13=-379

May 2,2025

Page: 1

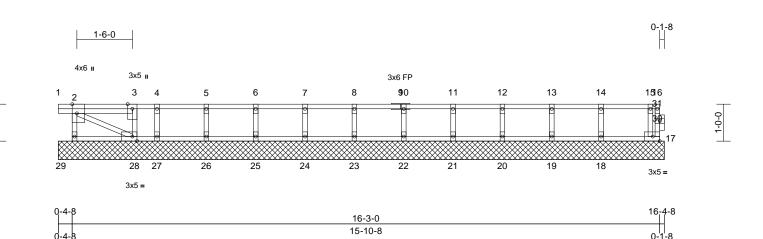
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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



Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F103	Floor Supported Gable	1	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri May 02 06:19:45 ID:LGHbia9JHN1jb?YuS?W5UqzKxvU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.1

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 69 lb	FT = 11%F, 11%E

### LUMBER

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

### **BRACING**

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size)

17=16-4-8, 18=16-4-8, 19=16-4-8, 20=16-4-8, 21=16-4-8, 22=16-4-8, 23=16-4-8, 24=16-4-8, 25=16-4-8, 26=16-4-8, 27=16-4-8, 28=16-4-8,

29=16-4-8

17=57 (LC 1), 18=105 (LC 1), Max Grav 19=96 (LC 1), 20=98 (LC 1), 21=98 (LC 1), 22=98 (LC 1), 23=98 (LC 1), 24=98 (LC 1), 25=97 (LC 1), 26=102 (LC 1), 27=65 (LC 1), 28=79 (LC 1), 29=93 (LC 1)

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

Tension

TOP CHORD 2-29=-89/0, 16-17=0/24, 1-2=0/0, 2-3=-13/0, 3-4=-11/0, 4-5=-11/0, 5-6=-11/0, 6-7=-11/0, 7-8=-11/0, 8-10=-11/0, 10-11=-11/0,

11-12=-11/0, 12-13=-11/0, 13-14=-11/0, 14-15=-11/0, 15-16=-3/0

BOT CHORD 28-29=0/0, 27-28=0/11, 26-27=0/11,

25-26=0/11, 24-25=0/11, 23-24=0/11, 22-23=0/11, 21-22=0/11, 20-21=0/11, 19-20=0/11, 18-19=0/11, 17-18=0/11

WEBS 3-28=-74/0, 2-28=0/12, 4-27=-61/0, 5-26=-93/0, 6-25=-88/0, 7-24=-89/0, 8-23=-89/0, 10-22=-89/0, 11-21=-89/0, 12-20=-89/0, 13-19=-88/0, 14-18=-94/0,

15-17=-77/0

- All plates are 1.5x3 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 3) 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 . 5)
- This truss is designed in accordance with the 2018 6) International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



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NOTES

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

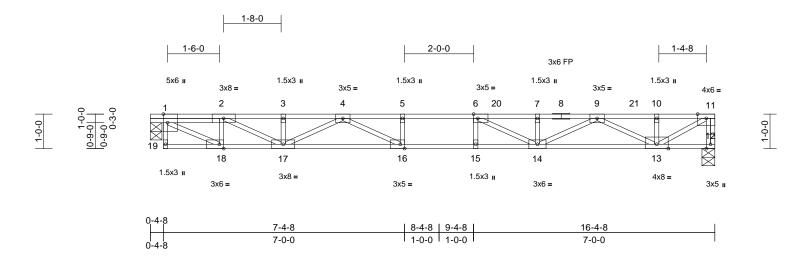
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F104	Floor	10	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries. Inc. Fri May 02 06:19:45 ID: LGHbia 9JHN1jb? YuS?W5UqzKxvU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff

Page: 1



Scale = 1:33.4

Plate Offsets (X, Y): [1:0-3-0,Edge], [6:0-1-8,Edge], [16:0-1-8,Edge], [18:0-1-8,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	0.46	Vert(LL)	-0.20	15-16	>938	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.28	15-16	>679	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.01	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 82 lb	FT = 11%F, 11%E

### LUMBER

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

**BRACING** 

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 1=0-4-0, 12=0-4-8 (size)

Max Grav 1=581 (LC 1), 12=586 (LC 1)

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

Tension TOP CHORD

1-19=0/8, 11-12=-582/0, 1-2=-987/0,

2-3=-1792/0, 3-4=-1792/0, 4-5=-2592/0, 5-6=-2592/0, 6-7=-2285/0, 7-9=-2285/0,

9-10=-960/0, 10-11=-960/0

**BOT CHORD** 18-19=0/0, 17-18=0/985, 16-17=0/2304,

15-16=0/2592, 14-15=0/2592, 13-14=0/1736,

12-13=0/0

**WEBS** 2-18=-482/0, 1-18=0/1102, 2-17=0/897,

3-17=-116/0. 4-17=-574/0. 4-16=0/517. 5-16=-165/0, 6-15=-55/75, 6-14=-561/0 7-14=-151/32, 9-14=0/616, 9-13=-870/0,

10-13=-128/0, 11-13=0/1100

### NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- All bearings are assumed to be SP No.2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 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: 12-19=-7, 1-3=-67, 3-20=-67, 20-21=-67,

11-21=-69



May 2,2025

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

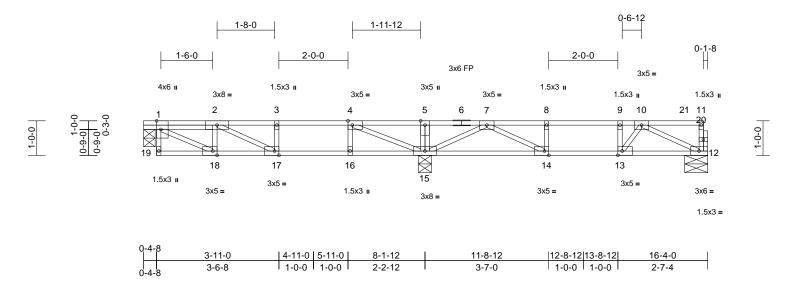
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F105	Floor	4	1	I73189754 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri May 02 06:19:45 ID:LGHbia9JHN1jb?YuS?W5UqzKxvU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.4

Plate Offsets (X, Y): [1:0-3-0,Edge], [4:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.55	Vert(LL)	-0.06	17-18	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.55	Vert(CT)	-0.08	17-18	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.31	Horz(CT)	-0.01	15	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 79 lb	FT = 11%F, 11%E

### LUMBER

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

### BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 1=0-4-0, 12=0-8-0, 15=0-4-8

Max Grav 1=358 (LC 3), 12=384 (LC 7),

15=870 (LC 1)

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

Tension

TOP CHORD 1-19=-2/2, 11-12=-78/0, 1-2=-575/0,

2-3=-772/0, 3-4=-772/0, 4-5=0/339, 5-7=0/336, 7-8=-772/0, 8-9=-772/0,

9-10=-772/0, 10-11=-6/0

18-19=0/0, 17-18=0/574, 16-17=0/772, **BOT CHORD** 

15-16=0/772, 14-15=0/514, 13-14=0/772,

12-13=0/622

**WEBS** 2-18=-247/0. 1-18=0/641. 3-17=-129/0.

4-16=0/81, 5-15=-203/0, 8-14=-153/0, 9-13=-199/0, 2-17=-13/220, 4-15=-966/0, 7-15=-740/0, 7-14=0/381, 10-12=-686/0,

10-13=0/290

### NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- All plates are 3x5 MT20 unless otherwise indicated.
- All bearings are assumed to be SP No.2
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 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: 12-19=-8, 1-3=-80, 3-7=-103, 7-9=-80,

9-11=-103



May 2,2025

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

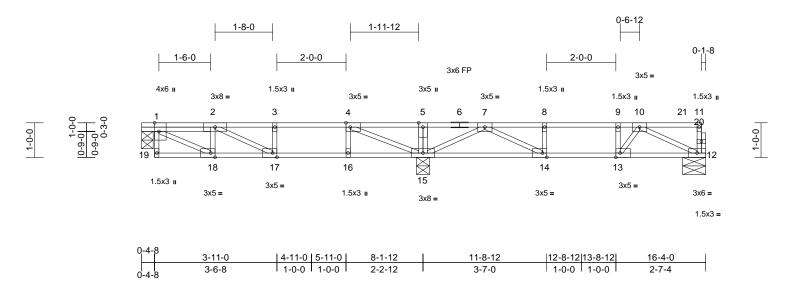
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job		Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
250	40256-02	F106	Floor	10	1	I73189755 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri May 02 06:19:45 

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Scale = 1:33.4

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	0.36	Vert(LL)	-0.05	17-18	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.39	Vert(CT)	-0.07	17-18	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	-0.01	15	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 79 lb	FT = 11%F, 11%E

LUMBER

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

BRACING

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

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

bracing.

REACTIONS (size) 1=0-4-0, 12=0-8-0, 15=0-4-8

Max Grav 1=279 (LC 3), 12=281 (LC 7),

15=620 (LC 1)

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

Tension

TOP CHORD 1-19=-1/2, 11-12=-52/0, 1-2=-445/0, 2-3=-562/0, 3-4=-562/0, 4-5=0/261,

5-7=0/260, 7-8=-605/0, 8-9=-605/0,

9-10=-605/0, 10-11=-4/0

BOT CHORD 18-19=0/0, 17-18=0/444, 16-17=0/562,

15-16=0/562, 14-15=0/407, 13-14=0/605,

12-13=0/468

**WEBS** 2-18=-188/0, 1-18=0/496, 5-15=-126/0,

2-17=-63/131, 3-17=-85/9, 4-16=0/68, 8-14=-122/0, 9-13=-182/0, 4-15=-694/0, 7-15=-570/0, 7-14=0/299, 10-12=-516/0,

10-13=0/265

### NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- All plates are 3x5 MT20 unless otherwise indicated.
- All bearings are assumed to be SP No.2 3)
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



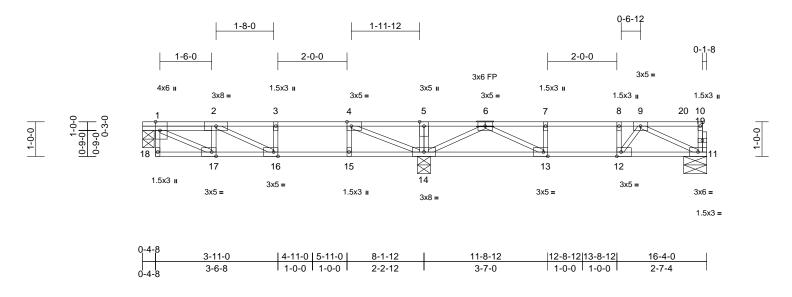
May 2,2025



Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F107	Floor	2	1	I73189756 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri May 02 06:19:45 ID:qSrzwwAx2h9aD974?i2K02zKxvT-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.4

Plate Offsets (X, Y): [1:0-3-0,Edge], [4:0-1-8,Edge], [12:0-1-8,Edge], [13:0-1-8,Edge], [16:0-1-8,Edge], [17:0-1-8,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	0.60	Vert(LL)	-0.05	16-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.09	16-17	>982	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.35	Horz(CT)	-0.02	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 79 lb	FT = 11%F, 11%E

### LUMBER

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

### BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 1=0-4-0, 11=0-8-0, 14=0-4-8

Max Grav 1=407 (LC 3), 11=299 (LC 7),

14=876 (LC 1)

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

Tension

TOP CHORD 1-18=-4/0, 10-11=-53/0, 1-2=-650/0,

2-3=-792/0, 3-4=-792/0, 4-5=0/338, 5-7=-681/335, 7-8=-681/0, 8-9=-681/0,

9-10=-4/0

17-18=0/0, 16-17=0/648, 15-16=0/792, **BOT CHORD** 

14-15=0/792, 13-14=0/487, 12-13=0/681,

11-12=0/509

**WEBS** 2-17=-276/0. 1-17=0/725. 5-14=-185/0.

2-16=-34/160, 3-16=-124/0, 4-15=0/89, 7-13=-129/0, 8-12=-218/0, 4-14=-1026/0, 6-14=-744/0, 6-13=0/294, 9-11=-563/0,

9-12=0/323

### NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- All plates are 3x5 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SP No.2
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 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: 11-18=-7, 1-7=-102, 7-10=-67



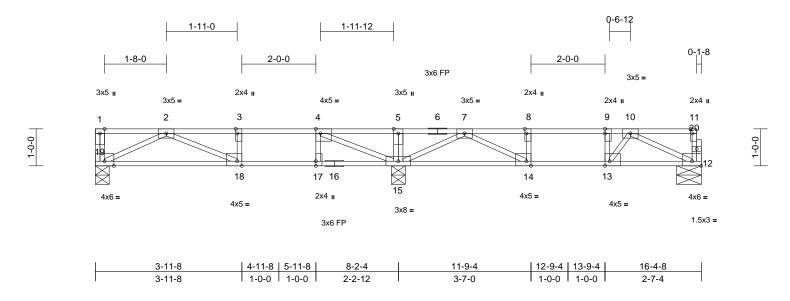
May 2,2025



Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F108	Floor	2	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri May 02 06:19:46 ID:mrzkKcBBaIPITSGT774o5TzKxvR-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:31.1

Plate Offsets (X, Y): [3:0-1-8.Edge	1. [4:0-1-8.Edae]. [8:0-1-8.Edae]. [9:0-1-	-8.Edgel. [11:0-1-8.Edgel. [12:Ed	ae.0-1-8]. [13:0-1-8.Edae]. [14:0-	1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.61	Vert(LL)	-0.09	18-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.13	18-19	>719	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.02	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 78 lb	FT = 11%F, 11%E

### LUMBER

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

### BRACING

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

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

bracing.

REACTIONS 12=0-8-0, 15=0-4-8, 19=0-4-8 (size) Max Grav

12=392 (LC 7), 15=870 (LC 1),

19=380 (LC 3)

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

Tension

TOP CHORD 1-19=-51/0, 11-12=-79/0, 1-2=0/0, 2-3=-880/0, 3-4=-880/0, 4-5=-21/304, 5-7=-22/302, 7-8=-805/0, 8-9=-805/0,

9-10=-805/0, 10-11=-6/0

**BOT CHORD** 18-19=0/630, 17-18=0/880, 15-17=0/880, 14-15=0/573, 13-14=0/805, 12-13=0/641 WEBS 5-15=-196/0, 3-18=-117/0, 4-17=0/79,

8-14=-148/0, 9-13=-215/0, 2-19=-701/0, 2-18=0/274, 4-15=-1016/0, 7-15=-735/0, 7-14=0/367, 10-12=-707/0, 10-13=0/315

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP No.2.
- This truss is designed in accordance with the 2018 3) International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1 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: 12-19=-8, 1-3=-80, 3-7=-103, 7-9=-80,

9-11=-103



May 2,2025

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

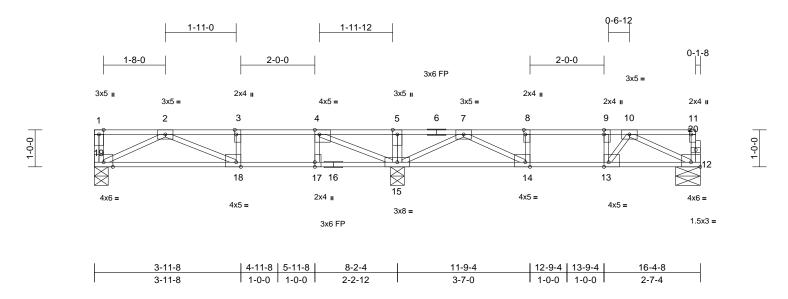
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F109	Floor	1	1	I73189758 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries. Inc. Fri May 02 06:19:46 ID:iE5UIIDR6wf0imQrEY6GBuzKxvP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:31.1

Plate Offsets (X, Y): [3:0-1-8,Edge], [4:0-1-8,Edge], [8:0-1-8,Edge], [9:0-1-8,Edge], [11:0-1-8,Edge], [12:Edge,0-1-8], [13:0-1-8,Edge], [14:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.71	Vert(LL)	-0.09	18-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.15	18-19	>629	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.02	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 78 lb	FT = 11%F, 11%E

### LUMBER

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

### BRACING

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

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

bracing.

REACTIONS (size) 12=0-8-0, 15=0-4-8, 19=0-4-8 Max Grav 12=356 (LC 7), 15=878 (LC 1),

19=429 (LC 3)

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

Tension

TOP CHORD 1-19=-63/0, 11-12=-63/0, 1-2=0/0,

2-3=-920/0, 3-4=-920/0, 4-5=-17/308, 5-7=-18/306, 7-8=-804/0, 8-9=-804/0,

9-10=-804/0, 10-11=-5/0

18-19=0/704, 17-18=0/920, 15-17=0/920, **BOT CHORD** 14-15=0/598, 13-14=0/804, 12-13=0/604 WEBS 5-15=-174/0, 3-18=-112/0, 4-17=0/91,

8-14=-144/0, 9-13=-256/0, 2-19=-784/0, 2-18=0/236, 4-15=-1063/0, 7-15=-769/0, 7-14=0/337, 10-12=-667/0, 10-13=0/377

### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP No.2.
- This truss is designed in accordance with the 2018 3) International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1 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: 12-19=-8, 1-8=-99, 8-11=-80

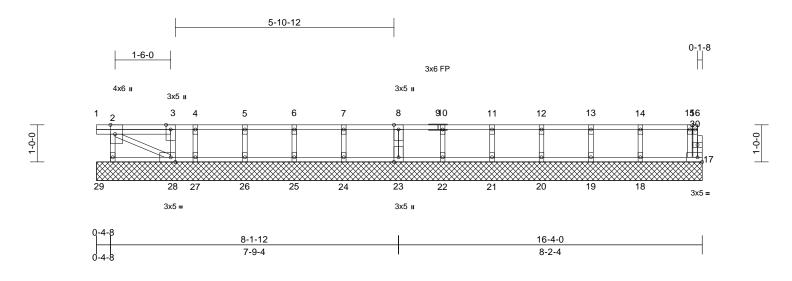


May 2,2025

Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F110	Floor Supported Gable	1	1	I73189759 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries. Inc. Fri May 02 06:19:46 

Page: 1



Scale = 1:31.1

Plate Offsets (X, Y	(): [2:0-3-0,Edge],	[28:0-1-8,Edge]
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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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 71 lb	FT = 11%F, 11%E

### LUMBER

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

### **BRACING**

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

### REACTIONS (size)

17=16-4-0, 18=16-4-0, 19=16-4-0, 20=16-4-0, 21=16-4-0, 22=16-4-0, 23=16-4-0, 24=16-4-0, 25=16-4-0, 26=16-4-0, 27=16-4-0, 28=16-4-0,

29=16-4-0

17=54 (LC 1), 18=105 (LC 1), Max Grav 19=96 (LC 1), 20=98 (LC 1), 21=100 (LC 1), 22=89 (LC 1), 23=99 (LC 1), 24=106 (LC 1), 25=94 (LC 1), 26=103 (LC 1), 27=65 (LC 1), 28=78 (LC 1), 29=94

(LC 1)

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

Tension

TOP CHORD 2-29=-90/0, 16-17=0/30, 1-2=0/0, 2-3=-15/0, 3-4=-13/0, 4-5=-13/0, 5-6=-13/0, 6-7=-13/0, 7-8=-13/0, 8-10=-13/0, 10-11=-13/0,

11-12=-13/0, 12-13=-13/0, 13-14=-13/0, 14-15=-13/0. 15-16=0/0

BOT CHORD 28-29=0/0, 27-28=0/13, 26-27=0/13,

25-26=0/13, 24-25=0/13, 23-24=0/13, 22-23=0/13, 21-22=0/13, 20-21=0/13, 19-20=0/13, 18-19=0/13, 17-18=0/13 3-28=-74/0, 2-28=0/14, 8-23=-90/0,

4-27=-61/0, 5-26=-93/0, 6-25=-86/0, 7-24=-96/0, 10-22=-81/0, 11-21=-91/0, 12-20=-89/0, 13-19=-87/0, 14-18=-95/0,

15-17=-81/0

### **NOTES**

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing. 2)
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- All bearings are assumed to be SP No.2 . 5)
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 2,2025

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

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



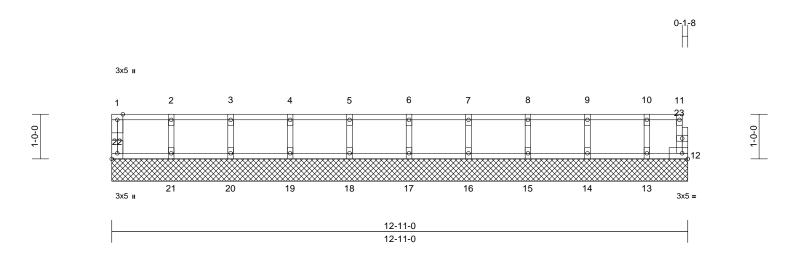
Edenton, NC 27932

WEBS

Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F111	Floor Supported Gable	2	1	I73189760 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri May 02 06:19:46 

Page: 1



Scale = 1:25.8

Plate Offsets	(X,	Y):	[22:Edge,0-	1-8
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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	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	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 52 lb	FT = 11%F, 11%E

### LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 12=12-11-0, 13=12-11-0, 14=12-11-0, 15=12-11-0, 16=12-11-0, 17=12-11-0,

18=12-11-0, 19=12-11-0, 20=12-11-0, 21=12-11-0,

22=12-11-0

12=26 (LC 1), 13=94 (LC 1), Max Grav 14=122 (LC 1), 15=116 (LC 1),

16=118 (LC 1), 17=117 (LC 1), 18=117 (LC 1), 19=117 (LC 1), 20=117 (LC 1), 21=118 (LC 1),

22=47 (LC 1)

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

Tension

TOP CHORD 1-22=-44/0, 11-12=-21/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0,

7-8=-6/0, 8-9=-6/0, 9-10=-6/0, 10-11=-6/0 21-22=0/6, 20-21=0/6, 19-20=0/6, 18-19=0/6,

17-18=0/6, 16-17=0/6, 15-16=0/6, 14-15=0/6,

13-14=0/6. 12-13=0/6

WEBS 2-21=-106/0, 3-20=-107/0, 4-19=-107/0,

5-18=-107/0, 6-17=-107/0, 7-16=-107/0, 8-15=-106/0, 9-14=-110/0, 10-13=-88/0

### NOTES

BOT CHORD

- 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.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 2,2025

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

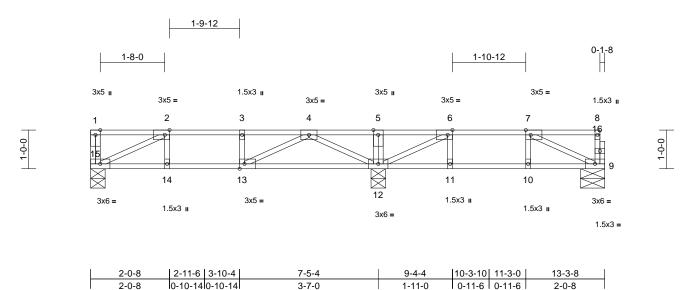
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F112	Floor	6	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries. Inc. Fri May 02 06:19:46 ID: IE 5 U IIDR 6 w f 0 im Qr EY 6 GBuz KxvP-R f C? Ps B70 Hq 3 NSgPqn L 8 w 3 u ITX b G K W r CDoi 7 J 4 z J C? f S G M S G

Page: 1



Scale = 1:29.8

Plate Offsets (X, Y): [3	[2:0-1-8,Edge], [6:0-	1-8,Edge], [7:0-1-8,	Edge], [13:0-1-8,Edge]
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		i –		1	-						i	
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	-0.04	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(CT)	-0.06	12-13	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	9	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 64 lb	FT = 11%F, 11%E

### LUMBER

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

### BRACING

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

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

bracing.

REACTIONS (size)

9=0-7-8, 12=0-4-8, 15=0-4-8 9=231 (LC 4), 12=649 (LC 9), Max Grav

15=299 (LC 10)

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

Tension

TOP CHORD 1-15=-58/9, 8-9=-71/0, 1-2=0/0, 2-3=-546/0,

3-4=-546/0, 4-5=0/310, 5-6=0/310,

6-7=-337/18, 7-8=-5/0

**BOT CHORD** 14-15=0/546, 13-14=0/546, 12-13=0/370, 11-12=-18/337, 10-11=-18/337, 9-10=-18/337

5-12=-134/0, 6-12=-569/0, 7-9=-368/22, 4-12=-622/0, 2-15=-603/0, 4-13=0/265,

2-14=0/52, 3-13=-114/0, 6-11=0/52,

7-10=-27/3

### NOTES

**WEBS** 

- 1) Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP No.2 .
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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



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

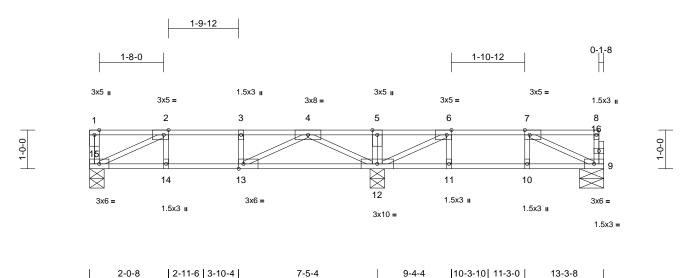
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	Install 4 Magnolia Acres-Crawl-Taylor EA SP FL GRH
25040256-02	F113	Floor	4	1	I73189762 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri May 02 06:19:46 ID:iE5UIIDR6wf0imQrEY6GBuzKxvP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:29.8

Plate Offsets (X, Y): [2:0-1-8,Edge], [6:0-1-8,Edge], [7:0-1-8,Edge], [13:0-1-8,Edge]

2-0-8

0-10-14 0-10-14

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.95	Vert(LL)	-0.04	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.95	Vert(CT)	-0.22	12-13	>405	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.01	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 64 lb	FT = 11%F, 11%E

1-11-0

0-11-6 0-11-6

2-0-8

LUMBER

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 2x4 SP No.1(flat) 2x4 SP No.3(flat) WEBS 2x4 SP No.3(flat) OTHERS

BRACING

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

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

bracing.

REACTIONS (size) 9=0-7-8, 12=0-4-8, 15=0-4-8

Max Uplift 9=-111 (LC 3)

Max Grav 9=90 (LC 4), 12=1283 (LC 9),

15=544 (LC 10)

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

TOP CHORD 1-15=0/75, 8-9=-112/0, 1-2=0/0, 2-3=-1333/0,

3-4=-1333/0, 4-5=0/1222, 5-6=0/1222,

6-7=0/476, 7-8=-8/0

**BOT CHORD** 14-15=0/1333, 13-14=0/1333, 12-13=0/462, 11-12=-476/0. 10-11=-476/0. 9-10=-476/0 WEBS 5-12=-49/33, 6-12=-1071/0, 7-9=0/531,

4-12=-1739/0, 2-15=-1474/0, 4-13=0/1044,

2-14=0/219, 3-13=-608/0, 6-11=0/140,

7-10=-130/0

### NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- All bearings are assumed to be SP No.1.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1 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.
- 7) CAUTION, Do not erect truss backwards.

3-7-0

### LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00,

Plate Increase=1.00 Uniform Loads (lb/ft)

Vert: 9-15=-8, 1-8=-80 Concentrated Loads (lb)

Vert: 3=-739

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Page: 1

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

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



### Symbols

## PLATE LOCATION AND ORIENTATION



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



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

₹

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

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

### PLATE SIZE

4 × 4

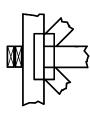
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

### **BEARING**



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

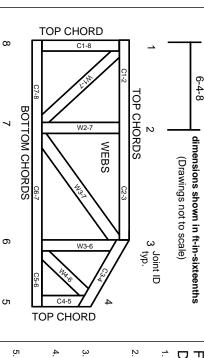
### Industry Standards: ANSI/TPI1: National I

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

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

DSB-22:

## Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

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

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### MiTek®



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

# ▲ General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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