

Maronda Systems

Maronda Systems 4005 Maronda Way Sanford FL 32771 (407) 321-0064 Fax (407) 321-3913

Engineer/Architect of Record: Carl Brown P.E. 258 Southhall Lane, Suite 200 Maitland, FL 32751 FL PE # 56126

Engineer/Architect of Record: Luis Jose Burgos Pasado, P.E. 258 Southhall Lane, Suite 200 Maitland, FL 32751 FL PE # 92724

Engineer/Architect of Record: Scott A Lewkowski P.E. 258 Southhall Lane, Suite 200 Maitland, FL 32751 FL PE # 78750

Design Criteria: TPI Design: Matrix Analysis MiTek software

PLAN JOB #	LOT	ADDRESS	DIV/SUB	MODEL
9FC00101	1-1	TBD STREET A LAKE CITY, FL 32024 PARCEL #15-45-16-03002-002	JAW/9FC	WLWF42B/RH

WILLOW F BASE

This structure was designed in accordance with, and meets the requirements of TPI standards and the FLORIDA BUILDING CODE 8thTH EDITION (2023) for 160 M.P.H. Wind Zone. Exposure C Truss loading is in accordance with ASCE 7-22. These trusses are designed for an enclosed building. With risk category II.

The Truss Engineering package for the above referenced site was generated by the Truss Designer/Architect/MiTek.

I, the Delegated Truss Engineer for the above referenced lot Have reviewed the package and confirmed that it matches the physical and structural Parameters found on the set of permit drawings.

Truss ID	Run Date	Drawing Reviewed	Truss ID	Run Date	Drawing Reviewed	No. of Eng. Dwgs:	32
Layout	10/16/23					Roof Loads-	
REACTION SUMMARY	10/16/23					TC Live:	16.0 psf
MII web plate	2017					TC Dead:	7.0 psf
OR1	2009					BC Live:	0.0 psf
ST-4ply Screw	2012					BC Dead:	10.0 psf
VC1	2009					Total	33.0 psf
TN1	2009					DurFac- Lbr:	1.25
ST-Rep01A1	2014					DurFac- Plt:	1.25
MMII-PIGGY-PERP	2019					O.C. Spacing:	24.0"
H12	10/16/23					Floor Loads-	
H13	10/16/23					TC Live:	40.0 psf
H13S	10/16/23					TC Dead:	10.0 psf
H14	10/16/23					BC Live:	0.0 psf
H14S	10/16/23					BC Dead:	5.0 psf
H15	10/16/23					Total	55.0 psf
H15S	10/16/23					DurFac- Lbr:	1.00
H16	10/16/23					DurFac- Plt:	1.00
H16S	10/16/23					O.C. Spacing:	24.0"
HGR11	10/16/23						
J15	10/16/23						
J35	10/16/23						
J55	10/16/23						
J75	10/16/23						
J95	10/16/23						
JGR95	10/16/23						
T18	10/16/23						
V01	10/16/23						
V11	10/16/23						
V13	10/16/23						
V14	10/16/23						
VG10	10/16/23						
VG12	10/16/23						
			INV #	DESC	QNTY		
			050060.0110	JUS26			
			050060.0047	THD28			
			050060.0049	THD28-2			
			050060.0106	HUS26			
			050060.0272	HUS179			
			050060.0058	HJC26	4		
			050060.0312	HJC26-SK60			
			SEAT PLATES		115		
			FLOOR SEAT PLATES				



258 Southhall Lane, Suite 200
Maitland, FL 32751

O: 321-972-0491 F: 407-880-2304
Certificate Of Authorization No. 9161

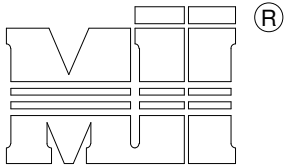
☐ CARL A. BROWN, PE - FL # 56126
☐ LUIS JOSE BURGOS PASADO, PE - FL # 92724
☐ SCOTT A. LEWKOWSKI, PE - FL # 78750



Signing Date: 07/02/2024

6-27-24

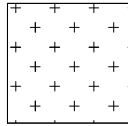
TO THE BEST OF THE ENGINEER'S KNOWLEDGE AND UNDERSTANDING, THE STRUCTURAL PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE SIGNED AND SEALED FOR THE STRUCTURAL PORTION OF THIS DRAWING.



MiTek USA, Inc.

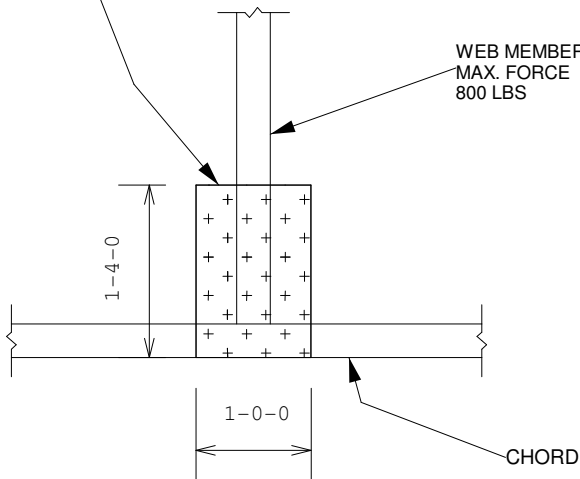
 ENGINEERED BY
TRENCO
 A MiTek Affiliate

1. ALL MATERIAL IS 2x4
2. THIS DETAIL IS APPLICABLE FOR DESIGNS WITH DOLS. OF 1.15 OR 1.25 AND LUMBER SPECIES SP, DF, HF, OR SPF.
3. DETAIL SHALL BE USED FOR CONDITIONS OF A MISSING OR LOOSE CONNECTOR PLATE ONLY.
4. CHORD MATERIAL IS CONTINUOUS THROUGH JOINT, THERE IS NO MAXIMUM CHORD FORCE AND NO SPLICE PERMITTED.
5. REFER TO MITTEK DESIGN DRAWING FOR WEB FORCES.

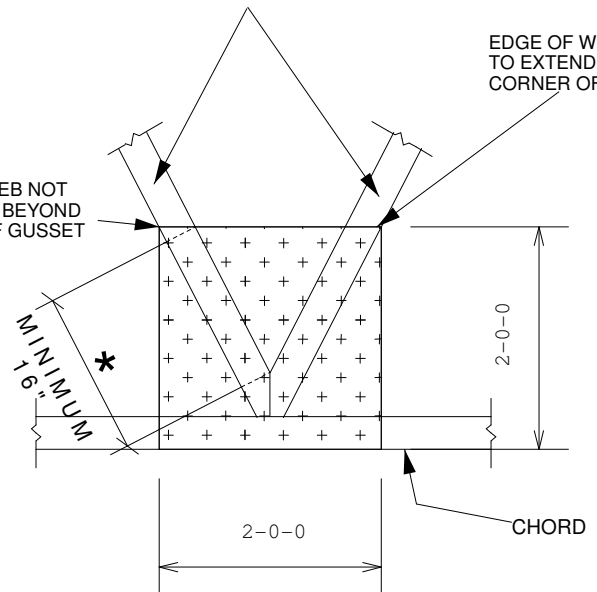


ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1) TO EACH FACE OF TRUSS WITH (0.131" X MIN 2.5") NAILS IN 3 ROWS SPACED @ 4" O.C. NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE FOR A NET 2" O.C. SPACING IN THE TRUSS. USE 2" MEMBER END DISTANCE.

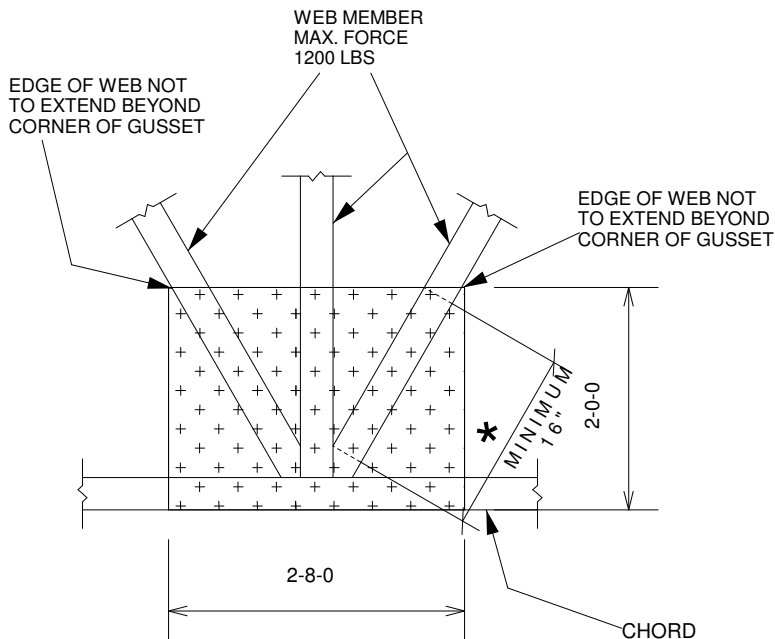
 EDGE OF WEB NOT
 TO EXTEND BEYOND
 CORNER OF GUSSET

 WEB MEMBER
 MAX. FORCE
 800 LBS

 WEB MEMBER
 MAX. FORCE
 1200 LBS

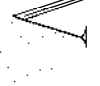
 EDGE OF WEB NOT
 TO EXTEND BEYOND
 CORNER OF GUSSET

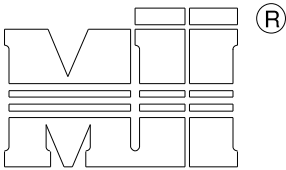
 EDGE OF WEB NOT
 TO EXTEND BEYOND
 CORNER OF GUSSET

 EDGE OF WEB NOT
 TO EXTEND BEYOND
 CORNER OF GUSSET

 WEB MEMBER
 MAX. FORCE
 1200 LBS

 EDGE OF WEB NOT
 TO EXTEND BEYOND
 CORNER OF GUSSET


* MEASUREMENT TAKEN AT POINTS WHERE WEB ACHIEVES FULL MEMBER DEPTH (AS MEASURED PERPENDICULAR TO WEB'S SAW-MILLED EDGE)



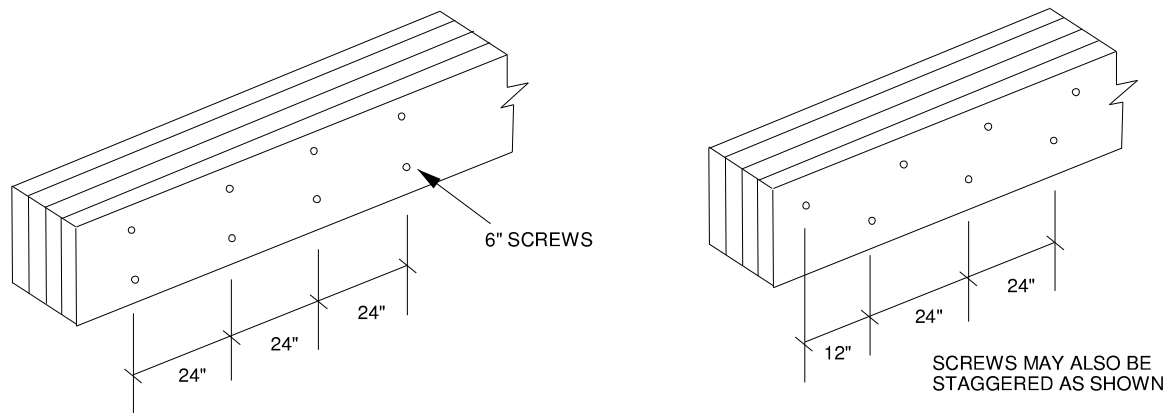


MiTek USA, Inc.

Four ply girder trusses are to be connected together using the nailing or screw schedule provided by Mitek 20/20 software. In addition to the nailing typically specified, 1/2" dia. bolts are sometimes specified throughout certain chords as indicated on the truss design drawing. In lieu of these bolts, the following wood screws may be used: USP WS6, MiTek Trusslok 6", or equivalent.

These screws are to be installed in two rows spaced 24" o.c. in 2x 6 and larger chords (use one row in 2x 4 chords) as shown in the detail below.

These connections are intended to provide clamping force to aid in allowing the four ply assembly to act as a unit and are not included in the calculation of ply to ply load transfer.

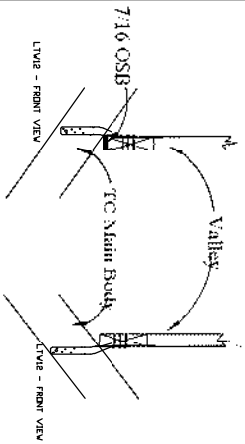


Please note that screws are not required from the back face. However, it is vitally important that the plies are tightly clamped together during the installation of the screws to prevent gaps between the plies.

For trusses where screws are specified for the ply to ply connection instead of nails, the bolts called in the connection notes may be omitted.

NON-BEVELED
BUT LIM. JOINTS

NON-BEVELED
BOTTOM CHORD
NO-SHEATHING



VALLEY CONNECTIONS

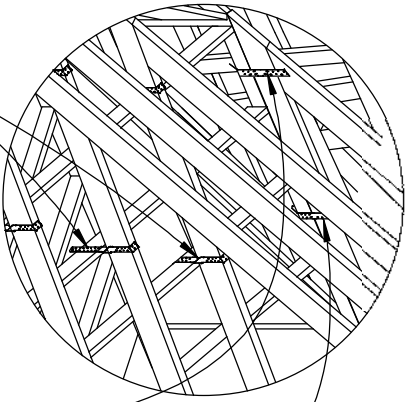
(ELEMENTS NOT SHOWN FOR CLARITY)

VALLEY KAT

Notes: Valley trusses can be installed either a top main body roof trusses or a top 7/16 sheathing. Connections of strapping remain the same as illustrated. Valley kats are required when a top main body truss option is utilized.

See truss engineering and standard details for truss bracing requirements.

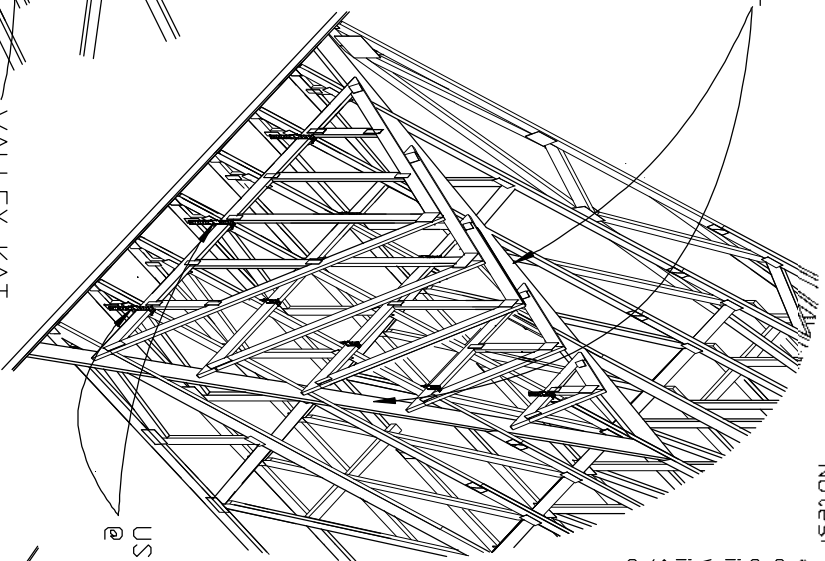
Main body trusses 2'OC perpendicular to valley is considered to be continuous bearing. If sheathing exists under valleys, Sheathing is not required to be continuous See NON BEVELED BOTTOM CHORD Detail



USP / MST12
@ 4'D.C. TYP

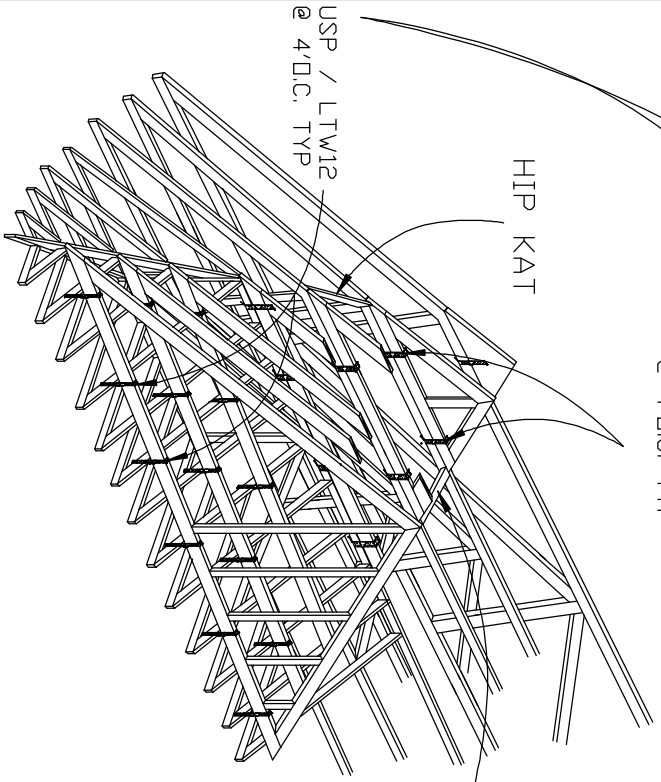
HIP KAT

VALLEY KAT



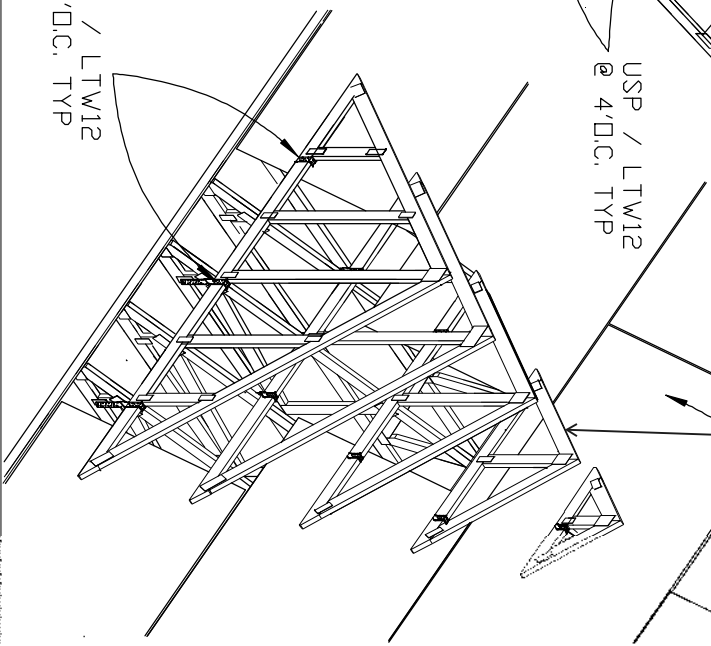
USP / LTM12
@ 4'D.C. TYP

7/16 Sheathing



USP / LTM12
@ 4'D.C. TYP

USP / LTM12
@ 4'D.C. TYP



REVISIONS

Maronda Homes

12111-100-1 100% MARONDA HOMES, INC. 100% MARONDA HOMES, INC.

TRUSS DETAILS

VALLEY CONNECTIONS

DRAWN BY: J.FESSIA

RELEASE DATE: 12/7/09

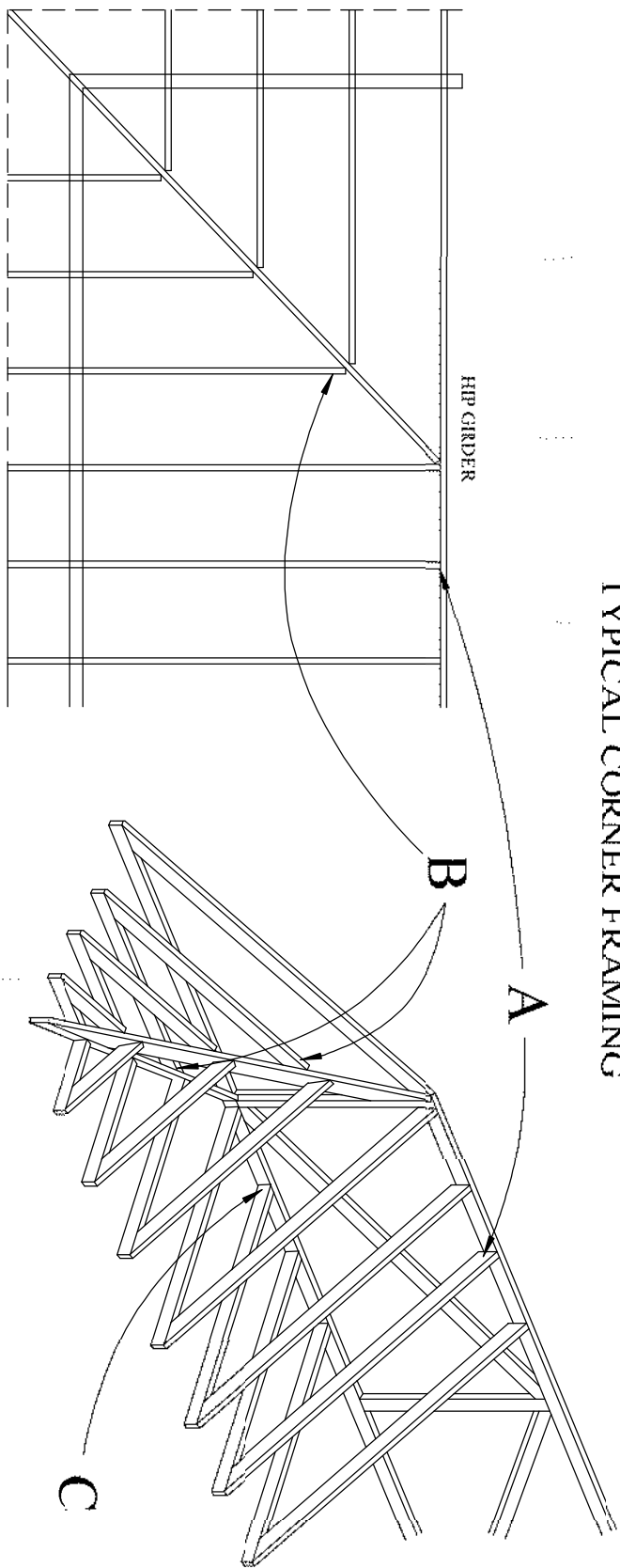
SHEET

VCI

100% MARONDA HOMES, INC.

TOE-NAILED CONNECTIONS AT BEARING LOCATIONS

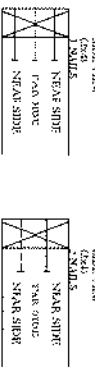
TYPICAL CORNER FRAMING



90 DEGREE ANGLE/SQUARE CUT

Connection at A

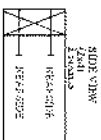
Connection at C



10d (0.131" x 3") nails

45 DEGREE ANGLE / SQUARE CUT

Connection at B



10d (0.131" x 3") nails

CONNECTION VALUES:

	GRAVITY	UPLIFT
(3)10D	320	385
(3)16D	355	462

Wind loading: Basic wind speed is 160 MPH U.T. (124 ASD)

Exposure category B or C

Occupancy category II

4.8 psf top chord dead load

4.2 psf bottom chord dead load

25' roof height

INTERIOR gable end zone

Enclosed building (Cond. I)

PRR-10, TPI-07, ASCE 7-10

Duration of load is 1.60

L = NAIL LENGTH

TRUSS DETAILS

TOE-NAILED CONNECTIONS

DRAWN BY:

GARAGE

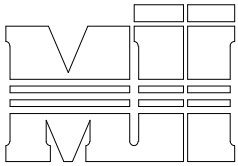
RELEASE DATE: 2/9/09

Maronda Homes

1001 201 60th Ave NW, Suite 200, Atlanta, GA 30328

SHEET

TN1



MiTek USA, Inc.

®

TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187
38	57	42"	3169	4754	2900	4350	2451	3677	2511	3767
44	66	48"	3657	5485	3346	5019	2829	4243	2898	4347

* DIVIDE EQUALLY FRONT AND BACK

ATTACH 2x SCAB OF THE SAME SIZE AND GRADE AS THE BROKEN MEMBER TO EACH
FACE OF THE TRUSS (CENTER ON BREAK OR SPLICE) WITH 10d NAILS

(TWO ROWS FOR 2x4, THREE ROWS FOR 2x6) SPACED 4" O.C. AS SHOWN. (.131"dia. x 3")

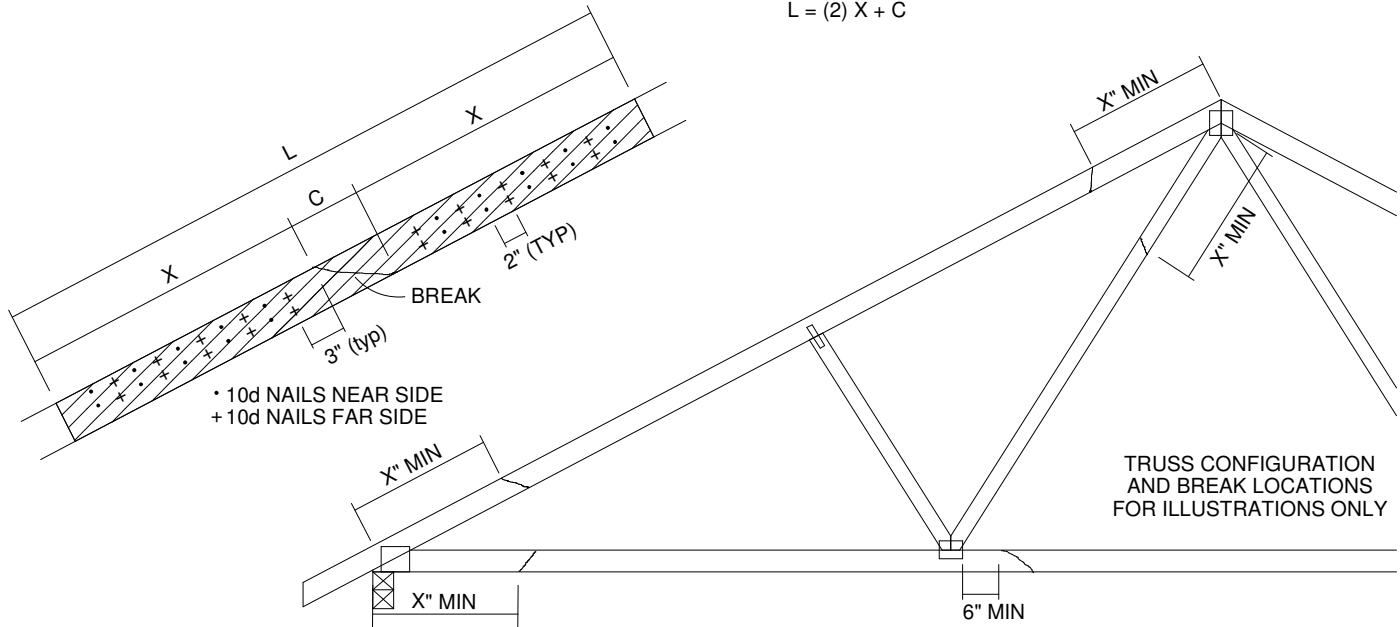
STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 0-2-0 O.C.

SPACING IN THE MAIN MEMBER. USE A MIN. 0-3-0 MEMBER END DISTANCE.

THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS)

THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:

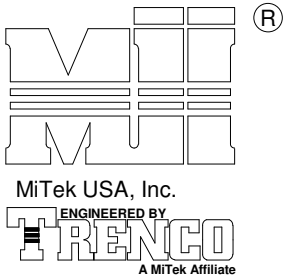
$$L = (2) X + C$$

THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY
PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

DO NOT USE REPAIR FOR JOINT SPLICES

NOTES:

1. THIS REPAIR DETAIL IS TO BE USED ONLY FOR THE APPLICATION SHOWN. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
4. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x ORIENTATION ONLY.
6. THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.



MAX MEAN ROOF HEIGHT = 30 FEET
BUILDING CATEGORY II
WIND EXPOSURE B or C
WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 100 MPH (MWFRS)
WIND DESIGN PER ASCE 7-10, ASCE 7-16 125 MPH (MWFRS)
DURATION OF LOAD INCREASE
FOR WIND LOADS: 1.60

DETAIL IS NOT APPLICABLE FOR TRUSSES
TRANSFERING DRAG LOADS (SHEAR TRUSSES).
ADDITIONAL CONSIDERATIONS BY BUILDING
ENGINEER/DESIGNER ARE REQUIRED.

THIS DETAIL SHALL BE ONLY USED FOR RESISTING A VERTICAL WIND UPLIFT
UP TO 140 LBS MAXIMUM AT EACH CONNECTION POINT. BUILDING DESIGNER
IS RESPONSIBLE FOR THE LOAD EXCEEDING THIS LIMITATION AND/OR IN
OTHER DIRECTIONS.

**PIGGY-BACK TRUSS
(CROSS-SECTION VIEW)**

Refer to actual truss design drawing for
additional piggyback truss information.

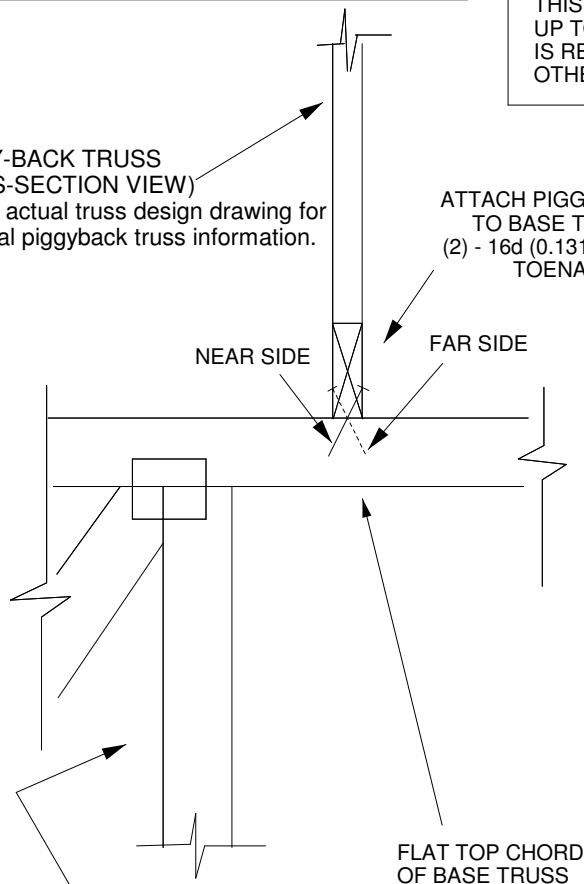
ATTACH PIGGYBACK TRUSS
TO BASE TRUSS WITH
(2) - 16d (0.131" X 3.5") NAILS
TOENAILED.

NEAR SIDE

FAR SIDE

NOTES FOR TRUSS:

1. THIS DETAIL IS VALID FOR ONE-PLY PIGGYBACK TRUSS ONLY;
2. THE CHORD MEMBER OF PIGGYBACK AND BASE TRUSSES
MUST BE SOUTHERN PINE OR DOUGLAS FIR-LARCH LUMBER;
3. THE SPACING OF PIGGYBACK TRUSSES AND BASE TRUSSES
IS 2 FT OR LESS;
4. THE PIGGYBACK TRUSSES SHOULD BE PERPENDICULAR TO
BASE TRUSSES.
5. PIGGYBACK TRUSS MAY NOT CANTILEVER OVER BASE TRUSS
OR HAVE AN OVERHANG WHICH WILL CREATE A HIGHER UPLIFT
AT CONNECTING POINT.



BASE TRUSS (SIDE VIEW)

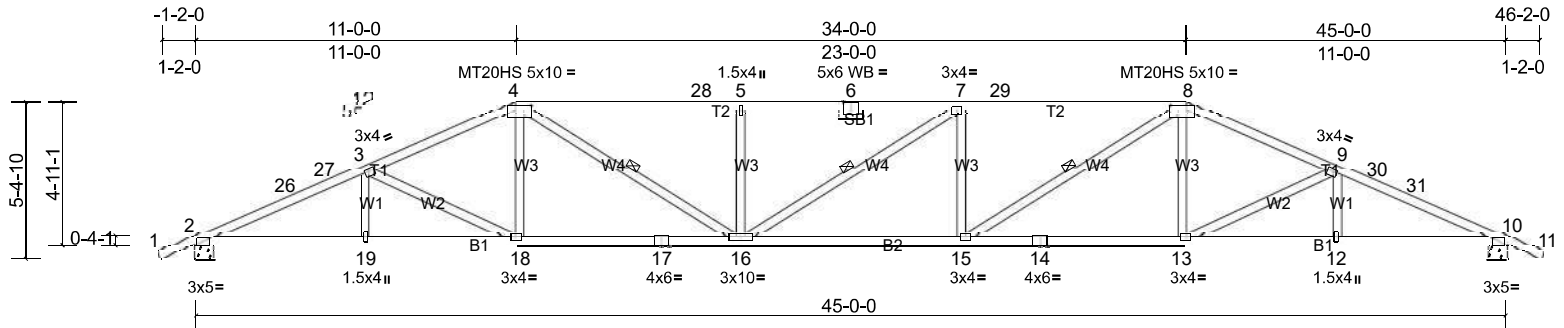
Refer to actual truss design drawing
for additional base truss information.

NOTES FOR TOE-NAIL:

1. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES
WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE
NAIL FROM THE MEMBER END AS SHOWN.
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF
NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING
OF THE WOOD.

Page: 1

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Scale = 1:79.2

Plate Offsets (X, Y): [2:0-0-6,Edge], [4:0-6-8,0-2-0], [6:0-3-0,Edge], [8:0-6-8,0-2-0], [10:0-0-6,Edge]

[illegible]

LUMBER

TOP CHORD	2x4 SP No.2 *Except* T2:2x4 SP No.1D
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 4-16, 7-16, 8-15

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1541/0-7-10, (min. 0-1-13), 10=1541/0-7-10, (min. 0-1-13)

Max Horiz 2=-157 (LC 17)
Max Uplift 2=-1026 (LC 12), 10=-1026 (LC 13)

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

TOP CHORD 2-26=-3385/2133, 26-27=-3338/2134, 3-27=-3314/2142, 3-4=-2960/2002, 4-28=-3569/2574, 5-28=-3569/2574, 5-6=-3569/2574, 6-7=-3569/2574, 7-29=-3568/2574, 8-29=-3568/2574, 8-9=-2960/2002, 9-30=-3314/2143, 30-31=-3338/2135, 10-31=-3385/2134

BOT CHORD 2-19=-2004/3086, 18-19=-2004/3086, 17-18=-1662/2698, 16-17=-1662/2698, 15-16=-2330/3568, 14-15=-1632/2698,
13-14=-1632/2698, 12-13=-1855/3085, 10-12=-1855/3085

WEBS 4-18=-115/419, 4-16=-813/1104, 5-16=-374/507, 7-16=-324/325, 7-15=-415/513, 8-15=-813/1102, 8-13=-115/419,
3-18=-461/457, 9-13=-460/458

NOTES

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

2) Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDF=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 40-4-6 to 46-2-11 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) All plates are MT20 plates unless otherwise indicated.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

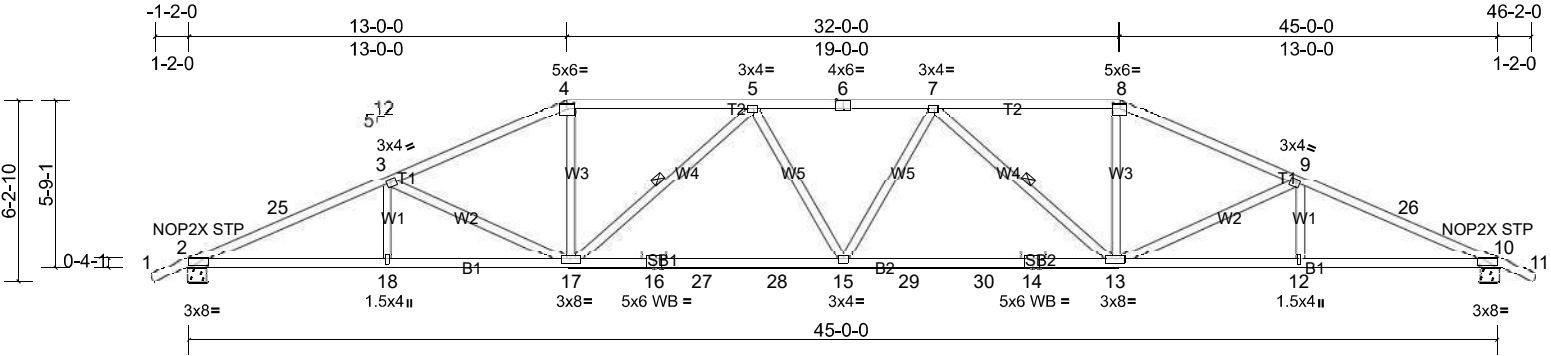
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00" tall by 2'-00"-00" wide will fit between the bottom chord and any other members.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1026 lb uplift at joint 10 and 1026 lb uplift at joint 2.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	H13	Hip	1	1	Job Reference (optional)

Maronda Homes, Sanford, user



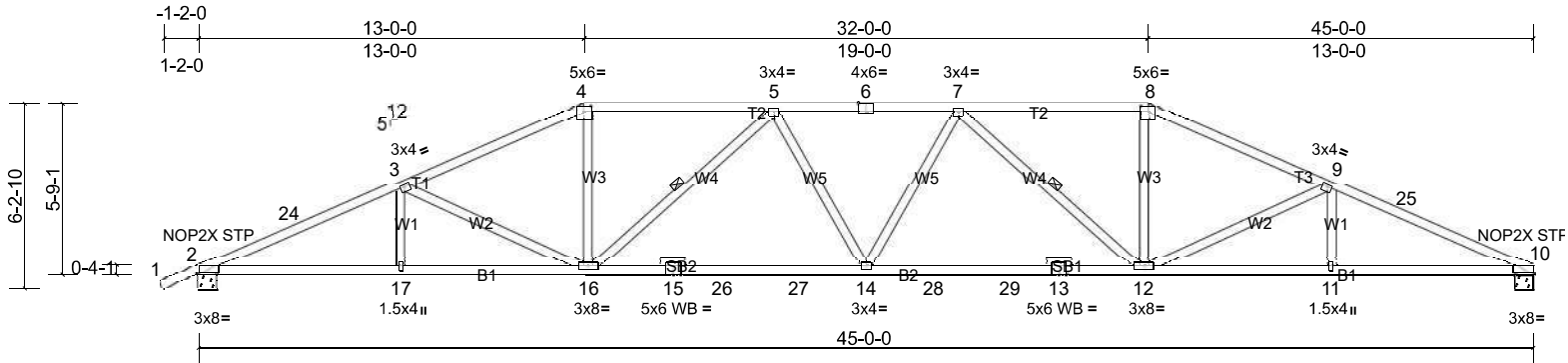
Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	H13S	Hip	1	1	Job Reference (optional)

Maronda Homes, Sanford, user

Run: 8.72 S Aug 20 2023 Print: 8.720 S Aug 20 2023 MiTek Industries, Inc. Mon Oct 16 15:31:10

Page: 1

ID:rJxcSo1k58XNg7NXstQCeuZMD6q-pyg7?XzdTZ8vEFT9Jlp?SGQ??rSw5V4znXk22ySywm



Scale = 1:77.6

Plate Offsets (X, Y): [2:0-8-0,0-0-6], [4:0-3-0,0-2-4], [6:0-3-0,Edge], [8:0-3-0,0-2-4], [10:0-8-0,0-0-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.76	Vert(LL)	0.53	14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.81	12-14	>670	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.19	10	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 226 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1D
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING

TOP CHORD
BOT CHORD
WEBS

Structural wood sheathing directly applied or 2-5-0 oc purlins.
Rigid ceiling directly applied or 4-7-6 oc bracing.
1 Row at midpt 5-16, 7-12

REACTIONS (lb/size) 2=1542/0-7-10, (min. 0-1-12), 10=1484/0-7-10, (min. 0-1-11)
Max Horiz 2=198 (LC 12)
Max Uplift 2=-1023 (LC 12), 10=-958 (LC 13)
Max Grav 2=1728 (LC 2), 10=1681 (LC 2)

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

TOP CHORD 2-24=-3778/2098, 3-24=-3749/2109, 3-4=-3202/1827, 4-5=-2935/1749, 5-6=-3564/2109, 6-7=-3564/2109,
7-8=-2937/1754, 8-9=-3205/1833, 9-25=-3740/2127, 10-25=-3788/2115
BOT CHORD 2-17=-2002/3461, 16-17=-2002/3461, 15-16=-1889/3450, 15-26=-1889/3450, 26-27=-1889/3450, 14-27=-1889/3450,
14-28=-1880/3451, 28-29=-1880/3451, 13-29=-1880/3451, 12-13=-1880/3451, 11-12=-1852/3470, 10-11=-1852/3470
WEBS 3-16=-609/585, 4-16=-399/998, 8-12=-400/999, 9-12=-617/600, 5-16=-757/553, 5-14=-133/381, 7-14=-131/381,
7-12=-756/551

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 38-2-2 to 45-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 958 lb uplift at joint 10 and 1023 lb uplift at joint 2.

LOAD CASE(S) Standard

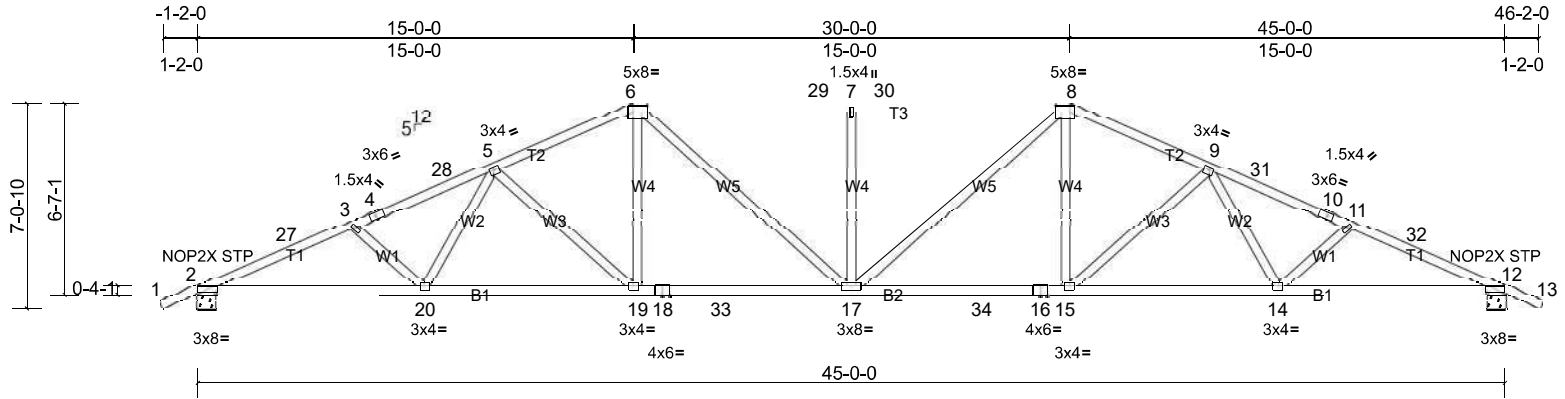
Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	H14	Hip	1	1	Job Reference (optional)

Maronda Homes, Sanford, user

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ID:E25wo2xHgc0E9lxeXSgXmKzMDaf-LI7knBy?iG02cVuzmbImv2tpHR7c8amxI7oAWcySywn



Scale = 1:79.3

Plate Offsets (X, Y): [2:0-8-0,0-0-10], [6:0-5-12,0-2-8], [8:0-5-12,0-2-8], [12:0-8-0,0-0-10]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.89	Vert(LL)	0.47	17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.66	17-19	>821	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.18	12	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 238 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1D *Except* B2:2x4 SP No.2
WEBS 2x4 SP No.2

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied.
Rigid ceiling directly applied or 4-7-8 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1541/0-7-10, (min. 0-1-12), 12=1541/0-7-10, (min. 0-1-12)
Max Horiz 2=208 (LC 12)
Max Uplift 2=-1020 (LC 12), 12=-1020 (LC 13)
Max Grav 2=1732 (LC 2), 12=1732 (LC 2)

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

TOP CHORD 2-27=-3808/2151, 3-27=-3777/2159, 3-4=-3658/2000, 4-28=-3622/2006, 5-28=-3609/2014, 5-6=-3000/1687, 6-29=-3105/1845, 7-29=-3105/1845, 7-30=-3105/1845, 8-30=-3105/1845, 8-9=-3000/1687, 9-31=-3609/2014, 10-31=-3622/2006, 10-11=-3657/2000, 11-32=-3777/2159, 12-32=-3808/2151
BOT CHORD 2-20=-2077/3498, 19-20=-1710/3120, 18-19=-1330/2750, 18-33=-1330/2750, 17-33=-1330/2750, 17-34=-1249/2750, 16-34=-1249/2750, 15-16=-1249/2750, 14-15=-1536/3120, 12-14=-1869/3498
WEBS 6-19=-250/634, 6-17=-454/559, 7-17=-398/543, 8-17=-454/559, 8-15=-250/634, 3-20=-247/371, 5-20=-184/459, 5-19=-511/512, 9-15=-511/512, 9-14=-185/459, 11-14=-247/371

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 36-4-6 to 46-2-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1020 lb uplift at joint 12 and 1020 lb uplift at joint 2.

LOAD CASE(S) Standard

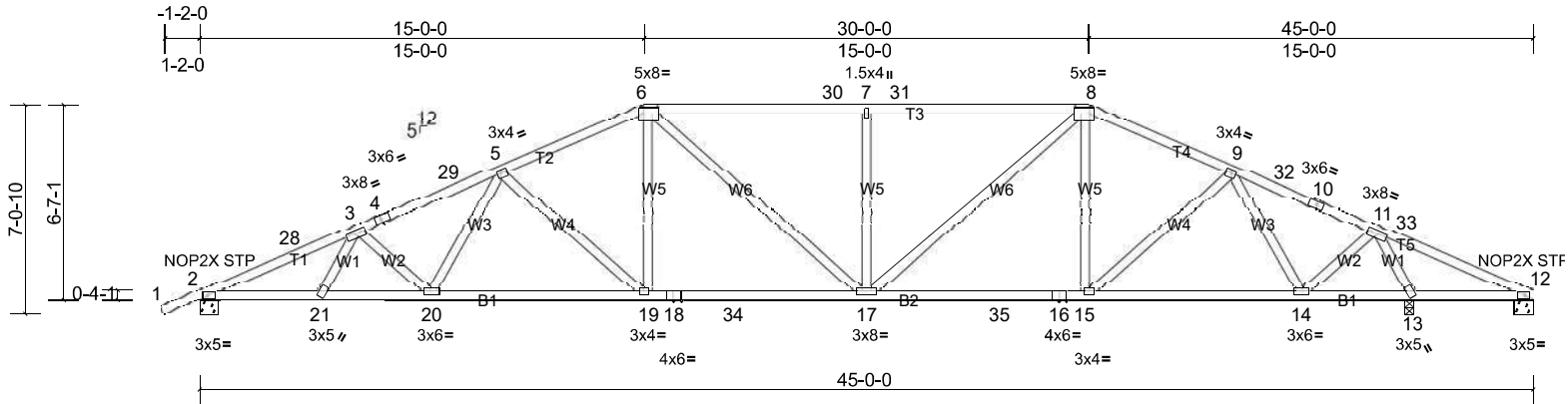
Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	H14S	Hip	1	1	Job Reference (optional)

Maronda Homes, Sanford, user

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Scale = 1:77.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.80	Vert(LL)	0.31	19	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.45	17-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.13	13	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 243 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 2-11-14 oc purlins.
Rigid ceiling directly applied or 4-2-13 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1344/0-7-10, (min. 0-1-12), 12=507/0-7-10, (min. 0-1-8),
13=2190/0-3-8, (min. 0-2-15)
Max Horiz 2=223 (LC 16)
Max Uplift 2=-926 (LC 12), 12=-593 (LC 2), 13=-1328 (LC 9)
Max Grav 2=1506 (LC 2), 12=314 (LC 12), 13=2504 (LC 2)

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

TOP CHORD 2-28=-3308/1894, 3-28=-3277/1902, 3-4=-3060/1765, 4-29=-3026/1771, 5-29=-3012/1779, 5-6=-2417/1414,
6-30=-2297/1450, 7-30=-2297/1450, 7-31=-2297/1450, 8-31=-2297/1450, 8-9=-1850/1097, 9-32=-840/607,
10-32=-848/600, 10-11=-889/593, 11-33=-909/1859, 12-33=-921/1815
BOT CHORD 2-21=-1858/3031, 20-21=-1869/2985, 19-20=-1503/2577, 18-19=-1121/2212, 18-34=-1121/2212, 17-34=-1121/2212,
17-35=-740/1674, 16-35=-740/1674, 15-16=-740/1674, 14-15=-603/1279, 13-14=-458/283, 12-13=-1676/894
WEBS 6-19=-249/636, 6-17=-275/264, 7-17=-398/543, 8-17=-601/862, 5-19=-505/515, 3-20=-283/364, 5-20=-193/443,
9-15=-219/586, 9-14=-1018/641, 11-14=-679/1597, 11-13=-2632/1429

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 36-4-6 to 45-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 593 lb uplift at joint 12, 926 lb uplift at joint 2 and 1328 lb uplift at joint 13.

LOAD CASE(S) Standard

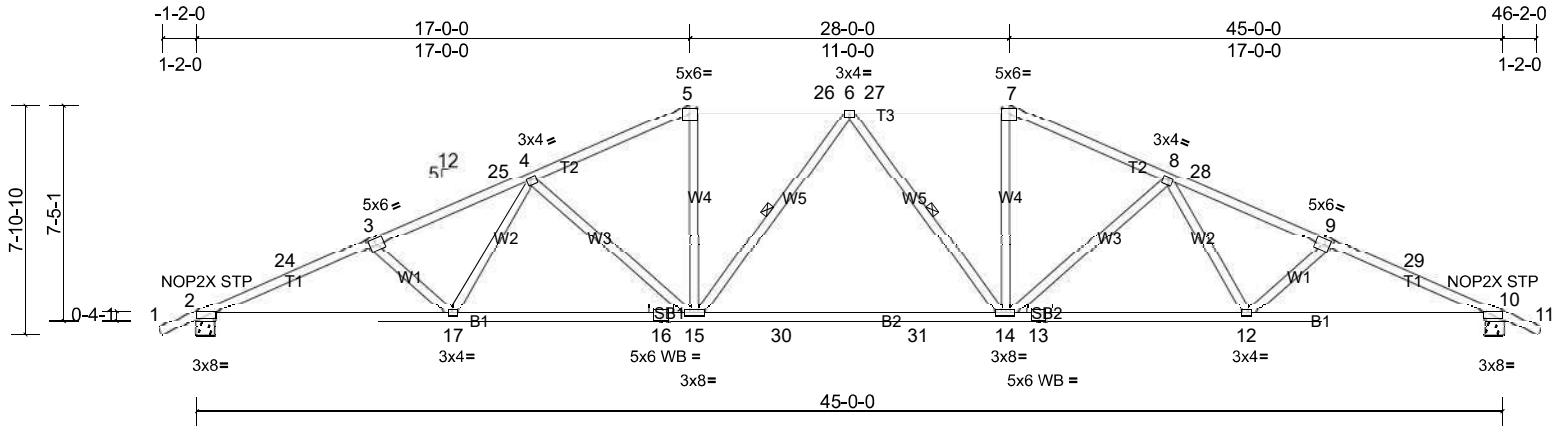
Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	H15	Hip	1	1	Job Reference (optional)

Maronda Homes, Sanford, user

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Scale = 1:79.4

Plate Offsets (X, Y): [2:0-8-0,0-0-10], [3:0-3-0,0-3-0], [5:0-3-0,0-2-4], [7:0-3-0,0-2-4], [9:0-3-0,0-3-0], [10:0-8-0,0-0-10]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	-0.57	14-15	>945	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.94	Vert(CT)	-1.00	14-15	>540	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.17	10	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 238 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1D
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING

TOP CHORD
BOT CHORD
WEBS

Structural wood sheathing directly applied or 2-4-9 oc purlins.
Rigid ceiling directly applied or 2-2-0 oc bracing.
1 Row at midpt 6-15, 6-14

REACTIONS (lb/size) 2=1541/0-7-10, (min. 0-1-12), 10=1541/0-7-10, (min. 0-1-12)
Max Horiz 2=234 (LC 12)
Max Uplift 2=-1016 (LC 12), 10=-1016 (LC 13)
Max Grav 2=1724 (LC 2), 10=1724 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-3729/2106, 3-24=-3699/2115, 3-25=-3562/1961, 4-25=-3491/1970, 4-5=-2821/1610, 5-26=-2581/1555, 6-26=-2581/1555, 6-27=-2581/1555, 7-27=-2581/1555, 7-8=-2821/1610, 8-28=-3491/1971, 9-28=-3562/1962, 9-29=-3699/2116, 10-29=-3729/2106
BOT CHORD 2-17=-2049/3423, 16-17=-1637/2998, 15-16=-1637/2998, 15-30=-1218/2666, 30-31=-1218/2666, 14-31=-1218/2666, 13-14=-1474/2998, 12-13=-1474/2998, 10-12=-1816/3423
WEBS 3-17=-280/414, 4-17=-234/518, 4-15=-576/607, 5-15=-359/881, 6-15=-308/369, 6-14=-308/369, 7-14=-359/881, 8-14=-576/607, 8-12=-235/518, 9-12=-280/415

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 34-4-6 to 46-2-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1016 lb uplift at joint 2 and 1016 lb uplift at joint 10.

LOAD CASE(S) Standard

Maronda Homes, Sanford, user Run: 8.72 S Aug 20 2023 Print: 8.720 S Aug 20 2023 MiTek Industries, Inc. Mon Oct 16 15:31:10 Page: 1
ID:0?Hwako746zpEbnJ?R9fbazMDDb-LI7knBy?IG02cVuzmbImv2ttuR6H8cXxl7oAWcySywn



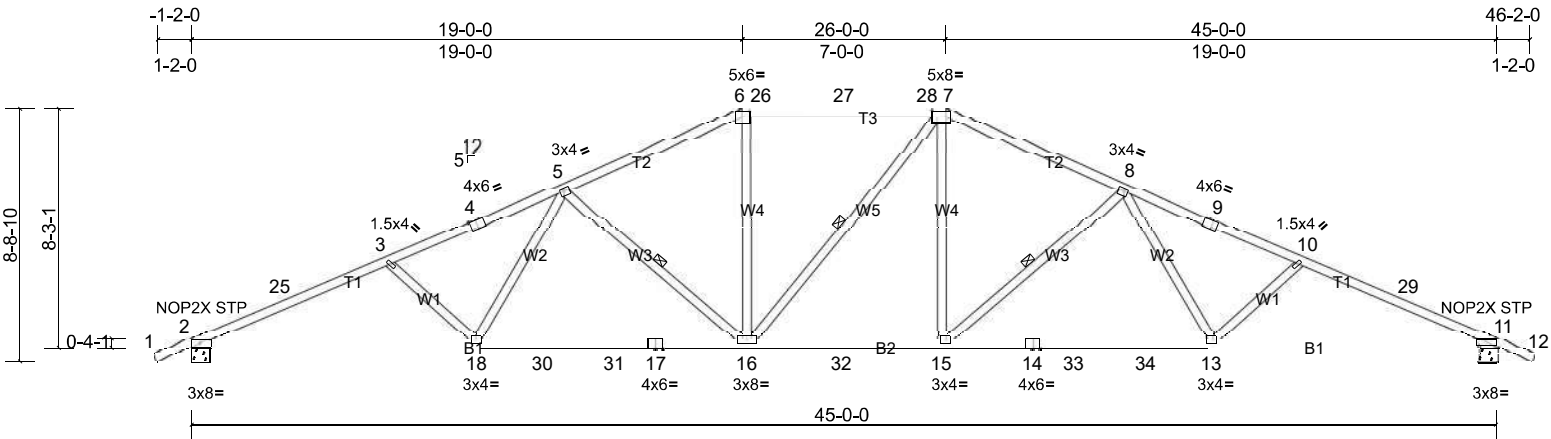
LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-10-13 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x4 SP No.2	WEBS	1 Row at midpt 6-17
REACTIONS	(lb/size)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
	2=1351/0-7-10, (min. 0-1-12), 12=-442/0-7-10, (min. 0-1-8), 13=2118/0-3-8, (min. 0-2-14)		
Max Horiz	2=249 (LC 12)		
Max Uplift	2=-925 (LC 12), 12=-517 (LC 2), 13=-1243 (LC 13)		
Max Grav	2=1508 (LC 2). 12=279 (LC 12). 13=2414 (LC 2)		

FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-28=-3315/1874, 3-28=-3277/1883, 3-4=-2995/1719, 4-29=-2938/1723, 5-29=-2921/1728, 5-6=-2237/1330, 6-30=-2018/1304, 7-30=-2018/1304, 7-31=-2018/1304, 8-31=-2018/1304, 8-9=-1886/1144, 9-32=-1190/790, 10-32=-1196/787, 10-11=-1264/774, 11-33=-811/1693, 12-33=-825/1647
BOT CHORD	2-21=-1856/3028, 20-21=-1864/2947, 19-20=-1440/2472, 18-19=-1440/2472, 18-34=-990/2037, 17-34=-990/2037, 17-35=-690/1703, 16-35=-690/1703, 15-16=-717/1486, 14-15=-717/1486, 12-13=-1520/820
WEBS	6-18=-307/684, 7-17=-286/388, 8-17=-456/576, 3-20=-322/423, 5-20=-217/523, 5-18=-594/604, 9-16=-91/372, 9-14=-733/521, 11-14=-493/1309, 11-13=-2762/1513

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 34-4-6 to 45-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 517 lb uplift at joint 12, 925 lb uplift at joint 2 and 1243 lb uplift at joint 13.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	H16	Hip	1	1	Job Reference (optional)



Scale = 1:79.5

Plate Offsets (X, Y): [2:0-4-2,0-1-8], [4:0-3-0,Edge], [6:0-3-0,0-2-4], [7:0-5-12,0-2-8], [9:0-3-0,Edge], [11:0-8-0,0-0-10]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.80	Vert(LL)	0.40	15-16	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.88	Vert(CT)	-0.70	13-15	>776	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.17	11	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 234 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins. Rigid ceiling directly applied or 4-6-6 oc bracing. 1 Row at midpt 7-16, 5-16, 8-15
BOT CHORD	2x4 SP No.1D	BOT CHORD	
WEBS	2x4 SP No.2	WEBS	
REACTIONS (lb/size) 2=1541/0-7-10, (min. 0-1-12), 11=1541/0-7-10, (min. 0-1-12)		<div>MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.</div>	
Max Horiz 2=259 (LC 12)			
Max Uplift 2=-1012 (LC 12), 11=-1012 (LC 13)			
Max Grav 2=1750 (LC 2), 11=1754 (LC 2)			
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			
TOP CHORD	2-25=-3770/2071, 3-25=-3741/2083, 3-4=-3576/1894, 4-5=-3529/1904, 5-6=-2655/1548, 6-26=-2421/1505, 26-27=-2421/1505, 27-28=-2421/1505, 7-28=-2421/1505, 7-8=-2665/1548, 8-9=-3539/1905, 9-10=-3586/1894, 10-29=-3750/2083, 11-29=-3779/2072		
BOT CHORD	2-18=-2037/3458, 18-30=-1563/2933, 30-31=-1563/2933, 17-31=-1563/2933, 16-17=-1563/2933, 16-32=-1011/2430, 15-32=-1011/2430, 14-15=-1405/2942, 14-33=-1405/2942, 33-34=-1405/2942, 13-34=-1405/2942, 11-13=-1778/3467		
WEBS	6-16=-273/761, 7-15=-344/777, 3-18=-321/477, 5-18=-251/661, 5-16=-696/673, 8-15=-696/673, 8-13=-252/661, 10-13=-321/477		

- NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 32-1-6 to 46-2-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1012 lb uplift at joint 2 and 1012 lb uplift at joint 11.
- LOAD CASE(S)

Standard

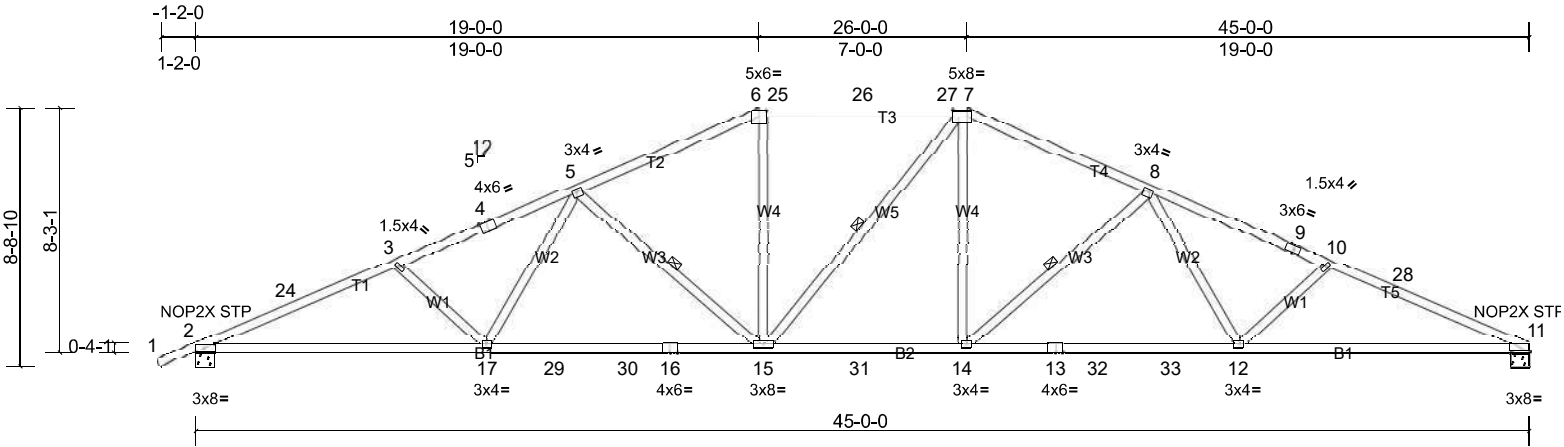
Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	H16S	Hip	1	1	Job Reference (optional)

Maronda Homes, Sanford, user

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Scale = 1:77.8

Plate Offsets (X, Y): [2:0-4-2,0-1-8], [4:0-3-0,Edge], [6:0-3-0,0-2-4], [7:0-5-12,0-2-8], [11:0-8-0,0-0-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.80	Vert(LL)	0.40	14-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.69	12-14	>778	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.17	11	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 232 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
BOT CHORD
WEBS

Structural wood sheathing directly applied or 2-2-0 oc purlins.
Rigid ceiling directly applied or 4-6-2 oc bracing.
1 Row at midpt 7-15, 5-15, 8-14

REACTIONS (lb/size) 2=1542/0-7-10, (min. 0-1-12), 11=1484/0-7-10, (min. 0-1-12)
Max Horiz 2=275 (LC 12)
Max Uplift 2=-1012 (LC 12), 11=-946 (LC 13)
Max Grav 2=1751 (LC 2), 11=1707 (LC 2)

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-3772/2072, 3-24=-3742/2084, 3-4=-3578/1895, 4-5=-3531/1905, 5-6=-2657/1556, 6-25=-2422/1512, 25-26=-2422/1512, 26-27=-2422/1512, 7-27=-2422/1512, 7-8=-2667/1550, 8-9=-3546/1917, 9-10=-3593/1899, 10-28=-3741/2098, 11-28=-3788/2087
BOT CHORD 2-17=-2053/3460, 17-29=-1580/2935, 29-30=-1580/2935, 16-30=-1580/2935, 15-16=-1580/2935, 15-31=-1036/2432, 14-31=-1036/2432, 13-14=-1433/2946, 13-32=-1433/2946, 32-33=-1433/2946, 12-33=-1433/2946, 11-12=-1824/3476
WEBS 6-15=-274/762, 7-14=-346/778, 3-17=-321/477, 5-17=-251/661, 5-15=-696/673, 8-14=-698/677, 8-12=-260/666, 10-12=-321/483

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 32-1-6 to 45-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1012 lb uplift at joint 2 and 946 lb uplift at joint 11.

LOAD CASE(S) Standard

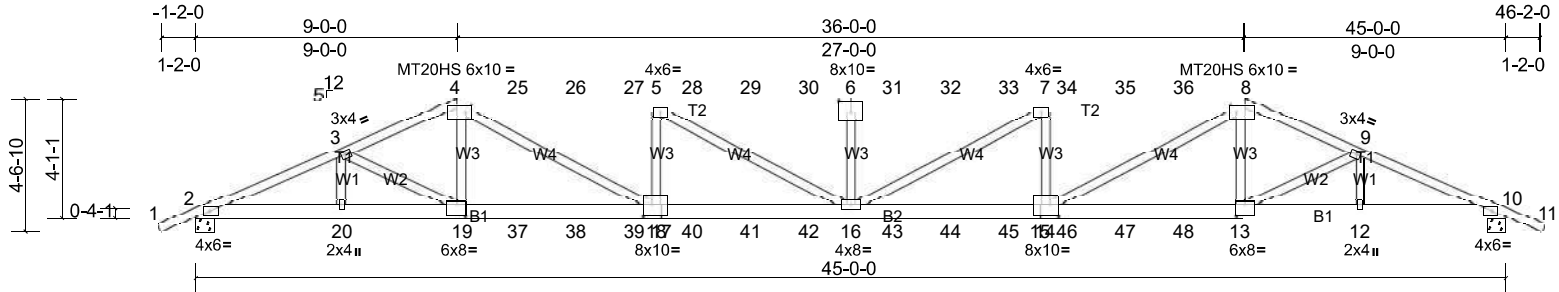
Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	HGR11	Hip Girder	2	3	Job Reference (optional)

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Scale = 1:79.1

Plate Offsets (X, Y): [4:0-2-4,0-3-0], [6:0-5-0,0-4-8], [8:0-2-4,0-3-0], [13:0-3-8,0-4-8], [15:0-3-8,0-4-8], [17:0-3-8,0-4-8], [19:0-3-8,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.52	Vert(LL)	0.80	16-18	>672	240	MT20HS 187/143
TCDL	7.0	Lumber DOL	1.25	BC	0.82	Vert(CT)	-0.75	16-18	>721	180	MT20 244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.32	Horz(CT)	-0.17	10	n/a	n/a	
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 855 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* T2:2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-5-9 oc bracing.

REACTIONS (lb/size) 2=3850/0-7-10, (min. 0-1-8), 10=3850/0-7-10, (min. 0-1-8)
Max Horiz 2=129 (LC 8)
Max Uplift 2=-2992 (LC 8), 10=-2992 (LC 9)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-9460/7312, 3-4=-9318/7236, 4-25=-12295/9519, 25-26=-12295/9519, 26-27=-12296/9519, 5-27=-12297/9519, 5-28=-13488/10391, 28-29=-13488/10391, 29-30=-13488/10391, 6-30=-13488/10391, 6-31=-13488/10391, 31-32=-13488/10391, 32-33=-13488/10391, 7-33=-13488/10391, 7-34=-12298/9519, 34-35=-12296/9519, 35-36=-12295/9518, 8-36=-12294/9518, 8-9=-9318/7234, 9-10=-9460/7310
BOT CHORD 2-20=-6755/8709, 19-20=-6755/8709, 19-37=-6610/8639, 37-38=-6610/8639, 38-39=-6610/8639, 18-39=-6610/8639, 17-18=-9325/12295, 17-40=-9325/12295, 40-41=-9325/12295, 41-42=-9325/12295, 16-42=-9325/12295, 16-43=-9314/12295, 43-44=-9314/12295, 44-45=-9314/12295, 15-45=-9314/12295, 14-15=-9314/12295, 14-46=-6537/8639, 46-47=-6537/8639, 47-48=-6537/8639, 13-48=-6537/8639, 12-13=-6625/8709, 10-12=-6625/8709
WEBS 4-19=-1031/1395, 8-13=-1030/1395, 3-19=-264/459, 9-13=-264/458, 5-18=-1229/1178, 4-18=-3158/4204, 5-16=-1119/1399, 6-16=-428/557, 7-16=-1120/1399, 7-14=-1229/1178, 8-14=-3158/4204

NOTES

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- The Fabrication Tolerance at joint 18 = 0%
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2992 lb uplift at joint 10 and 2992 lb uplift at joint 2.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 160 lb down and 179 lb up at 9-0-0, 43 lb down and 90 lb up at 11-0-12, 43 lb down and 90 lb up at 13-0-12, 43 lb down and 90 lb up at 15-0-12, 43 lb down and 90 lb up at 17-0-12, 43 lb down and 90 lb up at 19-0-12, 43 lb down and 90 lb up at 21-0-12, 43 lb down and 90 lb up at 22-6-0, 43 lb down and 90 lb up at 23-11-4, 43 lb down and 90 lb up at 25-11-4, 43 lb down and 90 lb up at 27-11-4, 43 lb down and 90 lb up at 29-11-4, 43 lb down and 90 lb up at 31-11-4, and 43 lb down and 90 lb up at 33-11-4, and 160 lb down and 179 lb up at 36-0-0 on top chord, and 831 lb down and 742 lb up at 9-0-0, 191 lb down and 124 lb up at 11-0-12, 191 lb down and 124 lb up at 13-0-12, 191 lb down and 124 lb up at 15-0-12, 191 lb down and 124 lb up at 17-0-12, 191 lb down and 124 lb up at 19-0-12, 191 lb down and 124 lb up at 21-0-12, 191 lb down and 124 lb up at 22-6-0, 191 lb down and 124 lb up at 23-11-4, 191 lb down and 124 lb up at 25-11-4, 191 lb down and 124 lb up at 27-11-4, 191 lb down and 124 lb up at 29-11-4, 191 lb down and 124 lb up at 31-11-4, and 191 lb down and 124 lb up at 33-11-4, and 831 lb down and 742 lb up at 35-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	HGR11	Hip Girder	2	3	Job Reference (optional)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

 Uniform Loads (lb/ft)

 Vert: 1-4=-46, 4-8=-46, 8-11=-46, 2-10=-20

 Concentrated Loads (lb)

 Vert: 4=-15 (F), 8=-15 (F), 19=-831 (F), 13=-831 (F), 16=-191 (F), 6=-34 (F), 25=-34 (F), 26=-34 (F), 27=-34 (F), 28=-34 (F), 29=-34 (F), 30=-34 (F), 31=-34 (F), 32=-34 (F), 33=-34 (F), 34=-34 (F), 35=-34 (F), 36=-34 (F), 37=-191 (F), 38=-191 (F), 39=-191 (F), 40=-191 (F), 41=-191 (F), 42=-191 (F), 43=-191 (F), 44=-191 (F), 45=-191 (F), 46=-191 (F), 47=-191 (F), 48=-191 (F)

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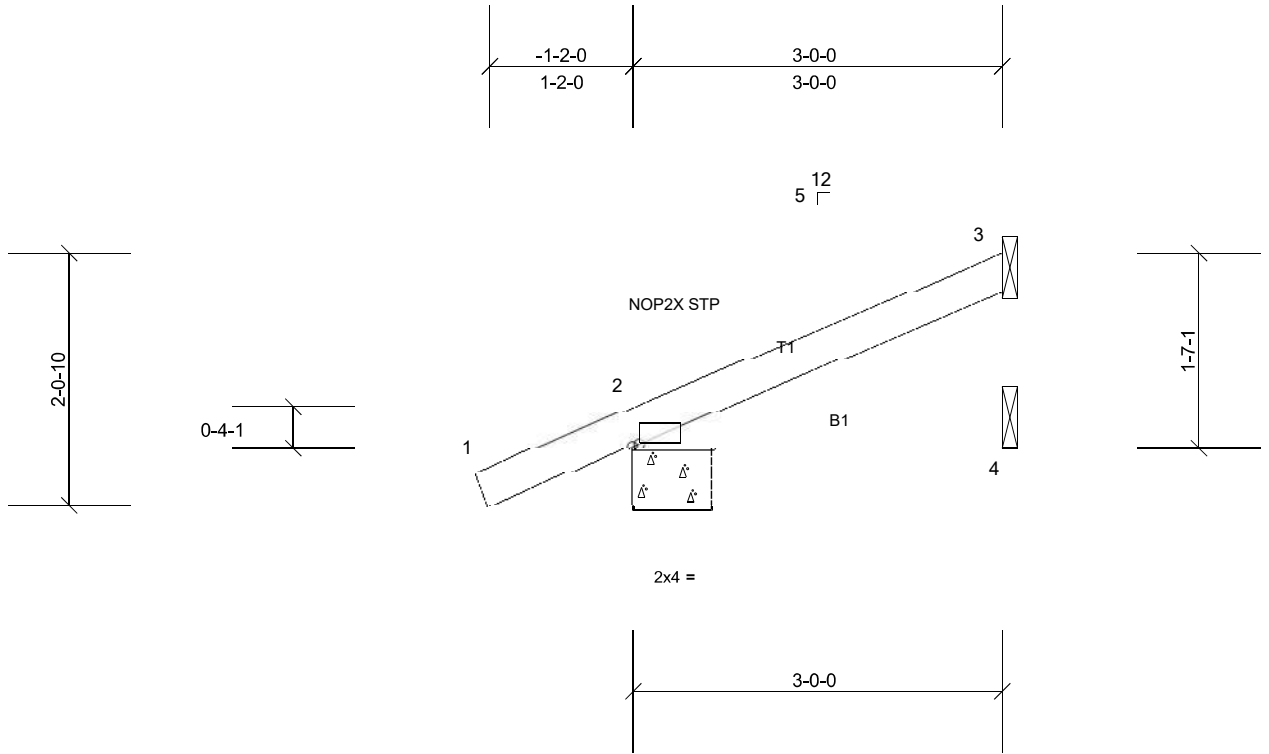


LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	(lb/size)		Mitek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
	2=124/0-7-10, (min. 0-1-8), 3=3/ Mechanical, (min. 0-1-8), 4=-5/ Mechanical, (min. 0-1-8)		
	Max Horiz 2=60 (LC 10)		
	Max Uplift 2=-150 (LC 6), 3=-2 (LC 10), 4=-5 (LC 1)		
	Max Grav 2=124 (LC 1), 3=10 (LC 6), 4=28 (LC 6)		
FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		

- NOTES**
- 1) Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 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) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 3, 150 lb uplift at joint 2 and 5 lb uplift at joint 4.
- LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	J35	Jack-Open	8	1	Job Reference (optional)

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Scale = 1:18.7

Plate Offsets (X, Y): [2'-0"-0'-10',Edge]

Loading	(psf)	Spacing	2'-0'-0'	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.25	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MP							Weight: 11 lb	FT = 20%

LUMBER

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

REACTIONS (lb/size) 2=165/0-7-10, (min. 0-1-8), 3=54/ Mechanical, (min. 0-1-8), 4=32/ Mechanical, (min. 0-1-8)
Max Horiz 2=118 (LC 10)
Max Uplift 2=-135 (LC 10), 3=-77 (LC 10), 4=-1 (LC 10)
Max Grav 2=165 (LC 1), 3=54 (LC 1), 4=50 (LC 3)

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

NOTES

- 1) Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 3, 135 lb uplift at joint 2 and 1 lb uplift at joint 4.

LOAD CASE(S) Standard

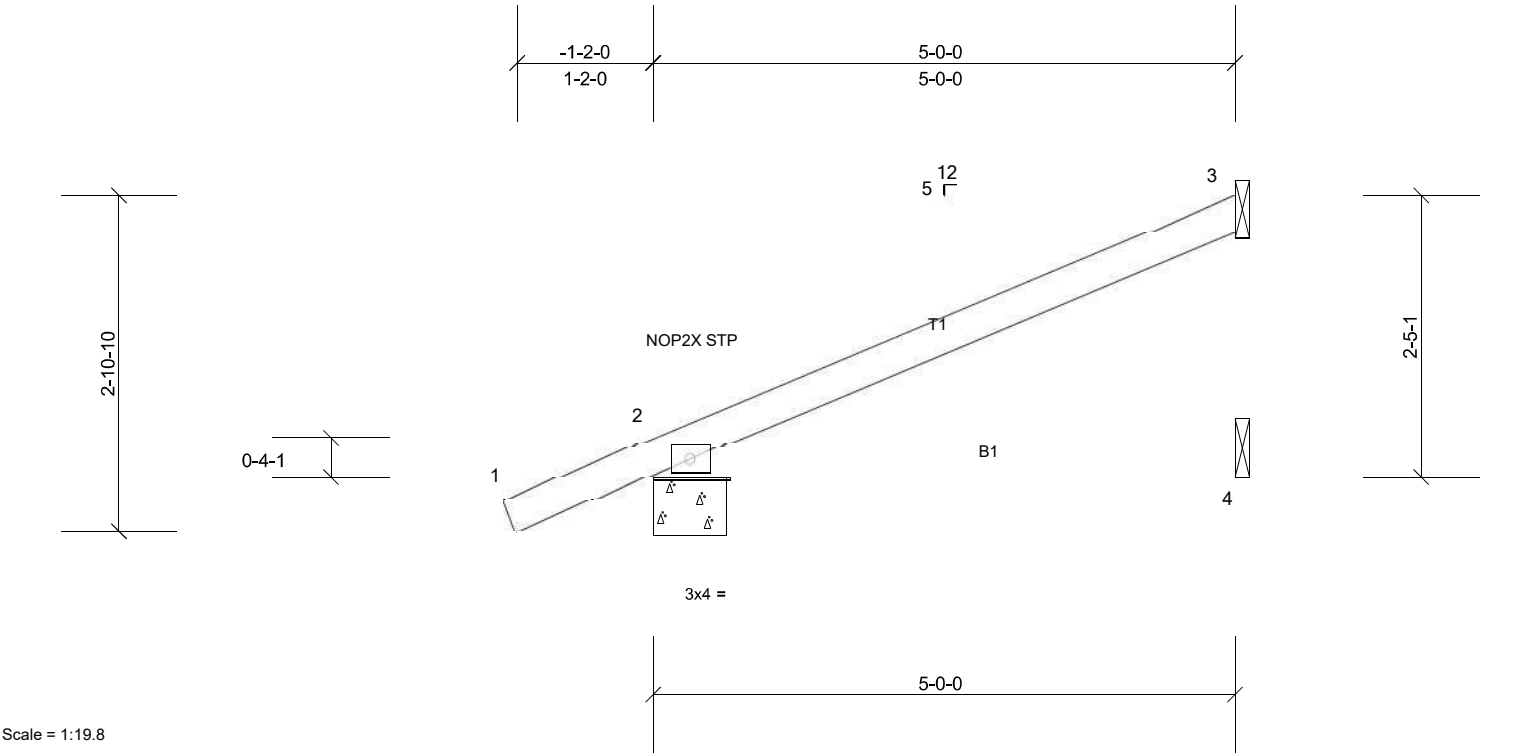
BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 3'-0'-0 oc purlins.
Rigid ceiling directly applied or 10'-0'-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	J55	Jack-Open	8	1	Job Reference (optional)



Scale = 1:19.8

Plate Offsets (X, Y): [2:0-1-14,0-0-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.55	Vert(LL)	0.06	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	-0.06	4-7	>953	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MP							Weight: 18 lb	FT = 20%

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

BRACING
TOP CHORD
BOT CHORD

REACTIONS (lb/size) 2=226/0-7-10, (min. 0-1-8), 3=98/ Mechanical, (min. 0-1-8), 4=58/ Mechanical, (min. 0-1-8)
Max Horiz 2=177 (LC 10)
Max Uplift 2=-167 (LC 10), 3=-144 (LC 10), 4=-4 (LC 10)
Max Grav 2=226 (LC 1), 3=98 (LC 1), 4=88 (LC 3)

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

NOTES
1) Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are MT20 plates unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 3, 167 lb uplift at joint 2 and 4 lb uplift at joint 4.

LOAD CASE(S) Standard

Structural wood sheathing directly applied or 5-0-0 oc purlins.
Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

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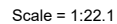


Plate Offsets (X, Y): [2:0-0-10,Edge]

LUMBER

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

BRACING
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.
Rigid ceiling directly applied or 9-5-14 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=291/0-7-10, (min. 0-1-8), 4=20/ Mechanical, (min. 0-1-8),
5=204/ Mechanical, (min. 0-1-8)
Max Horiz 2=228 (LC 10)
Max Uplift 2=-205 (LC 10), 4=-45 (LC 6), 5=-150 (LC 10)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-5=-370/278
WEBS 3-5=-349/464

NOTES

- 1) Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 2-8-5 to 6-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 4, 205 lb uplift at joint 2 and 150 lb uplift at joint 5.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	J95	Jack-Open	30	1	Job Reference (optional)

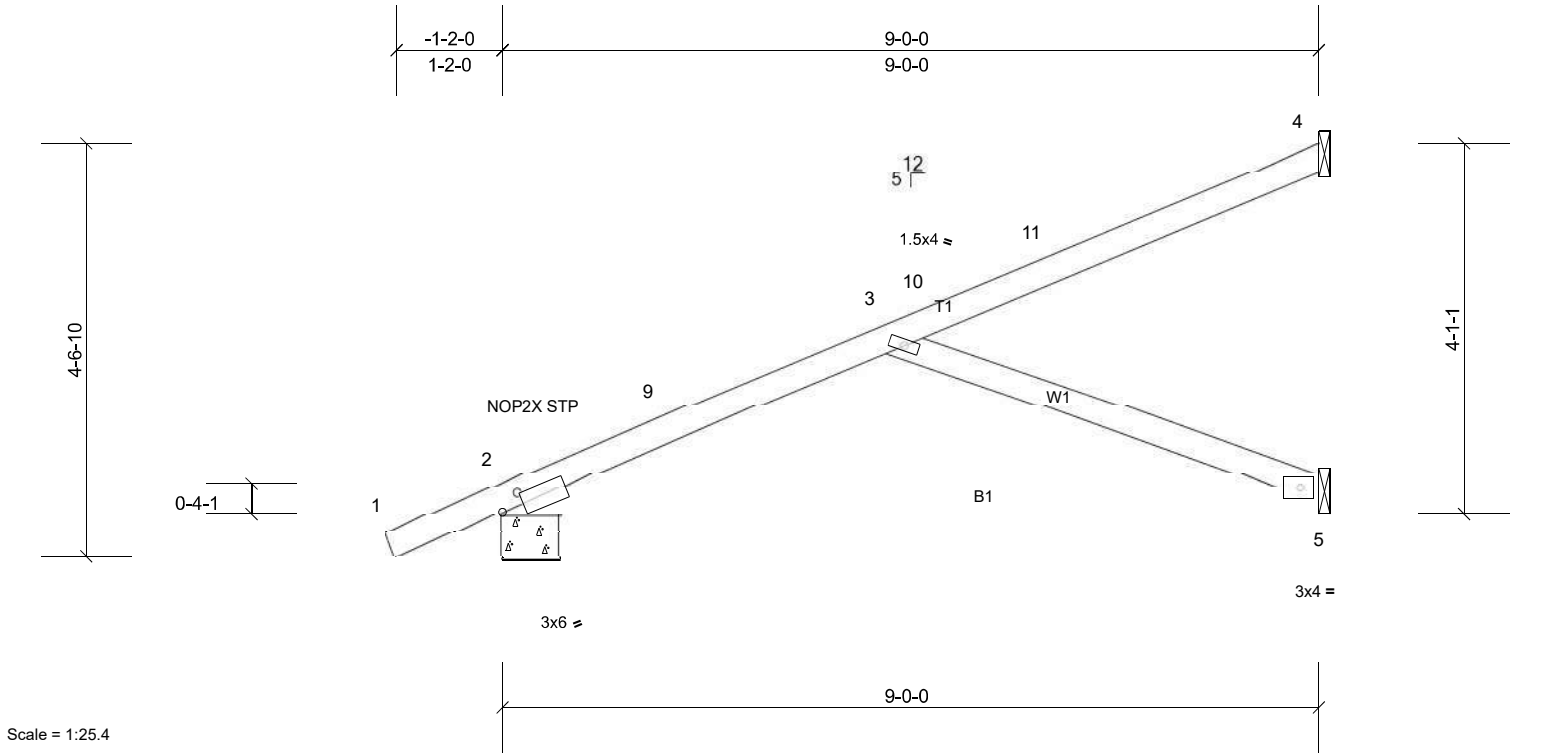


Plate Offsets (X, Y): [2:0-3-0,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	-0.19	5-8	>574	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.71	Vert(CT)	-0.38	5-8	>284	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.24	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 37 lb	FT = 20%

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

BRACING
TOP CHORD
BOT CHORD

REACTIONS (lb/size) 2=357/0-7-10, (min. 0-1-8), 4=80/ Mechanical, (min. 0-1-8), 5=211/ Mechanical, (min. 0-1-8)
Max Horiz 2=269 (LC 12)
Max Uplift 2=-239 (LC 12), 4=-104 (LC 8), 5=-112 (LC 12)
Max Grav 2=357 (LC 1), 4=80 (LC 1), 5=231 (LC 3)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-405/337, 3-9=-387/347
BOT CHORD 2-5=-571/492
WEBS 3-5=-525/610

NOTES
1) Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 1-9-5 to 8-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are MT20 plates unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 4, 239 lb uplift at joint 2 and 112 lb uplift at joint 5.

LOAD CASE(S) Standard

Structural wood sheathing directly applied or 6-0-0 oc purlins.
Rigid ceiling directly applied or 7-6-12 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

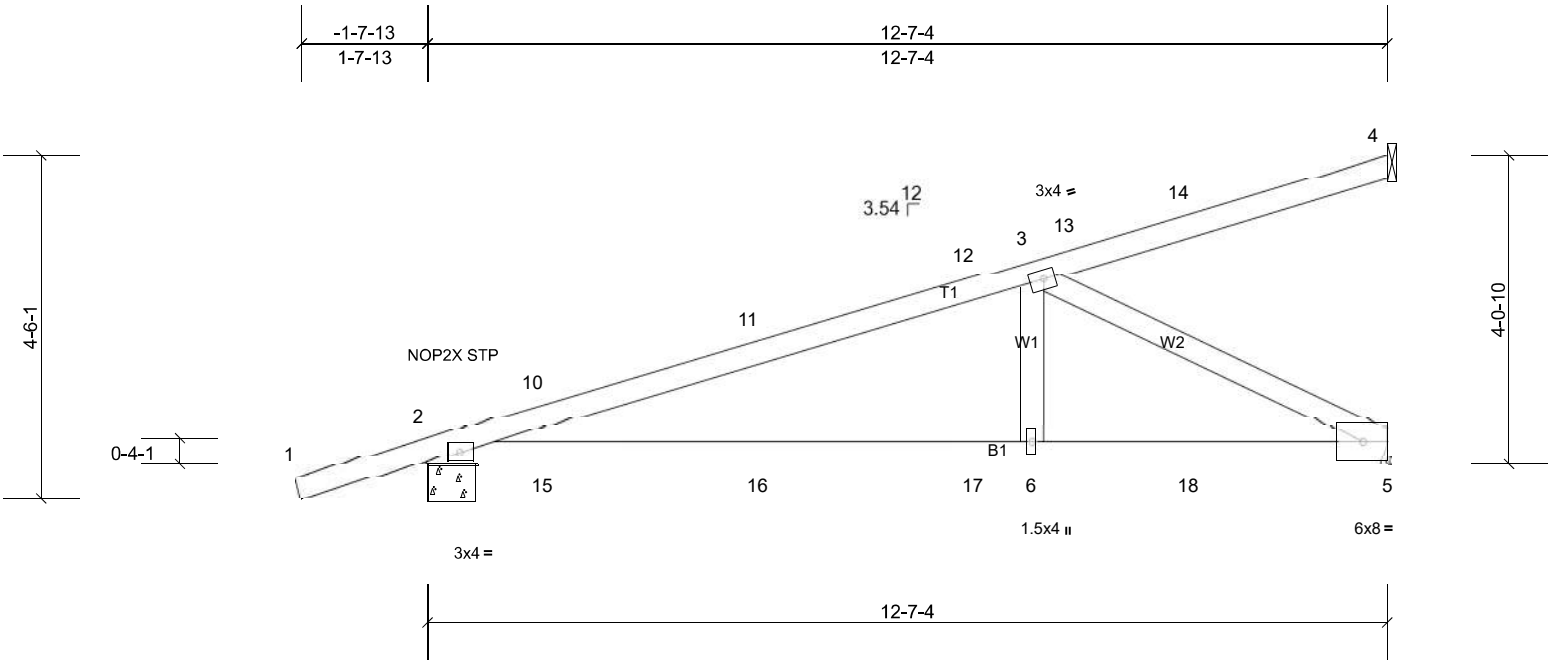
Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	JGR95	Diagonal Hip Girder	4	1	Job Reference (optional)

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Scale = 1:30.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.70	Vert(LL)	0.16	6-9	>931	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.16	6-9	>928	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.57	Horz(CT)	-0.02	5	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 52 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 4-10-1 oc purlins.
Rigid ceiling directly applied or 5-10-9 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=544/0-7-10, (min. 0-1-8), 4=47/ Mechanical, (min. 0-1-8),
5=669/ Mechanical, (min. 0-1-8)
Max Horiz 2=284 (LC 4)
Max Uplift 2=-592 (LC 4), 4=-88 (LC 29), 5=-601 (LC 8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-1095/902, 10-11=-1112/910, 11-12=-1074/911, 3-12=-1019/888
BOT CHORD 2-15=-1019/1031, 15-16=-1019/1031, 16-17=-1019/1031, 6-17=-1019/1031, 6-18=-1019/1031, 5-18=-1019/1031
WEBS 3-6=-265/575, 3-5=-1156/1143

NOTES

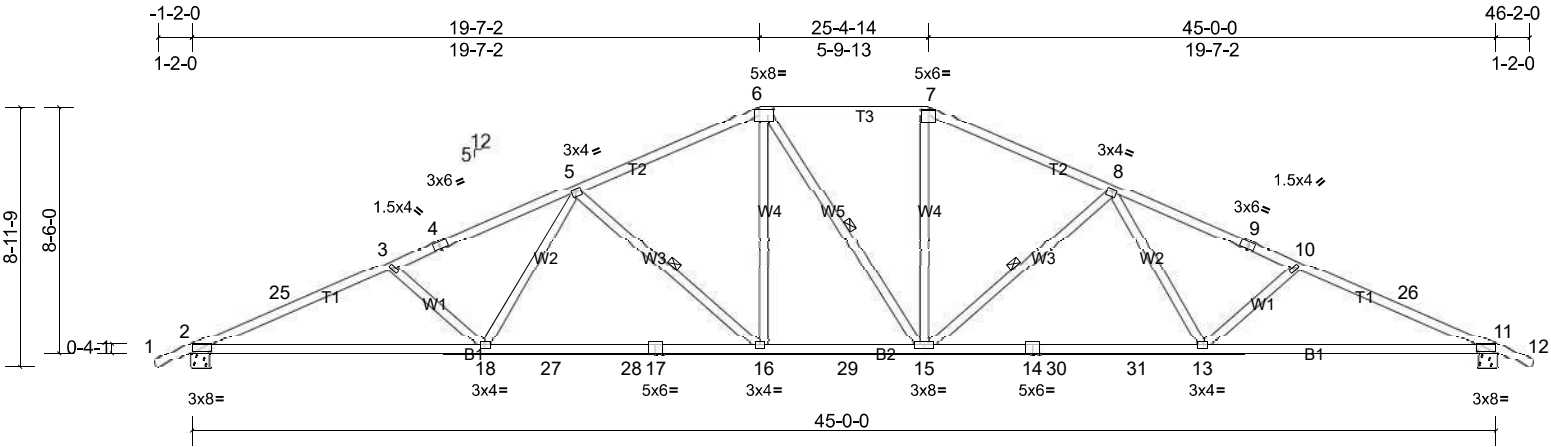
- Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- WARNING: Top chord live load is below minimum required by FRC. The building design professional for the overall structure to verify adequacy of top chord live load.
- 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.
- Refer to girder(s) for truss to truss connections.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 4, 592 lb uplift at joint 2 and 601 lb uplift at joint 5.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 116 lb down and 45 lb up at 1-6-1, 116 lb down and 45 lb up at 1-6-1, 37 lb down and 78 lb up at 4-4-0, 37 lb down and 78 lb up at 4-4-0, 63 lb down and 134 lb up at 7-1-15, 63 lb down and 134 lb up at 7-1-15, and 9 lb down and 54 lb up at 9-11-14, and 9 lb down and 54 lb up at 9-11-14 on top chord, and 31 lb down and 8 lb up at 1-6-1, 31 lb down and 8 lb up at 1-6-1, 9 lb down and 17 lb up at 4-4-0, 9 lb down and 17 lb up at 4-4-0, 31 lb down and 21 lb up at 7-1-15, 31 lb down and 21 lb up at 7-1-15, and 176 lb down and 167 lb up at 9-11-14, and 176 lb down and 167 lb up at 9-11-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

- Standard
- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-4=-46, 5-7=-20
Concentrated Loads (lb)
Vert: 10=91 (F=45, B=45), 11=-1 (F=0, B=0), 12=-66 (F=-33, B=-33), 14=45 (F=23, B=23), 16=-11 (F=-6, B=-6), 17=-59 (F=-29, B=-29), 18=-351 (F=-176, B=-176)

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	T18	Hip	8	1	Job Reference (optional)

Maronda Homes, Sanford, user



Scale = 1:79.5

Plate Offsets (X, Y): [2:0-8-0,0-0-10], [6:0-5-12,0-2-8], [7:0-3-0,0-2-4], [11:0-8-0,0-0-10]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.79	Vert(LL)	-0.42	16-18	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.92	Vert(CT)	-0.75	16-18	>722	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.17	11	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 236 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1D
WEBS 2x4 SP No.2

BRACING
TOP CHORD
BOT CHORD
WEBS

Structural wood sheathing directly applied or 2-2-0 oc purlins.
Rigid ceiling directly applied or 2-2-0 oc bracing.
1 Row at midpt 5-16, 6-15, 8-15

REACTIONS (lb/size) 2=1541/0-7-10, (min. 0-1-12), 11=1541/0-7-10, (min. 0-1-12)
Max Horiz 2=267 (LC 12)
Max Uplift 2=-963 (LC 12), 11=-963 (LC 13)
Max Grav 2=1754 (LC 2), 11=1751 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-25=-3771/2260, 3-25=-3742/2271, 3-4=-3564/2098, 4-5=-3516/2117, 5-6=-2604/1771, 6-7=-2364/1743, 7-8=-2598/1789, 8-9=-3509/2142, 9-10=-3558/2124, 10-26=-3735/2279, 11-26=-3765/2267
BOT CHORD 2-18=-1927/3460, 18-27=-1547/2909, 27-28=-1547/2909, 17-28=-1547/2909, 16-17=-1547/2909, 16-29=-1159/2370, 15-29=-1159/2370, 14-15=-1650/2903, 14-30=-1650/2903, 30-31=-1650/2903, 13-31=-1650/2903, 11-13=-1985/3454
WEBS 3-18=-335/497, 5-18=-251/685, 5-16=-729/706, 6-16=-371/774, 7-15=-311/762, 8-15=-729/706, 8-13=-251/685, 10-13=-335/497

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 31-8-11 to 46-2-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 963 lb uplift at joint 2 and 963 lb uplift at joint 11.

LOAD CASE(S) Standard

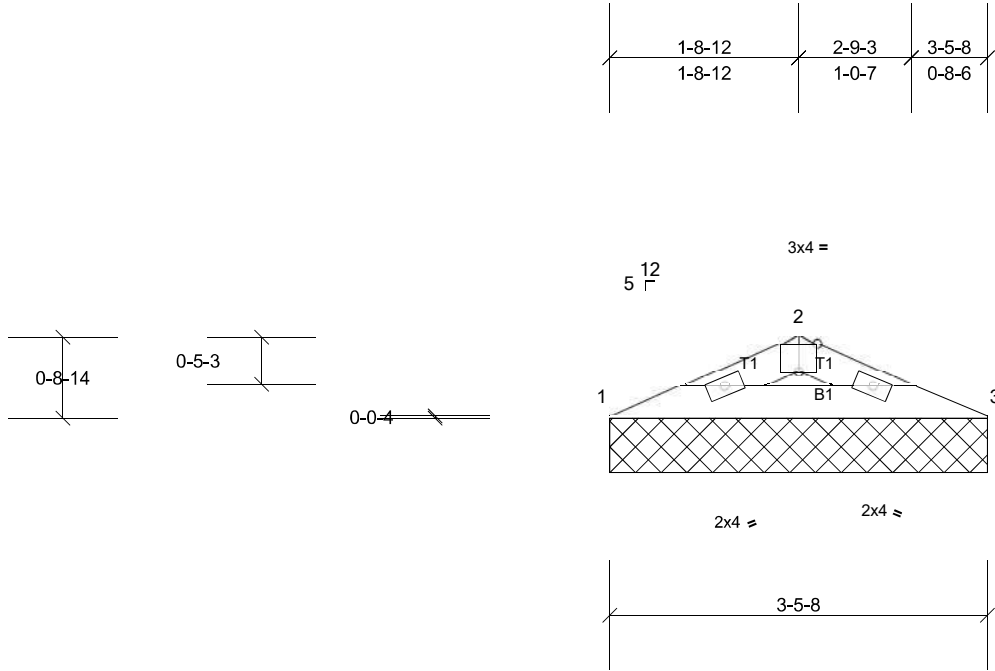
Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	V11	Valley	1	1	Job Reference (optional)

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Scale = 1:21.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MP							Weight: 8 lb	FT = 20%

LUMBER

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

REACTIONS (lb/size) 1=114/3-5-8, (min. 0-1-8), 3=114/3-5-8, (min. 0-1-8)
Max Horiz 1=18 (LC 12)
Max Uplift 1=-73 (LC 12), 3=-73 (LC 13)

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

TOP CHORD 1-2=-258/491, 2-3=-238/460
BOT CHORD 1-3=-420/229

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 1 and 73 lb uplift at joint 3.

LOAD CASE(S) Standard

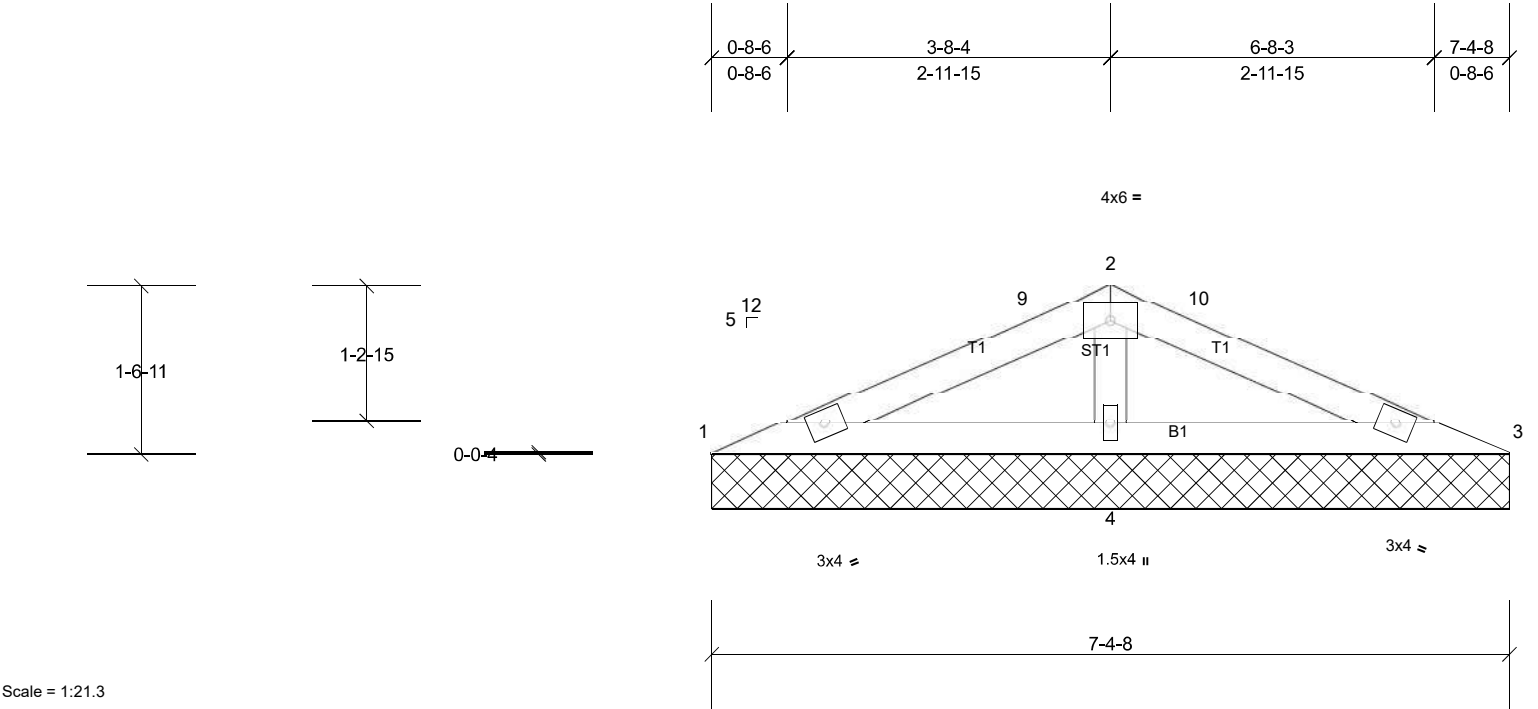
BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 3-5-8 oc purlins.
Rigid ceiling directly applied or 9-3-11 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	V13	Valley	1	1	Job Reference (optional)



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	7.0	Lumber DOL	1.25	BC	0.34	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a	Weight: 22 lb
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MP							FT = 20%

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

BRACING
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 7-4-8 oc purlins.
Rigid ceiling directly applied or 6-0-0 oc bracing.

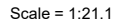
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 1=54/7-4-8, (min. 0-1-8), 3=54/7-4-8, (min. 0-1-8), 4=379/7-4-8, (min. 0-1-8)
Max Horiz 1=43 (LC 12)
Max Uplift 1=-48 (LC 12), 3=-56 (LC 13), 4=-213 (LC 12)
Max Grav 1=70 (LC 25), 3=70 (LC 26), 4=379 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-9=-317/193, 2-9=-312/198, 2-10=-331/198, 3-10=-335/193
BOT CHORD 1-4=-218/454, 3-4=-218/454
WEBS 2-4=-285/537

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 3-10-0 to 7-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 1, 56 lb uplift at joint 3 and 213 lb uplift at joint 4.
- LOAD CASE(S)** Standard

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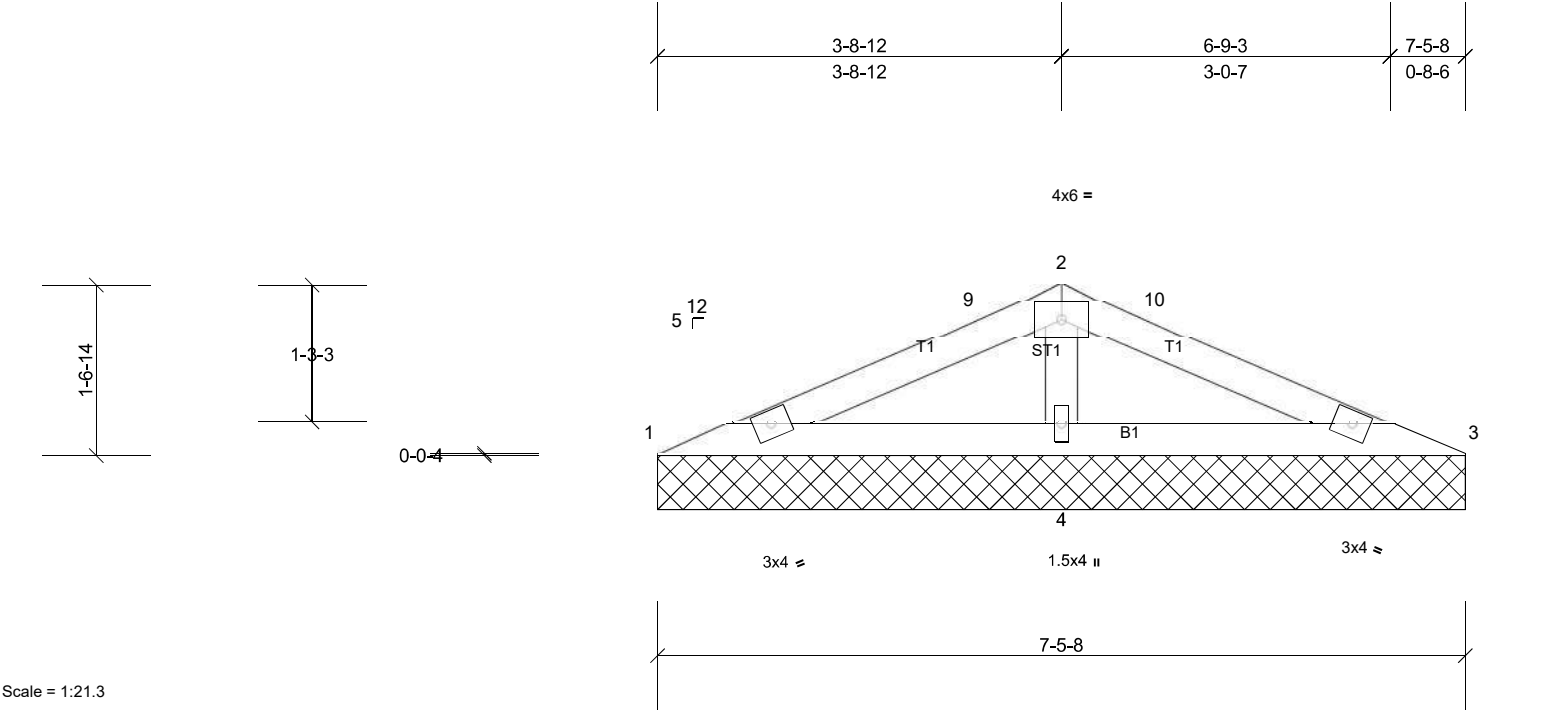


Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MP							Weight: 8 lb	FT = 20%

LOAD CASE(S) Standard

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	VG10	Valley	1	1	Job Reference (optional)



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.35	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MP							Weight: 22 lb	FT = 20%

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

BRACING
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 7-5-8 oc purlins.
Rigid ceiling directly applied or 6-0-0 oc bracing.

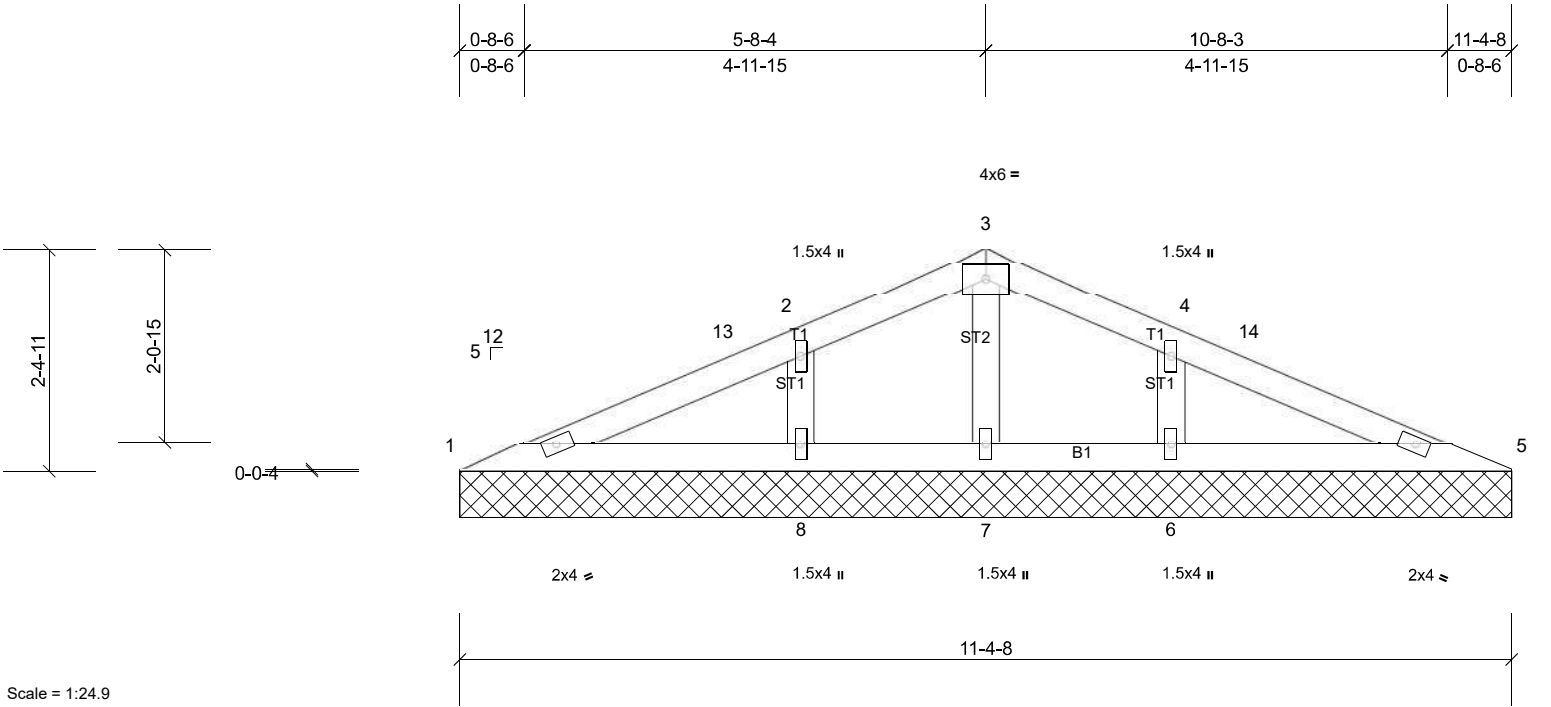
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 1=54/7-5-8, (min. 0-1-8), 3=54/7-5-8, (min. 0-1-8), 4=385/7-5-8, (min. 0-1-8)
Max Horiz 1=44 (LC 12)
Max Uplift 1=-48 (LC 12), 3=-56 (LC 13), 4=-217 (LC 12)
Max Grav 1=71 (LC 25), 3=71 (LC 26), 4=385 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-9=-322/197, 2-9=-318/202, 2-10=-337/202, 3-10=-341/197
BOT CHORD 1-4=-222/461, 3-4=-222/461
WEBS 2-4=-290/543

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 3-9-6 to 7-6-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 1, 56 lb uplift at joint 3 and 217 lb uplift at joint 4.
- LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	WILLOW F - BASE
Willow F	VG12	Valley	1	1	Job Reference (optional)



Scale = 1:24.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	16.0	Plate Grip DOL	1.25	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MS							Weight: 39 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 10-0-0 oc purlins.
Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS

All bearings 11-4-8.
(lb) - Max Horiz 1=-69 (LC 17)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5, 7 except 6=-225 (LC 13), 8=-226 (LC 12)
Max Grav All reactions 250 (lb) or less at joint(s) 1, 5, 6, 7, 8

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-174/317, 4-6=-174/317

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=160mph (3-second gust) Vasd=124mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C 10-1-6 to 11-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 8=225, 6=224.

LOAD CASE(S) Standard