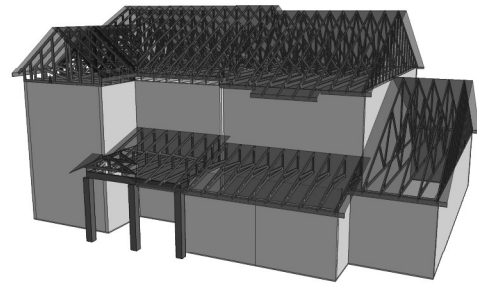




Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450



Builder: David Weekley Homes

Model: B330 A CP TMB GLH

THE PLACEMENT PLAN NOTES:

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

Approved By: _____

Date: _____

*** GRIDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.

** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTENTH.

* All uplift connectors shown within these documents are recommendations only. Per ANSI/TPI 1 all uplift connectors are the responsibility of the bldg designer and/or contractor.

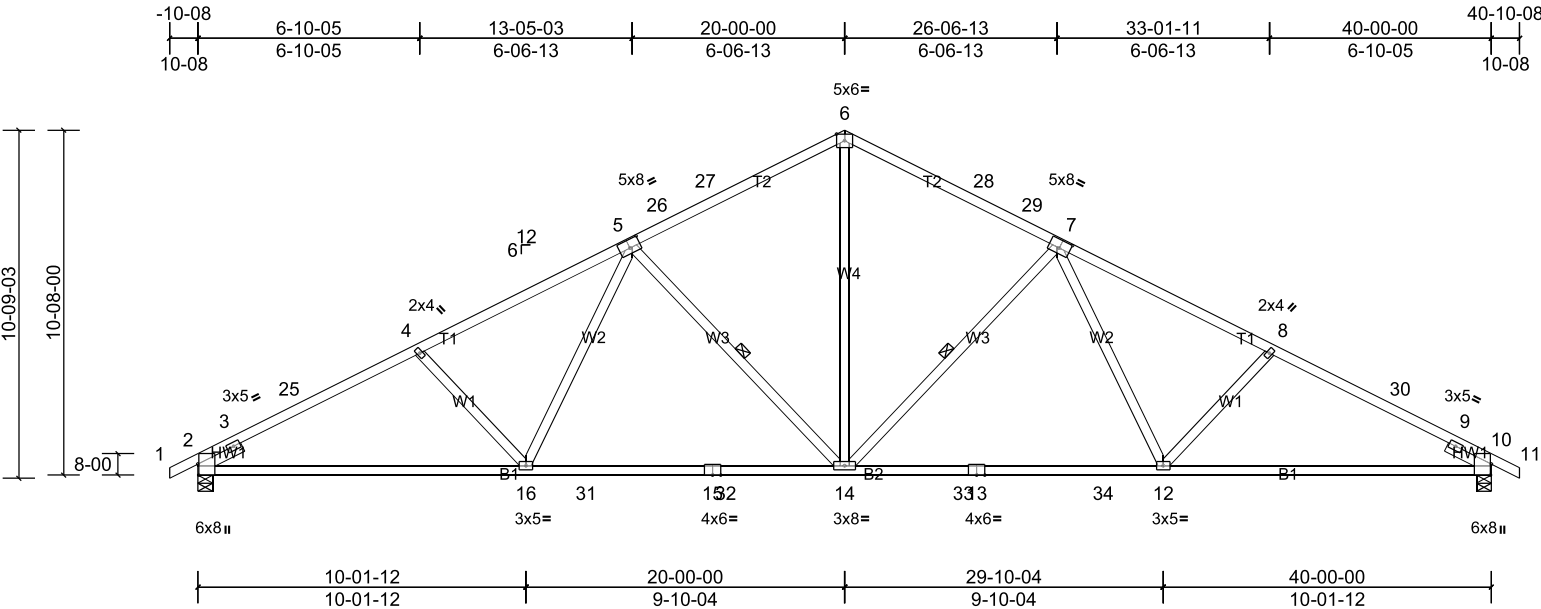
THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual components to be incorporated into the building design and are not to be used as a structural design. The building designer must select such trusses identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the support structure and the connection of the trusses to the building is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Trusses" available from the Truss Plate Institute, 983 D'Oroville Drive, Madison, WI 53719.



11



Job 25080032-01	Truss A	Truss Type Common	Qty 4	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:71.3

Plate Offsets (X, Y): [2:4-01,Edge], [5:4-00,3-00], [7:4-00,3-00], [10:4-01,Edge]

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.37	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.64	14-16	>754	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.14	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 213 lb	FT = 20%

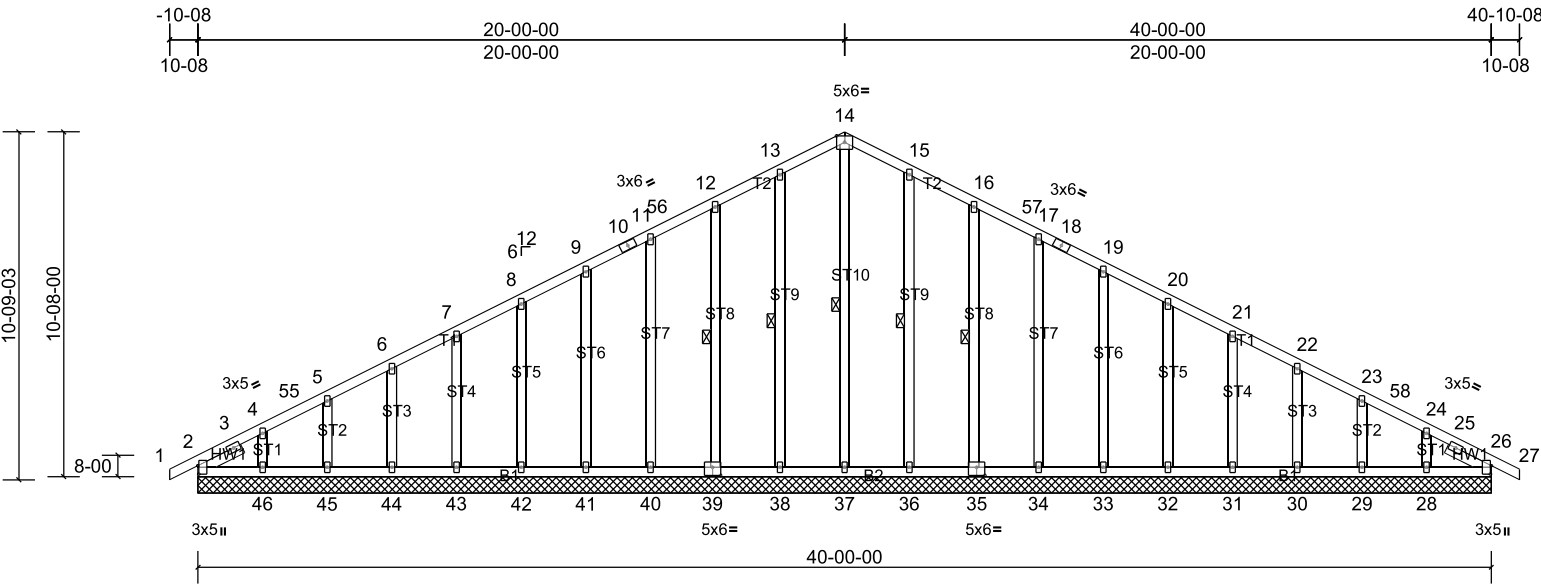
LUMBER		BRACING	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x4 SP No.3 *Except* W4:2x4 SP No.2	WEBS	1 Row at midpt 7-14, 5-14
SLIDER	Left 2x4 SP No.3 -- 1-06-00, Right 2x4 SP No.3 -- 1-06-00		
REACTIONS	(lb/size) 2=1652/5-08, (min. 2-02), 10=1652/5-08, (min. 2-02) Max Horiz 2=165 (LC 18) Max Uplift 2=-170 (LC 14), 10=-170 (LC 15) Max Grav 2=1809 (LC 3), 10=1809 (LC 3)		

FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1665/0, 3-25=-3431/291, 4-25=-3353/321, 4-5=-3226/321, 5-26=-2343/301, 26-27=-2282/312, 6-27=-2260/333, 6-28=-2260/333, 28-29=-2282/312, 7-29=-2343/301, 7-8=-3226/322, 8-30=-3353/321, 9-30=-3431/291, 9-10=-1328/0
BOT CHORD	2-16=-330/2978, 16-31=-191/2524, 15-31=-191/2524, 15-32=-191/2524, 14-32=-191/2524, 14-33=-109/2524, 13-33=-109/2524, 13-34=-109/2524, 12-34=-109/2524, 10-12=-181/2978
WEBS	6-14=-114/1658, 7-14=-853/247, 7-12=-25/626, 8-12=-301/191, 5-14=-853/247, 5-16=-25/626, 4-16=-301/191

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-1-8, Interior (1) 3-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 24-0-0, Interior (1) 24-0-0 to 36-10-8, Exterior(2E) 36-10-8 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

Job 25080032-01	Truss AGE	Truss Type Common Supported Gable	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:71.3

Plate Offsets (X, Y): [2:3-01,0-05], [26:3-01,0-05], [35:3-00,3-00], [39:3-00,3-00]

Loading	(psf)	Spacing	2-00-00	CSI	0.08	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	26	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
Weight: 286 lb FT = 20%												

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3 *Except* ST10:2x4 SP No.2
SLIDER Left 2x4 SP No.3 -- 1-06-00, Right 2x4 SP No.3 -- 1-06-00

BRACING
TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.
WEBS 1 Row at midpt 14-37, 13-38, 12-39, 15-36, 16-35

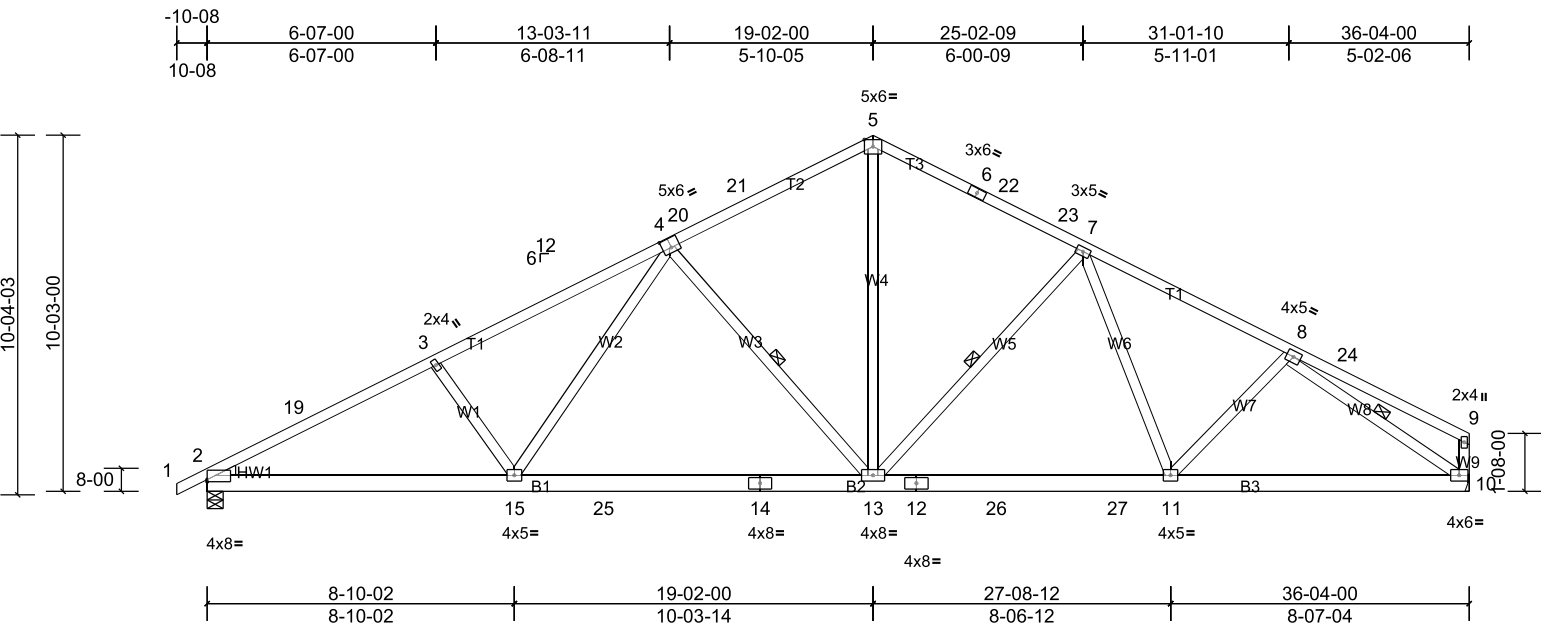
REACTIONS All bearings 40'-00-00.
(lb) - Max Horiz 2=165 (LC 18), 47=165 (LC 18)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47
Max Grav All reactions 250 (lb) or less at joint(s) 2, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 51

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 12-13=-104/271, 13-14=-121/311, 14-15=-121/311, 15-16=-104/271

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 3-1-8, Exterior(2N) 3-1-8 to 16-0-0, Corner(3R) 16-0-0 to 24-0-0, Exterior(2N) 24-0-0 to 36-10-8, Corner(3E) 36-10-8 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2'-0" oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-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) 2, 38, 39, 40, 41, 42, 43, 44, 45, 46, 36, 35, 34, 33, 32, 31, 30, 29, 28, 2.

LOAD CASE(S) Standard

Job 25080032-01	Truss B1	Truss Type Common	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:66.3

Plate Offsets (X, Y): [2:Edge,0-13], [4:3-00,3-04]

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.22	13-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.39	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.08	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 234 lb	FT = 20%

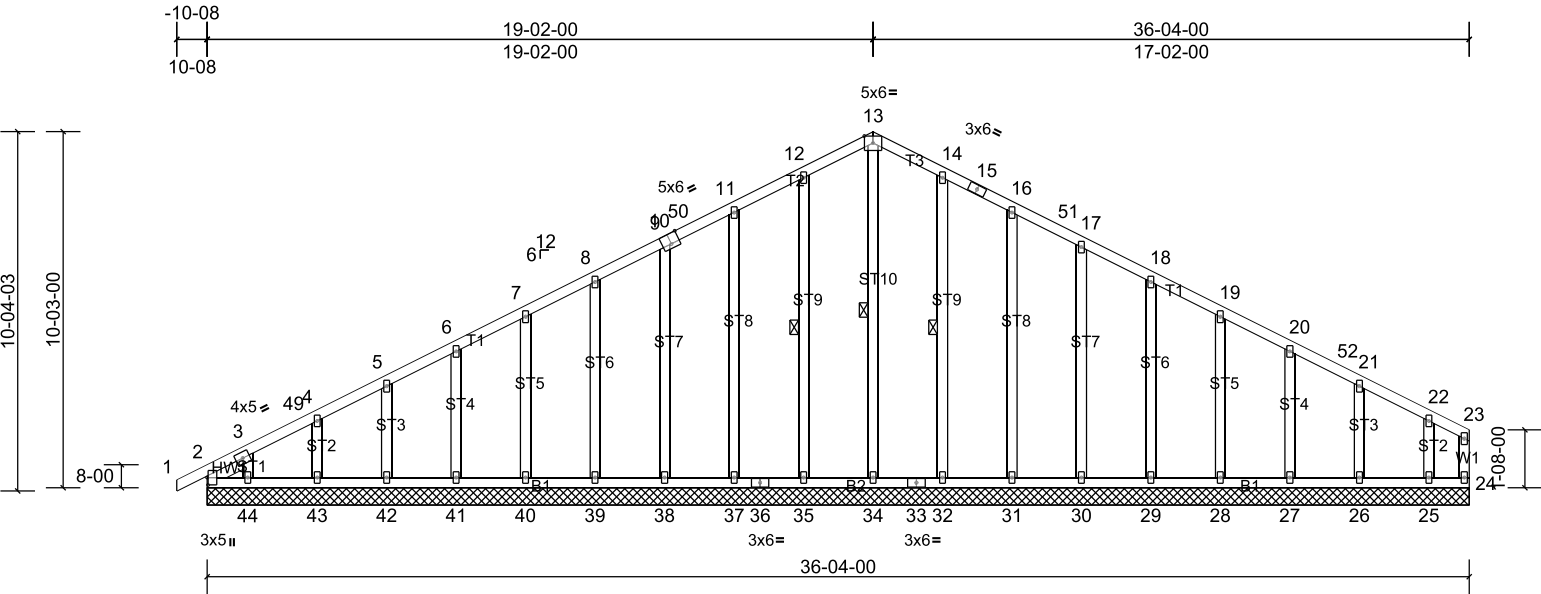
LUMBER			BRACING		
TOP CHORD	2x4 SP No.2		TOP CHORD	Structural wood sheathing directly applied or 2-10-10 oc purlins, except end verticals.	
BOT CHORD	2x6 SP No.2			Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	2x4 SP No.3		BOT CHORD	1 Row at midpt 4-13, 7-13, 8-10	
WEDGE	Left: 2x4 SP No.3		WEBS		
REACTIONS (lb/size) 2=1501/5-08, (min. 1-15), 10=1447/ Mechanical, (min. 1-08)			<div>MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.</div>		
Max Horiz 2=167 (LC 18)					
Max Uplift 2=-162 (LC 14), 10=-129 (LC 15)					

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-19=-3174/253, 3-19=-3098/283, 3-4=-2991/302, 4-20=-2024/272, 20-21=-2012/275, 5-21=-1950/304, 5-6=-1949/302, 6-22=-1955/286, 22-23=-1969/282, 7-23=-2023/273, 7-8=-2455/274
BOT CHORD	2-15=-317/2791, 15-25=-176/2201, 14-25=-176/2201, 13-14=-176/2201, 12-13=-71/2050, 12-26=-71/2050, 26-27=-71/2050, 11-27=-71/2050, 10-11=-147/2026
WEBS	3-15=-349/201, 4-15=-56/732, 4-13=-783/243, 5-13=-108/1424, 7-13=-537/205, 8-10=-2348/180

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-9-2, Interior (1) 2-9-2 to 15-6-6, Exterior(2R) 15-6-6 to 22-9-10, Interior (1) 22-9-10 to 32-6-10, Exterior(2E) 32-6-10 to 36-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 10.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

Job 25080032-01	Truss B1GE	Truss Type Common Supported Gable	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:66.3

Plate Offsets (X, Y): [2:2-08,0-05], [10:3-00,Edge]

Loading	(psf)	Spacing	2-00-00	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.00	24	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 259 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 1-01-15

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.
WEBS 1 Row at midpt 13-34, 12-35, 14-32

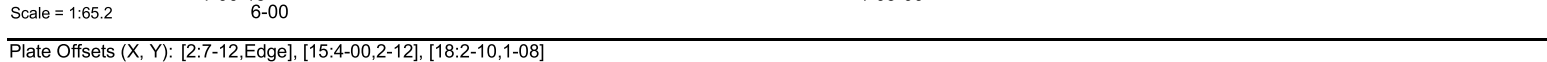
REACTIONS All bearings 36-04-00.
(lb) - Max Horiz 2=166 (LC 18), 45=166 (LC 18)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 26, 27, 28, 29, 30, 31, 32, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45 except 25=-111 (LC 15)
Max Grav All reactions 250 (lb) or less at joint(s) 2, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=-69/252, 9-10=-87/286, 10-50=-87/287, 11-50=-78/297, 11-12=-107/344, 12-13=-124/384, 13-14=-124/384, 14-15=-101/344, 15-16=-107/340, 16-51=-78/297, 17-51=-87/287, 17-18=-69/252
WEBS 13-34=-267/47

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-9-2, Exterior(2N) 2-9-2 to 15-6-6, Corner(3R) 15-6-6 to 22-9-10, Exterior(2N) 22-9-10 to 32-6-10, Corner(3E) 32-6-10 to 36-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 35, 37, 38, 39, 40, 41, 42, 43, 44, 32, 31, 30, 29, 28, 27, 26, 2 except (jt=lb) 25=111.

LOAD CASE(S) Standard

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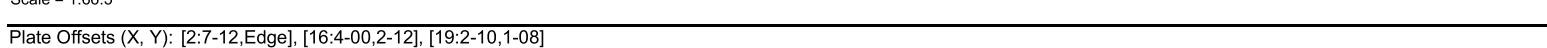
LUMBER		BRACING	
TOP CHORD	2x4 SP No.2 *Except* T1:2x10 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 3-2-12 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.2 *Except* B1:2x4 SP No.2, B3:2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 3-15, 5-13, 7-13, 8-10
REACTIONS	(lb/size) 1=1462/5-08, (min. 2-04), 10=1440/ Mechanical, (min. 1-08)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
	Max Horiz 1=156 (LC 18)		
	Max Uplift 1=-129 (LC 14), 10=-128 (LC 15)		
	Max Grav 1=1538 (LC 3), 10=1564 (LC 3)		

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-12 to 3-10-6, Interior (1) 3-10-6 to 15-6-6, Exterior(2R) 15-6-6 to 22-9-10, Interior (1) 22-9-10 to 32-6-10, Exterior(2E) 32-6-10 to 36-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 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) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 128 lb uplift at joint 10.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

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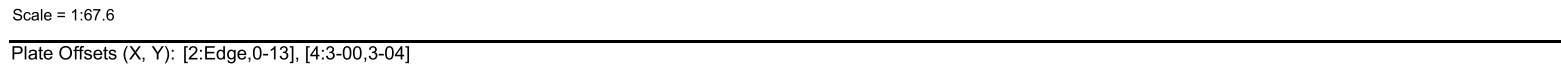
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1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

NOTES

- LOAD CASE(S) Standard

LOAD CASE(0) Standard

Carter Components, Sanford, NC, user Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Fri Aug 15 11:17:36 Page: 1
ID: Gv4TgJQ zUp79XZ1keqdoBykxAT-e5HGTDWXY0IXBigsxhUslO4PGPO9LaODrs1CzAyndt



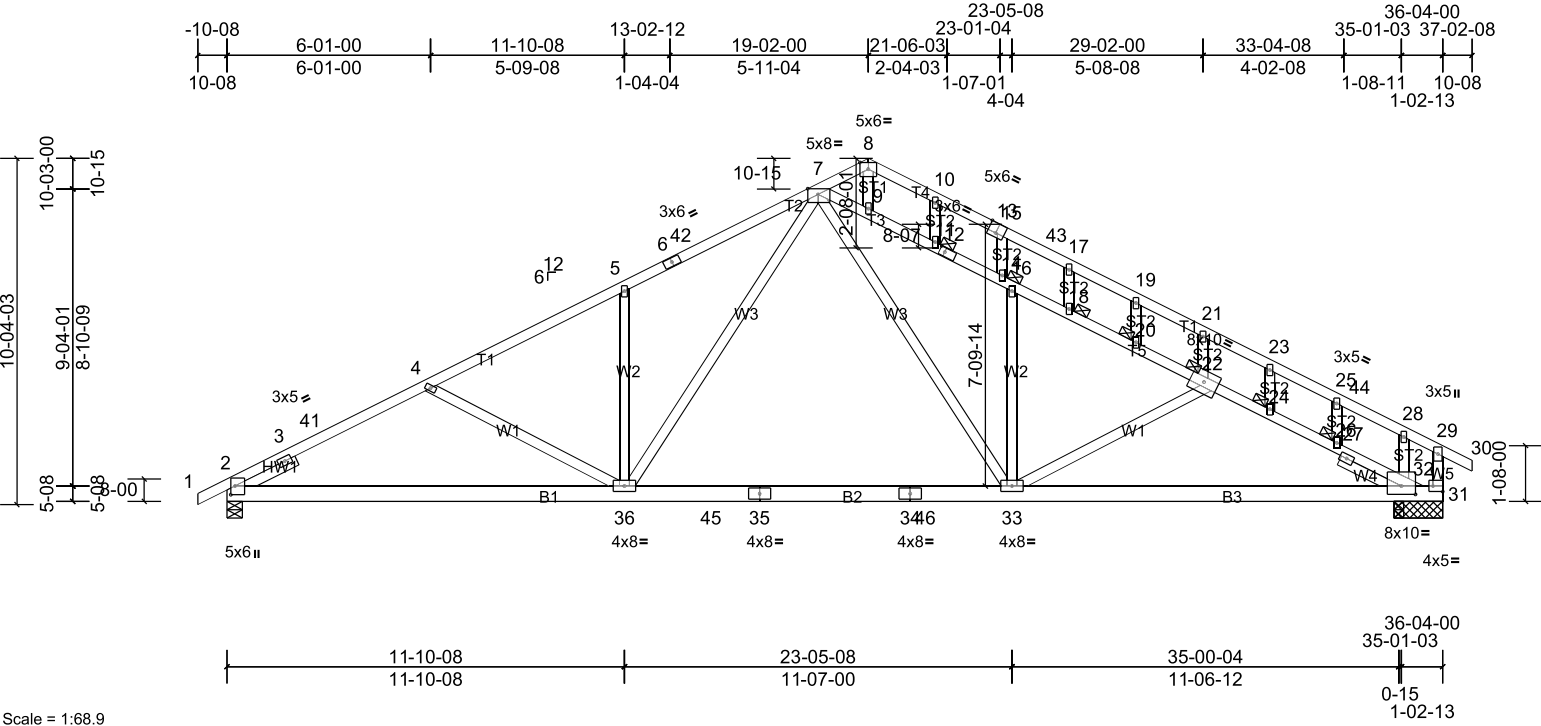
LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-10-11 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.2		Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3	BOT CHORD	1 Row at midpt 8-11, 4-14, 7-14
WEDGE	Left: 2x4 SP No.3	WEBS	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
REACTIONS	(lb/size) 2=1500/5-08, (min. 1-15), 11=1509/5-08, (min. 1-15) Max Horiz 2=159 (LC 18) Max Uplift 2=-162 (LC 14), 11=-149 (LC 15)		

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-9-2, Interior (1) 2-9-2 to 15-6-6, Exterior(2R) 15-6-6 to 22-9-10, Interior (1) 22-9-10 to 33-6-14, Exterior(2E) 33-6-14 to 37-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

Job 25080032-01	Truss B3GE	Truss Type Common Structural Gable	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:68.9

Plate Offsets (X, Y): [2:3-01,1-08], [7:3-12,Edge], [12:1-15,1-08], [13:3-00,Edge], [31:Edge,2-00], [32:5-00,3-00]

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.28	33-36	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.46	33-36	>911	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.07	31	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
Weight: 271 lb FT = 20%												

LUMBER			BRACING			
TOP CHORD	2x4 SP No.2		TOP CHORD	Structural wood sheathing directly applied or 2-11-11 oc purlins, except end verticals.		
BOT CHORD	2x6 SP No.2			Rigid ceiling directly applied or 10-0-0 oc bracing.		
WEBS	2x4 SP No.3 *Except* W3:2x4 SP No.2		BOT CHORD	1 Brace at Jt(s): 11, 14, 18, 20,		
OTHERS	2x4 SP No.3		JOINTS	24, 26, 22		
SLIDER	Left 2x4 SP No.3 -- 2-00-00			<div>MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.</div>		
REACTIONS (lb/size)						
2=1472/5-08, (min. 1-14), 31=53/1-05-08, (min. 1-15), 32=1480/1-05-08, (min. 1-15)						
Max Horiz 2=159 (LC 18)						

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1527/0, 3-41=-2889/548, 4-41=-2868/570, 4-5=-2625/484, 5-6=-2673/603, 6-42=-2629/610, 7-42=-2603/631, 7-8=-355/276, 8-10=-331/273, 10-13=-366/238, 13-15=-372/227, 15-43=-259/181, 17-43=-303/172, 17-19=-311/146, 19-21=-347/120, 21-23=-320/43, 23-25=-335/17, 25-44=-287/0, 28-44=-331/0, 28-29=-362/0, 29-31=-323/0, 7-9=-2309/388, 9-11=-2218/315, 11-12=-2248/340, 12-14=-2248/340, 14-16=-2344/386, 16-18=-2197/320, 18-20=-2236/342, 20-22=-2263/358, 22-24=-2507/552, 24-26=-2544/566, 26-27=-2613/617, 27-32=-2619/624
BOT CHORD	2-36=-348/2564, 36-45=-50/1663, 35-45=-50/1663, 34-35=-50/1663, 34-46=-50/1663, 33-46=-50/1663, 32-33=-309/2496, 31-32=0/272
WEBS	14-15=-312/103, 5-36=-429/257, 16-33=-461/148, 4-36=-305/206, 22-33=-304/233, 7-36=-251/1177, 7-33=-146/1107

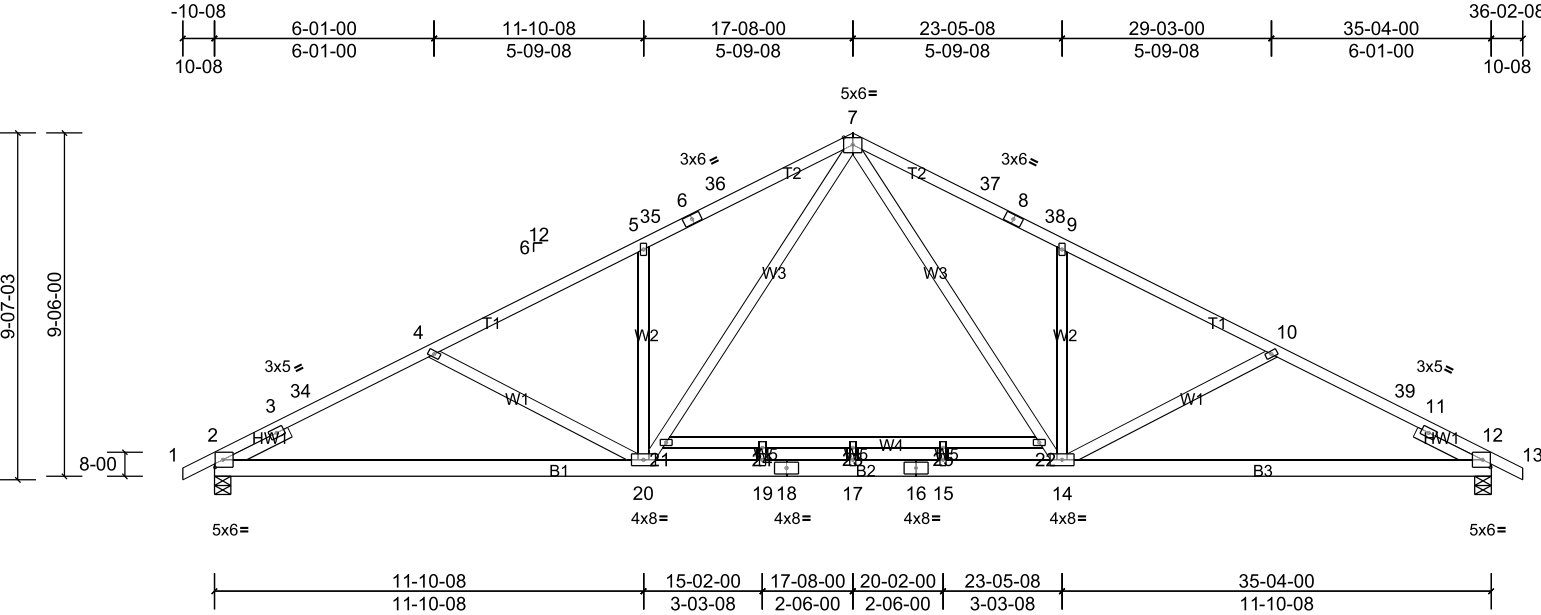
- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-9-2, Exterior(2N) 2-9-2 to 15-6-6, Corner(3R) 15-6-6 to 22-9-10, Exterior(2N) 22-9-10 to 33-6-14, Corner(3E) 33-6-14 to 37-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 31, and 32. This connection is for uplift only and does not consider lateral forces.

Job	Truss	Truss Type	Qty	Ply	1011 Serenity-Roof-B330 A CP TMB GLH
25080032-01	B3GE	Common Structural Gable	1	1	Job Reference (optional)

- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) 2 X 4 notch at 20000 o.c. is allowed along the stacked top chord. No notches allowed in overhang and 1008 from left end and 1008 from right end or 12" along rake from scarf, whichever is larger. Minimum 1.5x4 tie plates required at 2-0-0 o.c. maximum between the stacking chords. For edge-wise notching, provide at least one tie plate between each notch.

LOAD CASE(S) Standard

Job 25080032-01	Truss C	Truss Type Common	Qty 5	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:63.8									
Plate Offsets (X, Y): [2:2-09,2-08], [12:2-09,2-08]									
Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.15 17	>999	240
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.49 17	>858	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.08 12	n/a	n/a
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH					
BCDL	10.0								
									PLATES GRIP
									MT20 244/190
									Weight: 235 lb FT = 20%

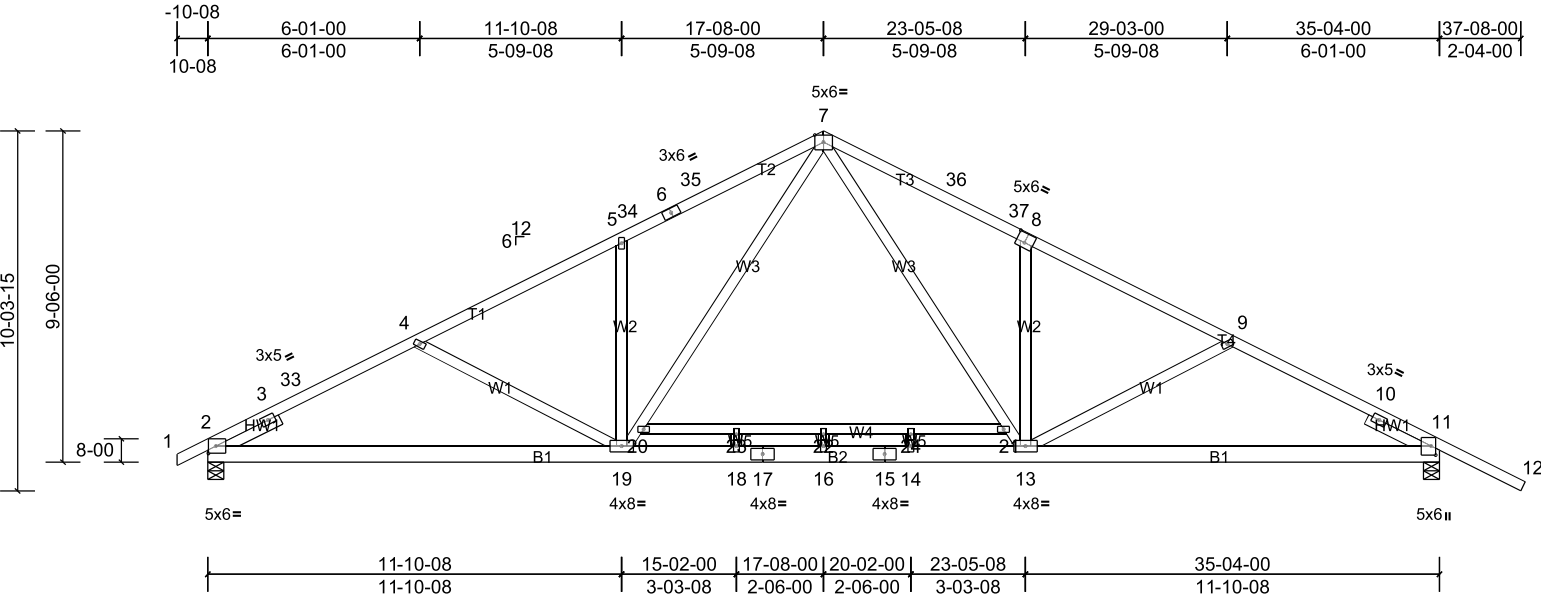
LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3 *Except* W3,W4:2x4 SP No.2		
SLIDER	Left 2x4 SP No.3 -- 2-00-00, Right 2x4 SP No.3 -- 2-00-00		
REACTIONS	(lb/size) 2=1561/5-08, (min. 1-13), 12=1561/5-08, (min. 1-13) Max Horiz 2=-147 (LC 15) Max Uplift 2=-55 (LC 14), 12=-55 (LC 15)		

FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1231/0, 3-34=-2582/58, 4-34=-2564/75, 4-5=-2327/28, 5-35=-2380/103, 6-35=-2369/106, 6-36=-2329/115, 7-36=-2308/134, 7-37=-2308/134, 8-37=-2329/115, 8-38=-2369/106, 9-38=-2380/103, 9-10=-2327/28, 10-39=-2564/75, 11-39=-2583/58, 11-12=-1064/0
BOT CHORD	2-20=-110/2241, 19-20=0/1450, 18-19=0/1450, 17-18=0/1450, 16-17=0/1450, 15-16=0/1450, 14-15=0/1450, 12-14=0/2241
WEBS	5-20=-509/217, 20-21=-93/1107, 7-21=-75/1122, 4-20=-287/205, 7-22=-75/1122, 14-22=-92/1107, 9-14=-509/217, 10-14=-287/206

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-7-14, Interior (1) 2-7-14 to 14-1-10, Exterior(2R) 14-1-10 to 21-2-6, Interior (1) 21-2-6 to 32-8-2, Exterior(2E) 32-8-2 to 36-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 200.0lb AC unit load placed on the bottom chord, 17-8-0 from left end, supported at two points, 5-0-0 apart.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
 - Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job 25080032-01	Truss C1	Truss Type Common	Qty 4	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:66.1

Plate Offsets (X, Y): [2:2-09,2-08], [8:3-00,3-04], [11:3-01,1-08]

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.15	16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.49	16	>856	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.08	11	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
Weight: 238 lb FT = 20%												

LUMBER
TOP CHORD 2x4 SP No.2 *Except* T4:2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* W3,W4:2x4 SP No.2
SLIDER Left 2x4 SP No.3 -- 2-00-00, Right 2x4 SP No.3 -- 2-00-00

BRACING
TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 2-2-0 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.

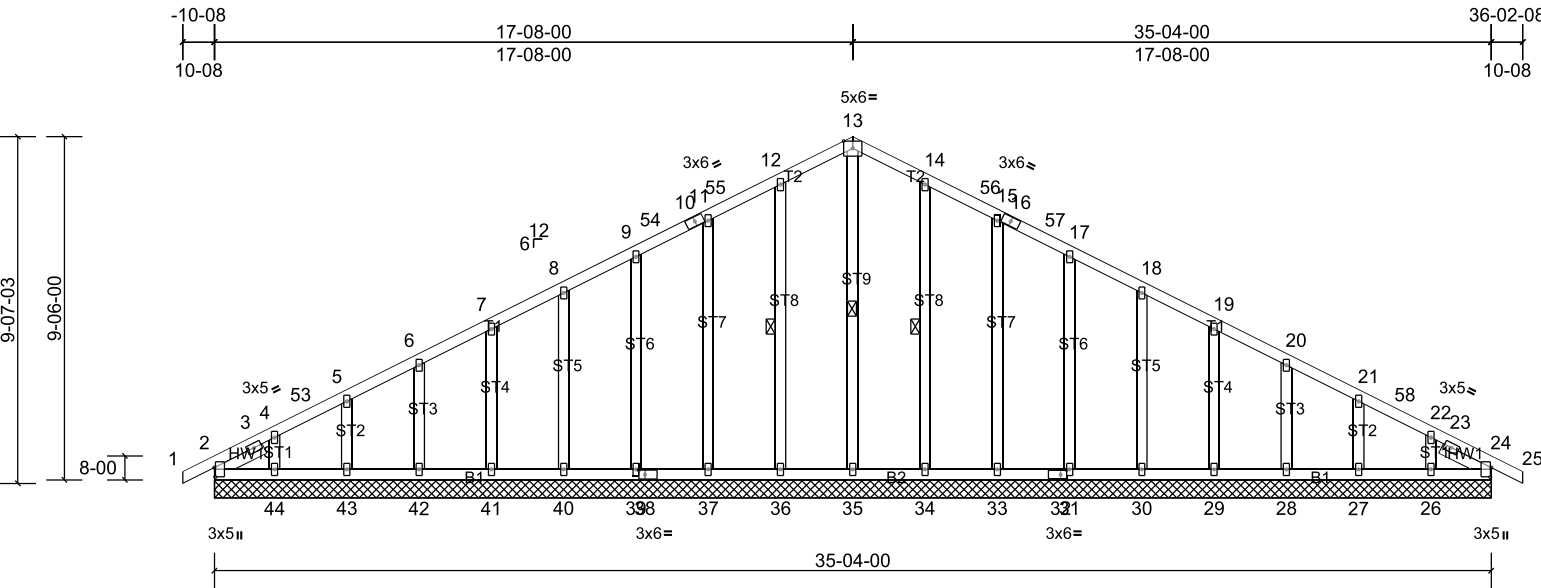
REACTIONS (lb/size) 2=1556/5-08, (min. 1-13), 11=1658/5-08, (min. 1-15)
Max Horiz 2=-171 (LC 19)
Max Uplift 2=-54 (LC 14), 11=-86 (LC 15)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1229/0, 3-33=-2576/48, 4-33=-2557/66, 4-5=-2320/18, 5-34=-2373/93, 6-34=-2363/97, 6-35=-2322/106, 7-35=-2301/125, 7-36=-2290/109, 36-37=-2352/90, 8-37=-2363/78, 8-9=-2310/1, 9-10=-2553/38, 10-11=-992/0
BOT CHORD 2-19=-97/2240, 18-19=0/1441, 17-18=0/1441, 16-17=0/1441, 15-16=0/1441, 14-15=0/1441, 13-14=0/1441, 11-13=0/2214
WEBS 5-19=-509/217, 19-20=-93/1109, 7-20=-75/1124, 4-19=-287/205, 7-21=-66/1102, 13-21=-81/1084, 8-13=-515/218, 9-13=-265/196

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-7-14, Interior (1) 2-7-14 to 14-1-10, Exterior(2R) 14-1-10 to 21-2-6, Interior (1) 21-2-6 to 34-2-6, Exterior(2E) 34-2-6 to 37-8-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 200.0lb AC unit load placed on the bottom chord, 17-8-0 from left end, supported at two points, 5-0-0 apart.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
 - Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job 25080032-01	Truss CGE	Truss Type Common Supported Gable	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:63.8

Plate Offsets (X, Y): [2:3-01,0-05], [24:3-01,0-05], [32:2-00,1-08], [38:2-00,1-08]

Loading	(psf)	Spacing	2-00-00	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	26	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 238 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 1-06-00, Right 2x4 SP No.3 -- 1-06-00

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 13-35, 12-36, 14-34

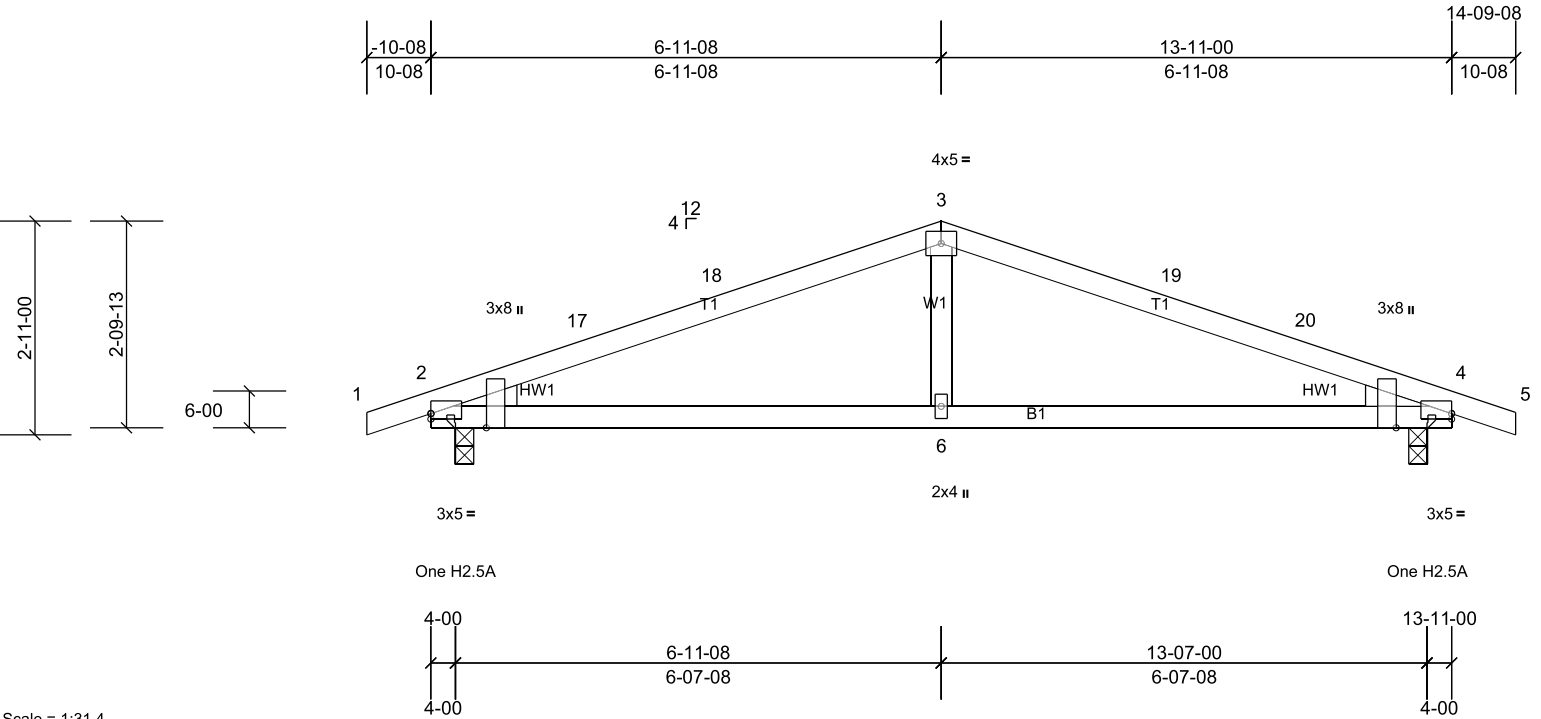
REACTIONS All bearings 35-04-00.
(lb) - Max Horiz 2=-147 (LC 15), 45=-147 (LC 15)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 26, 27, 28, 29, 30, 31, 33, 34, 36, 37, 39, 40, 41, 42, 43, 44, 45
Max Grav All reactions 250 (lb) or less at joint(s) 2, 24, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 39, 40, 41, 42, 43, 44, 45, 49

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

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-7-14, Interior (1) 2-7-14 to 14-1-10, Exterior(2R) 14-1-10 to 21-2-6, Interior (1) 21-2-6 to 32-8-2, Exterior(2E) 32-8-2 to 36-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 36, 37, 39, 40, 41, 42, 43, 44, 34, 33, 31, 30, 29, 28, 27, 26, 2.
 - Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job 25080032-01	Truss D	Truss Type Common	Qty 4	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:31.4

Plate Offsets (X, Y): [2:Edge,0-14], [2:2-05,Edge], [4:Edge,0-14], [4:2-05,Edge]

Loading	(psf)	Spacing	2-00-00	CSI	0.72	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.09	6-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.13	6-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.02	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 51 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 4-1-1 oc purlins.
Rigid ceiling directly applied or 8-6-15 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=609/3-00, (min. 1-08), 4=609/3-00, (min. 1-08)
Max Horiz 2=41 (LC 14)
Max Uplift 2=-221 (LC 10), 4=-221 (LC 11)
Max Grav 2=708 (LC 21), 4=708 (LC 22)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-17=-901/575, 17-18=-822/583, 3-18=-817/594, 3-19=-817/594, 19-20=-822/583, 4-20=-901/575
BOT CHORD 2-6=-458/775, 4-6=-458/775
WEBS 3-6=-116/268

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-8, Exterior(2R) 3-11-8 to 9-11-8, Interior (1) 9-11-8 to 11-9-8, Exterior(2E) 11-9-8 to 14-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

Job 25080032-01	Truss DGE	Truss Type Common Supported Gable	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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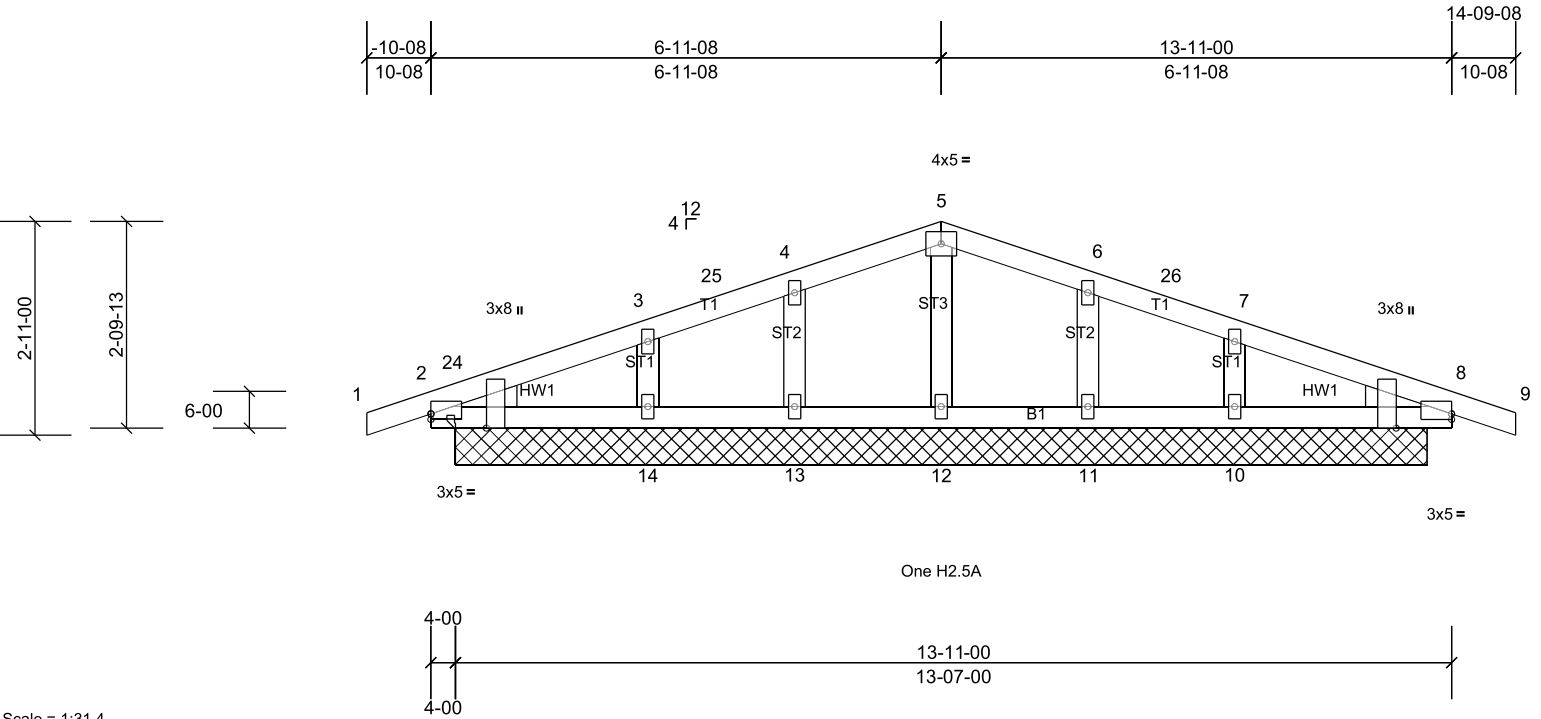


Plate Offsets (X, Y): [2:Edge,0-14], [2:2-05,Edge], [8:Edge,0-14], [8:2-05,Edge]

Loading	(psf)	Spacing	2-00-00	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.01	8	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 59 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

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.

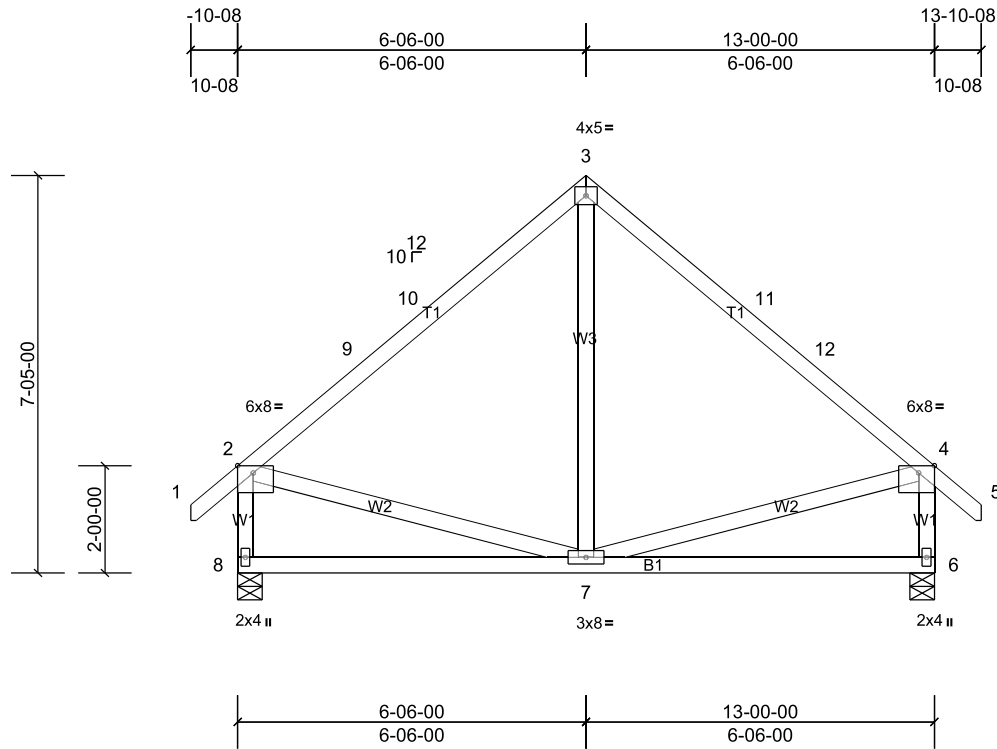
REACTIONS All bearings 13-03-00.
(lb) - Max Horiz 2=41 (LC 14), 18=41 (LC 14)
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 10, 11, 12, 13, 14, 18, 21
Max Grav All reactions 250 (lb) or less at joint(s) 2, 8, 11, 13, 18, 21 except 10=303 (LC 22), 12=421 (LC 21), 14=437 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-220/432, 3-25=-165/350, 4-25=-159/401, 4-5=-123/411, 5-6=-122/395, 6-26=-164/392, 7-26=-170/374, 7-8=-217/405
BOT CHORD 2-14=-365/260, 13-14=-365/260, 12-13=-365/260, 11-12=-365/260, 10-11=-365/260, 8-10=-365/260
WEBS 5-12=-360/181, 3-14=-275/153

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 3-11-8, Corner(3R) 3-11-8 to 9-11-8, Exterior(2N) 9-11-8 to 11-9-8, Corner(3E) 11-9-8 to 14-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, 12, 13, 14, 11, 10, and 8. This connection is for uplift only and does not consider lateral forces.
 - Non Standard bearing condition. Review required.

LOAD CASE(S) Standard

Job 25080032-01	Truss E	Truss Type Common	Qty 3	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:43

Plate Offsets (X, Y): [2:Edge,4-06], [4:Edge,4-06]

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.07	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 82 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* W1:2x4 SP No.2

REACTIONS (lb/size) 6=566/5-08, (min. 1-08), 8=566/5-08, (min. 1-08)
Max Horiz 8=205 (LC 13)
Max Uplift 6=-48 (LC 15), 8=-48 (LC 14)
Max Grav 6=648 (LC 22), 8=648 (LC 21)

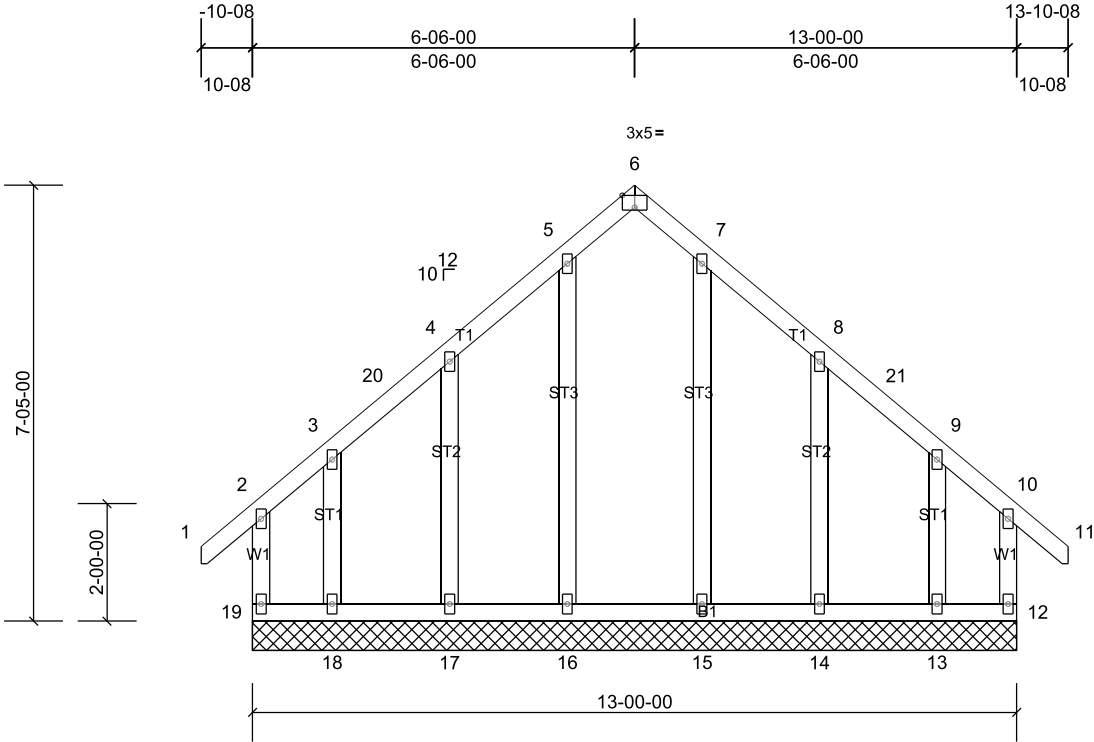
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-532/110, 9-10=-380/118, 3-10=-379/142, 3-11=-379/142, 11-12=-380/119, 4-12=-532/110, 2-8=-590/173,
4-6=-590/158
BOT CHORD 7-8=-207/272

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-9-14 to 2-2-2, Interior (1) 2-2-2 to 3-6-0, Exterior(2R) 3-6-0 to 9-6-0, Interior (1) 9-6-0 to 10-9-14, Exterior(2E) 10-9-14 to 13-9-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-11 oc purlins, except end verticals.
BOT CHORD 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 25080032-01	Truss EGE	Truss Type Common Supported Gable	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:39.2

Plate Offsets (X, Y): [6:2-08,Edge]

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 91 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
Rigid ceiling directly applied or 6-0-0 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS

All bearings 13-00-00.
(lb) - Max Horiz 19=205 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) except 12=160 (LC 11), 13=183 (LC 10), 14=107 (LC 15), 17=107 (LC 14), 18=189 (LC 11), 19=168 (LC 10)
Max Grav All reactions 250 (lb) or less at joint(s) 12, 14, 17, 19 except 13=279 (LC 26), 15=266 (LC 6), 16=266 (LC 5), 18=284 (LC 25)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-96/300, 7-8=-97/299

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-14 to 2-2-2, Exterior(2N) 2-2-2 to 3-4-4, Corner(3R) 3-4-4 to 9-7-12, Exterior(2N) 9-7-12 to 10-9-14, Corner(3E) 10-9-14 to 13-9-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 168 lb uplift at joint 19, 160 lb uplift at joint 12, 106 lb uplift at joint 17, 188 lb uplift at joint 18, 107 lb uplift at joint 14 and 182 lb uplift at joint 13.

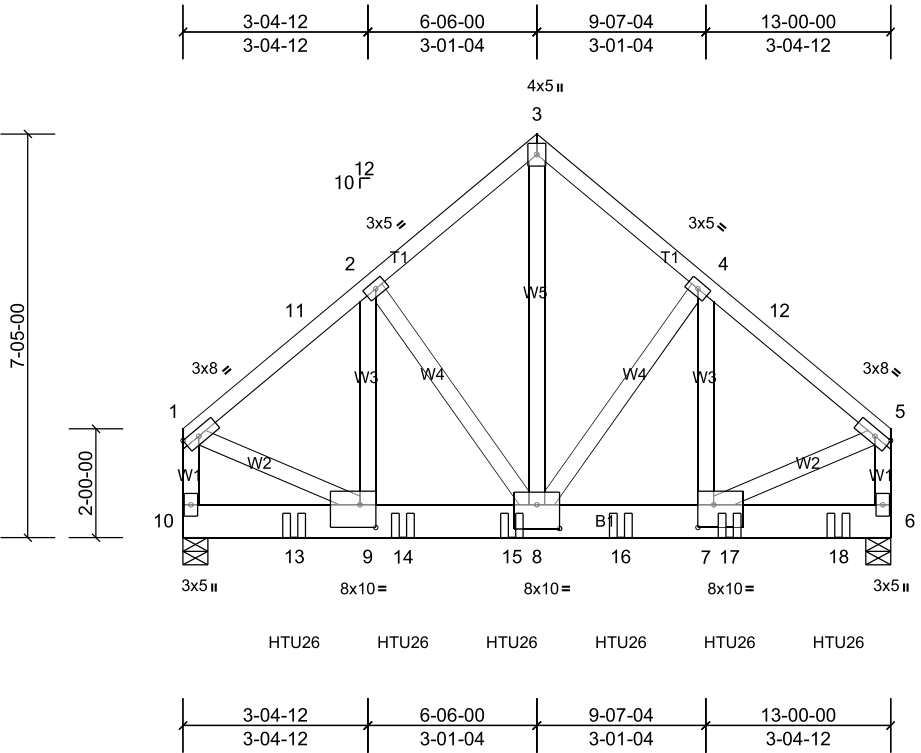
LOAD CASE(S) Standard

Job 25080032-01	Truss EGR	Truss Type Common Girder	Qty 1	Ply 2	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Carter Components, Sanford, NC, user

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Page: 1



Scale = 1:42.3

Plate Offsets (X, Y): [7:3-08,5-00], [8:5-00,5-04], [9:3-08,5-00]

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.03	8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.06	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
Weight: 230 lb FT = 20%												

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x8 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS (lb/size) 6=5134/5-08, (min. 2-05), 10=4411/5-08, (min. 2-00)
Max Horiz 10=-180 (LC 8)
Max Uplift 6=-486 (LC 13), 10=-416 (LC 12)
Max Grav 6=5540 (LC 6), 10=4772 (LC 5)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-11=-4028/380, 2-11=-3957/393, 2-3=-3386/394, 3-4=-3386/394, 4-12=-4006/398, 5-12=-4077/385, 1-10=-4108/376, 5-6=-4150/380
BOT CHORD 9-14=-317/3046, 14-15=-317/3046, 8-15=-317/3046, 8-16=-253/3083, 7-16=-253/3083
WEBS 1-9=-265/3281, 5-7=-268/3306, 2-9=-96/944, 2-8=-838/176, 3-8=-429/4037, 4-8=-901/182, 4-7=-105/1028

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 9-00 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 6-00 oc.
Web connected as follows: 2x4 - 1 row at 9-00 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 6. This connection is for uplift only and does not consider lateral forces.
 - Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-8 from the left end to 12-0-8 to connect truss(es) B1 (1 ply 2x6 SP), B1T (1 ply 2x6 SP) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

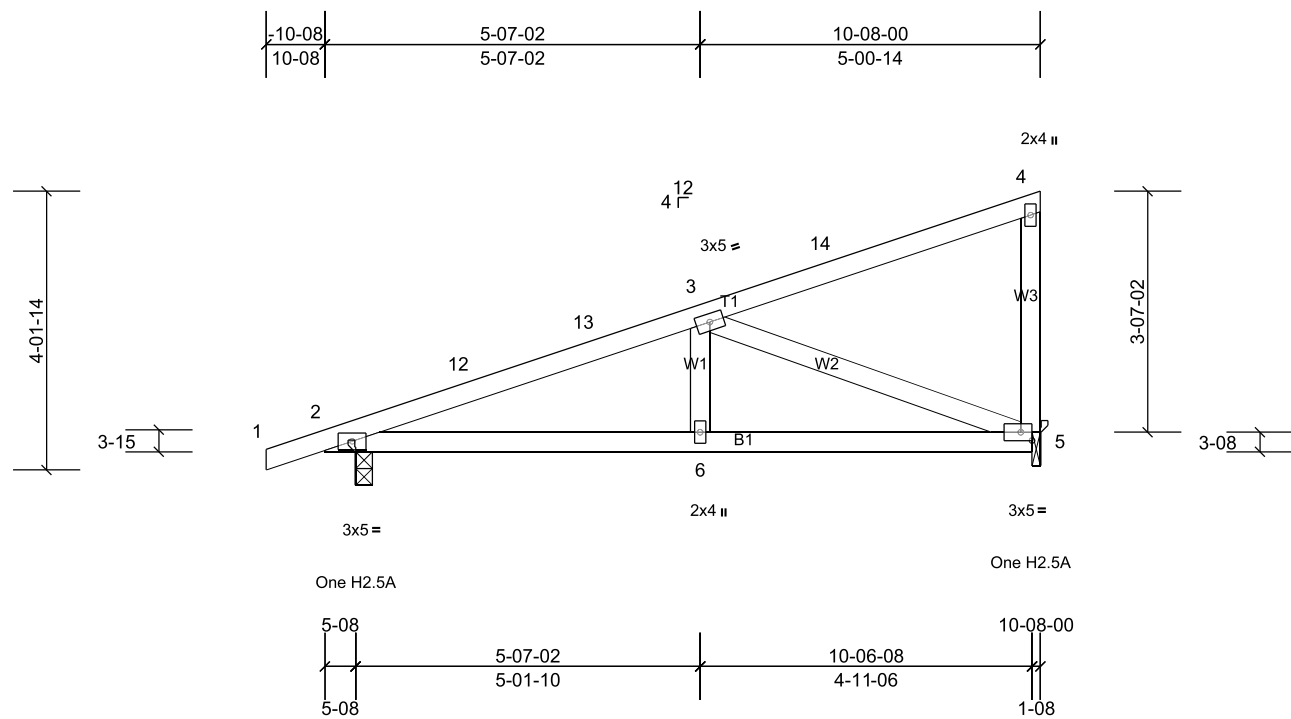
LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)

Job	Truss	Truss Type	Qty	Ply	1011 Serenity-Roof-B330 A CP TMB GLH
25080032-01	EGR	Common Girder	1	2	Job Reference (optional)

Vert: 1-3=-60, 3-5=-60, 6-10=-20
Concentrated Loads (lb)
Vert: 13=-1427, 14=-1420, 15=-1420, 16=-1420, 17=-1420, 18=-1422

Job 25080032-01	Truss F	Truss Type Monopitch	Qty 2	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:34.3

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	0.03	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.04	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 49 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
Rigid ceiling directly applied or 9-2-5 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

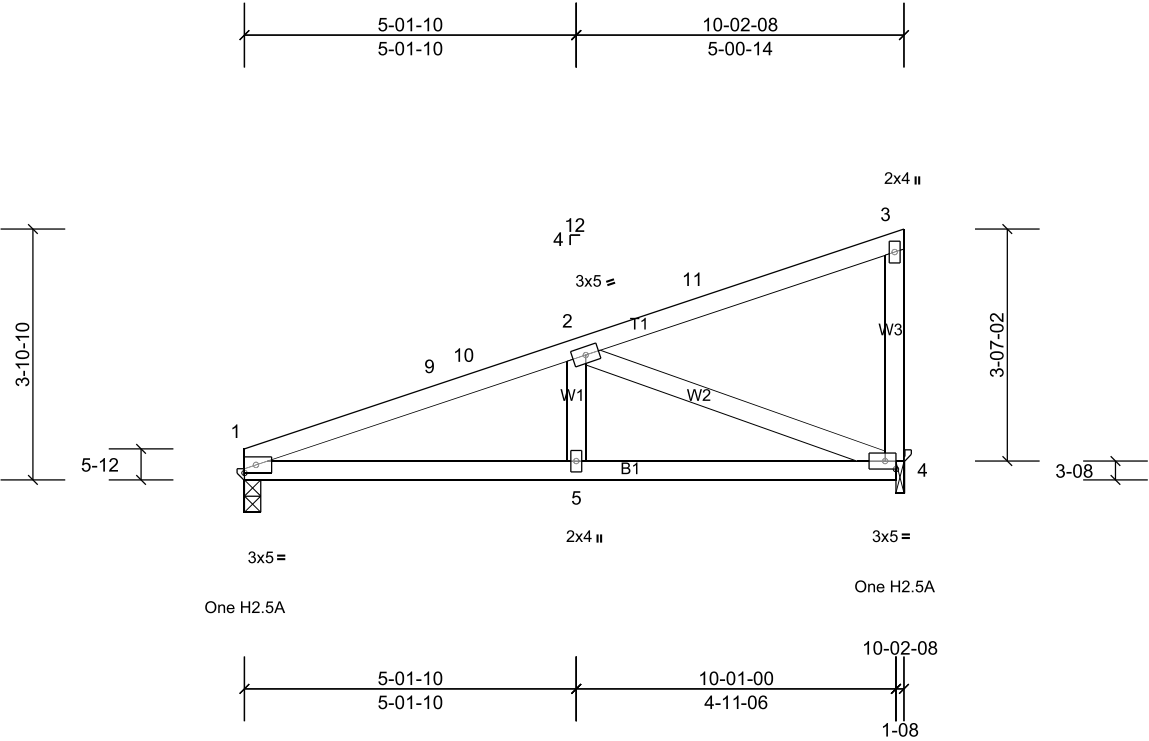
REACTIONS (lb/size) 2=497/3-00, (min. 1-08), 5=397/1-08, (min. 1-08)
Max Horiz 2=147 (LC 13)
Max Uplift 2=-190 (LC 10), 5=-159 (LC 10)
Max Grav 2=559 (LC 21), 5=525 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-12=-858/414, 12-13=-816/417, 3-13=-766/428
BOT CHORD 2-6=-404/775, 5-6=-404/775
WEBS 3-5=-803/487

- NOTES
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-6-4, Exterior(2E) 7-6-4 to 10-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 5.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

Job 25080032-01	Truss F1	Truss Type Monopitch	Qty 4	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:35.7

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	0.03	5-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.04	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 46 lb	FT = 20%

LUMBER

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

REACTIONS (lb/size) 1=402/3-00, (min. 1-08), 4=402/1-08, (min. 1-08)
Max Horiz 1=139 (LC 13)
Max Uplift 1=-141 (LC 10), 4=-162 (LC 10)
Max Grav 1=464 (LC 21), 4=530 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-9=-879/471, 9-10=-829/473, 2-10=-787/481
BOT CHORD 1-5=-463/796, 4-5=-463/796
WEBS 2-4=-827/552

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 7-0-12, Exterior(2E) 7-0-12 to 10-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 4. This connection is for uplift only and does not consider lateral forces.

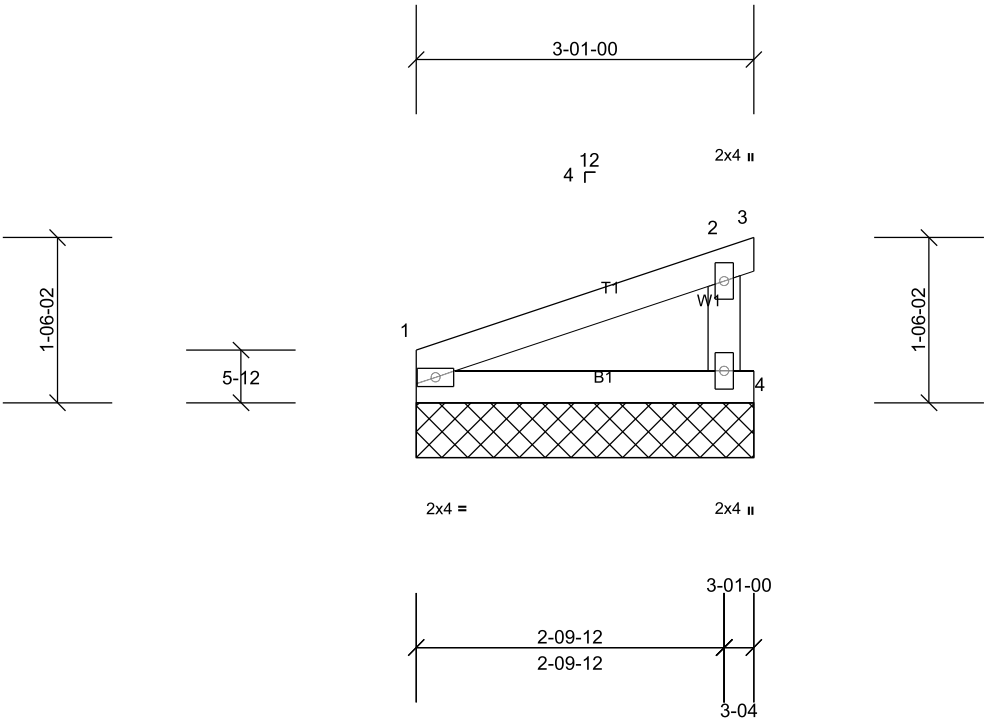
LOAD CASE(S) Standard

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
Rigid ceiling directly applied or 8-6-4 oc bracing.
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job 25080032-01	Truss F1GE	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:21

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	1	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							Weight: 11 lb	FT = 20%
BCDL	10.0											

LUMBER

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

REACTIONS All bearings 3-01-00.
(lb) - Max Horiz 1=43 (LC 13), 5=43 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 4, 5 except 3=184 (LC 20)
Max Grav All reactions 250 (lb) or less at joint(s) 1, 3, 5 except 4=375 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=332/326

NOTES

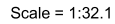
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 1 except (jt=lb) 3=183.

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals.
BOT CHORD 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.

Carter Components, Sanford, NC, user Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Fri Aug 15 11:17:4 Page: 1
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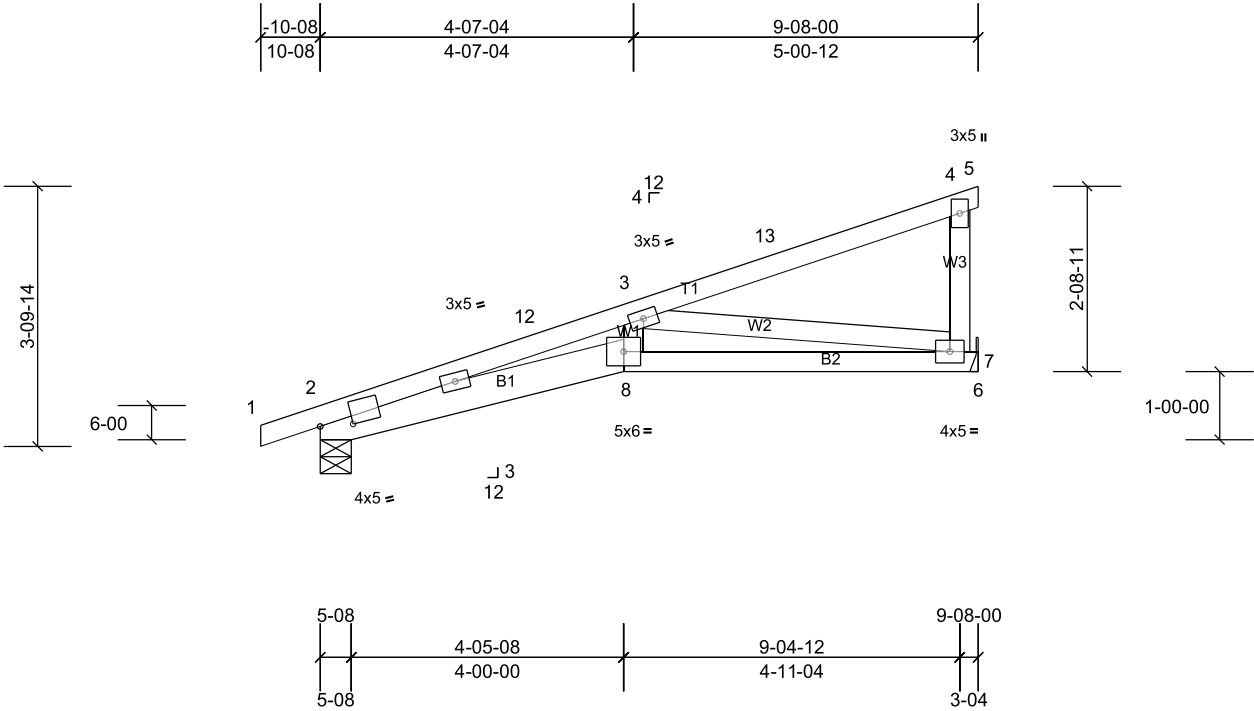


LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3	BRACING TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. <u>Rigid ceiling directly applied or 10-0-0 oc bracing.</u> <div style="border: 1px solid black; padding: 5px;"> MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. </div>
REACTIONS All bearings 10-02-08. (lb) - Max Horiz 2=147 (LC 13), 15=147 (LC 13) Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 9, 10, 11, 12, 15 Max Grav All reactions 250 (lb) or less at joint(s) 2, 8, 9, 10, 11, 12, 15		
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		

- ### NOTES
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-6-4, Corner(3E) 7-6-4 to 10-6-4 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
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TC LL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 6) All plates are 2x4 MT20 unless otherwise indicated.
 - 7) Gable studs spaced at 2'-0" oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0" tall by 2'-0" wide will fit between the bottom chord and any other members.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 2.
 - 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8, 9, 10, 11, and 12. This connection is for uplift only and does not consider lateral forces.
 - 12) Non Standard bearing condition. Review required.

LOAD CASE(S) Standard

Job 25080032-01	Truss G	Truss Type Monopitch	Qty 9	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:33.8

Plate Offsets (X, Y): [2:5-12,1-00]

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.08	8-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.13	8-11	>871	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.05	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 46 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* B2:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 4-5-5 oc purlins, except end verticals.
Rigid ceiling directly applied or 7-11-15 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=430/5-08, (min. 1-08), 7=395/ Mechanical, (min. 1-08)
Max Horiz 2=121 (LC 11)
Max Uplift 2=-81 (LC 10), 7=-74 (LC 14)
Max Grav 2=491 (LC 21), 7=524 (LC 21)

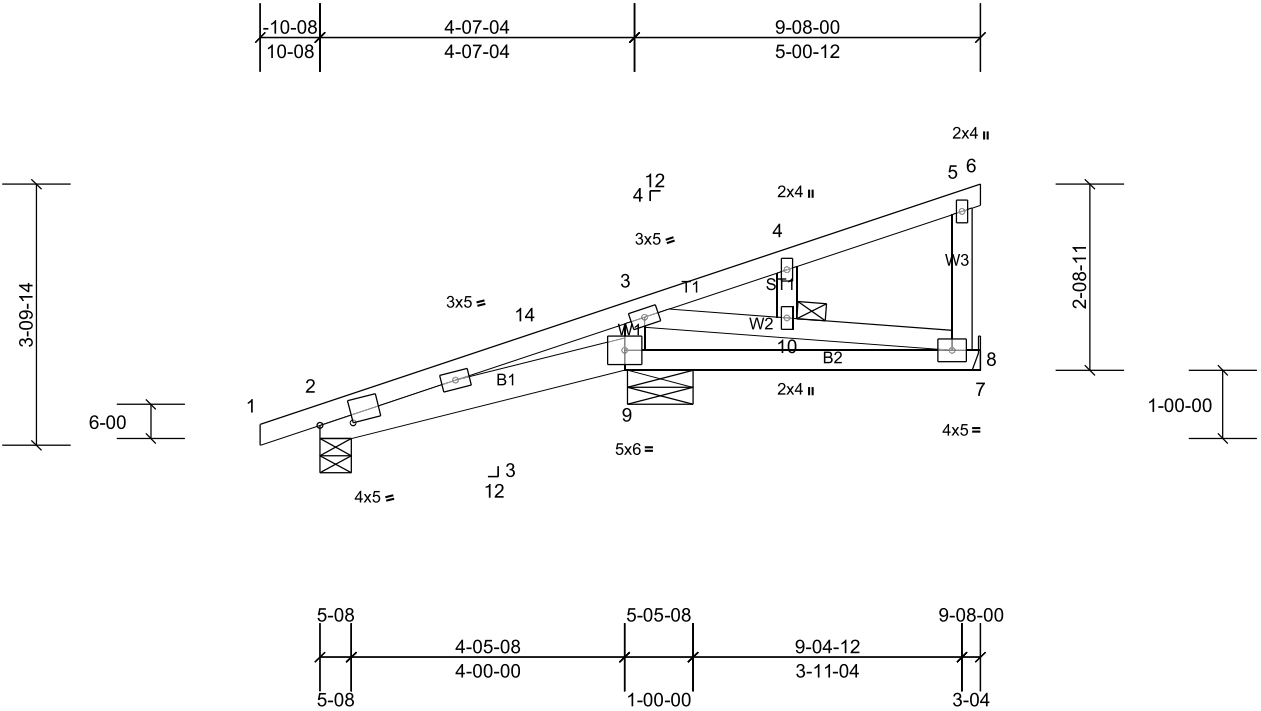
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-12=-1714/543, 3-12=-1697/550
BOT CHORD 2-8=-574/1652, 7-8=-544/1531
WEBS 3-8=-70/407, 3-7=-1460/561

NOTES

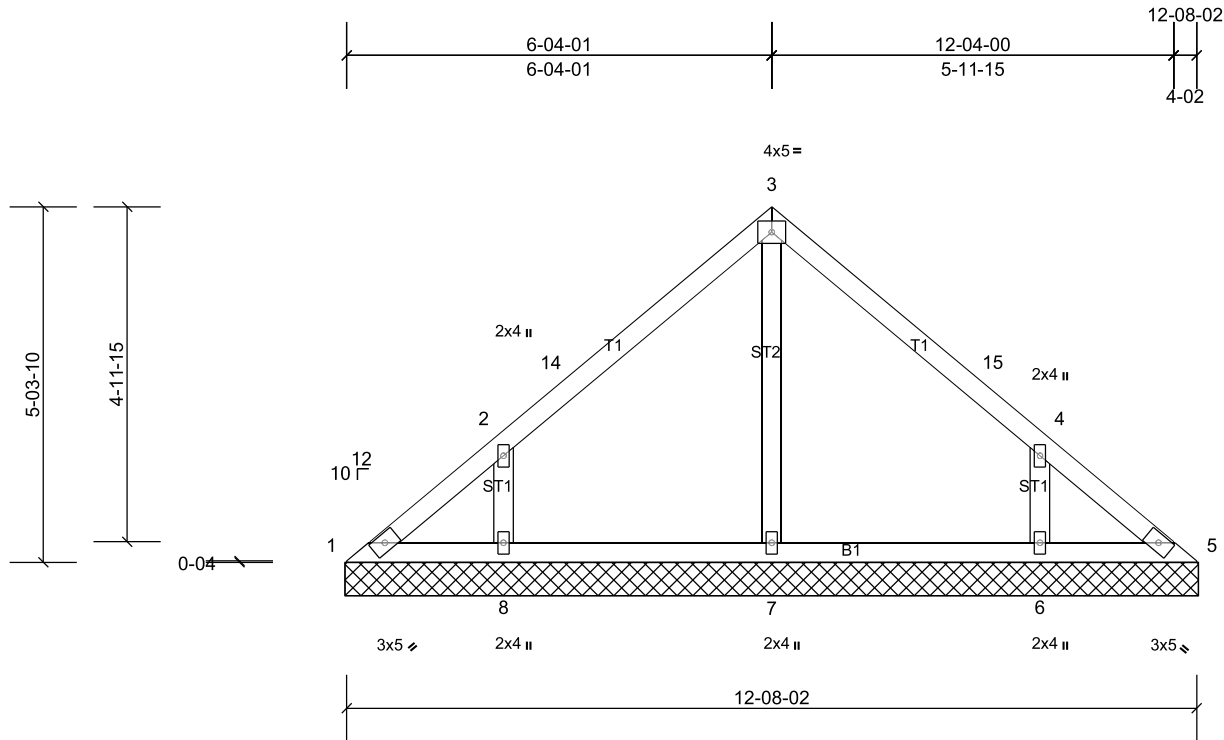
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 1-11-13, Interior (1) 1-11-13 to 6-8-0, Exterior(2E) 6-8-0 to 9-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 7.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

Job 25080032-01	Truss GSE	Truss Type Monopitch Structural Gable	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Job 25080032-01	Truss V1	Truss Type Valley	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:34.4

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 53 lb	FT = 20%
BCDL	10.0											

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 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.

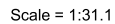
REACTIONS All bearings 12-08-11.
(lb) - Max Horiz 1=-120 (LC 10), 11=-120 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5, 11 except 6=-138 (LC 15), 8=-135 (LC 14)
Max Grav All reactions 250 (lb) or less at joint(s) 5 except 6=422 (LC 21), 7=411 (LC 21), 8=439 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-7=-327/0, 2-8=-383/203, 4-6=-379/206

- NOTES
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 3-4-6, Exterior(2R) 3-4-6 to 9-4-6, Interior (1) 9-4-6 to 9-8-11, Exterior(2E) 9-8-11 to 12-8-11 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - 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, 1 except (jt=lb) 8=135, 6=138.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5, 11.

LOAD CASE(S) Standard

Carter Components, Sanford, NC, user Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Fri Aug 15 11:17:42 Page: 1
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LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3	BRACING TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 10-0-0 oc purlins. <u>Rigid ceiling directly applied or 6-0-0 oc bracing.</u>
REACTIONS (lb/size) 1=16/10-03-14, (min. 1-08), 3=16/10-03-14, (min. 1-08), 4=795/10-03-14, (min. 1-08) Max Horiz 1=-97 (LC 10) Max Uplift 1=-73 (LC 21), 3=-73 (LC 20), 4=-126 (LC 14) Max Grav 1=84 (LC 20), 3=84 (LC 21), 4=870 (LC 20)		
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-9=-136/320, 9-11=-119/325, 2-11=-116/435, 2-10=-119/435, 3-10=-136/320 BOT CHORD 1-4=-288/191, 3-4=-288/191 WEBS 2-4=-727/301		
<div style="border: 1px solid black; padding: 5px;"> MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. </div>		

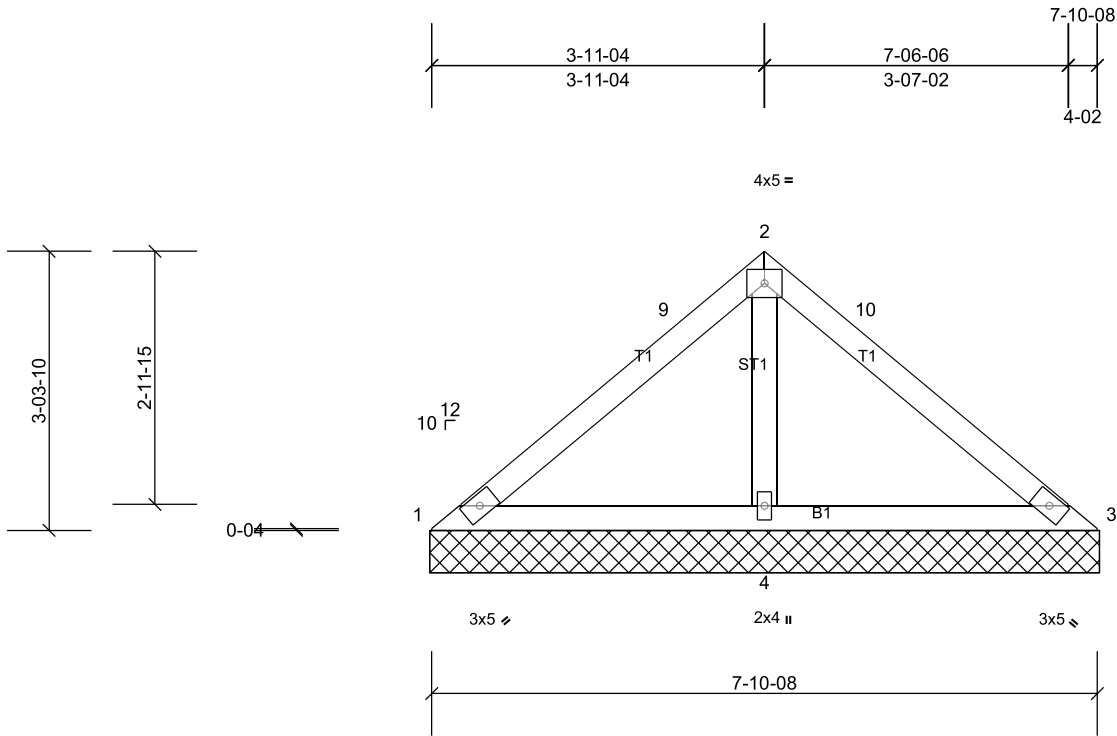
Structural wood sheathing directly applied or 10-0-0 oc purlins.
Rigid ceiling directly applied or 6-0-0 oc bracing.

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 7-3-14, Exterior(2E) 7-3-14 to 10-3-14 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) TCFL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 1, 73 lb uplift at joint 3 and 126 lb uplift at joint 4.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard

Job 25080032-01	Truss V3	Truss Type Valley	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:27.3

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							Weight: 30 lb	FT = 20%
BCDL	10.0											

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 7-10-8 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.

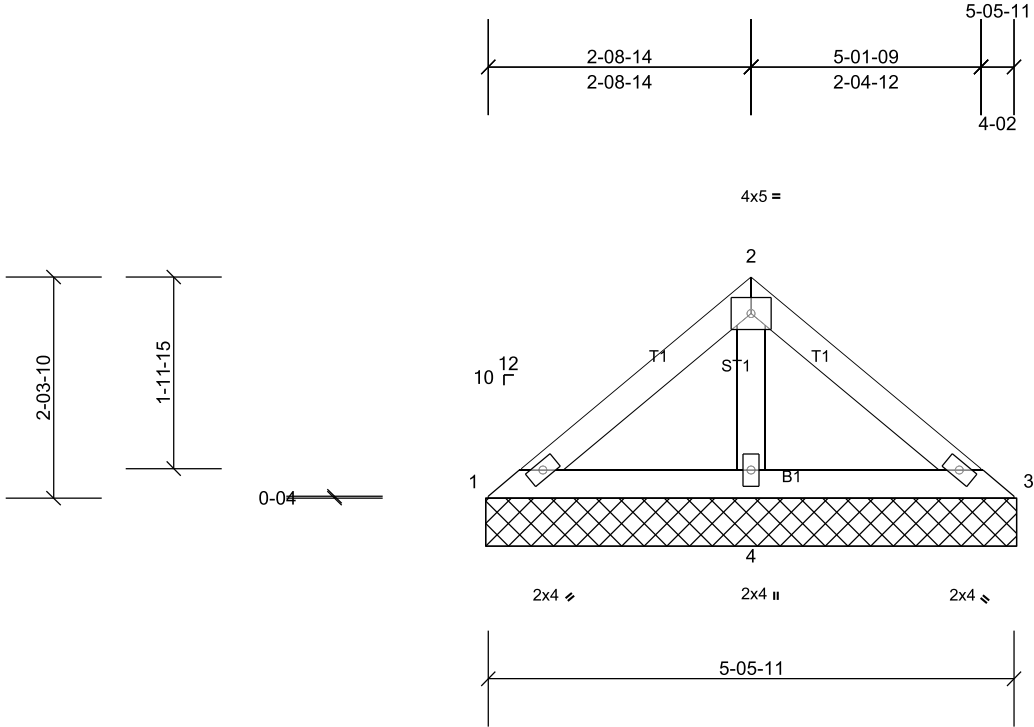
REACTIONS (lb/size) 1=30/7-11-02, (min. 1-08), 3=30/7-11-02, (min. 1-08),
4=573/7-11-02, (min. 1-08)
Max Horiz 1=-73 (LC 10)
Max Uplift 1=-36 (LC 21), 3=-36 (LC 20), 4=-89 (LC 14)
Max Grav 1=101 (LC 20), 3=101 (LC 21), 4=620 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-95/282, 2-10=-95/282
WEBS 2-4=-500/234

- NOTES
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 4-11-2, Exterior(2E) 4-11-2 to 7-11-2 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - Gable requires continuous bottom chord bearing.
 - 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 36 lb uplift at joint 1, 36 lb uplift at joint 3 and 89 lb uplift at joint 4.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard

Job 25080032-01	Truss V4	Truss Type Valley	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:24

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							Weight: 20 lb	FT = 20%
BCDL	10.0											

LUMBER

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

BRACING

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 5-5-11 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=49/5-06-05, (min. 1-08), 3=49/5-06-05, (min. 1-08),
4=344/5-06-05, (min. 1-08)
Max Horiz 1=50 (LC 13)
Max Uplift 3=-5 (LC 15), 4=-43 (LC 14)
Max Grav 1=94 (LC 20), 3=94 (LC 21), 4=358 (LC 20)

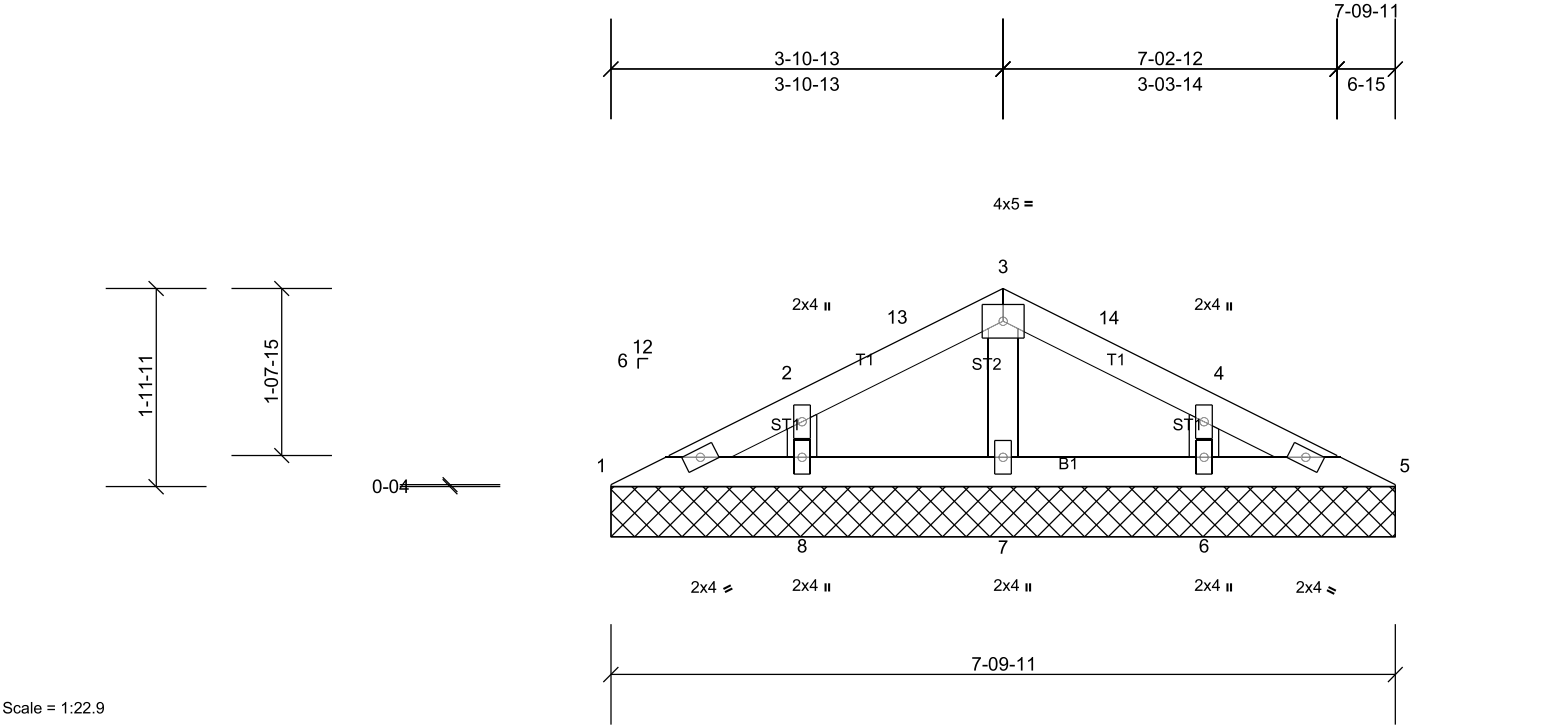
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-269/128

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- 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 5 lb uplift at joint 3 and 43 lb uplift at joint 4.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard

Job 25080032-01	Truss V11	Truss Type Valley	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Loading	(psf)	Spacing	2-00-00	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	n/a	-	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 26 lb	FT = 20%

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

BRACING
TOP CHORD
BOT CHORD

REACTIONS All bearings 7-09-11.
(lb) - Max Horiz 1=29 (LC 14)
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5, 6, 8
Max Grav All reactions 250 (lb) or less at joint(s) 1, 5, 7 except 6=263 (LC 21), 8=263 (LC 20)

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

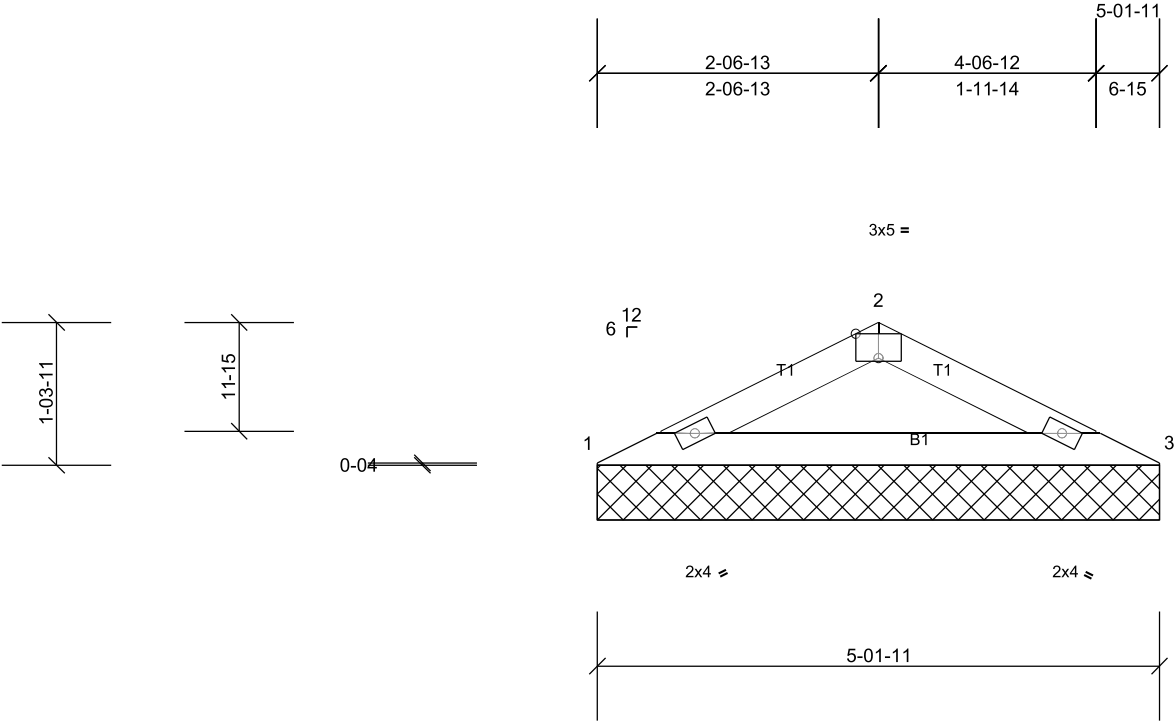
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C for Exterior(2E) 0-0-8 to 3-0-8, Exterior(2R) 3-0-8 to 4-10-3, Exterior(2E) 4-10-3 to 7-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.

LOAD CASE(S) Standard

Structural wood sheathing directly applied or 6-0-0 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.

Job 25080032-01	Truss V12	Truss Type Valley	Qty 1	Ply 1	1011 Serenity-Roof-B330 A CP TMB GLH Job Reference (optional)
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Scale = 1:21.1

Plate Offsets (X, Y): [2:2-08,Edge]

Loading	(psf)	Spacing	2-00-00	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							Weight: 14 lb	FT = 20%
BCDL	10.0											

LUMBER

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

REACTIONS (lb/size) 1=206/5-01-11, (min. 1-08), 3=206/5-01-11, (min. 1-08)
Max Horiz 1=18 (LC 14)
Max Uplift 1=-20 (LC 14), 3=-20 (LC 15)
Max Grav 1=237 (LC 20), 3=237 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-419/183, 2-3=-261/132
BOT CHORD 1-3=-150/364

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1 and 20 lb uplift at joint 3.
- MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

LOAD CASE(S) Standard