

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

Phone #:919-775-1450

Builder: David Weekley Homes



Model: B330 B CP TMB GRH

THE PLACEMENT PLAN NOTES:

1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.

2. The responsibilities of the Owner, Contractor, Building Designer, Component Designer and Component Manufacturer shall be as set forth in ANSI/TPI 1. Capitalized terms shall be as defined in ANSI/TP 1 unless otherwise indicated.

3. Each Component is designed as an individual component utilizing information provided by others. The Owner/Building Designer is responsible for reviewing all Component Submittal Packages and individual Component Design Drawings for compliance with the Construction Documents and compatibility with the overall Building design.

4. Contractor will not proceed with component installation until the Owner/Building Designer has reviewed the Component Submittal Package. Questions on the suitability of any Component will be resolved by the Building Designer.

5. The Building Designer and Contractor are responsible for all temporary and permanent bracing.

6. The Placement Plan assumes the building is dimensionally correct, structurally sound, and in a suitable condition to support each Component during installation and thereafter, including but not limited to installation of all bearing points. Proper design and construction of all structural components, including foundations, headers, beams, walls and columns are the responsibility of the Owner, Building Designer and Contractor.

7. Do not cut, drill, or modify any Component without first consulting the Component Manufacturer or Building Designer. Damaged Components shall not be installed unless directed by the Building Designer or approved by the Component Manufacturer.

8. Components must be handled and installed following all applicable safety standards and best practices, including but not limited to BCSI, OSHA, TPI and local codes. Failure to properly handle, brace or otherwise install Component can result in serious injury or death. 9. All uplift connectors shown within these documents are recommendations only. Per ANSI/TPI 1, all uplift connectors are the responsibility of the building designer and or contractor.

Approved By: _____

Date: _____



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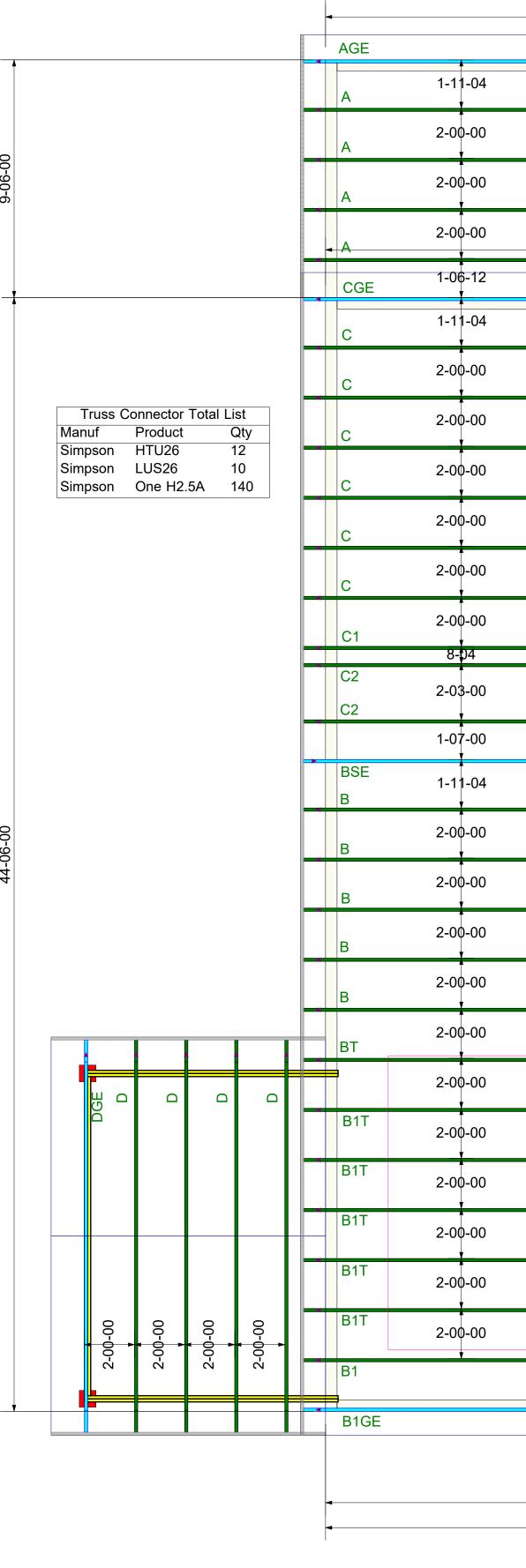
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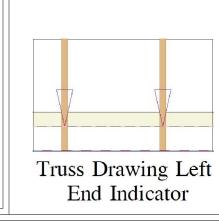
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DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH. AN SI/TPL 1, all uplift connectors are the responsibility of the bldg designer and or contractor.	THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual components to be incorporated into the building design at the specification of the building designer. See Individual design sheets for each truss design 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 subcure. The disign of the mass support subcure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Truss" available from the Truss Plate Institute, 583 D'Onifrio Drive: Madison, WI 53179
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S AKE KEAU A		
PRIOK IO ADDING ANY LUADS.	Bavid Weekley Homes 894 Serenity-Roof-B330 B CP	ROOF PLACEMENT PLAN
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PRIOK IO ADDING ANY LUADS.	Scale: Date: 4/22/ Des Nick Project 25040	775 2025 signer: Darr th Number: 157-01
GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOK TO ADDING ANY LOADS. DIMENSIONS ARE READ AS	Scale: Date: 4/22/ Des Nick Project 25040	775 2025 signer: Darr th Number: 157-01



Trenco 818 Soundside Rd Edenton, NC 27932

Re: 25040157-01 894 Serenity-Roof-B330 B CP TMB GRH

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

Pages or sheets covered by this seal: I72948363 thru I72948396

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

North Carolina COA: C-0844



April 24,2025

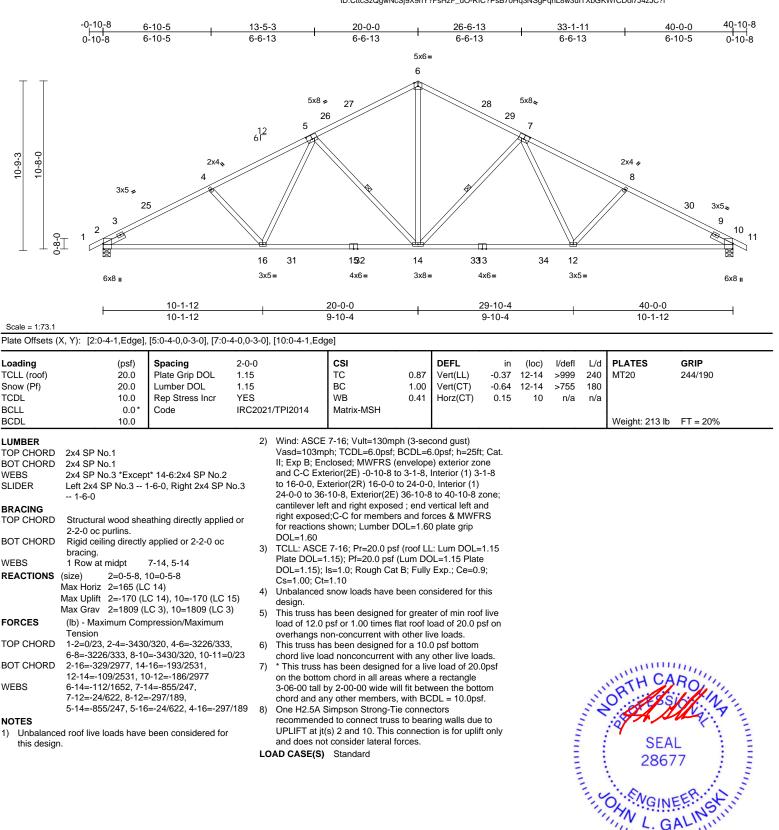
Galinski, John

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

Job		Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
250401	57-01	A	Common	4	1	Job Reference (optional)	172948363

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:32 ID:CttcSzQgwNcSj9X9hY?FsHzF_uO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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

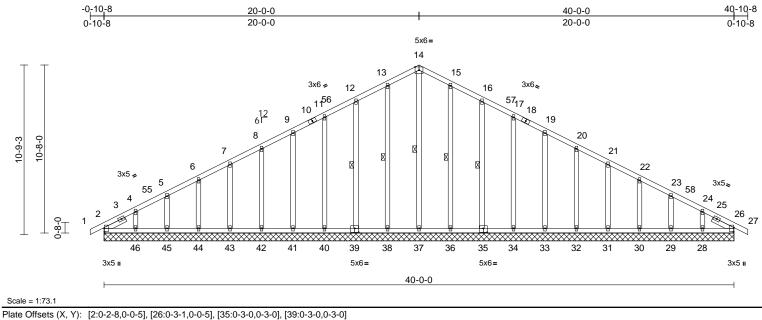
818 Soundside Road Edenton, NC 27932

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April 24,2025

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	AGE	Common Supported Gable	1	1	Job Reference (optional)	172948364

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries. Inc. Tue Apr 22 15:50:33 ID:94aeZ53wRfHxaJ4LIBSgWSzF_tZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Loading TCLL (roof) Snow (Pf) TCDL BCLL		(psf) 20.0 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2021/TPI2014	CSI TC BC WB Matrix		05	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01		- r - r		L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCDL		10.0												Weight: 286 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD	Left 2x4 S 1-6-0 Structura 6-0-0 oc Rigid ceil bracing.	o.2 o.3 *Excep SP No.3 I wood she purlins. ing directly		No.3 ed or		26=139 (LC 1 29=160 (LC 31=160 (LC 33=160 (LC 33=233 (LC 37=200 (LC 39=233 (LC 41=160 (LC 43=160 (LC 45=160 (LC	1), 1), 37), 22), 28), 21), 36), 1), 1),	NOT 1) U	WEBS 14-37=-205/45, 13-38=-205/66, 12-39=-193/83, 11-40=-140/76, 9-41=-126/77, 8-42=-126/77, 7-43= 6-44=-127/77, 5-45=-126/80, 4-46= 15-36=-205/66, 16-35=-193/83, 17-34=-140/76, 19-33=-126/77, 20-32=-126/77, 21-31=-126/77, 22-30=-127/77, 23-29=-126/80, 24-28=-131/135 NOTES 1) Unbalanced roof live loads have been consider this design.						
WEBS	1 Row at		(Ib) - Maximum Compression/Maximum Tension								7-16;	Vult=130mph (3	-second gust)		
	bracing.					$\begin{array}{l} 1\text{-}2\text{=}0/23, 2\text{-}4\text{-}216/79, 4\text{-}5\text{=}\text{-}167/82, \\ 5\text{-}6\text{=}\text{-}129/94, 6\text{-}7\text{=}\text{-}96/108, 7\text{-}8\text{=}\text{-}74/131, \\ 8\text{-}9\text{=}\text{-}62/154, 9\text{-}11\text{=}\text{-}72/178, 11\text{-}12\text{=}\text{-}85/222, \\ 12\text{-}13\text{=}\text{-}104/271, 13\text{-}14\text{=}\text{-}121/311, \\ 14\text{-}15\text{=}\text{-}121/311, 15\text{-}16\text{=}\text{-}104/271, \\ 16\text{-}17\text{=}\text{-}85/222, 17\text{-}19\text{=}\text{-}72/177, \\ 19\text{-}20\text{=}\text{-}60/132, 20\text{-}21\text{=}\text{-}48/86, 21\text{-}22\text{=}\text{-}44/41, \\ 22\text{-}23\text{=}\text{-}66/27, 23\text{-}24\text{=}\text{-}99/35, 24\text{-}26\text{=}\text{-}144/59, \\ 26\text{-}27\text{=}0/23\end{array}$				l a t 2	II; Exp E and C-C to 16-0- 24-0-0 t	3; En C Cor 0, Co 0 36-	cclosec rner(31 orner(3 -10-8, ft and d;C-C s show	d; MWFRS (enve E) -0-10-8 to 3-1 3R) 16-0-0 to 24. Corner(3E) 36-1 right exposed ; e for members an n; Lumber DOL=	PL=6.0psf; h=25ft; Cat lope) exterior zone -8, Exterior(2N) 3-1-8 0-0, Exterior(2N) 0-8 to 40-10-8 zone; nd vertical left and d forces & MWFRS 1.60 plate grip

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Continued on page 2

Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. WARNING Design valid for use only with MTek connectors. This design is based only upon parameters and property incorporate this design is based only upon parameters and property incorporate this design into the overall building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	AGE	Common Supported Gable	1	1	Job Reference (optional)	172948364

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) 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.
- 6) 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.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) 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.
- 11) * 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.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 2, 39 lb uplift at joint 38, 47 lb uplift at joint 39, 44 lb uplift at joint 40, 43 lb uplift at joint 41, 44 lb uplift at joint 42, 43 lb uplift at joint 43, 46 lb uplift at joint 44, 33 lb uplift at joint 45, 96 lb uplift at joint 46, 35 lb uplift at joint 36, 48 lb uplift at joint 35, 44 lb uplift at joint 34, 44 lb uplift at joint 37, 46 lb uplift at joint 31, 46 lb uplift at joint 30, 36 lb uplift at joint 29, 80 lb uplift at joint 28 and 21 lb uplift at joint 2.

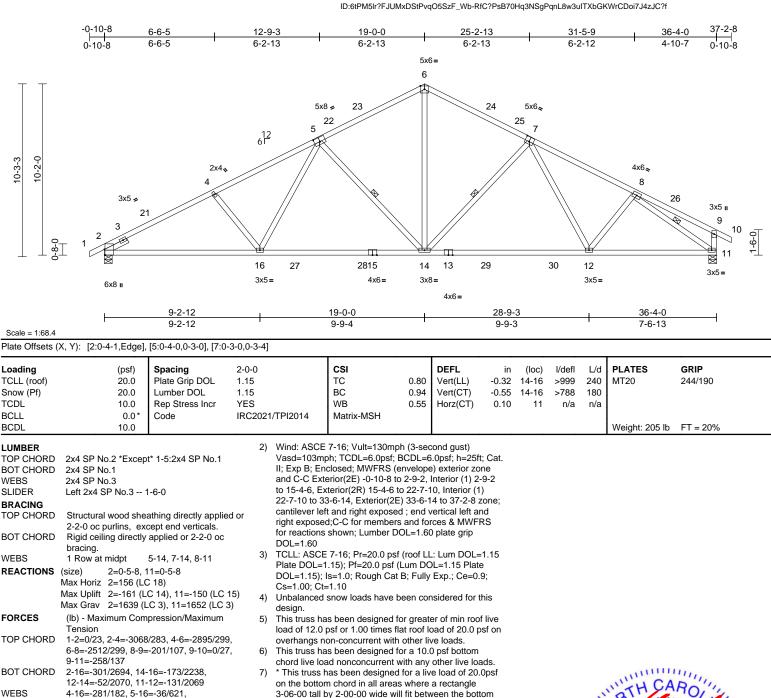
LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	В	Common	5	1	Job Reference (optional)	5

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:33



NOTES

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

8-11=-2424/150

5-14=-795/239, 6-14=-97/1404,

7-14=-549/220, 7-12=-1/267, 8-12=0/242,

UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.9) Attic room checked for L/360 deflection.

One H2.5A Simpson Strong-Tie connectors

chord and any other members, with BCDL = 10.0psf.

recommended to connect truss to bearing walls due to

LOAD CASE(S) Standard

8)



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TRENCO A MiTek Affiliate

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	B1	Common	1	1	Job Reference (optional)	172948366

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:33 Page: 1 ID:jCQDRPFmxy5us2K9CGvbovzF_Un-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -0-10-8 6-6-5 12-9-3 19-0-0 25-2-13 31-5-10 36-4-0 0-10-8 6-6-5 6-2-13 6-2-13 6-2-13 6-2-13 4-10-6 5x6= 6 22 23 5x6. 5x8 🖌 21 24 5 7 _12 6Г Ċ 10-3-3 0-2-2x4、 4x6 👟 4 8 25 3x5 < 2x4 🛛 20 q -8-0 15 26 2714 13 12 28 29 11 3x5= 3x5= 4x6 =3x8= 3x5= 6x8 4x6= 9-2-12 19-0-0 28-9-4 36-4-0 9-2-12 9-9-4 9-9-4 7-6-12 Scale = 1:68.3 Plat

Plate Offsets (X, Y): [2:0-4-1,Edge], [5:0-4-0,0-3-0], [7:0-3-0,0-3-4]													
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.32	13-15	>999	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.55	13-15	>787	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.10	10	n/a	n/a			
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH									

2)

LUMBER	
TOP CHORD	2x4
BOT CHORD	2x4
WEBS	2x4
SLIDER	Left

BCDL

2x4 SP No.3 -- 1-6-0 BRACING TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. WEBS 1 Row at midpt 5-13, 7-13, 8-10 REACTIONS (size) 2=0-5-8, 10= Mechanical Max Horiz 2=164 (LC 18) Max Uplift 2=-161 (LC 14), 10=-130 (LC 15) Max Grav 2=1640 (LC 3), 10=1601 (LC 3) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/23, 2-4=-3070/284, 4-6=-2897/300, 6-8=-2519/300, 8-9=-176/84, 9-10=-182/76 BOT CHORD 2-15=-309/2692, 13-15=-180/2236, 11-13=-81/2069, 10-11=-147/2074 WEBS 4-15=-281/182, 5-15=-36/621, 5-13=-795/239, 6-13=-98/1405, 7-13=-550/219, 7-11=-1/272, 8-11=0/238, 8-10=-2459/180

10.0

SP No.1

SP No.3

SP No.2 *Except* 1-5:2x4 SP No.1

NOTES

Unbalanced roof live loads have been considered for 1) 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 15-4-6. Exterior(2R) 15-4-6 to 22-7-10. Interior (1) 22-7-10 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 & MWERS 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 desian.
- 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. This truss has been designed for a 10.0 psf bottom 6)
- chord live load nonconcurrent with any other live loads. 7) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. Refer to girder(s) for truss to truss connections. 8)
- 9) Provide mechanical connection (by others) of truss to
- bearing plate capable of withstanding 130 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) 2. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



Weight: 203 lb FT = 20%

April 24,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall bilding design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	B1GE	Common Supported Gable	1	1	Job Reference (optional)	172948367

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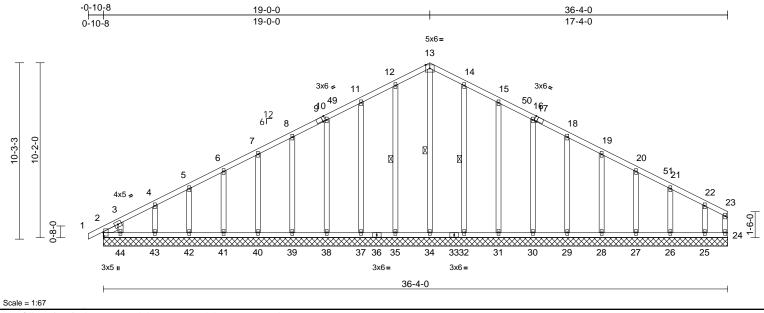


Plate Offsets (X, Y): [2:0-2-8,0-0-5], [9:0-1-14,Edge], [17:0-1-14,Edge]

1 1010 0110010 (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2 0,0 0 0],	[e.e : : :,=age]; [::			_										
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC202	21/TPI2014	CSI TC BC WB Matrix-		0.10 0.07 0.23	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00		- n/a - n/a	L/d 999 999 n/a	PLATES MT20 Weight: 256 lb	GRIP 244/190 FT = 20%	
	Structural 6-0-0 oc p Rigid ceili bracing. 1 Row at (size) Max Horiz	o.2 o.3 o.3 SP No.3 (l wood she burlins, ex ing directly midpt 2=36-4-(29=36-4-(29=36-4-(29=36-4-(40=36-4-(40=36-4-(40=36-4-(40=36-4-(2=164 (Lt 2=-69 (LC 26=-36 (L 26=-36 (L 28=-34 (L 30=-43 (L 30=-43 (L 30=-47 (L 37=-47 (L 37=-47 (L 37=-47 (L 37=-47 (L 37=-44 (L	athing directly applie cept end verticals. applied or 10-0-0 oc 13-34, 12-35, 14-32 , 24=36-4-0, 25=36-4 0, 27=36-4-0, 28=36- 0, 34=36-4-0, 31=36- 0, 38=36-4-0, 35=36- 0, 38=36-4-0, 39=36- 0, 41=36-4-0, 42=36- 0, 44=36-4-0	 F¹ -0, T¹ 4-0, 4-0, 4-0, 4-0, 4-0, 5), B¹ 5), B¹ 5), A¹ 4), 4), 4), 4, 4), W 	ORCES OP CHORD OT CHORD VEBS	(lb) - Maa Tension 1-2=0/23 4-5=-129 7-8=-77/ 11-12=-1 13-14=-1 15-16=-8 18-19=-5 20-21=-3 23-24=-5 2-44=-22 41-42=-2 38-39=-2 34-35=-2 24-25=-2 13-34=-2 13-34=-2 13-34=-12 14-32=-2 14-32=-12 14-32=-12 19-28=-1	25=136 (L 27=159 (L 29=160 (L 31=228 (L 37=228 (L 39=160 (C 41=160 (L 43=165 (C) 43=165	C 37), C 37), C 37), C 37), C 37), C 37), C 37), C 37), C 36), C	3, 6-7=-90/1 , 10-11=-88/ 24/375,)7/335, 243, 152, 48, 22-23=-7 , 42-43=-22/ 5, 39-40=-22 5, 39-40=-22 5, 35-37=-22 5, 35-37=-22 5, 31-32=-22 5, 25-26=-22 4/63, 5/76, 7, 6-41=-12? 03, 3-44=-98 3/84, 5/76,	22), 22), 22), 22), 22), 21), 21), 21),	2) V V III a to 2 cri for 3) T S S O S O S O S O C D T D D	his design. Vind: ASCI 'asd=103m ; Exp B; E on d C-C Cc o 15-4-6, C 2-7-10 to ; antilever le ght exposs- preaction VOL=1.60 iruss desig nly. For s; ee Standa r consult q CLL: ASC 'late DOL= 100L=1.10)	E 7-16 nph; T(nclose prner(3 2-6-1) eft and ed;C-C s show aned fo tuds ex rd Indu jualifie E 7-16 :1.15); ; Is=1.(; Vult=130mph (3 CDL=6.0psf; BCC d; MWFRS (enve E) -0-10-8 to 3-0 3R) 15-4-6 to 22 0, Corner(3E) 32- right exposed ; e C for members an mr; Lumber DOL= r wind loads in th xposed to wind (r ustry Gable End I d building design 6; Pr=20.0 psf (fon Pf=20.0 psf (Lun); Rough Cat B; f	DL=6.0psf; h=25ft; Ca elope) exterior zone -0, Exterior(2N) 3-0-0 -7-10, Exterior(2N) 3-0-0 -7-10, Exterior(2N) end vertical left and d forces & MWFRS =1.60 plate grip ne plane of the truss normal to the face), Details as applicable, er as per ANSI/TPI 1. of LL: Lum DOL=1.15 n DOL=1.15 Plate =ully Exp.; Ce=0.9;	0 ; 1. 5

April 24,2025

Page: 1



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent ouclings with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria and DSE2** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbaccomponents.com)



Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH		
25040157-01	B1GE	Common Supported Gable	1	1	Job Reference (optional)	172948367	
Carter Components (Sanford, N	C), Sanford, NC - 27332,	Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:33					

- 6) 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. 7)
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * 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.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 2, 39 lb uplift at joint 35, 47 lb uplift at joint 37, 43 lb uplift at joint 38, 44 lb uplift at joint 39, 44 lb uplift at joint 40, 44 lb uplift at joint 41, 43 lb uplift at joint 42, 45 lb uplift at joint 43, 94 lb uplift at joint 44, 34 lb uplift at joint 32, 49 Ib uplift at joint 31, 43 Ib uplift at joint 30, 44 Ib uplift at joint 29, 43 Ib uplift at joint 28, 46 Ib uplift at joint 27, 36 Ib uplift at joint 26, 108 Ib uplift at joint 25 and 69 Ib uplift at joint 2.

LOAD CASE(S) Standard

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries. Inc. Tue Apr 22 15:50:33 ID:va6oJ_bKLZdwDLTYr9P9wpzF_UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and PCB Building Component Science Michael Component Advancing Component Advancing Component Advancing and PCB and Component Advancing Component Compone and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	B1T	Roof Special	5	1	Job Reference (optional)	172948368

10-2-0

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:34 Page: 1 ID:jCQDRPFmxy5us2K9CGvbovzF_Un-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f <u>-2-4-1</u>1 22-10-2 6-2-9 10-4-8 16-7-5 29-0-14 33-11-5 2-4-11 6-2-13 6-2-9 4-1-15 6-2-13 6-2-12 4-10-7 5x8= 5 29 22 5x6. 2x4, 28 23 12 6 Δ 6 10-2-0 8x10 -8-8-8 3 4x6 👟 7 3x6 II 24 27 2x4 I 3x6 =8 0-5-8 -10ήŢ 1-0-Q 15 13 a 2x4 II 12 11 25 26 10 2x4 🛛 3x5= 2x4 I 6x8= 3x5= $5 \times 10 =$ 8x10= 3x6= -2-4-11 6-4-5 13-1-5 16-7-5 26-4-8 33-11-5 2-4-11 6-4-5 6-9-0 3-6-0 9-9-3 7-6-13 Scale = 1:68.3 Plate Offsets (X, Y): [6:0-3-0,0-3-4], [14:0-7-0,0-2-12] Loading 2-0-0 CSI DEFL in l/defl L/d PLATES GRIP (psf) Spacing (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 тс 0.82 Vert(LL) -0.32 10-12 >999 240 MT20 244/190 Snow (Pf) 20.0 Lumber DOL 1.15 BC 0.89 Vert(CT) -0.57 10-12 >752 180 TCDL 10.0 Rep Stress Incr WB Horz(CT) YES 0.64 0.19 9 n/a n/a BCLL 0.0 Code IRC2021/TPI2014 Matrix-MSH Weight: 250 lb BCDL 10.0 FT = 20% Wind: ASCE 7-16; Vult=130mph (3-second gust) LUMBER 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. TOP CHORD 2x4 SP No.2 *Except* 1-3:2x10 SP 2400F II; Exp B; Enclosed; MWFRS (envelope) exterior zone 2.0E. 3-5:2x4 SP No.1 and C-C Exterior(2E) 0-2-12 to 3-7-8, Interior (1) 3-7-8 to BOT CHORD 2x4 SP No.1 *Except* 2-14:2x6 SP No.2, 14-13:2x4 SP No.3 15-7-4, Exterior(2R) 15-7-4 to 22-4-12, Interior (1) 22-4-12 to 32-9-8, Exterior(2E) 32-9-8 to 36-2-4 zone; WFBS 2x4 SP No.3 BRACING cantilever left and right exposed ; end vertical left and right exposed C-C for members and forces & MWERS TOP CHORD Structural wood sheathing directly applied or for reactions shown; Lumber DOL=1.60 plate grip 2-2-0 oc purlins, except end verticals. DOL=1.60 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc 3)

bracing, Except: 6-0-0 oc bracing: 12-13. WEBS 1 Row at midpt 3-14, 5-12, 6-12, 7-9 **REACTIONS** (size) 1=0-5-8, 9= Mechanical Max Horiz 1=155 (LC 18) Max Uplift 1=-128 (LC 14), 9=-130 (LC 15) Max Grav 1=1540 (LC 3), 9=1570 (LC 3) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 5-7=-2470/296, 7-8=-170/84, 8-9=-180/76, 1-2=-734/118, 2-4=-3522/305, 4-5=-2525/336 BOT CHORD 2-15=-289/3232, 14-15=-286/3248, 13-14=-36/0, 12-13=-42/34, 10-12=-75/2014, 9-10=-145/2037 WEBS 3-14=-1071/130, 12-14=0/1705, 5-14=-194/1432, 5-12=-92/327, 6-12=-562/216, 6-10=0/296, 7-10=0/230, 7-9=-2417/170, 4-14=-426/184, 3-15=0/376 NOTES

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

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
- 4) desian.
- 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. Refer to girder(s) for truss to truss connections.

- 7) 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 130 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) 1. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

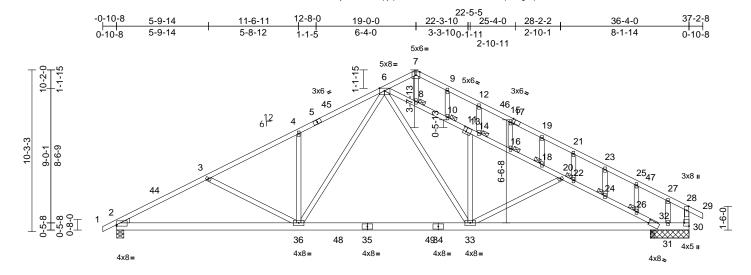


April 24,2025

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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	BSE	Common Structural Gable	1	1	Job Reference (optional)	172948369

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:34 ID:jfMMInrRxWpjnpkdD7IdQkzF_VJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



	11-6-11	22-5-5	34-0-4	36-4-0
	11-6-11	10-10-10	11-6-15	2-3-12
Scale = 1:73.1				

	L	11-6-1		I	22-5-					34-0-4	1		36-4-0	
Scale = 1:73.1	I	11-6-1	1	I	10-10-	-10	1			11-6-1	5		2-3-12	
	(X, Y): [2:Edge,0-1-1],	[6:0-3-12,Edge], [11:	0-2-4,0-3	-4], [17:0-1-14	4,Edge], [30:Edge,0-	3-8], [3	2:0-0-2,0-2-1	2]						
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC202	1/TPI2014	CSI TC BC WB Matrix-MSH	0.67 0.76 0.50	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.25 -0.40 0.07	(loc) 33-36 33-36 30	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 269	GRIP 244/190 lb FT = 20%	
	3-2-14 oc purlins, e Rigid ceiling directly bracing. 1 Brace at Jt(s): 8, 10, 14, 16, 18, 22, 24, 26	athing directly applied xcept end verticals. applied or 10-0-0 oc 30=2-5-8, 31=2-5-8,	dor No 1)	this design. Wind: ASCI Vasd=103m II; Exp B; E and C-C Co to 15-4-6, C	E 7-16; Vult=130mph nph; TCDL=6.0psf; B nclosed; MWFRS (ei orner(3E) -0-10-8 to 2 corner(3R) 15-4-6 to	9=-128, 3-24=-1: 7-31=-2 6=-246, 3=-138, 0-33=-3 e been (h (3-sec 3CDL=6 nvelope 2-9-2, E 22-7-1(/83, 9/16, 7/182, /1164, /1035, 67/253 considered fo cond gust) 6.0psf; h=25ft; e) exterior zor zxterior (2N) 2 0, Exterior(2N) 2	r ; Cat. ne -9-2 I)	on 1 3-00 cho 11) Pro bea 31. 12) N/A 13) Gra or ti	the botto 6-00 tall l rd and a vide mec rring plate A aphical pu he orient tom chore	m cho by 2-0 ny oth chanic e capa urlin re ation o	ord in all areas 00-00 wide will ler members, s cal connection able of withsta	tion a live load of 20. where a rectangle fit between the bot with BCDL = 10.0ps (by others) of truss nding 692 lb uplift a does not depict the ong the top and/or	ttom sf. to at joint
	$\begin{array}{rrrr} 32=2-5-8\\ Max Horiz& 2=157 (LC\\ Max Uplift& 2=-156 (L\\ 32=-156 (L\\ 32=-156 (L\\ 31=-251 (L\\ 3$	C 18) C 14), 31=-692 (LC 2 C 15) C 5), 30=609 (LC 6), LC 11), 32=1746 (LC pression/Maximum 5/576, 3-4=-2580/471 356/216, 7-9=-348/2 5=-300/117, 11=-335/49, i=-348/0, 25-27=-308 i=-0/27, 28-30=-366/0 i=-2117/367, 3-14=-2049/341, 5-18=-2144/392, 0-22=-2415/577, 4-26=-2513/643,	, 3) 3) , 215, 4) , (0, 5) , 6) 7) 8) 9)	cantilever le right expose for reaction: DOL=1.60 Truss desig only. For si see Standa or consult q TCLL: ASC Plate DOL= DOL=1.15); Cs=1.00; C Unbalancec design. This truss h load of 12.0 overhangs i All plates ai Gable stud;	33-6-14, Corner(3E) iff and right exposed ad;C-C for members is shown; Lumber DC ned for wind loads in uds exposed to wind rd Industry Gable Er ualified building desis E 7-16; Pr=20.0 psf 1.15); Pf=20.0 psf 1.15); Df=20.0 psf 1.15); Pf=20.0 psf 2.15); Pf=20.0 psf 2.15); Pf=20.0 psf 2.15); Pf	I; end v and for DL=1.60 n the pla d (norm nd Deta igner as (roof LL Lum DC B; Fully een cor or great at roof k other liv other liv other a 10.0	vertical left an rces & MWFR D plate grip ane of the tru lal to the face ils as applical s per ANSI/TF DL=1.15 Plate Exp.; Ce=0.5 nsidered for th er of min roof pad of 20.0 ps ve loads. se indicated. 0 psf bottom	d SS), ble, PI 1. 1.15 9); his live sf on	15) Atti			280 0,5,0,0	AROUK	and

April 24,2025

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Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and RCSI Building Component Safety Information. available from the Structural Building Component Association (www.stearoomponent.com) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	BSE	Common Structural Gable	1	1	Job Reference (optional)	172948369
Carter Components (Sanford, NO	C), Sanford, NC - 27332,	Run: 8.73 S Feb 19 2	025 Print: 8.	730 S Feb 1	9 2025 MiTek Industries, Inc. Tue Apr 22 15:50:34	Page: 2

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LOAD CASE(S) Standard

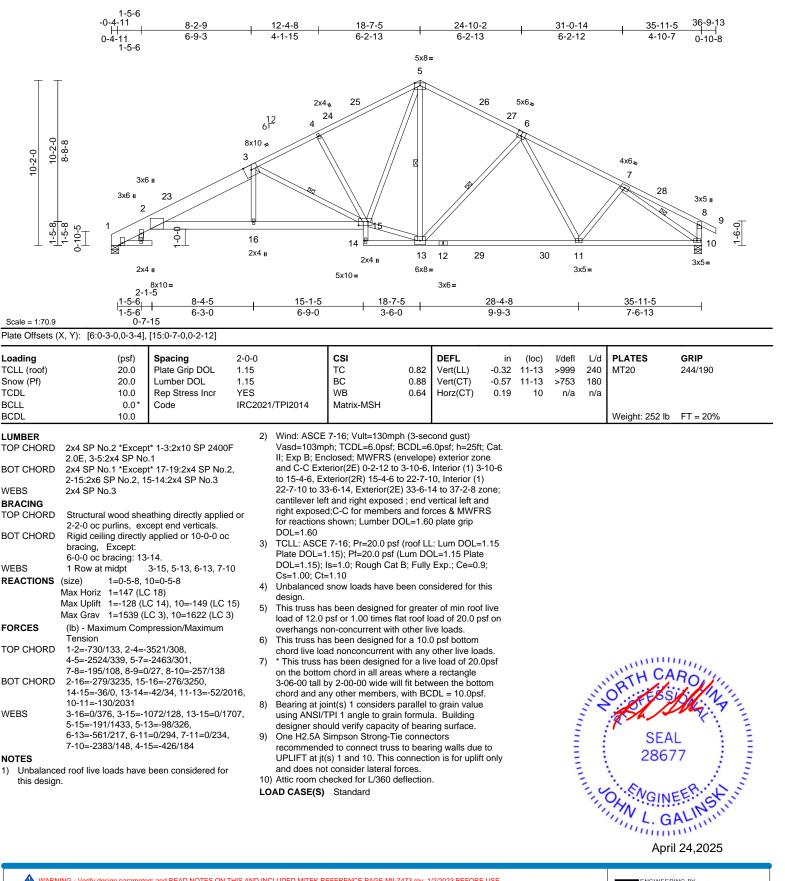
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent outlapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job		Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
2504	0157-01	BT	Roof Special	1	1	Job Reference (optional)	172948370

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:34 ID:6tPM5Ir?FJUMxDStPvqO5SzF_Wb-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	С	Common	6	1	Job Reference (optional)	172948371

1)

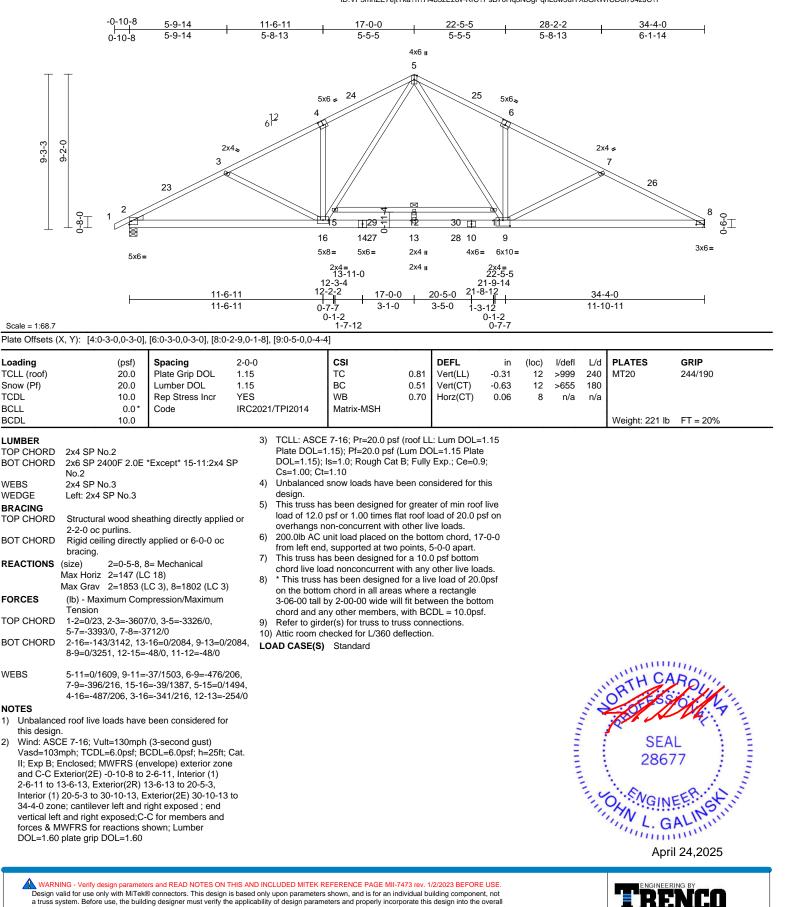
2)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:34 ID:VP5mnZE7ejtTka?ri?H4b3zEzov-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

818 Soundside Road

Edenton, NC 27932

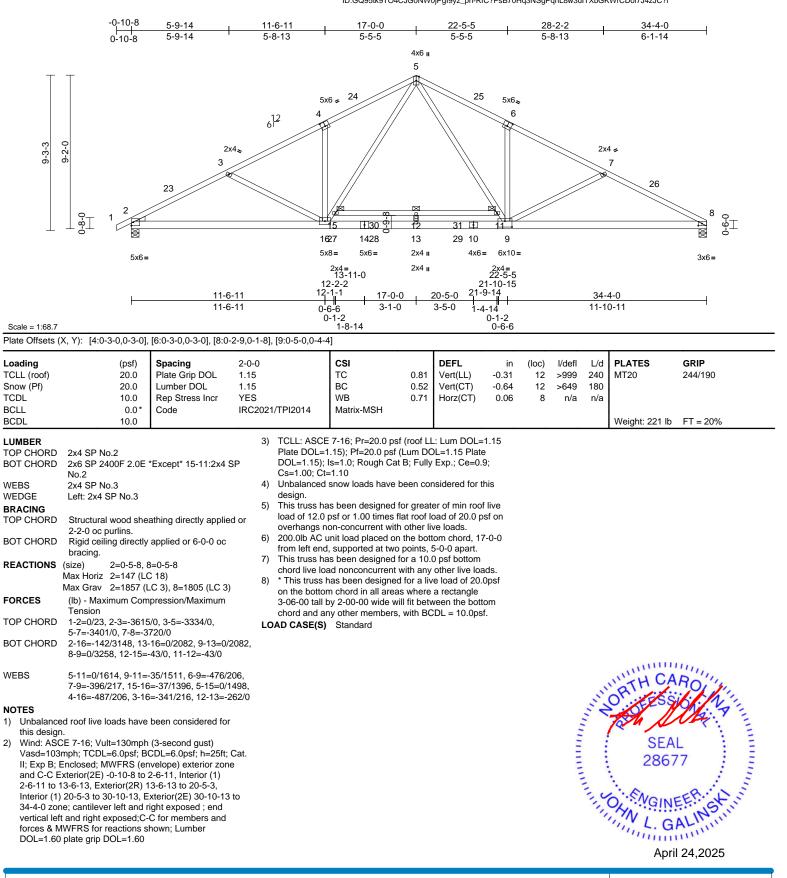


bilding design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication,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

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	C1	Common	1	1	Job Reference (optional)	172948372

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:34 ID:GQ95tk9TO4CJG0NW0jPgI9yz_pn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	C2	Common	2	1	I72948373 Job Reference (optional)	

Carter Components

9-2-0 9-5-3

Scale = 1:68.7 Plate Offsets (X,

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD BOT CHORD

WEBS

WEDGE

					-						-
	Truss	Truss Type		Qty	Ply	894 Seren	ity-Roof-B	330 E	3 CP TMB GRH	1700 400 70	
01	C2	Common		2	1	Job Refere	ence (optio	onal)		172948373	
ents (Sanford, N	C), Sanford, NC - 27332,	•	Run: 8.73 S Feb 19 2 ID:VP5mnZE7ejtTka?							Page: 1	-
-0-1 - 0-1	10-8 <u>5-9-14</u> 	11-6-11 5-8-13	<u>17-0-0</u> 5-5-5	<u>22</u> - 5-	- 5-5 +	<u>28-2</u> 5-8-	2-2 ·13		<u>34-4-0</u> 6-1-14	35-2-8 0-10-8	
т			4x6 5	"							
		5x6 -	26		27 2x	3x5 ≈ 4 II 6 7					
5	2x4 3 25							2x4 = 8	28		
	2	17	1629 15		2 II 13 0 12 11	1				9 10 % ₩	
	5x6=	5x8= 2;	= 5x6= 2x4 (4= 2x4 I3-11-0		4x6= 6x1 2x4= 22-5-					3x6=	
	<u>11-6-1</u> 11-6-1	12-2 1 12-1- 1 12-1- 1 0-6-1	2-2 -1 17-0-0	<u>20-5-0</u> 3-5-0	22-5- 21-10-1 21-9-14 1-4-14 1-4-14 0-1-2 0-6-6	5		<u>34-4-0</u> 1-10-1			
(X, Y): [4:0-3-	0,0-3-0], [9:0-6-4,0-0-7], [11:0				000	0					-
	(psf)Spacing20.0Plate Grip DOL20.0Lumber DOL10.0Rep Stress Incr0.0*Code	2-0-0 1.15 1.15 YES IRC2021/TPI2014	BC 0.	.52 Ver	t(LL) -0. t(CT) -0.	in (loc) 31 14 64 14 06 9	>999 >648	L/d 240 180 n/a	PLATES MT20	GRIP 244/190	_
	10.0								Weight: 222 lb	FT = 20%	-
2x4 SP No.2 2x6 SP 240 No.2	2 0F 2.0E *Except* 17-13:2x4 S	Vasd=103mp P II; Exp B; End	7-16; Vult=130mph (3 oh; TCDL=6.0psf; BCD closed; MWFRS (enve erior(2E) -0-10-8 to 2-6	L=6.0psf lope) ext	; h=25ft; Cat erior zone						

BRACING	
TOP CHORD	Structural wood sheathing directly applied or
	2-2-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc

2x4 SP No.3

Left: 2x4 SP No.3

DOT OTIOND		ing anoonly applied of 0 0 00				
	bracing.					
REACTIONS	(size)	2=0-5-8, 9=0-5-8				
	Max Horiz	2=-148 (LC 15)				
	Max Grav	2=1856 (LC 3), 9=1849 (LC 3)				
FORCES	(lb) - Max	imum Compression/Maximum				
	Tension					
TOP CHORD	1-2=0/23,	2-3=-3614/0, 3-5=-3333/0,				
	5-6=-3399/0, 6-8=-3364/0, 8-9=-3718/0,					
	9-10=0/23	3				
BOT CHORD	2-18=-13	6/3150, 15-18=0/2084,				
	11-15=0/2	2084, 9-11=0/3259, 14-17=-43/0,				
	13-14=-4	3/0				
WEBS	5-13=0/10	614, 11-13=-36/1512,				
	6-11=-47	7/207, 8-11=-398/218,				
	17-18=-3	7/1396, 5-17=0/1499,				
	4-18=-48	7/206, 3-18=-341/216, 14-15=-262/0				
NOTEO						

NOTES

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

- 2-6-11 to 13-6-13, Exterior(2R) 13-6-13 to 20-5-3, Interior (1) 20-5-3 to 31-9-5, Exterior(2E) 31-9-5 to 35-2-8 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 3)
- 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 4) design.
- This truss has been designed for greater of min roof live 5) 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) 200.0lb AC unit load placed on the bottom chord, 17-0-0 from left end, supported at two points, 5-0-0 apart.
- This truss has been designed for a 10.0 psf bottom 7) chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf 8) 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. Attic room checked for L/360 deflection. 9)

LOAD CASE(S) Standard



April 24,2025



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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	CGE	Common Supported Gable	1	1	Job Reference (optional)	172948374

Run: 8.73 S Nov 16 2023 Print: 8.730 S Nov 16 2023 MiTek Industries, Inc. Thu Apr 24 14:27:04 ID:HSVLvMXIBUOh6UIn9Dc1gjzEzgn-UyrxThx1eLBObrm1YWbP9dgqV8nTWWS9lgE3QIzNeYt

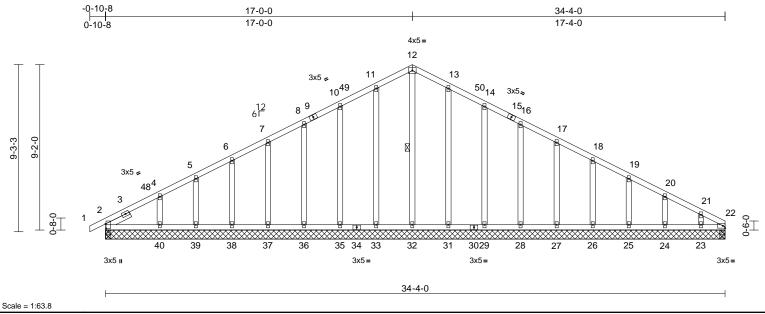
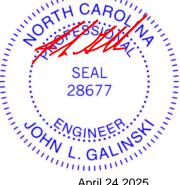


Plate Offsets (X, Y): [2:0-3-1,0-0-5]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2021	/TPI2014	CSI TC BC WB Matrix-MSH	0.08 0.06 0.24	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.01	(loc) 40-43 40-43 22	l/defl >999 >999 n/a	L/d 240 180 n/a		GRIP 244/190 FT = 20%
	2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.2	eathing directly applied r applied or 10-0-0 oc 12-32 C 18), 41=147 (LC 18 (D0 (lb) or less at joint 25, 26, 27, 28, 29, 37 7, 38, 39, 40, 41	5) 6) (s) 7) (s) 8) 1, 33, 9) joint 10)	only. For stu see Standara or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design. This truss ha load of 12.0 overhangs n All plates are Gable studs This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha	ned for wind loads ads exposed to win d Industry Gable E tailified building des 7-16; Pr=20.0 psf I.15); Pf=20.0 psf I.15); Pf=20.0 psf I.15); Rough Cat =1.10 snow loads have I as been designed f psf or 1.00 times f on-concurrent with 2 2x4 MT20 unless spaced at 2-0-0 or is been designed ad nonconcurrent has been designed no hord in all area by 2-00-00 wide win y other members.	nd (norm ind Deta signer a: f (roof LI (Lum DC B; Fully been cor for great lat roof l a other li s otherwi c. for a 10. with any f for a liv s where ull fit betw	al to the face ils as applica is per ANSI/TI : L'um DOL= DL=1.15 Plate Exp.; Ce=0.9 nsidered for the er of min roof pad of 20.0 p ve loads. se indicated. O ps bottom other live loa e load of 20.0 a rectangle), ble, Pl 1. 1.15 9; his 2; f live sf on ds. Dpsf					
FORCES	(lb) - Max. Comp./M (lb) or less except w	ax. Ten All forces 2 /hen shown.											in the
this design 2) Wind: ASC Vasd=103 II; Exp B; and C-C E 2-6-11 to	ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B Enclosed; MWFRS (er Exterior(2E) -0-10-8 to 13-6-13, Exterior(2R) 1) 20-5-3 to 30-10-13, E	n (3-second gust) CDL=6.0psf; h=25ft; (nvelope) exterior zone 2-6-11, Interior (1) 13-6-13 to 20-5-3,	Cat.	AD CASE(S)	Stanuaru						and the second s	SEA	

34-4-0 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



April 24,2025

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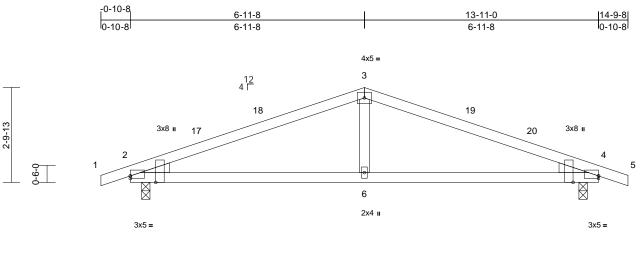


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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	D	Common	4	1	Job Reference (optional)	172948375

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries. Inc. Tue Apr 22 15:50:35 ID:nqLL14Jf5JAmMe82YAnlwAzF_pM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:34.2

2-11-0

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

Plate Offsets	(X, Y): [2:Edge,0-0-14],	[2:0-2-5,Edge], [4:E	dge,0-0-1	4], [4:0-2-5,Ec	lge]								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	20.0 20.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2021	I/TPI2014	CSI TC BC WB Matrix-MSH	0.72 0.56 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.13 0.02	(loc) 6-11 6-11 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 51 lb	GRIP 244/190 FT = 20%
this desig 2) Wind: AS Vasd=10 II; Exp B and C-C to 3-11-8 9-11-8 to cantileve right exp members	 2x4 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Right: 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood sheatt 4-1-1 oc purlins. Rigid ceiling directly ap bracing. Size) 2=0-3-0, 4= Max Horiz 2=41 (LC 14 Max Uplift 2=-221 (LC Max Grav 2=708 (LC 24 (Ib) - Maximum Compr Tension 1-2=0/17, 2-3=-901/59 4-5=0/17 2-6=-458/775, 4-6=-45 3-6=-116/268 Ced roof live loads have both 	pplied or 8-6-15 oc :0-3-0 4) 10), 4=-221 (LC 11 21), 4=708 (LC 22) ression/Maximum 94, 3-4=-901/594, 58/775 een considered for 3-second gust) DL=6.0psf; h=25ft; C elope) exterior zone 1-8, Interior (1) 2-1- -11-8, Interior (1) 3-8 to 14-9-8 zone; end vertical left and exposed; C- C for or reactions shown;	4) 5) For 6) 7) 8) LO Cat.	Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 overhangs n This truss ha load of 12.0 overhangs n This truss ha chord live loa * This truss ha on the bottor 3-06-00 tall b chord and ar One H2.5A S recommende UPLIFT at jt(snow loads have b is been designed for psf or 1.00 times file on-concurrent with is been designed for ad nonconcurrent v has been designed in chord in all areas by 2-00-00 wide will by other members. Simpson Strong-Tie ed to connect truss s) 2 and 4. This co t consider lateral for	Lum DC B; Fully peen cor or greate at roof k other liv or a 10.0 vith any for a liv s where Il fit betw e connec to bear onnectio	DL=1.15 Plate Exp.; Ce=0.9 Isidered for the er of min roof bad of 20.0 p re loads. 0 psf bottom other live loa e load of 20.0 a rectangle reen the botthe ctors ing walls due	e 9; f live f live sf on ads. 0psf om				ORTH CA ORTHESS SEA 286	EEP. K

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GA mm April 24,2025



Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	DGE	Common Supported Gable	1	1	Job Reference (optional)	172948376

2-11-0

Scale = 1:33.5

Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

WEDGE

BRACING

TOP CHORD

BOT CHORD

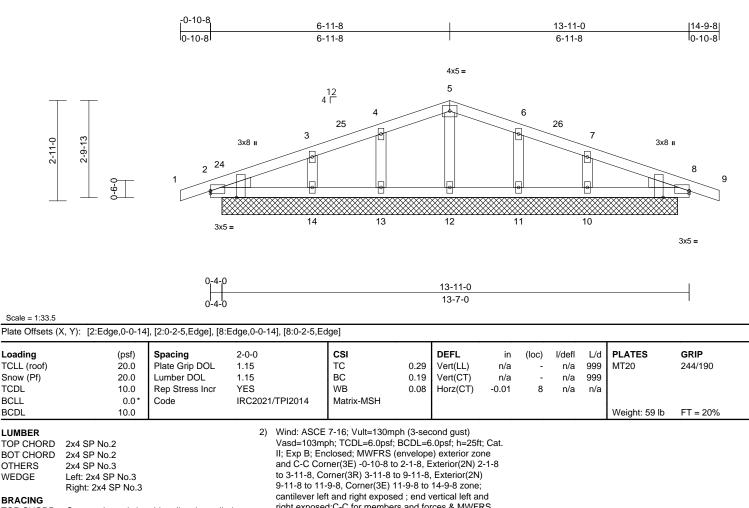
TCDL

BCLL

BCDL

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries. Inc. Tue Apr 22 15:50:35 ID:UUQhZhEGk9Im0a6ieC968izF_pT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



TOP CHORD	Structural wood sheathing directly applied or
	10-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc

	bracing.	
REACTIONS	(size)	2=13-3-0, 8=13-3-0, 10=13-3-0,
		11=13-3-0, 12=13-3-0, 13=13-3-0,
		14=13-3-0
	Max Horiz	2=41 (LC 14)
	Max Uplift	2=-1 (LC 21), 8=-71 (LC 36),
		10=-44 (LC 15), 11=-35 (LC 11),
		12=-47 (LC 10), 13=-23 (LC 14),
		14=-75 (LC 10)
	Max Grav	2=0 (LC 10), 8=128 (LC 22),
		10=302 (LC 22), 11=205 (LC 22),
		12=420 (LC 21), 13=123 (LC 21),
		14=437 (LC 21)
FORCES	(lb) - Max	imum Compression/Maximum

Maximum Compression/Maximum Tension TOP CHORD 1-2=0/17, 2-3=-220/432, 3-4=-165/401, 4-5=-123/411 5-6=-122/395 6-7=-170/392

	+ 5 = 125/+11, 5 0 = 122/555, 0 1 = 110/552,
	7-8=-217/405, 8-9=0/17
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, 4-13=-146/110,
	3-14=-275/153, 6-11=-183/128,
	7-10=-212/127

NOTES

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

right exposed C-C for members and forces & MWERS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) 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
- 5) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live 6) 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. 7)
- 8) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom 9) chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

LOAD CASE(S) Standard



April 24,2025



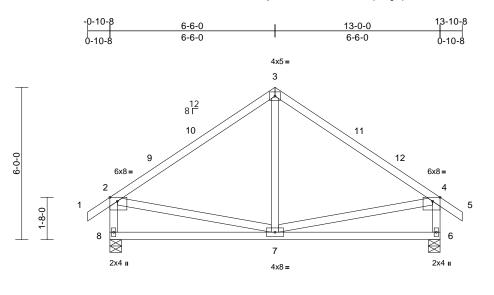
Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	E	Common	3	1	Job Reference (optional)	172948377

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:35 ID:wb1oEU3ot9zDodjcIXhweSzF_Yu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



6-6-0	13-0-0
6-6-0	6-6-0

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

Scale = 1:45.4

	X, Y): [2:0-3-8,Edge],	[4:0-3-8,Edge]											
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC202 ⁻	1/TPI2014	CSI TC BC WB Matrix-MSH	0.75 0.35 0.11	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.07 0.00	(loc) 6-7 7-8 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 76 lb	GRIP 244/190 FT = 20%
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II; Exp B; E and C-C E to 3-60, E to 3-60, E to 3-60, E to 1-10-8, E cantilever right expos for reaction DOL=1.60 3) TCLL: ASC Plate DOL	2x4 SP No.2 2x4 SP No.3 *Excep Structural wood she 5-10-10 oc purlins, - Rigid ceiling directly bracing. (size) 6=0-5-8, & Max Horiz 8=165 (LC Max Uplift 6=-59 (LC Max Grav 6=655 (LC (lb) - Maximum Com Tension 1-2=0/34, 2-3=-561/ 4-5=0/34, 2-8=-597/ 7-8=-169/263, 6-7=- 3-7=0/213, 2-7=-35/: ed roof live loads have the complexity of the second path room for the second complexity of the second co	athing directly applie except end verticals. applied or 10-0-0 oc 3=0-5-8 C 13) 15), 8=-59 (LC 14) C 22), 8=655 (LC 21) pression/Maximum 121, 3-4=-561/121, 165, 4-6=-597/155 82/223 272, 4-7=-38/272 been considered for (3-second gust) CDL=6.0psf; h=25ft; ivelope) exterior zon 2-1-8, Interior (1) 2-1 6-0, Interior (1) 2-1 7, Interior (1)	Cat. e -8 b to d s .15	design. This truss ha load of 12.0 overhangs n This truss ha chord live loa * This truss h on the bottor 3-06-00 tall h chord and ar One H2.5A S recommende UPLIFT at jtt	snow loads have b s been designed for post or 1.00 times fla on-concurrent with s been designed for ad nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will by other members. Simpson Strong-Tie ad to connect truss s) 8 and 6. This co t consider lateral for Standard	or great at roof k other liv or a 10. vith any for a liv s where l fit betv e connec to bear nnectio	er of min rooi aad of 20.0 p ve loads. 0 psf bottom other live loa e load of 20. a rectangle veen the bott ctors ing walls due	f live isf on ads. Opsf com				SEA 2867	EEP

TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) 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

April 24,2025



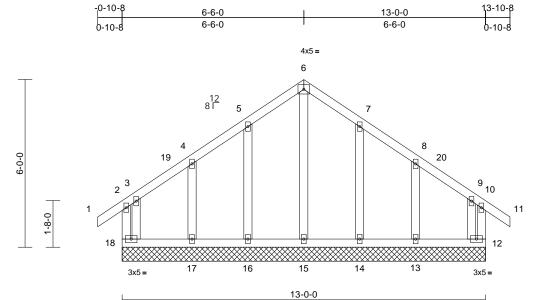
L. GA 111111111

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCEL Building Component Science Use Component Categories (http://www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	EGE	Common Supported Gable	1	1	Job Reference (optional)	172948378

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:35 ID:hs_OLPz9_OqUDEXuG81pmYzF_Z1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:41.2	

Scale = 1.41.2													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2021/	/TPI2014	CSI TC BC WB Matrix-MR	0.12 0.06 0.13	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 12	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 83 lb	GRIP 244/190 FT = 20%
	6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 12=13-0-(15=13-0-(18=13-0-(Max Horiz 18=165 (L Max Uplift 12=-61 (L 14=-48 (L 17=-96 (L Max Grav 12=183 (L 14=257 (L 16=257 (L	applied or 6-0-0 oc 0, 13=13-0-0, 14=13-0 0, 16=13-0-0, 17=13-0 0 C 13) C 14), 13=-94 (LC 15 C 15), 16=-48 (LC 14 C 14), 18=-63 (LC 15 C 25), 13=233 (LC 22 C 22), 15=165 (LC 24 C 24), 17=236 (LC 24 C 24), 17=2	l or -0, 3) -0, 4)), 2), 5) 5)	Vasd=103mp II; Exp B; Enc and C-C Corr to 3-6-0, Corr 10-10-8, Corr left and right exposed;C-C reactions sho DOL=1.60 Truss design only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced : design.	7-16; Vult=130m th; TCDL=6.0psf; closed; MWFRS ner(3E) -0-10-8 ti ner(3E) 10-10-8 ti exposed ; end ve for members an own; Lumber DOI ed for wind loads ds exposed to wid I Industry Gable alified building dt 7-16; Pr=20.0 psf s=1.0; Rough Ca =1.10 snow loads have s been designed	BCDL=6 (envelopp o 2-1-8, E 9-6-0, Ex: to 13-10-6 ertical left d forces a L=1.60 pl s in the pl ind (norm End Deta sesigner a sf (roof LL (Lum DC at B; Fully been cor	.0psf; h=25ft; exterior zor ixterior(2N) 2- terior(2N) 9-6 zone; cantilk and right A MWFRS for ate grip ane of the tru: al to the face ills as applical s per ANS/TFF .: Lum DOL=' DL=1.15 Plate Exp.; Ce=0.5 asidered for th	c Cat. he -1-8 -0 to ever ss), ble, p1 1. 1.15 -0; his	LOAD C				
FORCES	18=190 (L (Ib) - Maximum Com Tension	,		overhangs no	osf or 1.00 times	th other liv	/e loads.	sf on					1111
TOP CHORD	2-18=-188/140, 1-2= 3-4=-99/121, 4-5=-8 6-7=-117/270, 7-8=-	=0/34, 2-3=-78/71, 8/198, 5-6=-116/271, 84/202, 8-9=-92/106, 1=0/34, 10-12=-181/23	8) 9)	Gable require Truss to be fur braced again	2x4 MT20 unles es continuous bo ully sheathed fror st lateral movem spaced at 2-0-0 c	ttom chor m one fac ent (i.e. d	d bearing. e or securely				N.V.	ORTH CA	ROUNT
BOT CHORD		7=-79/81, 15-16=-79/8 I=-79/81, 12-13=-79/8	1, 11)	This truss ha	s been designed	for a 10.0						pr ~	K E
WEBS NOTES 1) Unbalance this design	6-15=-220/34, 5-16= 4-17=-184/114, 3-18 7-14=-220/99, 8-13= ed roof live loads have	=-220/109, 3=-220/175, =-184/149, 9-12=-203/	12) 159 13)	* This truss h on the bottom 3-06-00 tall b chord and an Provide med bearing plate 18, 61 lb uplit	ad nonconcurrent has been designe in chord in all area by 2-00-00 wide w by other members hanical connection capable of withs ft at joint 12, 48 II 17, 48 Ib uplift at	ed for a liv as where vill fit betv s. on (by oth standing 6 b uplift at	e load of 20.0 a rectangle veen the botto ers) of truss t i3 lb uplift at ju joint 16, 96 lb	Dpsf Dm o oint D		THURSE.	annun a	SEA 286	EEP. St.
				joint 13.	17, 40 D UPIIII AL	junit 14 a	na 94 in abili	ıdl				1. L. G	mmm

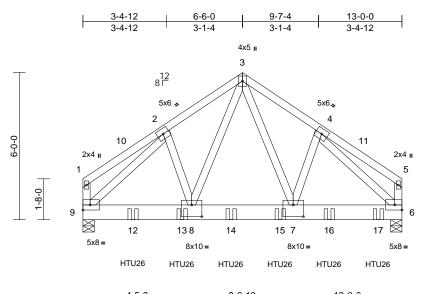
April 24,2025



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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	EGR	Common Girder	1	2	Job Reference (optional)	172948379

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:35 ID:ySTbSIhb7CBDnk89ITG2qHzF_9Z-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4-5-3	8-6-13	13-0-0	L
4-5-3	4-1-11	4-5-3	I

Plate Offsets (X, Y): [7:0-5-0,0-5-12], [8:0-5-0,0-5-12]

Scale = 1:47

Loading (psf) Spacing 2-0-0 CSI DEFL	in (lefl L/	d PLATES	GRIP
TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.72 Vert(LL)	-0.04	7-8 >9	99 24	0 MT20	244/190
Snow (Pf) 20.0 Lumber DOL 1.15 BC 0.27 Vert(CT)		7-8 >9	99 18	0	
TCDL 10.0 Rep Stress Incr NO WB 0.59 Horz(CT) 0.01	6 r	n/a n/a	/a	
BCLL 0.0* Code IRC2021/TPI2014 Matrix-MSH					
BCDL 10.0				Weight: 209 lb	FT = 20%
LUMBER 4) Wind: ASCE 7-16; Vult=130mph (3-second gust)					
TOP CHORD 2x4 SP No.2 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=2					
BOT CHORD 2x8 SP 2400F 2.0E II; Exp B; Enclosed; MWFRS (envelope) exterior					
WEBS 2x4 SP No.3 cantilever left and right exposed ; end vertical left					
BRACING right exposed; Lumber DOL=1.60 plate grip DOL	=1.60				
TOP CHORD Structural wood sheathing directly applied or					
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DO					
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc broging					
$C_{c} = 1.00 \cdot C_{t} = 1.10$	±0.9,				
REACTIONS (size) 6=0-5-8, 9=0-5-8 (a) Unbalanced snow loads have been considered fr	or this				
Max Horiz 9=-144 (LC 35) design	// 1110				
Max Uplift 6=-500 (LC 13), 9=-429 (LC 12) 7) This truss has been designed for a 10.0 psf botto	m				
Max Grav 6=5561 (LC 6), 9=4788 (LC 5) chord live load nonconcurrent with any other live					
FORCES (lb) - Maximum Compression/Maximum 8) * This truss has been designed for a live load of 2					
Tension on the bottom chord in all areas where a rectangl					
TOP CHORD 1-2=-491/86, 2-3=-4728/498, 3-4=-4766/502, 3-06-00 tall by 2-00-00 wide will fit between the b	ottom				
4-5=-521/89, 1-9=-373/77, 5-6=-391/78 chord and any other members.					
BOT CHORD 8-9=-340/3564, 7-8=-249/2969, 9) One H2.5A Simpson Strong-Tie connectors					
6-7=-315/3595 recommended to connect truss to bearing walls of WEBS 3-7=-296/2739, 4-7=-138/1135, UPLIET at it(s) 9 and 6. This connection is for uplication.					
WEBS 3-7=-296/2739, 4-7=-138/1135, UPLIFT at jt(s) 9 and 6. This connection is for upl 3-8=-287/2648, 2-8=-138/1132, and does not consider lateral forces.	int only				11.
2-9=-4745/403, 4-6=-4753/404 10) Use Simpson Strong-Tie HTU26 (10-16d Girder,				111110	1111
NOTES 10, 100 100, 100 100, 100 100, 100 100, 100 100	0.00			THUA	ROIL
1) 2-ply truss to be connected together with 10d max. starting at 2-0-8 from the left end to 12-0-8				1 ON WERE	in the
(0.131"x3") nails as follows: connect truss(es) to back face of bottom chord.			2	N. OFF	PK. S'
Top chords connected as follows: 2x4 - 1 row at 0-9-0 11) Fill all nail holes where hanger is in contact with I	umber.		-		191: 2
oc. LOAD CASE(S) Standard			5	100	u : E
Bottom chords connected as follows: 2x8 - 2 rows 1) Dead + Snow (balanced): Lumber Increase=1.1	5, Plate		1	: SEA	(L : =
staggered at 0-6-0 oc. Increase=1.15			=	: 286	
Web connected as follows: 2x4 - 1 row at 0-9-0 oc. Uniform Loads (lb/ft)			1	: 200	// : :
2) All loads are considered equally applied to all plies, Vert: 1-3=-60, 3-5=-60, 6-9=-20			Ξ	NORTH CA	1 3
except if noted as front (F) or back (B) face in the LOAD Concentrated Loads (lb)			3	A. A.	Ains
CASE(S) section. Ply to ply connections have been Vert: 12=-1427 (B), 13=-1420 (B), 14=-1420 (C) at (D)	(B),		1	O, NGIN	EFFICE
provided to distribute only loads noted as (F) or (B), 15=-1420 (B), 16=-1420 (B), 17=-1422 (B) unless otherwise indicated.			-	1 MAL	··· N2 .
3) Unbalanced roof live loads have been considered for				L.G	ALIN

April 24,2025

Page: 1

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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	F	Monopitch	6	1	Job Reference (optional)	172948380

5-5-10 5-5-10

Carter Components (Sanford, NC), Sanford, NC - 27332,

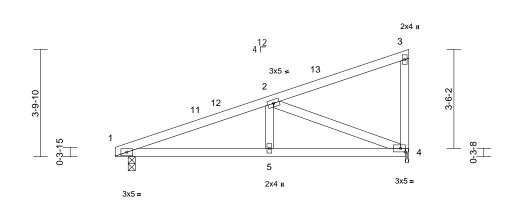
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10-5-0

4-11-6

Page: 1



0-5-8	5-5-10	10-3-8	10-5-0
0-5-8	5-0-2	4-9-14	0-1-8

Scale = 1:40.9													
Loading TCLL (roof) Snow (Pf) TCDL BCLL	(psf) 20.0 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC202	1/TPI2014	CSI TC BC WB Matrix-MSH	0.38 0.27 0.42	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.03 -0.04 0.01	(loc) 5-10 5-10 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0											Weight: 46 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing.	cept end verticals.		on the bottou 3-06-00 tall I chord and au Bearings are Bearing at jo using ANSI/ designer sho	has been designe m chord in all area by 2-00-00 wide w ny other members a assumed to be: wint(s) 4 considers TPI 1 angle to gra buld verify capacit chanical connectio	as where vill fit betv s. , Joint 4 S ; parallel t in formula y of bear	a rectangle veen the bott SP No.3 . o grain value a. Building ng surface.	om e					
I	(size) 1=0-3-0, 4 Max Horiz 1=138 (LC Max Uplift 1=-152 (L Max Grav 1=493 (LC	C 13) .C 10), 4=-158 (LC 1		One H2.5A recommende UPLIFT at jt	e at joint(s) 4. Simpson Strong-T ed to connect trus (s) 1 and 4. This c t consider lateral	s to bear connectio	ing walls due						
FORCES	(lb) - Maximum Com Tension			DAD CASE(S)									
	1-2=-857/455, 2-3=- 1-5=-436/775, 4-5=- 2-5=-89/212, 2-4=-8	436/775)2										
NOTES													
Vasd=103r II; Exp B; E and C-C Ex 7-3-4, Exte and right e: porch left a forces & M DOL=1.60 2) TCLL: ASC Plate DOL=	CE 7-16; Vult=130mph mph; TCDL=6.0psf; B Enclosed; MWFRS (er vaterior(2E) 0-0-0 to 3- erior(2E) 7-3-4 to 10-3 exposed; end vertical and right exposed;C-0 WFRS for reactions s plate grip DOL=1.60 CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L =1.15); Is=1.0; Rough Cat E Ct=1.10	CDL=6.0psf; h=25ft; velope) exterior zor 0-0, Interior (1) 3-0-(-4 zone; cantilever le left and right expose for members and hown; Lumber roof LL: Lum DOL=- um DOL=1.15 Plate	ne D to eft id; 1.15									ORTH CA ORTH CA SEA 286	ROMAN AND AND AND AND AND AND AND AND AND A
,	d snow loads have be	en considered for th	nis								-	· ·	1 2

- Unbalanced snow loads have been considered for this 3) design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

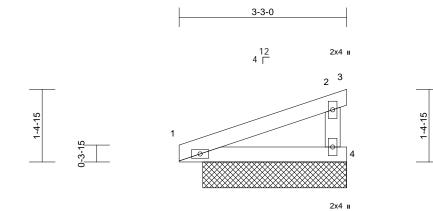
L. GA mmm April 24,2025

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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	F1GE	Monopitch Supported Gable	1	1	Job Reference (optional)	172948381

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:35 ID:05Rb2nqdzWbg0FxJai2r9FzF_oh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



2x4 =



Scale = 1:22.4

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2021/TPI2014	BC 0	0.09 0.06 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 11 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 3-3-0 oc purlins, ex Rigid ceiling directly bracing.	cept end verticals.	chord live loa 7) * This truss I on the bottor 3-06-00 tall I chord and ar 8) Provide mec bearing plate	is been designed for a ad nonconcurrent with has been designed for in chord in all areas wi by 2-00-00 wide will fit by other members. hanical connection (by capable of withstand ft at joint 3 and 13 b	any a liv here betw y othe	other live load e load of 20.0 a rectangle veen the botto ers) of truss to 3 lb uplift at jo	ipsf im o					
	(size) 1=2-9-8, 5 Max Horiz 1=42 (LC Max Uplift 1=-13 (LC 4=-68 (LC Max Grav 1=167 (LC 4=297 (LC	C 10), 3=-132 (LC 20 C 14) C 20), 3=36 (LC 14),	LOAD CASE(S)	Standard								
FORCES	(lb) - Maximum Com Tension	pression/Maximum										
TOP CHORD BOT CHORD	1-2=-28/47, 2-3=-49 1-4=-39/40	/41, 2-4=-265/263										
 NOTES 1) 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(35) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DDL=1.60 plate grip DDL=1.60 2) Truss designed for wind loads in the plane of the truss only. For stude 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) TCLL: ASCE 7-16; Pr=20.0 psf (toof LL: Lum DDL=1.15 Plate DDL=1.15); Is=1-0.0 psf (toof LL: Lum DDL=1.15 Plate DDL=1.15); Is=1-0.0; 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 studs spaced at 2-0-0 oc. 												

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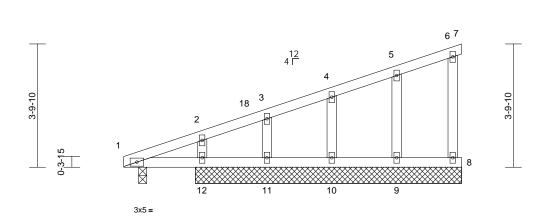
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCEL Building Component Science Use Component Categories (http://www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

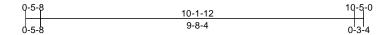
Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	FGE	Monopitch	1	1	Job Reference (optional)	172948382

10-5-0

Carter Components (Sanford, NC), Sanford, NC - 27332,

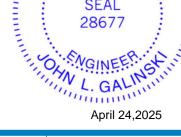
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Scale = '	1:35.5
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CLL (root) 20.0 Piare Gin POL 1.15 TC 0.11 TC 0.01 C1/2 r > 999 240 MT20 24/190 Signe (P) 0.00 Lumber DOL 1.15 TC 0.14 BC 0.00 12-17 >999 240 MT20 24/4/190 Signe (P) 0.00 Lumber DOL 1.15 TC 0.14 BC 0.00 12-17 >999 240 Weight: 46 lb FT = 20% UMRER CDL 10.0 Code IRC2021/TPI2014 Matix-MSH Weight: 46 lb FT = 20% UMRER CDC LORD 2x4 SP No.2 1 Wind: ASCE 7-16; Vulk=130mph (3-second gust) Variat-103mph; TOL=6.0pc; HSCDL=6.0pc;								i						
Biow (P) 20.0 (CDL Lumber DOL (CDL 1.15 (CDL BC 0.00 (WB Vert(CT) 0.00 12-17 >999 180 (Weight 46 lb FT = 20% UMBER OOP CHORD 2x4 SP No.2 Code IRC2021/TPI2014 BC 0.00 7 n/a n/a UMBER OOP CHORD 2x4 SP No.2 Vert(CT) 0.00 7 n/a n/a STACING 2x4 SP No.3 The Solo 0.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 12.00 7 n/a n/a UMBER OOP CHORD 2x4 SP No.2 10.00 10.60 3.00 10.00 10.00 10.00 10.00 10.00 12.01 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 12.01 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 </td <td>Loading</td> <td>(psf)</td> <td>Spacing</td> <td>2-0-0</td> <td></td> <td>csi</td> <td></td> <td>DEFL</td> <td>in</td> <td>(loc)</td> <td>l/defl</td> <td>L/d</td> <td>PLATES</td> <td>GRIP</td>	Loading	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
CDL 10.0 BCLL Rep Stress Incr YES IRCOde WB 0.04 Matrix-MSH Horz(CT) 0.00 7 n/a N/a VEL 10.0 Code IRC2021/TPI2014 Matrix-MSH Horz(CT) 0.00 7 n/a N/a UJMBER OP CHORD 2x4 SP No.2 N/mdt:ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0ps; H=251; Cat. II; Exp E: Enclosed; MVMFRS (envelope) exterior zone and C-C Correr(3E) 0-0-10 3-0-0, Cp. Sterior(2R) 3-0-10 10-5-0 zone; cantilever left and right exposed; -cd C N/mdt:ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0ps; H=251; Cat. IF EXP E: Zx4 SP No.3 Structural wood sheathing directly applied or 6-0-0 co purins, except end verticals. N/mdt:MFRS (envelope) exterior zone and C-C Correr(3E) 0-0-10 3-0-0, Cp. Sterior(2R) 3-0-10 10-5-0 zone; cantilever left and right exposed; -cd C members and forces & MWFRS ior reactions shown; Lumber DCL=100 plate grip DDL=16.0 N/matrix-MSH N/matrix-MSH N/matrix-MSH VERS 10-8-3-0; 7=8-2-8, 8=8-2-8, 9=8-2-8, 9-8-2-8, 11=8-2-8, 12=8	TCLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.14	Vert(LL)	0.00	12-17	>999	240	MT20	244/190
SCLL 0.0* Code IRC2021/TPI2014 Matrix-MSH Weight: 46 lb FT = 20% JUMBER OP CHORD 2x4 SP No.2 Nind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0ps; RCDL=6.0ps; h=25ft; Cdt.	Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.05	Vert(CT)	0.00	12-17	>999	180		
SCDL 10.0 Weight: 46 lb FT = 20% JUMBER OP CHORD 2x4 SP No.2 Wind: ASCE 7-16; Vull=130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	TCDL	10.0	Rep Stress Incr	YES		WB	0.04	Horz(CT)	0.00	7	n/a	n/a		
UMBER OP CHORD 2x4 SP No.2 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0pst; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E): 0-0-0 to 3-0.0; Exterior(2N) 3-0-0 to 10-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; end vertical 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 bracing. TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purifins, except end verticals. Rigid ceiling directly applied or bracing. 1) Wind: ASCE 7.16; Vult=130mph; TCDL=6.0pst; h=250, pi and C-C Corner(3E) 0-0-0 to 3-0.0; Extentior(2N) 3-0-0 to 10-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; or wind loads in the plane of the truss only. For stude exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANS/ITPI 1. TCL: ASCE 7.16; Nog Opt Cat B; Fully Exp; Ce=0.9; Ca=1.00; Cl=1.10; Plate DOL=1.15; Pl=20.0 pst (cort L: Lum DOL=-1.15 Plate DOL=-1.15; Pl=20.0 pst (cort L: Lum DOL=-1.15) Plate DOL=-1.15; Pl=20.0 pst (cort L: Lum DOL=-1.15) Plate DOL=-1.15; Plate Dotom chord hall areas where a rectangle 3-06-00 tall by 2-00-00 wide will th between the bottom chord and any other irrel loads. * This truss has been designed for a live load of 20.0pst ort live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0pst (LC 20), 11=200 (LC 20), 12=272 (LC 20), 11=200 (LC 20), 12=272 (LC 20), 11=200 (LC 20), 12=275 (LC 20), 11=200 (LC 20), 21=275 (LC 20), 11=200 (LC 20), 21=275 (LC 20), 11=200 (LC 20), 21=275 (LC 20), 11=200 (LC 20), 21=272 (LC 20), 11=200 (LC 20), 22=26 (LC 20), 11=200 (LC	BCLL	0.0*	Code	RC202	1/TPI2014	Matrix-MSH								
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	BCDL	10.0											Weight: 46 lb	FT = 20%
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	LUMBER			1)	Wind: ASCE	7-16: Vult=130m	ph (3-se	cond aust)						
 VEBS 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 3 OP CHORD 2x4 SP No.3 3 OP CHORD 3TUCTURE wood sheathing directly applied or 10-0-0 oc bracing. REACTIONS (size) 1=0-3-0, 7=8-2-8, 8=8-2-8, 9=8-2-8, 10=8-2-6, 11=8-2-8, 11=8-2-8, 12=8-2-8 Max Horiz 1=138 (LC 11) Max Horiz 1=138 (LC 11) Max Grav 1=107 (LC 23), 7=26 (LC 13), 8=99 (LC 14), 11=-30 (LC 10), 12=-50 (LC 14) Max Grav 1=107 (LC 23), 7=26 (LC 13), 8=99 (LC 23), 12=00 (LC 20), 12=172 (LC 10), 12=-50 (LC 14) Max Grav 1=107 (LC 23), 7=26 (LC 13), 8=99 (LC 23), 12=00 (LC 20), 12=172 (LC 19). 5=-50 (TC 23), 7=26 (LC 13), 8=99 (LC 23), 12=00 (LC 23), 12=00 (LC 23), 12=00 (LC 23), 12=00 (LC 14) FORCES (b) - Maximum Compression/Maximum Tension TOP CHORD 1=12=588/8, 11-12=-42/75, 8-9=-42/75 (LC 13), 8=9-3(1-12)=-42/75, 8-9=-42/75 (LC 14) VEBS 5-9=177/116, 4-10=-182/136, 3-11=-163/128, 2-12=-171/116, 4-10=-182/136, 3-11=-163/128, 2-12=-171/116, 4-10=-182/136, 3-11=-163/128, 2-12=-171/116, 4-10=-182/136, 3-11=-163/128, 2-12=-171/116, 4-10=-182/136, 3-11=-163/128, 2-12=-171/116, 4-10=-182/136, 3-11=-163/128, 2-12=-171/116, 4-10=-182/136, 3-11=-163/128, 2-12=-171/116, 4-10=-182/136, 3-11=-163/128, 2-12=-141/140 	TOP CHORD	2x4 SP No.2							; Cat.					
2x4 SP No.3 2x4 SP No.3 SRACING OP CHORD 5tructural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. 10-5-0 zone; cantilever left and right exposed; C for members and forces & MWFRS for reactions shown; Lumber SOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. 10-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; for members and forces & MWFRS for reactions shown; Lumber SOT CHORD 1=0-3-0, 7=8-2-8, 8=8-2-8, 9=8-2-8, 10-8-2-8, 11=8-2-8, 12=8-2-8 1=0-3-0, 7=8-2-8, 8=8-2-8, 9=8-2-8, 10-8-2-8, 11=8-2-8, 12=8-2-8 Max Horiz 1=138 (LC 11) Max Upit Tr =-22 (LC 10), 8=-32 (LC 11), 9=-33 (LC 10), 10-35 (LC 14), 11=-30 (LC 25), 7=26 (LC 14), 11=-30 (LC 20), 9=217 (LC 20), 10=222 (LC 20), 9=217 (LC	BOT CHORD	2x4 SP No.2			II; Exp B; En	closed; MWFRS ((envelop	e) exterior zoi	ne					
 Structural bert network Structural wood sheathing directly applied or 6-0-0 oc purins, excepted not verticals. Structural wood sheathing directly applied or 10-0-0 oc bracing. Structural wood sheathing directly applied or 10-0-0 oc mosult qualified building designer as per ANS/ITPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (con LL: Lum DOL=1.15) Plate DOL=1.16); It=20.0 psf (Lot 10, 10=-35 (LC 14), design. 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 ive load on 20.0 psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-0-00 wide will fit between the bottom chord and any other members. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 bl uplift at joint 7. CAD CASE(S) Standard 	WEBS	2x4 SP No.3							-0 to					
 Structural wood sheathing directly applied of OP CHORD Structural wood sheathing directly applied of 10-0-0 oc bracing. SOT CHORD Rigid ceiling directly applied of 10-0-0 oc bracing. REACTIONS (size) 1-0-3-0, 7-8-2-8, 8=8-2-8, 9=8-2-8, 10-8-2-8, 11-8-2-8, 11-8-2-8, 12-8-2-8 Max Horiz 1=138 (LC 11) Max Upitit 7-22 (LC 10), 18-32 (LC 11), 9=-33 (LC 10), 12-50 (LC 14), 11=-30 (LC 10), 12=-50 (LC 14), 11=-30 (LC 20), 9=217 (LC 20), 11=200 (LC 20), 12=172 (LC 20), 11=200 (LC 20), 12=172 (LC 1) FORCES (b) - Maximum Compression/Maximum Tension FOP CHORD 1-2137/135, 2-3=-92/118, 3-4=-79/105, 4-5-69/92, 5-6-57/72, 6-7=-18/8, 6-8-99/35 SOT CHORD 1-1268/86, 11-1242/75, 10-11=-42/75, 9-1042/75, 8-9=-42/75 SOT CHORD 1-1268/86, 11-1242/75, 10-11=-42/75, 9-1042/75, 8-9=-42/75 SOT CHORD 1-12132/136, 3-11=-163/128, 2-12=-141/140 GABE at a space at 2-20 (b) structural wood show and parameters. 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 in all areas where a rectangle 3-06-00 tal by 2-00-00 wide will fit between the bottom chord in all areas where a rectangle 3-06-00 tal by 2-00-00 wide will fit between the bottom chord in all areas where a rectangle 3-06-00 tal by 2-00-00 wide will fit between the bottom chord in all areas where a rectangle 3-06-00 tal by 2-00-00 wide will fit between the bottom chord in all areas where a rectangle 3-06-00 tal by 2-00-00 wide will fit between the bottom chord in all areas where a rectangle 3-06-00 tal by 2-00-00 wide will fit between the bottom chord in all areas where a rectangle 3-06-00 tal by 2-00-00 wide will fit between the bottom chord in all areas where a rectangle 3-06-00 tal by 2-00-00 wide will fit between the bottom chord in all areas where a rectangle 3-06-00 tal	OTHERS	2x4 SP No.3												
 DOL=1.60 plate grip DOL=1.60 DOL=1.60 plate grip DOL=1.60 DOL=1.60 plate grip DOL=1.60 Truss designed for wind loads in the plane of the truss only. For stude exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANS/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (cont L1: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (cont L1: Lum DOL=1.15); Pf=20.0 psf (cont L1: Lum DOL=1.15	BRACING													
 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. 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) TCL: ASCE 7-16; Pr=20. 0ps (toor DL=1.15) Plate DDL=1.15); Pl=20. 0ps (toor DL=1.15); Pl=20. 0ps (toor DL=1.15); Plate DDL=1.15); Pl=20. 0ps (toor DL=1.15); Plate DDL=1.15); Plate DDL=1.1	TOP CHORD	Structural wood she	eathing directly applied of	or				Lumber						
 Not CHORD Right chaining uncerting sphere of the ord of the practing. REACTIONS (size) 1=0-3-0, 7=8-2-8, 8=8-2-8, 9=8-2-8, 10=8-2-8, 11=8-2-8, 12=8-2-8, 10=8-2-8, 10=8-2-8, 10=8-2-8, 10=8-2-8, 10=8-2-8, 11=8-2-8, 11=8-2-8, 12=8-2-8, 10=8-2-8, 10=8-2-8, 10=8-2-8, 10=8-2-8, 10=8-2-8, 11=8-2-8, 11=8-2-8, 12=8-2-8, 10=8-2-8, 10=8-2-8, 11=8-2-8, 11=8-2-8, 11=8-2-8, 11=8-2-8, 12=8-2-8, 10=8-2-8, 10=8-2-8, 10=8-2-8, 11=8-2-8, 11=8-2-8, 11=8-2-8, 11=8-2-8, 12=8-2-8, 10=8-2-8, 10=8-2-8, 10=8-2-8, 11=8-		6-0-0 oc purlins, ex	cept end verticals.	0)										
 SEACTIONS (size) 1=0-3-0, 7=8-2-8, 8=8-2-8, 9=8-2-8, 10=8-2-8, 11=8-2-8, 12=8-2-8 Max Horiz 1=138 (LC 11) Max Upitit 7=-22 (LC 10), 8=-32 (LC 11), 9=-33 (LC 10), 10=-35 (LC 14), 11=-30 (LC 20), 12=-50 (LC 14), 11=-30 (LC 20), 12=-50 (LC 14), 11=-30 (LC 20), 12=-172 (LC 20), 11=200 (LC 20), 12=172 (LC 20), 11=200 (LC 20), 12=172 (LC 1), 12=-50 (LC 13), 8=-99 (LC 20), 11=200 (LC 20), 12=172 (LC 13) FORCES (Ib) - Maximum Compression/Maximum Tension COP CHORD 1-22-137/135, 2-3=-92/118, 3-4=-79/105, 4-5=-69/93.5 BOT CHORD 1-12=-58/86, 11-12=-42/75, 10-11=-42/75, 9-10=-42/75, 8-9=-42/75 (L-12), 10-11=-42/75, 9-10=-42/75 (L-12), 10-11=-42/75, 9-10=-42/75, 8-9=-42/75 (L-12), 10-11=-42/75, 9-10=-42/75 (L-12), 10-11=-42/75 (L-12), 10-11=-42/75 (L-12), 10-11=-42/75 (L-12), 10-11=-42/	BOT CHORD		applied or 10-0-0 oc	2)										
CEACTIONS(size) $1=0-3\cdot0, 7=8\cdot2\cdot8, 9=8-2\cdot8, 9=8-2\cdot8, 10=8-2\cdot8, 10=8-2\cdot8, 11=8-2-8, 12=8-2\cdot8, 10=8-2\cdot8, 11=8-2-8, 12=8-2\cdot8, 10=8-2\cdot8, 11=8-2-8, 12=8-2\cdot8, 10=8-2\cdot8, 11=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 11=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 11=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 11=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 11=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 11=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 12=8-2\cdot8, 12=8-2\cdot8, 12=8-2\cdot8, 10=8-2\cdot8, 12=8-2\cdot8, 12=8-2\cdot8,$		bracing.												
 TOLE-2-8, 11=8-2-8, 12=8-2-8 TOLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pl=20.0 psf (Lum D	REACTIONS			2-8,										
 Max Horiz 1=138 (LC 11) Max Uplift 7=-22 (LC 10), 8=-32 (LC 11), 9=-33 (LC 10), 10=-35 (LC 14), 11=-30 (LC 10), 12=-50 (LC 13), 8=99 (LC 20), 9=217 (LC 20), 10=-222 (LC 20), 11=200 (LC 20), 12=172 (LC 1) ORCES (b) - Maximum Compression/Maximum Tension OP CHORD 1-2=-137/135, 2-3=-92/118, 3-4=-79/105, 4-5=-69/92, 5-6=-57/72, 6-7=-18/8, 6-8=-99/35 SOT CHORD 1-12=-58/86, 11-12=-42/75, 10-11=-42/75, 9-10=-42/75, 8-9=-42/75 WEBS 5-9=-177/116, 4-10=-182/136, 3-11=-163/128, 2-12=-141/140 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. 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 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 22 lb uplift at joint 7. LOAD CASE(S) Standard 		10=8-2-8	, 11=8-2-8, 12=8-2-8	3)										
$\begin{array}{lll} \mbox{Max Horz } 1=138 (LC 11) \\ \mbox{Max Uplif } 7=22 (LC 10), 8=-32 (LC 11), \\ 9=-33 (LC 10), 10=-35 (LC 14), \\ 11=-30 (LC 10), 12=-50 (LC 14), \\ 11=-30 (LC 10), 12=-50 (LC 14), \\ 11=-30 (LC 20), 9=217 (LC 20), 10=222 \\ (LC 20), 9=217 (LC 20), 10=222 \\ (LC 20), 11=200 (LC 20), 12=172 \\ (LC 1) \end{array} \\ \begin{array}{lllllllllllllllllllllllllllllllllll$				0,										
 9=-33 (LC 10), 10=-35 (LC 14), 11=-30 (LC 10), 12=-50 (LC 14) Max Grav 1=107 (LC 25), 7=26 (LC 13), 8=99 (LC 20), 9=217 (LC 20), 10=222 (LC 20), 11=200 (LC 20), 12=172 (LC 1) ORCES (lb) - Maximum Compression/Maximum Tension OP CHORD 1-2=-137/135, 2-3=-92/118, 3-4=-79/105, 4-5=-69/92, 5-6=-57/72, 6-7=-18/8, 6-8=-99/35 SOT CHORD 1-12=-58/86, 11-12=-42/75, 9-10=-42/75, 8-9=-42/75,														
 11=-30 (LC 10), 12=-50 (LC 14) Max Grav 1=107 (LC 25), 7=26 (LC 13), 8=99 (LC 20), 9=217 (LC 20), 10=222 (LC 20), 11=200 (LC 20), 12=172 (LC 1) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-137/135, 2-3=-92/118, 3-4=-79/105, 4-5=-69/92, 5-6=-57/72, 6-7=-18/8, 6-8=-99/35 OT CHORD 1-12=-58/86, 11-12=-42/75, 9-10=-42/75, 8-9=-42/75 VEBS 5-9=-177/116, 4-10=-182/136, 3-11=-163/128, 2-12=-141/140 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. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 7. LOAD CASE(S) Standard 					Cs=1.00; Ct	=1.10								
 Max Grav 1=107 (LC 25), 7=26 (LC 13), 8=99 (LC 20), 9=217 (LC 20), 10=222 (LC 20), 11=200 (LC 20), 12=172 (LC 1) 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. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 7. LOAD CASE(S) Standard 				4)	Unbalanced	snow loads have	been co	nsidered for th	his					
 (LC 20), 9=217 (LC 20), 10=222 (LC 20), 11=200 (LC 20), 12=172 (LC 1) (D - Maximum Compression/Maximum Tension COP CHORD 1-2=-137/135, 2-3=-92/118, 3-4=-79/105, 4-5=-69/92, 5-6=-57/72, 6-7=-18/8, 6-8=-99/35 SOT CHORD 1-12=-58/86, 11-12=-42/75, 9-10=-42/75, 8-9=-42/75 VEBS 5-9=-177/116, 4-10=-182/136, 3-11=-163/128, 2-12=-141/140 CAP M 120 tilles 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 investment of 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 22 lb uplift at joint 7. LOAD CASE(S) Standard 				00										
 (LC 20), 11=200 (LC 20), 12=172 (LC 1) (LC 1) (LC 1) (LC 1) (LC 1) (LC 1) (D) - Maximum Compression/Maximum Tension (D) C HORD 1-2=-137/135, 2-3=-92/118, 3-4=-79/105, 4-5=-69/92, 5-6=-57/72, 6-7=-18/8, 6-8=-99/35 SOT C HORD 1-12=-58/86, 11-12=-42/75, 10-11=-42/75, 9-10=-42/75, 8-9=-42				5)				ise indicated.						
 (LC 1) (LC 1)				2 '										
FORCES (lb) - Maximum Compression/Maximum Tension (lb) - Maximum Compression/Maximum Tension 8) * 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. 80 * 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) * This truss has been designed for a live loads. 80 * 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. 9) 80 * 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. 9) 80 * 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. 9) 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 7. 7. LOAD CASE(S) Standard SEAL			11-200 (20 20), 12-112	- 7)										
	FORCES	· · · ·	nression/Maximum											
	TOROLO		ipression/maximum	8)					Upst				minin	11111
	TOP CHORD		-92/118. 3-4=-79/105.						~ m				W'TH CA	ROUL
								ween the bott	om				R	. Alle
		6-8=-99/35		a)				ers) of truss t	'n			5.	O'KESS	Willing .
	BOT CHORD	1-12=-58/86, 11-12	=-42/75, 10-11=-42/75,	5)								: 5	<u> </u>	11.7 %
					01									MA: 3
	WEBS		=-182/136, 3-11=-163/1	28,		Standard							00	1 E
NOTES 28677 - 2		2-12=-141/140		Ľ	UAD CASE(S)	Stanuaru					=		SEA	NL : E
	NOTES												286	77 : 2



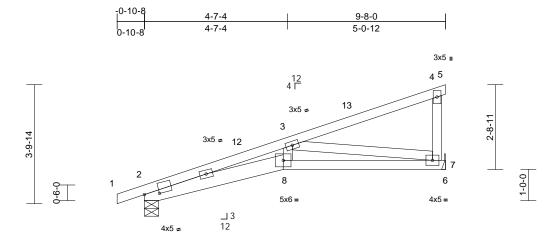
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTP11 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

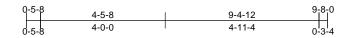


Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	G	Monopitch	9	1	Job Reference (optional)	172948383

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:36 ID:Dy_JjEEKvGAptckEgqDBdczF_tK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:37	
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Plate Offsets (X, Y): [2:0-5-12,0-1-0]

	(7, 1). [2.0 0 12,0 1 0				-								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC202	1/TPI2014	CSI TC BC WB Matrix-MSH	0.60 0.52 0.69	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.13 0.05	(loc) 8 7-8 7	l/defl >999 >872 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 46 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	OP CHORD 2x4 SP No.2 OT CHORD 2x6 SP No.2 *Except* 8-6:2x4 SP No.2 ZES 2x4 SP No.3 RACING OP CHORD OP CHORD Structural wood sheathing directly applied or 4-5-5 oc purlins, except end verticals. OT CHORD Rigid ceiling directly applied or 7-11-15 oc bracing.				is been designed for psf or 1.00 times file on-concurrent with is been designed for ad nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will by 2-00-00 wide wide wide wide wide wide wide wide	at roof k other liv or a 10.0 vith any for a liv s where I fit betw ass conr barallel t of bear	bad of 20.0 p re loads.) psf bottom other live loa e load of 20.0 a rectangle veen the bott nections. o grain value a. Building ng surface.	ads. Opsf com					
TOP CHORD	Tension		10	7.	e capable of withsta Simpson Strong-Tie	0		joint					
BOT CHORD WEBS	4-5=-8/0, 4-7=-224/1 2-8=-574/1652, 7-8= 3-8=-70/407, 3-7=-1-	-544/1531, 6-7=0/0		UPLIFT at jt	ed to connect truss s) 2. This connecti isider lateral forces	on is foi							
 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) 1-111-13 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 				DAD CASE(S)	Standard						and the second s	OR TH CA OR THESS SEA 2867	LÈÈ

- 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
- 3) Unbalanced snow loads have been considered for this design.

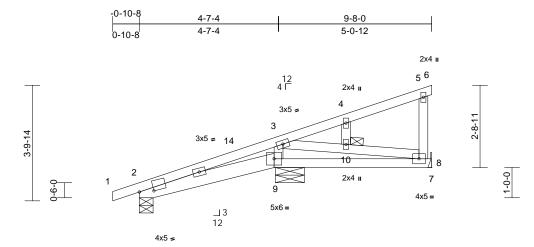
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L. GAL

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	GSE	Monopitch Structural Gable	1	1	Job Reference (optional)	172948384

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries. Inc. Tue Apr 22 15:50:36 ID:j7LOAWWFe1s7RV5MhJbHFGzF_qO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



0-5-8	3 4-5-8	5-5-8	9-4-12	9-8-0
0-5-8	3 4-0-0	1-0-0	3-11-4	0-3-4

Plate Offsets (X, Y): [2:0-5-12,0-1-0]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD BOT CHORD WEBS	2x6 SP No.2 *Excep 2x4 SP No.3	Plate Grip DOL Lumber DOL Rep Stress Incr Code	c s c	Truss design only. For stu see Standard or consult qu		d (norm nd Deta igner a	al to the face ils as applica s per ANSI/T	e), able, PI 1.	(loc) 8-9 8-9 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 47 lb	GRIP 244/190 FT = 20%
OTHERS BRACING TOP CHORD BOT CHORD JOINTS REACTIONS	6-0-0 oc purlins, ex Rigid ceiling directly bracing. 1 Brace at Jt(s): 10 (size) 2=0-5-8, 8 Max Horiz 2=121 (LC Max Uplift 2=-43 (LC 9=-73 (LC Max Grav 2=221 (LC	applied or 10-0-0 oc 3= Mechanical, 9=0-11 C 11) C 10), 8=-39 (LC 14), C 14) C 21), 8=281 (LC 21),	F F (4) U (5) T (5) T (7) T (7) T (7) T (8) *	 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. 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. 									
9=513 (LC 21) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/17, 2-3=-144/55, 3-4=-105/24, 4-5=-65/30, 5-6=-8/0, 5-8=-177/93 BOT CHORD 2-9=-108/202, 8-9=-77/147, 7-8=0/0 WEBS 3-9=-377/185, 3-10=-101/105, 8-10=-111/112, 4-10=-71/47 NOTES 1) 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				3-06-00 tall £ shord and ar Refer to gird, Bearing at jo using ANSI/1 designer sho Provide mec bearing plate 3 and 73 lb u Dne H2.5A S uconsended JPLIFT at jt(n chord in all areas by 2-00-00 wide will by other members. er(s) for truss to tru int(s) 2 considers p IPI 1 angle to grain build verify capacity hanical connection a capable of withsta uplift at joint 9. Simpson Strong-Tie ad to connect truss s) 2. This connectit isider lateral forces.	fit betw ss conr arallel formul of bear (by oth nding 3 conne to bear on is for	veen the bott nections. to grain value a. Building ing surface. ers) of truss i 99 lb uplift at j ctors ing walls due	e to joint e to			and the second sec	SEA 286	
cantilever right expo	r left and right exposed osed;C-C for members ons shown; Lumber DO	; end vertical left and and forces & MWFRS	LOA	D CASE(S)	Standard						anna ann	OL SNGIN	EEP. St.



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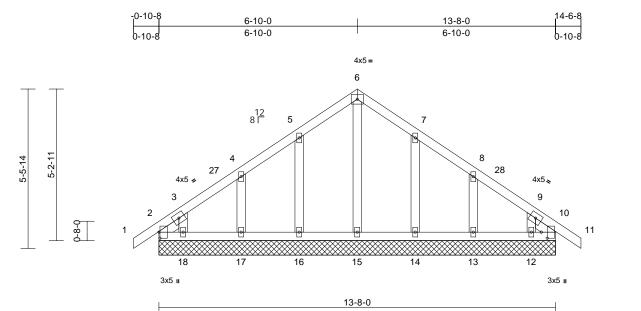
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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	L01	Common Supported Gable	1	1	Job Reference (optional)	172948385

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries. Inc. Tue Apr 22 15:50:36 ID:r65Ou1rnZod2MtC7NGOC9Tyz_I0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:39.7			I									I	
Plate Offsets (X, Y): [2:0-2-8,0-0-7],	[10:0-2-8,0-2-7]					_						
Loading	(psf)	Spacing	2-0-0		CSI		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	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.06	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2021	I/TPI2014	Matrix-MSH								
BCDL	10.0											Weight: 76 lb	FT = 20%
TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	13=13-8-0	athing directly applie applied or 10-0-0 o 10=13-8-0, 12=13- 0, 14=13-8-0, 15=13 0, 17=13-8-0, 18=13	ed or c 8-0, 3-8-0, 2)	this design. Wind: ASCI Vasd=103m II; Exp 8; Ei and C-C Cc to 3-10-0, C 9-10-0 to 11 cantilever le right expose for reactions DOL=1.60 Truss desig only. For st	I roof live loads ha E 7-16; Vult=130m ph; TCDL=6.0psf hclosed; MWFRS rner(3E) -0-10-8 t orner(3R) 3-10-0 -6-8, Corner(3E) fit and right exposed ad;C-C for member s shown; Lumber I ned for wind loads uds exposed to w rd Industry Gable	ph (3-sed ; BCDL=6 (envelope o 2-1-8, E to 9-10-0 11-6-8 to ed ; end v rs and fo DOL=1.60 s in the pl ind (norm	cond gust) .0psf; h=25ft e) exterior zoo ixterior(2N) 2 Exterior(2N) 14-6-8 zone; vertical left ar cces & MWFF 0) plate grip ane of the tru al to the face	; Cat. ne 2-1-8 nd RS ss	2, 1 at jo 60 I join 13) Bev	7 lb upli bint 17, 8 b uplift a t 2 and 7 reled pla ace with	ft at joi 30 lb up at joint 17 lb up ate or sl a truss	nt 10, 61 lb uplift blift at joint 18, 60 13, 70 lb uplift at blift at joint 10. him required to p chord at joint(s)	ing 52 lb uplift at joint at joint 16, 60 lb uplift 0 lb uplift at joint 14, joint 12, 52 lb uplift at provide full bearing 2, 19.

	Max Uplift 2=-52 (LC 10), 10=-17 (LC 11),	
	12=-70 (LC 15), 13=-60 (LC 15),	
	14=-60 (LC 15), 16=-61 (LC 14),	
	17=-60 (LC 14), 18=-80 (LC 14)	
	Max Grav 2=128 (LC 31), 10=108 (LC 22),	
	12=123 (LC 26), 13=227 (LC 22)),
	14=259 (LC 22), 15=145 (LC 33)),
	16=259 (LC 21), 17=227 (LC 21)),
	18=134 (LC 25)	
FORCES	(lb) - Maximum Compression/Maximum	
	Tension	
TOP CHORD	1-2=0/29, 2-3=-80/82, 3-4=-93/75,	
	4-5=-81/78, 5-6=-91/151, 6-7=-91/151,	
	7-8=-75/78, 8-9=-61/34, 9-10=-80/63,	
	10-11=0/29	
BOT CHORD	2-18=-38/115, 17-18=-38/115, 16-17=-38/1	15,
	15-16=-38/115, 14-15=-38/115,	
	13-14=-38/115, 12-13=-38/115,	
	10-12=-38/115	
WEBS	6-15=-105/0, 5-16=-219/108, 4-17=-185/12	0,
	3-18=-107/115, 7-14=-219/108,	
	8-13=-185/120, 9-12=-107/115	

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 4)

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 5) design.

6) 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. 7) Gable requires continuous bottom chord bearing.

- 8) Gable studs spaced at 2-0-0 oc. 9)
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 11) * 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.



April 24,2025

818 Soundside Road Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	L02	Common Girder	1	2	Job Reference (optional)	172948386

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:36 ID:jSS2JQ00P25JO8ydTLdvPlzGcCJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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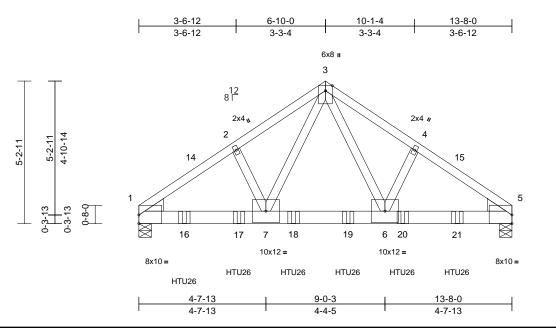


Plate Offsets (X, Y): [1:Edge,0-3-13], [5:Edge,0-3-13]										
Loading (psf) TCLL (roof) 20.0 Snow (Pf) 20.0 TCDL 10.0 BCLL 0.0* BCDL 10.0	Plate Grip DOL1.7Lumber DOL1.7Rep Stress IncrNO	15	CSI TC BC WB Matrix-MSH	0.45 0.48 0.94	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.15 0.02	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 164 lb	GRIP 244/190 FT = 20%
4-2-6 oc purlins.	C 37) LC 5), 5=5738 (LC 6) apression/Maximum 624/0, 3-4=-7570/0, 1440, 5-6=0/6318 30/169, 3-7=0/4550, ther with 10d s: 2x4 - 1 row at 0-9-0 ows: 2x6 - 3 rows - 1 row at 0-9-0 oc. applied to all plies, ck (B) face in the LOAD hections have been noted as (F) or (B),	 Vasd=103n II; Exp B; E cantilever le right expose 5) TCLL: ASC Plate DOL= DOL=1.15); Cs=1.00; C 6) Unbalanced design. 7) This truss h chord live ld 8) * This truss on the botto 3-06-00 tall chord and a 9) Use Simpso: 14-10dx1 1, max. startin connect trus 10) Fill all nail h LOAD CASE(S 1) Dead + Sr Increase= Uniform Lo Vert: 1- Concentra 	I snow loads have to as been designed for ad nonconcurrent to has been designed m chord in all areas by 2-00-00 wide wi ny other members. on Strong-Tie HTU2 2 Truss) or equival g at 1-8-0 from the ss(es) to back face oles where hanger) Standard oow (balanced): Lur 1.15	BCDL=6 enveloped d; end v 60 plate (roof LL Lum DC B; Fully been cor or a 10.0 with any for a liv s where Il fit betw 66 (10-16 ent space left end of bottor is in cor nber Inc 1=-19 49 (B),	.0psf; h=25ft) exterior zoo ertical left ar grip DOL=1. : Lum DOL= L=1.15 Plate Exp.; Ce=0.3 usidered for tl) psf bottom other live load e load of 20.1 a rectangle ween the botth of Girder, ed at 2-0-0 ct to 11-8-0 to n chord. tact with lum rease=1.15, l 8=-1549 (B)	ne; id 60 1.15 2 3; ids. Opsf om ber. Plate				SEA 2867	7 ER C

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

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818 Soundside Road Edenton, NC 27932

April 24,2025

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	V1A	Valley	1	1	Job Reference (optional)	172948387

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:36 ID:at3RJk1CU9toAhG3EqgvdgzGcDa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

13-8-0

6-5-13



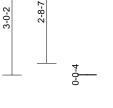
14-4-5

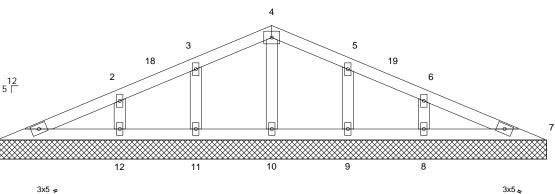
0-8-6

4 3 18 Ð 2 12 5 [P

7-2-3

7-2-3





14-4-5

4x5 =

Scale = 1:30.3

Scale = 1:30.3													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0 10.0	Plate Grip DOL Lumber DOL Rep Stress Incr * Code	1-11-4 1.15 1.15 YES IRC2021/TPI2	CSI TC BC WB Matrix-MSH	0.25 0.16 0.08	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a -0.01	(loc) - - 7	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 53 lb	GRIP 244/190 FT = 20%	
FORCES TOP CHORD BOT CHORD WEBS NOTES	10-0-0 oc purlins Rigid ceiling dire- bracing. (size) 1=14-5 9=14-6 12=14 Max Horiz 1=44 (Max Uplift 1=-24 (LC 15 14), 12 Max Grav 1=64 ((LC 21 (LC 21 (LC 22) (lb) - Maximum C Tension 1-2=-73/318, 2-3 4-5=0/336, 5-6=- 1-12=-281/98, 11 9-10=-281/98, 8- 4-10=-346/61, 3- 5-9=-158/88, 6-8	thy applied or 6-0-0 oc -8, 7=14-5-8, 8=14-5-4 -8, 10=14-5-8, 11=14- 5-8 -C 14) (LC 36), 7=-1 (LC 21),), 9=-30 (LC 15), 11=-1 -54 (LC 14) -C 35), 7=0 (LC 15), 8), 9=148 (LC 21), 10=-2), 11=203 (LC 20), 12=-) ompression/Maximum =-35/317, 3-4=0/316, 33/328, 6-7=-94/352 -12=-281/98, 10-11=-2 θ =-281/98, 7-8=-284/9 11=-183/94, 2-12=-211	Vasc II; Ex and 1 to 4- ed or 10-2 canti right for re 3, 3) Trus oDL DOL 25-8, 3) Trus only. see 5 35 (LC 4) TCLI Plate 266 Cs=1 298 5) Unbs 80 Gabl 9) This chor 81/98, 10) * This on th 3-06 (80, chor 11) Prov bear	I: ASCE 7-16; Vult=130r I=103mph; TCDL=6.0ps p B; Enclosed; MWFRS C-C Exterior(2E) 0-0-0 tt 2-12, Exterior(2R) 4-2-12; 12 to 11-2-12, Exterior(lever left and right expose exposed; C-C for member actions shown; Lumber = 1.60 s designed for wind load For studs exposed to w Standard Industry Gable moult qualified building of L: ASCE 7-16; Pr=20.0 ps = 1.15); Is=1.0; Rough C L. 00; Ct=1.10 alanced snow loads have gn. at es quires continuous bo e studs spaced at 2-0-0 truss has been designed d live load nonconcurrent s truss has been designed d live load nonconcurrent is truss has been designed d live load nonconcurrent is truss has been designed d live load nonconcurrent is truss has been designed d and any other member ide mechanical connecti ing plate capable of with b uplift at joint 7 and 1 lit	f; BCDL=((envelop) 0 3-2-12, 1 2 to 10-2 2 E) 11-2 sed; end ers and fo DOL=1.6 Is in the pl vind (norm End Deta designer a ss f (roof LI at B; Fully e been co oc. d for a 10. t with any ed for a liv as where will fit bett 's. on (by oth standing 2	6.0psf; h=25ft a) exterior zonterior (1) 3-2 12, Interior (1) 2 to 14-5-8 z vertical left ar rcces & MWFF D plate grip ane of the tru lal to the face ils as applica s per ANSI/T s: Lum DOL= DL=1.15 Plate Exp.; Ce=0.1 nsidered for t se indicated. d bearing. 0 psf bottom other live loa re load of 20.1 a rectangle veen the bott ers) of truss i 24 lb uplift at j	ne 2-12) cone; nd RS ss e), hble, PI 1. :1.15 e 9; his ads. Opsf com to			ALC: NOT	OR TH CASE SEA 286	ROJU ROJU	
this desigr	n.		Śurfa	eled plate or shim require ce with truss chord at jo ASE(S) Standard			g			annun an	SEA 286	EER.	A State

April 24,2025



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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	V1B	Valley	1	1	Job Reference (optional)	172948388

2-0-11

2-4-6

Scale = 1:27.5 Loading

TCLL (roof)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:36 ID:P1QiZn6z3?eyuckDa5nJtxzGcDU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

11-3-2

0-8-6

3

GRIP

GA

April 24,2025

244/190

5-7-9 10-6-12 5-7-9 4-11-3 4x5 = 2 9 10 12 5 Г 0-0-4 4 3x5 🗠 2x4 II 3x5 🗸 11-3-2 Spacing 2-0-0 CSI DEFL l/defl L/d PLATES (psf) in (loc) 20.0 Plate Grip DOL 1.15 TC 0.52 Vert(LL) n/a n/a 999 MT20 20.0 BC 0.51 Lumber DOL 1 15 Vert(TL) n/a n/a 999

Snow (Pf) TCDL 10.0 Rep Stress Incr YES WB 0.13 Horiz(TL) 0.00 4 n/a n/a BCLL 0.0 Code IRC2021/TPI2014 Matrix-MSH BCDL 10.0 Weight: 35 lb FT = 20%TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 LUMBER 4) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 2x4 SP No.3 Cs=1.00; Ct=1.10 OTHERS Unbalanced snow loads have been considered for this 5) BRACING desian. TOP CHORD Structural wood sheathing directly applied or Gable requires continuous bottom chord bearing. 6) 10-0-0 oc purlins. 7) Gable studs spaced at 4-0-0 oc. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc 8) This truss has been designed for a 10.0 psf bottom bracing. chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf **REACTIONS** (size) 1=11-3-2, 3=11-3-2, 4=11-3-2 9) Max Horiz 1=35 (LC 18) on the bottom chord in all areas where a rectangle Max Uplift 1=-30 (LC 21), 3=-30 (LC 20), 3-06-00 tall by 2-00-00 wide will fit between the bottom 4=-61 (LC 14) chord and any other members. Max Grav 1=140 (LC 20), 3=140 (LC 21), 10) Provide mechanical connection (by others) of truss to 4=816 (LC 20) bearing plate capable of withstanding 30 lb uplift at joint FORCES (lb) - Maximum Compression/Maximum 1, 30 lb uplift at joint 3 and 61 lb uplift at joint 4. Tension LOAD CASE(S) Standard TOP CHORD 1-2=-181/492, 2-3=-181/492 1-4=-403/206, 3-4=-403/206 BOT CHORD WFBS 2-4=-634/316NOTES HIN STR. Unbalanced roof live loads have been considered for 1) this design OR Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone MANANITA IN and C-C Exterior(2E) 0-0-10 to 3-0-10, Exterior(2R) 3-0-10 to 8-3-12, Exterior(2E) 8-3-12 to 11-3-12 zone; cantilever left and right exposed ; end vertical left and SEAL right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 867

DOL=1.60 Truss designed for wind loads in the plane of the truss 3) 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.

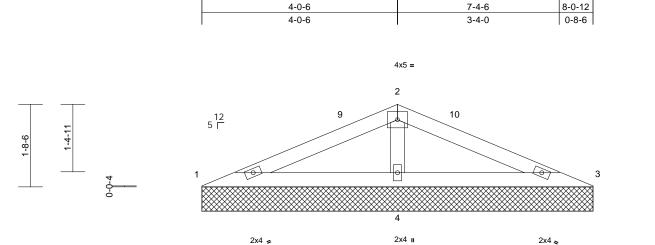
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall bilding design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	V1C	Valley	1	1	Job Reference (optional)	172948389

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:36 ID:logDP99T7E8NNE1_pwsF1nzGcDQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

8-0-12

Page: 1



2x4 🚅

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Scale	=	1:23.7

TCLL (roof)2Snow (Pf)2TCDL1BCLL1	still states and the second s	2-0-0 1.15 1.15 YES IRC2021/TPI2014	CSI TC 0.26 BC 0.28 WB 0.07 Matrix-MP	DEFL in Vert(LL) n/a Vert(TL) n/a Horiz(TL) 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES GRIP MT20 244/190 Weight: 24 lb FT = 20%
BOT CHORD Rigid ceiling of bracing. REACTIONS (size) 1=2 Max Horiz 1=2 Max Uplift 1=- Max Grav 1=1 4=5	rectly applied or 6-0-0 oc -0-12, 3=8-0-12, 4=8-0-12 4 (LC 14) 14 (LC 14), 3=-19 (LC 15), 38 (LC 14) 23 (LC 20), 3=123 (LC 21) 21 (LC 20) 10 Compression/Maximum 2-3=-155/284	Plate DOL= DOL=1.15); Cs=1.00; Cs=1.00; Cs D Unbalanced design. 6) Gable requir 7) Gable studs 8) This truss ha chord live lo 3.06-00 tall 1 chord and ai 0), 10) Provide med bearing plate	snow loads have been cor res continuous bottom chor spaced at 4-0-0 oc. as been designed for a 10.0 ad nonconcurrent with any has been designed for a liv m chord in all areas where by 2-00-00 wide will fit betw ny other members. chanical connection (by oth e capable of withstanding 1 t at joint 3 and 38 lb uplift a	DL=1.15 Plate Exp.; Ce=0.9; hsidered for this d bearing. D psf bottom other live loads. e load of 20.0psf a rectangle veen the bottom ers) of truss to 4 lb uplift at joint				
 Unbalanced roof live loads this design. Wind: ASCE 7-16; Vult=13 Vasd=103mph; TCDL=6.0 II; Exp B; Enclosed; MWFI and C-C Exterior(2E) 0-0- 3-0-10 to 5-1-5, Exterior(2 	0mph (3-second gust) osf; BCDL=6.0psf; h=25ft; RS (envelope) exterior zor 0 to 3-0-10, Exterior(2R)	Cat.					New York	OR TH CAROLINI

- 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 3)
- 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.

- THILLING STAT The second se 28677 L. GA minin April 24,2025

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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	170040000
25040157-01	V1D	Valley	1	1	Job Reference (optional)	172948390

0-8-11

0-0-4

1-0-6

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:36 ID:eIT6SsDcymmgT?wycURRkqzGcDL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-2-0

1-8-13

4-10-5

0-8-6

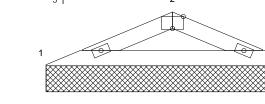
3

2x4 👟



3x5 = 12 5 Г 2

2-5-3 2-5-3



2x4 ዾ

4-10-5

Scale = 1:22.1

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2021/TPI2014	CSI TC BC WB Matrix-MP	0.19 0.19 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 13 lb	GRIP 244/190 FT = 20%
BOT CHORD 2x4 BRACING TOP CHORD Str 4-1 BOT CHORD Rig bra REACTIONS (size Max Max Max FORCES (lb) Tel TOP CHORD 1-2	10-5 oc purlins. gid ceiling directly acing. e) 1=4-10-5, < Horiz 1=14 (LC < Uplift 1=-20 (LC < Grav 1=219 (LC	14) : 14), 3=-20 (LC 15) : 20), 3=219 (LC 21 pression/Maximum	8) This trus chord live 9) * This tru 9) * This tru 9) * This tru 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	is spaced at 4-0-0 is has been designed load nonconcurren ss has been designed tom chord in all are all by 2-00-00 wide v d any other member nechanical connecti late capable of withs lb uplift at joint 3. (S) Standard	I for a 10. t with any ed for a liv as where will fit betv s. on (by oth	other live load re load of 20.1 a rectangle veen the bott ers) of truss	0psf om to					
NOTES	0= 100/001											
 this design. Wind: ASCE 7- Vasd=103mph; II; Exp B; Enclo and C-C Exteri- exposed ; end members and f 	-16; Vult=130mph ; TCDL=6.0psf; B osed; MWFRS (er ior(2E) zone; cant vertical left and rig	CDL=6.0psf; h=25ft; ivelope) exterior zor ilever left and right ght exposed;C-C for for reactions shown	Cat. ne							New York	SEA 286	ROUNT
 Truss designed only. For studs see Standard In 	d for wind loads in s exposed to wind Industry Gable En	the plane of the true (normal to the face) d Details as application oner as per ANSI/TF), ple,								SEA 286	L 77
 TCLL: ASCE 7 Plate DOL=1.1 	′-16; Pr=20.0 psf (5); Pf=20.0 psf (L =1.0; Rough Cat E	roof LL: Lum DOL= um DOL=1.15 Plate ; Fully Exp.; Ce=0.9	1.15							in and a second	OL ENGIN	EEP. St.
 Unbalanced sn design. 	now loads have be	en considered for th	iis							1	L.G	ALIN
Gable requires		n choru bearing.									Apr	il 24,2025



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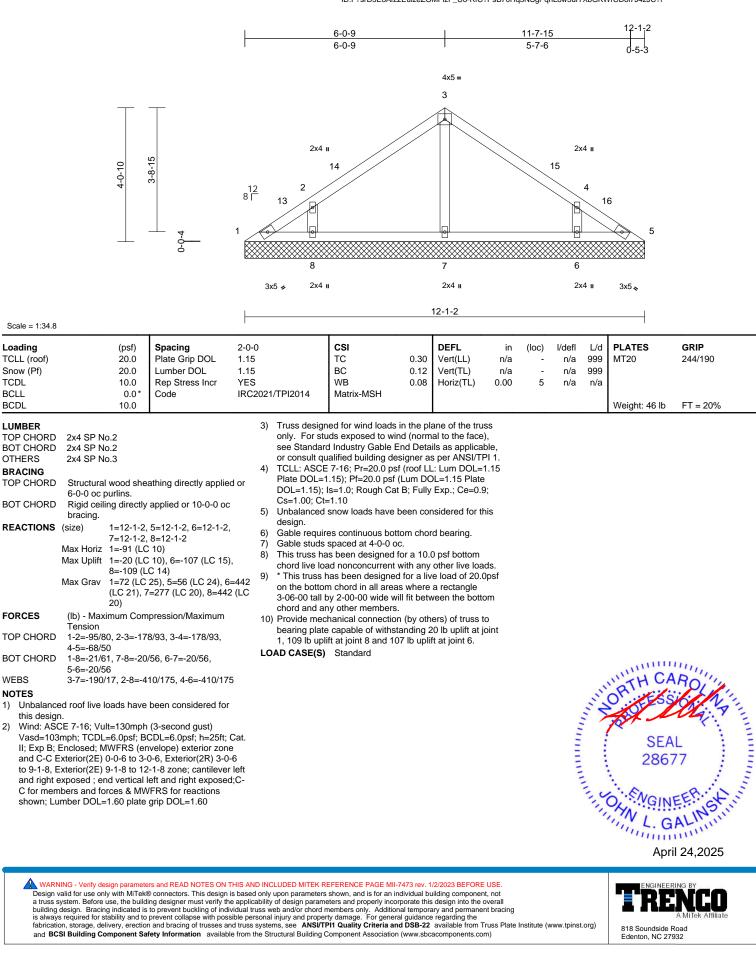
Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	V2A	Valley	1	1	Job Reference (optional)	172948391

1)

2)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries. Inc. Tue Apr 22 15:50:36 ID:F?srD3E8Afz2EulzeZOMFizF_Uo-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	V2B	Valley	1	1	Job Reference (optional)	172948392

4-6-9

4-6-9

Carter Components (Sanford, NC), Sanford, NC - 27332,

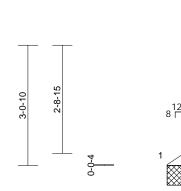
Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:37 ID:jCQDRPFmxy5us2K9CGvbovzF_Un-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

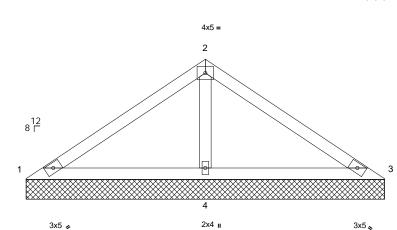
8-7-15

4-1-6

pi7J4zJC?f

Page: 1





9-1<u>-2</u>

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Scale	=	1:29.2

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC202	1/TPI2014	CSI TC BC WB Matrix-MSH	0.36 0.36 0.12	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 32 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS	9-1-2 oc purlins. Rigid ceiling directly bracing. (size) 1=9-1-2, Max Horiz 1=-68 (LC Max Uplift 1=-33 (LC 4=-71 (LC Max Grav 1=120 (L 4=693 (L	C 21), 3=-33 (LC 20), C 14) C 20), 3=120 (LC 21) C 21) npression/Maximum -110/343	6) 7) 8) 9)	Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable requir Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall th chord and ar) Provide mec bearing plate	snow loads have es continuous bot spaced at 4-0-0 o is been designed ad nonconcurrent has been designe m chord in all area by 2-00-00 wide w hay other members hanical connectio e capable of withs t at joint 3 and 71	(Lum DC t B; Fully been cor tom chor c. for a 10.0 with any d for a liv s where ill fit betv n (by oth tanding 3	DL=1.15 Plate Exp.; Ce=0.9 Insidered for the d bearing. 0 psf bottom other live loa re load of 20.0 a rectangle veen the botto ers) of truss t 33 lb uplift at j	e); ds. Dpsf om o					
NOTES 1) Unbalance this design	ed roof live loads have	been considered for											

- 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) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 6-1-8, Exterior(2E) 6-1-8 to 9-1-8 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.

SEAL 28677

April 24,2025



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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	V2C	Valley	1	1	Job Reference (optional)	172948393

3-0-9

3-0-9

Carter Components (Sanford, NC), Sanford, NC - 27332,

1-8-15

2-0-10

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:37 ID:3vKW7slcvs?qVRKsxZ_V44yz_fG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4x5 =

5-7-15 2-7-6 6-1-2

3

2x4 👟







4

6-1-2

Scale = 1:25.2

oading CLL (roof)		(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.15	DEFL Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 244/190
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.17	Vert(TL)	n/a	-	n/a	999		,
CDL		10.0	Rep Stress Incr	YES		WB	0.05	Horiz(TL)	0.00	4	n/a	n/a		
CLL		0.0*	Code	IRC202	21/TPI2014	Matrix-MP								
CDL		10.0		_									Weight: 21 lb	FT = 20%
JMBER OP CHORD	2x4 SP No	2		5)) Unbalanced design.	snow loads have	e been cor	nsidered for th	is					
OF CHORD	2x4 SP No			6	0	es continuous bo	ottom chor	d bearing.						
THERS	2x4 SP No			7	Gable studs	spaced at 4-0-0	oc.							
RACING				8)		s been designed								
OP CHORD			athing directly applie	dor		ad nonconcurrer as been design								
	6-1-2 oc p			9,		n chord in all are			ipsi					
OT CHORD	bracing.	ig airectly	applied or 6-0-0 oc		3-06-00 tall b	y 2-00-00 wide	will fit betw		m					
EACTIONS	0	1=6-1-2, 3	3=6-1-2, 4=6-1-2			y other member			_					
	Max Horiz					hanical connecti capable of with								
			14), 3=-11 (LC 15), 4	1=-38		joint 3 and 38 lt								
		(LC 14)	20), 3=98 (LC 21), 4	₋₃₀₇ L	OAD CASE(S)	Standard								
		(LC 20)	20), 3–30 (LC 21), 4	-557										
ORCES		. ,	pression/Maximum											
	Tension													
OP CHORD	1-2=-96/16	,												
OT CHORD	1-4=-142/1 2-4=-302/1		142/106											
OTES	2-4-502/1	55												
	d roof live lo	ads have	been considered for										SEA 286	111.
this design													White CA	D
			(3-second gust)	•								~	athor	10/11
			CDL=6.0psf; h=25ft; velope) exterior zon									2.	0	Sidden Vie
			ilever left and right	e								32		Wait
			ght exposed;C-C for										1900 20	5 S S S 2
			for reactions shown;								=		SEA	NL : E
	DL=1.60 plat		L=1.60 the plane of the trus								=		286	77 : =
			(normal to the face)								=		200	11 I E
see Standa	ard Industry	Gable En	d Details as applicat	je,								-	N	1.5
			gner as per ANSI/TF									20	S. SNOW	FERIN
			roof LL: Lum DOL=1 um DOL=1.15 Plate	.15								11	Chan Gill	S. S.
			3; Fully Exp.; Ce=0.9										L.G	ALIN
Cs=1.00; C		5	, , , , , , , , , , , , , , , , , , ,	,									L.G	111111
														il 24,2025
													, .pi	



A WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTER REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/ITPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	V3A	Valley	1	1	Job Reference (optional)	172948394

Scale = 1:35.5 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

WEBS

NOTES

1)

2)

TOP CHORD

BOT CHORD

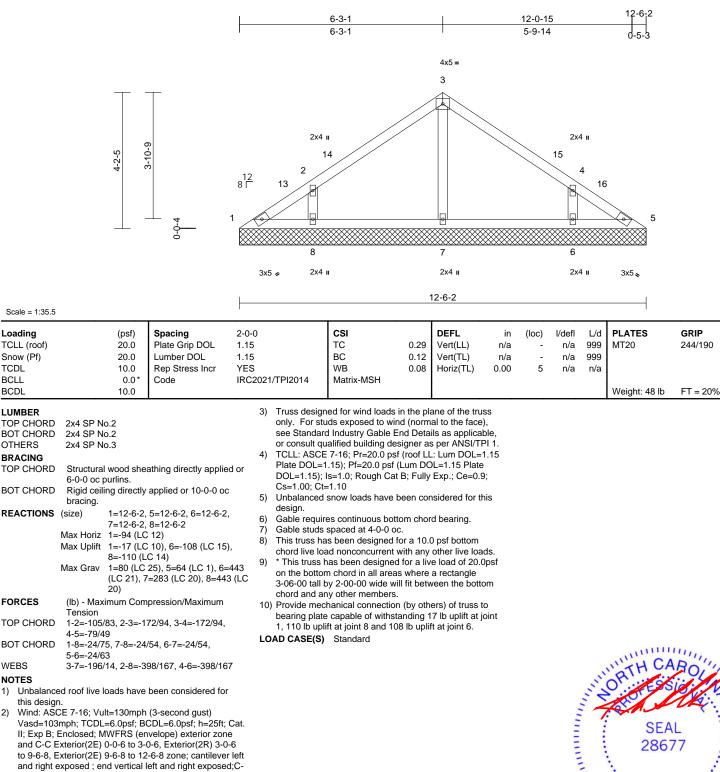
TCDL

BCLL

BCDL

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:37 ID:LPYS_T7Dbcug7wtciWpnyMzGcDS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



April 24,2025

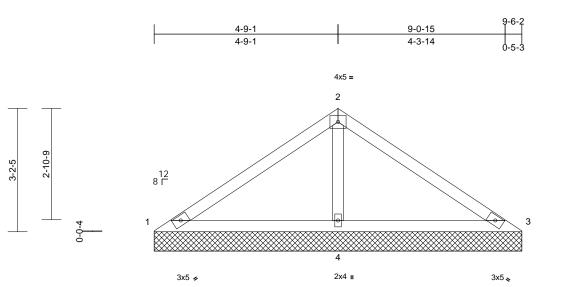


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Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	V3B	Valley	1	1	Job Reference (optional)	172948395

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:37 ID:iNLL1ABMQ9WyEhmZU3PzfPzGcDN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



9-6-2

Scale = 1:29.8

00010 = 1.20.0												
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2021/TPI2014	CSI TC BC WB Matrix-MSH	0.41 0.40 0.14	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 33 lb	GRIP 244/190 FT = 20%
FORCES TOP CHORD BOT CHORD WEBS	2x4 SP No.3 Structural wood she 9-6-2 oc purlins. Rigid ceiling directly bracing.	applied or 6-0-0 oc 3=9-6-2, 4=9-6-2 (10) (21), 3=-42 (LC 20), (14) (20), 3=120 (LC 21) (2	 Plate DO DOL=1.1 Cs=1.00; Unbalanc design. Gable rec Gable stu This truss chord live This truss chord live * This truss chord and 3-06-00 t chord and y T0) Provide n bearing p 1, 42 lb u 	CE 7-16; Pr=20.0 ps =1.15); Pf=20.0 ps 5); Is=1.0; Rough Ca Ct=1.10 ed snow loads have uires continuous bo ds spaced at 4-0-0 d has been designed load nonconcurrent is has been designed tom chord in all area all by 2-00-00 wide v I any other members techanical connection tate capable of withs polift at joint 3 and 77 S) Standard	t (Lum DC at B; Fully been cou ttom chor oc. for a 10. with any d for a liv as where will fit betv 3. no (by oth standing 4	DL=1.15 Plate Exp.; Ce=0.9 nsidered for th d bearing. 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t l2 lb uplift at j	ds. Dpsf om					
this design 2) Wind: ASC	d roof live loads have E 7-16; Vult=130mph	(3-second gust)	0-1								HTH CA	RO

- 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) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 6-6-8, Exterior(2E) 6-6-8 to 9-6-8 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.



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A MiTek Affiliat 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	894 Serenity-Roof-B330 B CP TMB GRH	
25040157-01	V3C	Valley	1	1	Job Reference (optional)	172948396

3-3-1

3-3-1

Carter Components (Sanford, NC), Sanford, NC - 27332,

1-10-9

2-2-5

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Tue Apr 22 15:50:37 ID:yP2cOP8SztMgRrMgKFS2Kyz_fT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4x5 = 2

2x4 II

6-6-2

6-0-15

2-9-14

6-6-2

1-5-3

3

2x4 💊



6 12 8 Г 0 1 0-0-4 4

2x4 🍫

Scale = 1:25.7

Lading (ps) Spacing 2.0.0 CSI 0.18 Vert(L) in (loc) Vert(T) in in (loc) Vert(T) in in in in in in SPS SPS GRP 244/190 Mater Vert(T) in in in SPS Mater Mater Neg 0.28 Vert(T) in in in SPS 244/190 Vert(T) in in in SPS	Scale = 1:25.7											
 TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 Gable studs spaced at 4-0-0 cc. Gable studs spaced at 4-0-0 cc. This truss has been designed for a 10.0 psf bottom chord bearing. Got CHORD Rigid celling directly applied or 6-0-0 cb bracing. BOT CHORD Rigid celling directly applied or 6-0-0 cb bracing. REACTIONS (size) 1-6-6-2, 3-e-6-2, 4-e-6-2 (LC 14), 3=-10 (LC 15), 4=-43 (LC 14) (LC 20), 3=-101 (LC 21), 4=-437 (LC 21) (LC 21), 4=-433 (LC 21) (LC 22), 4=-4337/146 NOTES I) Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-16; Yull=130mph (3-second gust) vasch (22) cond gust) vasch (23) cond gust) (CC 2 therrior ZDE conditiver lift and right exposed; end vertical left and right exposed; ch d vertical left and right	TCLL (roof) 20.0 Snow (Pf) 20.0 TCDL 10.0 BCLL 0.0*	Plate Grip DOL Lumber DOL Rep Stress Incr	1.15 1.15 YES	TC BC WB	0.20	Vert(LL) Vert(TL)	n/a n/a	-	n/a n/a	999 999	MT20	244/190
TOP CHORD 1-2=-98/189, 2-3=-98/189 BOT CHORD 1-4=-161/115, 3-4=-161/115 WEBS 2-4=-337/146 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; c-C for members and forces & MWFRS for reactions shown;	TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3 BRACING TOP CHORD Structural wood shea 6-6-2 oc purlins. BOT CHORD Rigid ceiling directly bracing. REACTIONS (size) 1=6-6-2,3 Max Horiz 1=-47 (LC Max Uplift 1=-2 (LC (LC 14) Max Grav 1=101 (LC 4=437 (LC	applied or 6-0-0 oc 3=6-6-2, 4=6-6-2 2 10) 14), 3=-10 (LC 15), 4 C 20), 3=101 (LC 21) C 21)	design. 6) Gable requi 7) Gable studs 8) This truss h chord live le 9) * This truss on the botto 3-06-00 tall chord and a 10) Provide me bearing plat 10 lo uplife	res continuous botto s spaced at 4-0-0 oc. as been designed for ad nonconcurrent w has been designed im chord in all areas by 2-00-00 wide will iny other members. chanical connection the capable of withsta at joint 3 and 43 lb up	om chor or a 10. ith any for a liv where fit betw (by oth nding 2	d bearing.) psf bottom other live loa e load of 20.0 a rectangle ween the botto ers) of truss t ! Ib uplift at joi	ds.)psf om o					
 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 4) TCLL: ASCE 7-16; Pr=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Co. 100; Cb ±100; Cb	TOP CHORD 1-2=-98/189, 2-3=-98 BOT CHORD 1-4=-161/115, 3-4=-											
 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 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 (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; Ce 1:00; Cb : 100; Cb : 100; 												
 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 4) TCLL: ASCE 7-16; Pr=20.0 psf (toof 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; Ce 1 400; Cf 1 410. 		been considered for										in the second se
	 Wind: AŠCE 7-16; Vult=130mph Vasd=103mph; TCDL=6.0psf; B0 II; Exp B; Enclosed; MWFRS (en and C-C Exterior(2E) zone; canti exposed ; end vertical left and rig members and forces & MWFRS Lumber DOL=1.60 plate grip DO Truss designed for wind loads in only. For studs exposed to wind see Standard Industry Gable En or consult qualified building desig TCLL: ASCE 7-16; Pr=20.0 psf (L Plate DOL=1.15); Pf=20.0 psf (L) 	CDL=6.0psf; h=25ft; tvelope) exterior zone ilever left and right ght exposed;C-C for for reactions shown; DL=1.60 the plane of the trus (normal to the face), d Details as applicab gner as per ANSI/TP roof LL: Lum DDL=1.15 Plate	e s le, l 1. 15							and Summer	SEA 286	EER Stuning



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