

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

Phone #:919-775-1450

Builder: David Weekley Homes



Model: 1000 Serenity - B330 E

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: _____

* FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS) . *:	* DAMAGED COM	PONENTS SHOULD NOT BE	E INSTALLED UNLESS TOLD TO B	THE COMPONENT PLANT.	** TRUSS TO TRUSS CONNE	CTIONS ARE TOE-N	IAILED, UNLESS NOTED OTHERWISE	
									neral Notes:
									CUTTING OR DRILLING OF COMPONENTS
				45-00-00					
	•			40-00-00		►	5-00-00		
	AGE						_	• •	
	A	1-11-04							
	A	2-00-00						0	
0-90-6	A	2-00-00						0-90-6	CONT
		2-00-00		36-04-00		7-02	-00 - 00		
	CGE	1-06-12	PB2			1 672	GSE		
	10-02-00	1-11-04		15-04-00	10-10-00		G	1-11-04	
	С	2-00-00	PB1					2-00-00	
× *	C	2-00-00	PB1			HTU28 LUS26	G	2-00-00 8	
2 80			DB1			HTU28	G	<u>ь</u> <u>ф</u>	



ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS.

CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

S FOR PLY TO PLY CONN	
Truss Drawing Left End Indicator ** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS. ** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH. 1, all L	uplift connectors shown within these documents are recommendations only. Per ANSI/TPI uplift connectors are the responsibility of the bldg designer and or contractor.
David Weekley Homes Date: 3/21/2C Sheet N Design Design Design Design NTS David Weekley Homes 1000 Serenity-Roof-B330 E BNS CP TMB GRH	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 structure. The disign of the tuss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For
ROOF PLACEMENT PLAN	general guidance regarding the bracing, consult "Bracing of Wood Truss" available from the Truss Plate Institute, 583 D'Onifrio Drive: Madison, WI 53179

43-06-00

45-00-00

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	A	Common	4	1	I72215035 Job Reference (optional)

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:31:57

Page: 1 ID:CttcSzQgwNcSj9X9hY?FsHzF_uO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -0-10-8 0-10-8 40-10-8 6-10-5 13-5-3 20-0-0 26-6-13 40-0-0 33-1-11 6-10-5 6-6-13 6-6-13 6-6-13 6-6-13 6-10-5 0-10-8 5x6= 6 5x8👟 5x8 🦗 27 28 26 29 5 7 12 61 10-9-3 10-8-0 2x4 🎣 2x4、 4 8 3x5 🍃 25 30 3x5 9 3 10 0-8-0 R. 16 31 1532 14 3313 34 12 3x5= 4x6= 3x8= 4x6= 3x5= 6x8 II 6x8 II 40-0-0 10-1-12 20-0-0 29-10-4 10-1-12 9-10-4 9-10-4 10-1-12 Scale = 1:73.1 Plate Offsets (X, Y): [2:0-4-1,Edge], [5:0-4-0,0-3-0], [7:0-4-0,0-3-0], [10:0-4-1,Edge]

	(psf)	Spacing	2-0-0		CSI	0.97	DEFL	in 0.27	(loc)	l/defl	L/d	PLATES	GRIP
Spow (Df)	20.0	Fiale Grip DOL	1.15			1.00	Vert(LL)	-0.37	14-10	>999	190	IVI I 20	244/190
Show (PI)	20.0		1.15			1.00		-0.64	14-10	>/54	180		
TODL	10.0	Rep Stress Incr	YES		WB	0.41	Horz(CT)	0.15	10	n/a	n/a		
BCLL	0.0*	Code	IRC202	I/TPI2014	Matrix-MSH								
BCDL	10.0											Weight: 213 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.1 2x4 SP No.1 2x4 SP No.3 *Excep Left 2x4 SP No.3 7 1-6-0 Structural wood she 2-2-0 oc purlins. Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 1 Max Horiz 2=-105 (L Max Uplift 2=-170 (L Max Gray 2=1809 (I	t* 14-6:2x4 SP No.2 1-6-0, Right 2x4 SP I athing directly applie applied or 2-2-0 oc 7-14, 5-14 10=0-5-8 C 15) C 14), 10=-170 (LC C 3). 10=-1809 (LC C 3). 10=-1809 (LC	2) No.3 ed or 3) 15) 4) 3) 5)	Wind: ASCE Vasd=103mp II; Exp B; Enn and C-C Exte to 16-0-0, Ex 24-0-0 to 36- cantilever lef right exposed for reactions DOL=1.60 TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design.	7-16; Vult=130mpl bh; TCDL=6.0psf; E closed; MWFRS (e erior(2E) -0-10-8 to terior(2E) 16-0-0 to 10-8, Exterior(2E)) t and right exposed t;C-C for members shown; Lumber DC 7-16; Pr=20.0 psf (15); Pf=20.0 psf (I s=1.0; Rough Cat 1.10 snow loads have b	h (3-sec 3CDL=6 invelope 3-1-8, 1 2-24-0-0 36-10-8 4; end v and for DL=1.60 (roof LL Lum DC B; Fully een cor	ond gust) .0psf; h=25ft exterior zoo Interior (1) 3- i, Interior (1) to 40-10-8 z ertical left ar ces & MWFF 0 plate grip .: Lum DOL= L=1.15 Plate Exp.; Ce=0.9 sidered for th	; Cat. ne 1-8 one; id RS 1.15 9; his					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	, J)	load of 12.0	osf or 1.00 times fla	at roof lo	ad of 20.0 p	sf on					
TOP CHORD	1-2=0/23, 2-4=-3431 6-8=-3226/333, 8-10	/321, 4-6=-3226/333)=-3431/321, 10-11=	3, 6) 0/23	This truss ha	s been designed fo	or a 10.0 vith anv) psf bottom other live loa	ıds					
BOT CHORD	2-16=-330/2978, 14- 12-14=-109/2524, 10	-16=-191/2524, 0-12=-185/2978	7)	* This truss h	as been designed	for a liv where	e load of 20.0 a rectangle	Opsf				annun a	11111
WEBS	6-14=-114/1658, 7-1 7-12=-25/626, 8-12= 5-14=-853/247, 5-16	4=-853/247, 301/191, 5=-25/626, 4-16=-30	1/191 8)	3-06-00 tall b chord and an One H2.5A S	y 2-00-00 wide wil y other members, impson Strong-Tie	I fit betw with BC	veen the both $DL = 10.0$ pst	om f.		6	J.	OP. FESS	HOL III
NOTES				recommende	d to connect truss	to bear	ng walls due	to		U.	VV	UNICO P	-
1) Unbalance	ed roof live loads have	been considered for		UPLIFT at jt(s) 2 and 10. This c	onnecti	on is for uplif	t only			8 8	R.	
this design)			and does not	consider lateral fo	rces.						CEAL	

this design.

LOAD CASE(S) Standard



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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 PCB Building Component Science Michael Component Advancement description (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	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	AGE	Common Supported Gable	1	1	I72215036 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:31:58 ID:94aeZ53wRfHxaJ4LIBSgWSzF_tZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



		-,],	[,[,[,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
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-I	0.08 0.05 0.15 MSH	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc) - - 26	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 286 lb	GRIP 244/190 FT = 20%	6
LUMBER TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD	2x4 SP No. 2x4 SP No. 2x4 SP No. Left 2x4 SF 1-6-0 Structural v 6-0-0 oc pu Rigid ceilin bracing.	2 2 3 *Except 2 No.3 1 wood shea urlins. g directly	* 37-14:2x4 SP No.2 -6-0, Right 2x4 SP N athing directly applied applied or 10-0-0 oc	2 ko.3 d or	Max Grav	2=162 (LC 27), : 28=161 (LC 27), 30=160 (LC 37), 32=161 (LC 22), 34=179 (LC 22), 36=247 (LC 22), 38=247 (LC 21), 40=179 (LC 21), 42=161 (LC 21), 44=160 (LC 36),	26=139 (LC ² 29=160 (LC 31=160 (LC 33=160 (LC 35=233 (LC 37=200 (LC 39=233 (LC 41=160 (LC 43=160 (LC 45=160 (LC	1), 1), 1), 37), 22), 28), 21), 36), 1), 1),	NOTES 1) Un	S balanced	14-3/: 12-39: 9-41= 6-44= 15-36: 17-34: 20-32: 22-30: 24-28: d roof li	=-205/45, 13-38 =-193/83, 11-40 -126/77, 8-42=- -127/77, 5-45=- =-205/66, 16-35 =-140/76, 19-33 =-126/77, 21-31 =-127/77, 23-29 =-131/135 ve loads have b	205/66, 140/76, 26/77, 7-43 26/80, 4-46 193/83, 126/77, 126/77, 126/80, een considé	}=-126/77, }=-131/135,
WEBS REACTIONS	1 Row at m (size)	hidpt 2=40-0-0, 32=40-0-0 35=40-0-0 35=40-0-0 41=40-0-0 41=44-0-0-0 2=165 (LC 2=-21 (LC 29=-36 (LC 33=-44 (LC 35=-48 (LC 35=-48 (LC 40=-44 (LC 46=-96 (LC	14-37, 13-38, 12-39, 15-36, 16-35 26=40-0-0, 28=40-0, 30=40-0-0, 31=40-0, 30=40-0, 31=40-0, 38=40-0-0, 37=40-0, 39=40-0-0, 40=40-0, 42=40-0-0, 43=40-0, 42=40-0-0, 46=40-0 14) 10), 28=-80 (LC 15) C 15), 30=-46 (LC 15) C 15), 32=-44 (LC 15) C 15), 32=-44 (LC 15) C 15), 32=-44 (LC 15) C 15), 32=-44 (LC 15) C 15), 33=-44 (LC 15) C 15), 33=-44 (LC 14) C 14), 41=-43 (LC 14) C 14), 43=-43 (LC 14) C 14), 45=-33 (LC 14) C 14)	FORCES TOP CHORD 0-0,	(lb) - Max Tension 1-2=0/23, 5-6=-129/ 8-9=-62/1 12-13=-10 14-15=-12 16-17=-84 19-20=-60 22-23=-60 23-60 22-23=-60 22-23=-60 22-23=-60 22-23=-60 22-23=-60 22-23=-60 22-23=-60 22-23=-44 40-41=-44 32-33=-44 30-31=-44 28-29=-44	imum Compressi 2-4=-216/79, 4-5 /94, 6-7=-96/108, 54, 9-11=-72/178 D4/271, 13-14=-11 5/222, 17-19=-72/ D/132, 20-21=-48/ 5/27, 23-24=-99/3 23 1/167, 45-46=-44/1 4/167, 45-46=-44/1 4/167, 38-40=-44/1 4/167, 38-40=-44/1 4/167, 33-34=-44/1 4/167, 33-34=-44/1 4/167, 33-34=-44/1 4/167, 26-28=-44/1 4/167, 26-28=-44/1 1/167, 26-28=-4	on/Maximum =-167/82, 7-8=-74/131, 11-12=-85/ 21/311, 04/271, 177, 86, 21-22=-4 5, 24-26=-14 67, 167, 167, 167, 167, 167, 167, 167,	, 222, 14/41, 14/59,	this 2) Wii Va: II; I and to 24- car righ for DC	s design. nd: ASCI sd=103m Exp B; Ei d C-C Cc 16-0-0, C 0-0 to 36 tillever lk expose reaction: DL=1.60	E 7-16; nclosee rmer(3l 5-10-8, ff and ed;C-C s s show	Vult=130mph (: CDL=6.0psf; BCI 3; MWFRS (env. E) -0-10-8 to 3-1 3R) 16-0-0 to 24 Corner(3E) 36 for members ar n; Lumber DOL- TH CA SEA 458	3-second gu DL=6.0psf; h alope) exter -8, Exterior -0-0, Exterior -0-0, Exterior -0-0, Exterior -0-0, Exterior -1.60 plate -1.60 plate -1.	Ist) n=25ft; Cat. ior zone (2N) 3-1-8 or(2N) 0-8 zone; left and MWFRS grip

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 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)



818 Soundside Road Edenton, NC 27932

March 25,2025

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	AGE	Common Supported Gable	1	1	I72215036 Job Reference (optional)

- 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.
- * 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, 44 lb uplift at joint 34, 44 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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:31:58 ID:94aeZ53wRfHxaJ4LIBSgWSzF_tZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

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



Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	В	Attic	3	1	I72215037

Scale = 1:86.7



[2:0-2-14,0-2-0], [4:0-4-0,0-2-0], [5:0-5-4,0-2-12], [7:0-5-4,0-2-12], [7:0-5-4,0-2-12], [8:0-0-2,0-2-4], [9:0-2-3,0-2-4], [12:Edge,0-1-8], [13:0-3-8,0-1-8], [17:0-2-8,0-2-8], [27:0-2-4,Edge], Plate Offsets (X, Y): [31:0-3-8,0-1-8], [34:0-4-0,0-2-4]

Loading	(psf) 20.0	Spacing Plate Grip DOI	2-0-0 1.15		CSI TC	0.57	DEFL Vert(LL)	in -0.33	(loc) 16-19	l/defl	L/d 240	PLATES MT20	GRIP 244/190	
Snow (Pf)	20.0	Lumber DOI	1 15		BC	0.90	Vert(CT)	-0.54	19-21	>748	180	MT20HS	187/143	
TCDL	10.0	Rep Stress Incr	YES		WB	0.97	Horz(CT)	0.08	12	n/a	n/a		101/110	
BCLL	0.0*	Code	IRC20	21/TPI2014	Matrix-MSH	0.01	Attic	-0.25	15-29	>725	360			
BCDL	10.0						,	0.20	.0 20			Weight: 340 lb	FT = 20%	
LUMBER TOP CHORD	2x6 SP No.2 *Excep	t* 7-11:2x6 SP 2400	V F	VEBS 3	8-31=-641/0, 3-30≕ I-29=0/934, 14-15=	-111/48 -47/272	4, 29-30=-81 2, 9-15=0/106	/178, 57,	8) All p 9) This	olates ar s truss h	e 3x5 as bee	MT20 unless othe n designed for a	erwise indicate 10.0 psf botton	d. n
	2.0E			4	-33=-1691/53, 33-3	34=-16	21/46,		, cho	rd live lo	ad nor	nconcurrent with	any other live lo	oads.
BOT CHORD	2x4 SP No.1 *Except	t* 29-15:2x4 SP No.2	2,	3	84-35=-2164/0, 8-3	5=-218 -13=-5	6/0, 2-31=0/1 50/0	784,	10) * Th on t	nis truss the botto	has be m cho	en designed for a	a live load of 20 ere a rectangle	0.0psf
WEBS	2x4 SP No.3 *Except	t* 4-30,9-14,4-8,8-9:2	2x6	1	1-13=0/2096, 15-1	7=0/18	48, 27-29=0/ [.] 0, 17-1911	1797, 79/0	3-00	6-00 tall	by 2-0	0-00 wide will fit I	between the bo	ottom
	5P N0.2				26-27=-1389/0.19-2	20=0/80)9. 25-26=0/1	061.	11) Ceil	ling dead	d load	(5 0 psf) on mem	ber(s) 8-9 4-3	3
	Structural wood she	athing directly applied	dor	2	20-21=-272/0, 24-2	5=-426/	0,	,	33-3	34, 34-3	5, 8-35	; Wall dead load	(5.0psf) on me	ember
		cent end verticals an	u u nd	2	20-22=-129/353, 22	-23=-10	63/14,		(s).4	4-29, 9-1	15		· · · /	
	2-0-0 oc purlins (5-5	-7 max.): 5-7.		5	5-33=-36/469, 6-34=	=-460/1	12, 7-35=0/3	36,	12) Bot	tom choi	rd live	load (40.0 psf) ar	nd additional bo	ottom
BOT CHORD	Rigid ceiling directly	applied or 2-9-3 oc		7	/-34=-387/865, 5-34	1=-740/	686		cho	rd dead	load (5	5.0 psf) applied o	nly to room. 28	-29,
	bracing.		N	IOTES					26-2	28, 24-2	6, 22-2	24, 21-22, 19-21,	16-19, 15-16	
WEBS	1 Row at midpt	8-34	1) Unbalanced	roof live loads have	been o	considered fo	r	13) Ref	er to giro	der(s) f	or truss to truss of	connections.	
JOINTS	1 Brace at Jt(s): 19,			this design.					14) Gra	phical p	urlin re	presentation doe	s not depict the	e size
	26, 34		2) Wind: ASCE	7-16; Vult=130mph	i (3-sec	ond gust)		or ti	he orient	tation o	of the purlin along	the top and/or	
REACTIONS	(size) 12= Mech	anical, 32=0-5-8		Vasd=103mp	oh; TCDL=6.0psf; B	CDL=6	.0psf; h=25ft;	Cat.		om chor	a.	d far 1 /200 daflag	4ia.a	
	Max Horiz 32=-279 (I	LC 12)		II; Exp B; En	closed; MWFRS (er	nvelope) exterior zor	ne	15) Alli		necke		uon.	
	Max Grav 12=2109 ((LC 48), 32=2084 (LC	C 48)	and C-C Exte	erior(2E) -0-8-4 to 2	-8-10,	Interior (1) 2-8	8-10	LOAD	SASE(S)) Star	ndard		
FORCES	(lb) - Maximum Com Tension	pression/Maximum		to 6-6-3, Exte 16-1-13 to 16	6-10-13, Exterior(2F)	8-1-13, R) 16-10	Interior (1))-13 to 26-6-8	З,				mun	in.	
TOP CHORD	1-2=0/30 2-3=-2274	1/0 3-4=-2494/0		Interior (1) 26	6-6-8 to 30-6-6, Ext	erior(2	E) 30-6-6 to				1	I'L CA	Roll	
	4-5=-1152/208. 5-6=	-1573/557.		33-11-4 zone	; cantilever left and	right e	xposed ; end			/	1 .	alle	0111	
	6-7=-1573/557, 7-8=	-992/421. 8-9=-2025	/21.	vertical left a	nd right exposed;C	C for n	nembers and				1.	O' ESS	b. A	1
	9-10=-2789/0, 10-11	=-2599/0, 2-32=-219	0/0,		FRS IOF reactions s	nown;	Lumber						~~~~~	in
	11-12=-2237/0				ate grip DOL=1.60 7.16 Dr 20.0 pot	reafil		1 1 5				:0	K .	-
BOT CHORD	31-32=-242/278, 30-	-31=0/1755,	3	Ploto DOI -1	15): Pf=20.0 psf (LUIII DOL=	1.15		-	6 6	054		-
	25-30=-135/3865, 23	3-25=0/4682,		DOI = 1.15)	s=1.0. Rough Cat F	R' Fully	$E_{xn} \cdot C_{e=0}$.				SEA	L :	
	20-23=0/4682, 17-20	0=0/4162,		Cs=1.00: Ct=	:1.10	5, i uny	Exp., 00-0.0	,				4584	4 :	
	14-17=-24/1903, 13-	-14=0/2071, 12-13=-5	^{5/74,} 4) Unbalanced	snow loads have be	en cor	sidered for th	nis		-	8	100	1 A A	-
	28-29=-1034/53, 26-	-28=-1034/53,		design.							1			2
	24-26=-3102/0, 22-2	24=-3102/0, 212220/0	5) This truss ha	s been designed fo	r greate	er of min roof	live			-7	· En	CR. Z	3
	21-22=-3229/0, 19-2	.1=-3229/0, .161586/13		load of 12.0	osf or 1.00 times fla	t roof lo	ad of 20.0 ps	sf on			11	GIN	E.F. GU	5
	10 13-1000/13, 10-	10-1000/10		overhangs no	on-concurrent with	other liv	/e loads.				1	PEIA	NUN	
			6	 Provide adec 	juate drainage to pi	event v	vater ponding	9.				TIN VV J	Jun 1	
			7	 All plates are 	MT20 plates unles	s other	wise indicate	d.				i annu	1111	

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818 Soundside Road Edenton, NC 27932

March 25,2025

Page: 1

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	B1	Piggyback Base	1	1	Job Reference (optional)

11-0-0

Scale = 1:69.1

Loading

TCLL (roof)

Snow (Pf)

LUMBER

TCDL

BCLL

BCDL

2-6-0

-0-10-8

0-10-8

5-7-7

5-7-7

16

25

7-7-2

7-7-2

Plate Grip DOL

Rep Stress Incr

Lumber DOL

Spacing

Code

3x5 ı 2

15

Plate Offsets (X, Y): [4:0-3-12,0-1-12], [6:0-3-12,0-1-12]

(psf)

20.0

20.0

10.0

0.0

10.0

TOP CHORD 2x4 SP No.2 *Except* 6-8:2x4 SP No.1

X

3x5=

11-4-0

5 - 8 - 9

91<u>2</u> 4x8 🍫

18

26 14 27

3x5=

2-0-0

1.15

1.15

YES

IRC2021/TPI2014

3 17

5x6=

Ш

13

4x5=

16-6-5

8-11-4

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)

Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.

4

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:31:59

ID:LKC_EscL4trfY8AISnB7qGypZv8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 21-8-11 28-4-9 34-1-0 16-6-5 5-2-5 5-2-5 6-7-15 5-8-7 2x4 u 5x6= 192052122 6 23 4x6。 7 24 2x4 II 8 12 a -28 12 29 11 30 10 31 32 3x6= 3x5= 3x8= 3x5= 25-5-8 34-1-0 8-11-3 8-7-8 DEFL PLATES GRIP CSI in (loc) l/defl L/d тс 0.89 Vert(LL) -0.20 12-14 >999 240 MT20 244/190 BC 0.97 Vert(CT) -0.33 12-14 >999 180 WB 0.67 Horz(CT) 0.07 9 n/a n/a Matrix-MSH Weight: 242 lb FT = 20%

Page: 1

LOAD CASE(S) Standard

BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.3 *Except* 14-4,12-4,12-5,12-6,10-6:2x4 SP No.2		II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-6-6, Interior (1) 2-6-6 to 6-6-3, Exterior(2R) 6-6-3 to 16-1-13, Interior (1)
BRACING TOP CHORD BOT CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-4 max.): 4-6. Rigid ceiling directly applied or 2-2-0 oc bracing Except:		16-1-13 to 16-10-13, Exterior(2R) 16-10-13 to 26-68, Interior (1) 26-6-8 to 30-6-6, Exterior(2E) 30-6-6 to 33-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
WEBS REACTIONS	10-0-0 co bracing: 14-15. 1 Row at midpt 3-15, 7-9, 5-12 (size) 9= Mechanical, 15=0-5-8	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; C=-1.00; Ct=1.10
	Max Horiz 15=-283 (LC 12) Max Uplift 9=-127 (LC 15), 15=-139 (LC 14) Max Grav 9=1617 (LC 47), 15=1680 (LC 47)	4) 5)	Unbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live.
FORCES	(Ib) - Maximum Compression/Maximum Tension	0)	load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overbangs non-concurrent with other live loads
TOP CHORD	1-2=0/37, 2-3=-228/123, 3-4=-1911/287, 4-5=-1537/266, 5-6=-1537/266, 6-7=-2064/283, 7-8=-261/100, 2-15=-290/136, 8-9=-248/86	6) 7) 8)	Provide adequate drainage to prevent water ponding. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf
BOT CHORD	14-15=-175/1361, 12-14=-121/1232, 10-12=-28/1288, 9-10=-92/1543	- /	on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
WEBS	3-15=-1919/111, 7-9=-2016/118, 4-14=-118/464, 3-14=-106/339, 4-12=-121/554, 5-12=-562/154, 6-12=-132/450, 6-10=-108/600, 7-10=-221/245	9) 10)	chord and any other members, with $BCDL = 10.0psf$. Refer to girder(s) for truss to truss connections. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at join a

NOTES

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

he bottom 10.0psf. าร truss to uplift at joint 11) One H2.5A Simpson Strong-Tie connectors

- recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15. This connection is for uplift only and does not consider lateral forces.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	B1GE	Piggyback Base Supported Gable	1	1	I72215039 Job Reference (optional)

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 13:31:59 ID:va6oJ_bKLZdwDLTYr9P9wpzF_UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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WARNING

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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB 0	GRH
25030124-01	B1GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)	172215039
Carter Components (Sanford, N	C), Sanford, NC - 27332,	Run: 8.73 S Feb 19 2	2025 Print: 8.	730 S Feb 19	9 2025 MiTek Industries, Inc. Fri Mar 21 13:31:59	Page: 2

ID:va6oJ_bKLZdwDLTYr9P9wpzF_UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

- 5) 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) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * 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.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 42, 262 lb uplift at joint 23, 24 lb uplift at joint 33, 36 lb uplift at joint 32, 4 lb uplift at joint 31, 92 lb uplift at joint 28, 62 lb uplift at joint 27, 72 lb uplift at joint 26, 46 lb uplift at joint 25, 239 lb uplift at joint 24, 34 lb uplift at joint 34, 92 lb uplift at joint 38, 69 lb uplift at joint 39, 36 Ib uplift at joint 40 and 187 lb uplift at joint 41.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	B1T	Piggyback Base	4	1	Job Reference (optional)

2-5-8

6-6-4

6-6-4

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:31:59 Page: 1 ID:jCQDRPFmxy5us2K9CGvbovzF_Un-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 2-3-12 -0-10-8 0-10-8 6-10-12 11-4-0 15-7-12 21-8-11 27-9-1 34-1-0 6-0-15 4-5-4 4-3-12 6-3-15 4-7-0 6-0-7 2-3-12 5x6= 2x4 II 5x6= 62**23**425 5 7 \bowtie \bowtie Æ 9¹² 3x5 3x5、 21⁴ 26 8 27 20 11-0-0 2x4 II 3¹⁹ 28 3x5 3x8、 2 9 2-6-0 -8-12 14 Ϋ́ 29 30 15 31 32 18 13 10 3x5= 12 11 4x8= 33 3x5= 3x5= 2x4 u 5x10= 4x5 =2x4 II 4x8= 22-2-0 || 0-3-9 2-5-8 8-11-12 15-6-0 21-10-7 27-9-1 34-1-0 -H

6-4-7

5-7-1

6-3-15

Scale = 1:70.9

Plate Offsets	(X, Y): [5:0-3-12,0-1-1	2], [7:0-3-12,0-1-12]], [10:Edge,	0-1-8], [12:0-2	-12,0-3-0], [14:0-2	2-12,0-2-	0], [16:0-2-12	2,0-2-0]						
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 IRC2027	I/TPI2014	CSI TC BC WB Matrix-MSH	0.76 0.76 0.54	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.12 -0.21 0.08	(loc) 14-15 14-15 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 266 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 *Excep 2x4 SP No.3 *Excep No.2 Structural wood she 3-3-12 oc purlins, e 2-0-0 oc purlins (3-6 Rigid ceiling directly bracing, Except:	t* 17-3:2x4 SP No.3 t* 14-5,14-7,12-7:2x athing directly applie xcept end verticals, -8 max.): 5-7. applied or 10-0-0 or	1) 3 2) 44 SP ed or and c	Unbalanced this design. Wind: ASCE Vasd=103mp II; Exp B; Enn and C-C Exte to 6-6-3, Exte 16-1-13 to 16 Interior (1) 20 33-11-4 zone vertical left a forces & MW	roof live loads hav 7-16; Vult=130mp ph; TCDL=6.0psf; closed; MWFRS (erior(2E) -0-10-8 te erior(2E) 6-6-3 to 5-10-13, Exterior(2 6-6-8 to 30-6-6, Ex cantilever left ar nd right exposed; (FRS for reactions	ve been o bh (3-sec BCDL=6 envelope o 2-6-6, 16-1-13, 2R) 16-11 kterior(21 od right e C-C for m Shown:	considered fo cond gust) .0psf; h=25ft) exterior zon Interior (1) 2- Interior (1) 0-13 to 26-6-1 E) 30-6-6 to ixposed; end nembers and Jumber	r ; Cat. ne 6-6 8, I	12) Gra or ti bott LOAD (phical p ne orient om chor CASE(S)	urlin re ation c d. Star	epresentation doe of the purlin along ndard	s not depict t the top and/	he size or
1 Row at midp WEBS REACTIONS	6-0-0 0c blacing. 17 ot 6-14 1 Row at midpt (size) 10= Mech Max Horiz 18=-283 (Max Uplift 10=-127 (Max Grav. 10=1551	-10. 8-12 hanical, 18=0-5-8 LC 12) LC 15), 18=-139 (LC (LC 47), 18=1628 (L	3) C 14) 4) C 47)	DOL=1.60 pl TCLL: ASCE Plate DOL=1 DOL=1.15); l Cs=1.00; Ct= Unbalanced	ate grip DOL=1.60 7-16; Pr=20.0 psf .15); Pf=20.0 psf Is=1.0; Rough Cat =1.10 snow loads have b) f (roof LL (Lum DC B; Fully been cor	.: Lum DOL= DL=1.15 Plate Exp.; Ce=0.§ nsidered for th	1.15 9 9; his						
FORCES TOP CHORD	(lb) - Maximum Com Tension 1-2=0/37, 2-3=-1615 4-5=-2006/293, 5-6= 6-7=-1593/267, 7-8= 8-9=-1963/181, 2-18 9-10=-1629/159	pression/Maximum 5/161, 3-4=-1724/29 1594/266, 1797/263, 3=-1780/185,	5) 3, 6) 7) 8)	This truss ha load of 12.0 j overhangs no Provide adeo This truss ha chord live loa * This truss truss	is been designed f psf or 1.00 times fl on-concurrent with quate drainage to is been designed f ad nonconcurrent pas been designed	for greate lat roof le o other liv prevent v for a 10.0 with any	er of min roof bad of 20.0 pa ve loads. water ponding 0 psf bottom other live loa e load of 20 (f live sf on g. Ids.		\wedge	L. I.V.	ORTH CA	ROLIN	
BOT CHORD WEBS	17-18=-28/19, 16-17 15-16=-182/1540, 1- 13-14=0/121, 6-14=- 11-13=-63/1519, 10 4-16=-464/151, 5-14 12-14=-29/1225, 7-1 7-12=-74/404, 8-12= 9-11=-30/1442, 5-15 4-15=-318/229, 16-1 2-16=-113/1434	7=0/41, 3-16=-250/1 4-15=-130/1313, -582/157, -11=-39/127 ==-145/531, 4=-162/530, =-423/191, 8-11=-17 ==-131/653, 18=-265/275,	62, 9) 10 1/81, 11	 on the bottor 3-06-00 tall b chord and ar Refer to gird Provide mec bearing plate 10. One H2.5A S recommende UPLIFT at jt(does not con 	n chord in all area by 2-00-00 wide wi by other members, er(s) for truss to tri hanical connectior e capable of withst Simpson Strong-Ti ed to connect truss (s) 18. This connect isider lateral force	s where ill fit betv with BC uss conr (by oth anding 1 e conne s to bear ction is fo s.	a rectangle veen the bott DL = 10.0psl nections. ers) of truss t 27 lb uplift at ctors ing walls due or uplift only a	om f. to t joint to and		Shummer	No.	SEA 4584	L 4 EFR.50	

"Innin March 25,2025

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	BGR	Attic Girder	1	2	Job Reference (optional)



Plate Olisets ((X, Y): [4:0-4-0,0-2-0],	[5:0-5-4,0-2-12], [7:	0-5-4,0-2-	12], [27:0-2-4,0	0-3-0], [35:0-4-0,0	2-4]								
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 NO IRC202	1/TPI2014	CSI TC BC WB Matrix-MSH	0.48 0.80 0.62	DEFL Vert(LL) Vert(CT) Horz(CT) Attic	in -0.21 -0.35 0.06 -0.15	(loc) 16-19 19-21 12 15-29	l/defl >999 >999 n/a >999	L/d 240 180 n/a 360	PLATES MT20 Weight: 681 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD	2x6 SP No.2 *Except 2.0E 2x4 SP No.2 *Except	t* 7-11:2x6 SP 2400 t* 27-18:2x4 SP No.	W DF 1	EBS	3-31=-846/7, 3-30= 29-30=-144/846, 4 14-15=-124/1027, 10-14=-261/248, 1	=-131/71 -29=0/1 9-15=0/ 0-13=-7	l6, 613, 1794, 55/5,		5) TC Pla DO Cs:	LL: ASC te DOL= L=1.15); =1.00; C	E 7-16 :1.15); ; ls=1.(t=1.10	; Pr=20.0 psf (rc Pf=20.0 psf (Lur); Rough Cat B;	of LL: Lum DOL n DOL=1.15 Pla Fully Exp.; Ce=(.=1.15 ite).9;
WEBS	2x4 SP No.3 *Except SP No.2	t* 4-30,9-14,4-8,8-9	:2x6		4-33=-2463/124, 3 34-35=-3398/37, 8	3-35=-2 -34=-34	370/116, 29/36,		6) Uni	balanceo sign.	d snow	loads have bee	n considered for	this
BRACING TOP CHORD	Structural wood shea 6-0-0 oc purlins, exo 2-0-0 oc purlins (6-0-	athing directly applie cept end verticals, a -0 max.): 5-7.	ed or nd		2-31=0/2321, 11-1 27-29=0/1840, 16- 17-19=-1103/0, 26 25-26=0/1140, 20-	3=0/271 17=-267 -27=-13 21=-324	4, 15-17=0/1 7/0, 27-28=-30 55/0, 19-20=0 1/0, 24-25=-48	856,)9/0,)/845, 39/0,	7) Thi loa ove 8) Pro	s truss h d of 12.0 erhangs ovide ade	as bee) psf or non-co equate	en designed for (1.00 times flat r ncurrent with oth drainage to prev	of load of 20.0 of load of 20.0 rer live loads. vent water pondi	of live psf on ing.
BOT CHORD	Rigid ceiling directly bracing.	applied or 6-0-0 oc			20-22=-129/420, 2 5-33=-50/576, 7-34	2-23=-1 4=-7/404	53/14, ł, 6-35=-477/ [.] o/400	115,	9) All 10) Thi	plates ai s truss h	re 3x5 las bee	MT20 unless off on designed for a	erwise indicated 10.0 psf botton	d. n
JOINTS	1 Brace at Jt(s): 19, 26, 35		N	DTES	7-35=-385/824, 5-	35=-125	9/409		chc 11) * T	ord live lo his truss	has be	nconcurrent with een designed for ard in all aroas w	any other live lo a live load of 20	bads. D.0psf
REACTIONS FORCES TOP CHORD	(size) 12= Mech Max Horiz 32=-279 (I Max Grav 12=2889 ((lb) - Maximum Com Tension 1-2=0/30, 2-3=-2887	anical, 32=0-5-8 LC 10) (LC 48), 32=2829 (L pression/Maximum //0, 3-4=-3224/0,	1) C 46)	2-ply truss to (0.131"x3") r Top chords o staggered at Bottom chor 0-9-0 oc.	 be connected tog nails as follows: connected as follow 0-9-0 oc, 2x4 - 1 in ds connected as follows: 2x4 - 2 in ds connected as follows: 	ether wi ws: 2x6 - row at 0- ollows: 2	th 10d - 2 rows -9-0 oc. x4 - 1 row at	246 -	3-0 chc 12) Cei 33- (s).	6-00 tall ord and a iling dea 35, 34-3 4-29, 9-	by 2-0 any oth d load 5, 8-34	00-00 wide will fit ler members. (5.0 psf) on mer 4; Wall dead loa	between the bo nber(s). 8-9, 4-3 d (5.0psf) on me	/ttom /3, ember
BOT CHORD	1-2=0/30, 2-3=-2887 4-5=-1195/215, 5-6= 6-7=-1341/8111, 7-8= 9-10=-3633/0, 10-11 11-12=-2840/0 31-32=-243/282, 30- 25-30=-208/4442, 23 20-23=0/5284, 17-20 14-17=-118/2629, 13 12-13=-5/67, 28-29= 26-28=-902/132, 24- 22-24=-3001/0, 21-2 19-21=-3216/0, 16-1 15-16=-1613/24	/0, 3-43224/0, -1341/811, -861/421, 8-9=-246i =-3347/0, 2-32=-270 31=-19/2394, 3-25=0/5284, 0=0/4765, 3-14=0/2654, -902/132, 26=-3001/0, 2=-3216/0, 9=-1613/24,	8/36, 2) 65/0, 3) 3) 4)	Web connec 2 rows stagg All loads are except if not CASE(S) se provided to c unless other Unbalanced this design. Wind: ASCE Vasd=103m II; Exp B; En cantilever let right expose	ted as follows: 2x ² gered at 0-9-0 oc. considered equall ed as front (F) or b ction. Ply to ply con distribute only load wise indicated. roof live loads hav 7-16; Vult=130mp ph; TCDL=6.0psf; closed; MWFRS (if and right expose d; Lumber DOL=1.	I - 1 row y applie ack (B) nnection s noted e been bh (3-sec BCDL=6 envelope d; end v 60 plate	at 0-9-0 oc, 2 d to all plies, face in the LC is have been as (F) or (B), considered for cond gust) 5.0psf; h=25ft exterior zor vertical left an grip DOL=1.	2x6 - DAD r ; Cat. ne; id 60		0	NA AND AND AND AND AND AND AND AND AND A	SEA 458 VORCEPS	IL 44 EEFR. OT	Mannannin

Continued on page 2

Scale = 1:83

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)



818 Soundside Road Edenton, NC 27932

March 25,2025

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	BGR	Attic Girder	1	2	I72215041 Job Reference (optional)

- 13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 28-29, 26-28, 24-26, 22-24, 21-22, 19-21, 16-19, 15-16
- 14) Refer to girder(s) for truss to truss connections.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 839 lb down and 71 lb up at 10-4-12, and 839 lb down and 71 lb up at 25-3-4 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.
- 17) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (lb/ft)
 - Vert: 1-2=-60, 2-5=-60, 5-7=-60, 7-8=-60, 8-9=-70,
 - 9-11=-60, 12-32=-20, 15-29=-30, 4-33=-10,
 - 33-35=-10, 34-35=-10, 8-34=-10 Drag: 4-29=-10, 9-15=-10
 - Concentrated Loads (lb)
 - Vert: 30=-450 (F), 14=-450 (F)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:00 ID:HiLQkPKHOQTU5G6uHHvM5iy8nJN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



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

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	С	Attic	7	1	I72215042



Plate Offsets (X, Y): [39:Edge,0-3-8]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDI	(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-MSH	0.78 0.92 1.00	DEFL Vert(LL) Vert(CT) Horz(CT) Attic	in -0.28 -0.51 0.11 -0.20	(loc) 23-25 23 14 17-30	l/defl >999 >827 n/a >912	L/d 240 180 n/a 360	PLATES MT20 MT20HS	GRIP 244/190 187/143	
BCDL	10.0										weight. 369 ib	F1 = 20%	
LUMBER TOP CHORD	2x6 SP No.2 *Excep 2.0E	t* 8-11:2x6 SP 2400	BOT CHORD	38-39=-897/483, 3 33-35=-354/1274, 26-31=-971/3622, 21-24=0/4470, 16-	85-38=-9 31-33=- 24-26=0	76/485, 665/1075, /4470, 86, 15-16-0/	2691	2) Wi Va II;	nd: ASCI sd=103m Exp B; E	E 7-16; hph; TC nclosed	Vult=130mph (3 CDL=6.0psf; BCE d; MWFRS (enve 25) -0-8-4 to 2-10	-second gust) DL=6.0psf; h=2 elope) exterior	25ft; Cat. zone
BOICHORD	2x4 SP No.1 Excep	2400F 2 0F		14-15=0/2691 29-	30=-769	/1531	2031,	to	6-4-1 Fx	terior(2	2R) 6-4-1 to 26-8	-10 Interior (1) 2-10-2
WEBS	2x4 SP No.3 *Excep 10-16,5-9,5-31,9-10, 37-2:2x4 SP No.2	t* 4-3:2x6 SP No.2,		27-29=-769/1531, 23-25=-2354/28, 2 20-22=-2584/0, 18	25-27=-2 2-23=-2 2-20=-90	2354/28, 584/0, 2/0, 17-18=-9	02/0,	26 cai rigi	8-10 to 3 ntilever le	81-8-14 eft and ed;C-C	I, Exterior(2E) 31 right exposed ; e for members an	-8-14 to 35-3- end vertical lef d forces & MV	-4 zone; t and VFRS
SLIDER	Right 2x4 SP No.3	1-6-0		36-37=-153/2061,	34-36=-	153/2061,		for	reaction	s show	n; Lumber DOL=	1.60 plate gri	р
BRACING				32-34=-353/1815,	30-32=-	353/1815		DC	L=1.60				
TOP CHORD	Structural wood shea 2-9-14 oc purlins, ex 2-0-0 oc purlins (5-9	athing directly applie xcept end verticals, -13 max.): 6-8.	ed or WEBS and	37-38=0/96, 3-37= 10-17=0/1132, 12- 12-15=-43/127, 5- 40-42=-1811/59 4	-704/13 16=-384 40=-188	9, 16-17=-8/4 /242, 8/67, 224/0	.35,	3) TC Pla DC	LL: ASC ite DOL=)L=1.15); -1.00: C	E 7-16 1.15); ; ls=1.0 t=1 10	; Pr=20.0 psf (ro Pf=20.0 psf (Lun); Rough Cat B; F	of LL: Lum DC n DOL=1.15 P Fully Exp.; Ce	DL=1.15 late =0.9;
BOT CHORD	Rigid ceiling directly bracing	applied or 2-2-0 oc		9-41=-3260/0, 30-	31=0/12	2, 30-43=0/14	491,	4) Un	balanced	d snow	loads have beer	o considered for	or this
WEBS	1 Row at midpt	9-42		5-43=0/1562, 17-1	9=0/162	9, 18-19=-26	1/0,	de	sign.				
JOINTS	1 Brace at Jt(s): 20, 34, 27, 42			19-20=-1140/0, 20 21-23=-221/729, 2)-21=0/8 23-24=-2	15, 21-22=-29 20/32, 26, 25, 26 - 29	93/0,	5) Th loa	d of 12.0	as bee) psf or	en designed for g 1.00 times flat ro	reater of min r of load of 20.	oof live 0 psf on
REACTIONS	(size) 14= Mech Max Horiz 39=-277 (Max Grav 14=2265 (anical, 39=0-5-8 LC 12) (LC 48), 39=2848 (L	C 48)	25-26=-510/0, 35- 34-35=-523/0, 33- 28-29=-253/0, 27- 32-33=-293/0, 30-	37=0/12/ 34=0/35 28=-141 33=0/73	26, 35-36=-26 7, 28-30=0/20 3/0, 26-27=0/ 2 6-40=-44/4	069, 1233, 77	6) Pro 7) All	plates a	equate re MT2	drainage to prev 0 plates unless of	ent water pon therwise indic	ding. ated.
FORCES	(lb) - Maximum Com	pression/Maximum		8-41=0/447, 7-42=	-472/10	3, 8-42=-253/	'973,				"TH CA	Roin	
TOP CHORD	Lension 1-2=0/30, 2-3=-3050 4-5=-2887/0, 5-6=-13 7-8=-1398/672, 8-9= 10-12=-3347/0, 12-1	//0, 3-4=-3381/0, 321/116, 6-7=-1398/ 811/513, 9-10=-25 4=-3520/0, 2-39=-3	/672, NOTES 34/0, 1) Unbalanc 152/0 this decia	6-42=-1322/377, 3 2-37=0/2859, 4-43 ed roof live loads hav	87-39=-2 8=-404/49 ve been o	46/811, 9 considered fo	ır		C	Èò	AREE	distre	iller.
			una desig								SEA	L 1	-



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	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	С	Attic	7	1	I72215042 Job Reference (optional)

- 8) All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom short live load papeapeurcent with any other live load
- 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.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10,
 5-40, 40-42, 41-42, 9-41, 4-43; Wall dead load (5.0psf) on member(s).3-37, 10-17, 30-43, 5-43
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 29-30, 27-29, 25-27, 23-25, 22-23, 20-22, 18-20, 17-18, 36-37, 34-36, 32-34, 30-32
- 13) Refer to girder(s) for truss to truss connections.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:00 ID:VP5mnZE7ejtTka?ri?H4b3zEzov-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 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 **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.sbcaccomponents.com)

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	CGE	Attic Structural Gable	1	1	Job Reference (optional)



mm March 25,2025

Continued on page 2

TCDL

BCLL

BCDL

WEBS

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 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

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	CGE	Attic Structural Gable	1	1	I72215043 Job Reference (optional)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-4 to 2-10-2, Interior (1) 2-10-2 to 6-4-1, Exterior(2R) 6-4-1 to 26-6-4, Interior (1) 26-6-4 to 31-9-10, Exterior(2E) 31-9-10 to 35-4-0 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
- 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) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 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) Ceiling dead load (5.0 psf) on member(s). 12-13, 4-63, 56-63, 56-57, 57-58, 58-59, 59-60, 60-64, 12-64; Wall dead load (5.0psf) on member(s).3-52, 13-27, 4-44
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 41-44, 39-41, 37-39, 35-37, 33-35, 31-33, 28-31, 27-28, 50-52, 48-50, 46-48, 44-46
- 14) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 54, 53, 26, 20, 25, 24, 23, 22, 21, and 45. This connection is for uplift only and does not consider lateral forces.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 16) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:01 ID:HSVLvMXIBUOh6UIn9Dc1gjzEzgn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

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



Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	CGR	Attic Girder	2	2	Job Reference (optional)

Carter Componen	nts (Sanford, NC), Sanford, NC - 27332,	Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:01 P	'age: 1
	2-4-4 -0-10-8 8-6-3 0-10-8 6-1-15 2-4-4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Scale = 1:82.3	$\begin{array}{c} \begin{array}{c} 0 \\ 0 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Plate Offsets (X	(, Y): [2:0-2-8,0-2-8], [6:0-5-4,0-2-12], [8:0-5-4	,0-2-12], [9:0-0 ⁻¹ 10,0-2-4], [13:Edge,0-1-3], [19:0-2-4,0-3-0], [28:0-2-4,0-3-4], [37:0-2-4,0-2-8], [42:0-4-0,0-2-4]	
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) Spacing 3-4 20.0 Plate Grip DOL 1.4 20.0 Lumber DOL 1.4 10.0 Rep Stress Incr NO 0.0* Code IR 10.0 Rep Stress Incr NO	D-0 CSI DEFL in (loc) l/defl L/d PLATES GRIP 15 TC 0.67 Vert(LL) -0.24 23-25 >999 240 MT20 244/190 15 BC 0.99 Vert(CT) -0.42 23-25 >999 180 0 WB 0.86 Horz(CT) 0.09 13 n/a n/a 2021/TPI2014 Matrix-MSH - Attic -0.18 17-30 >999 360	
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD JOINTS REACTIONS (FORCES TOP CHORD	2x6 SP No.2 *Except* 8-11:2x6 SP 2400F 2.0E 2x4 SP No.1 *Except* 30-17,37-30:2x4 SP No.2 2x4 SP No.3 *Except* 10-16:2x4 SP No.2, 5-9,31-5,9-10,4-3:2x6 SP No.2 Right: 2x4 SP No.3 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0). Rigid ceiling directly applied or 5-6-2 oc bracing. 1 Brace at Jt(s): 6, 8, 2, 20, 34, 27, 40, 41, 42, 43 (size) 13=0-5-8, 39=0-5-8 Max Horiz 39=-428 (LC 10) Max Grav 13=3443 (LC 44), 39=4279 (LC 44 (lb) - Maximum Compression/Maximum Tension 1-2=0/45, 2-3=-4302/0, 3-4=-4729/0, 4-5=-4052/0, 5-6=-1866/175, 6-7=-2124/937, 7-8=-2124/937, 8-9=-1234/747, 9-10=-3465/0, 10-12=-4657/0, 12-13=-4923/0, 13-14=0/37, 2-39=-4471/0	 BOT CHORD 38-39=-1322/778, 35-38=-1442/783, 33-35=-559/2027, 31-33=-1122/1781, 26-31=-1609/5680, 24-26=0/6972, 21-24-90(6972, 16-21=0/6253, 15-16=0/3787, 29-30=-1343/2480, 25-27=-3832/249, 22-32=-3432/249, 22-23=-4249/0, 12-22=-3432/249, 22-23=-4249/0, 12-22=-429/0, 12-22=-429/0, 12-22=-429/0, 12-22=-429/0, 12-22=-429/0, 12-22=-427/0, 12-22	lies, ne LOAD been (B), ed for it) =25ft; Cat. or zone; sft and bL=1.60 iOL=1.15 Plate e=0.9; for this n roof live 0.0 psf on

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, rerection 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	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	CGR	Attic Girder	2	2	I72215044 Job Reference (optional)

- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are 2x4 MT20 unless otherwise indicated.
- 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) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 5-40, 40-42, 41-42, 9-41, 4-43; Wall dead load (5.0psf) on member(s).3-37, 10-17, 30-43, 5-43
- 13) Bottom chord live load (40.0 psf) and additional bottom chord lead load (5.0 psf) applied only to room. 29-30, 27-29, 25-27, 23-25, 22-23, 20-22, 18-20, 17-18, 36-37, 34-36, 32-34, 30-32
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:01 ID:VP5mnZE7ejtTka?ri?H4b3zEzov-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

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



Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	D	Common	4	1	I72215045 Job Reference (optional)

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:02 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]

Fiale Olisels	(A, T). [2.Edge,0-0-14], [2	2.0-2-5,Eugej, [4.E	uye,0-0-1	4j, [4.0-2-3,E0	lgej								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) S 20.0 P 20.0 Li 10.0 R 0.0* C 10.0	Spacing Plate Grip DOL umber 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%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood sheathi 4-1-1 oc purlins. Rigid ceiling directly app bracing. (size) 2=0-3-0, 4=0 Max Horiz 2=41 (LC 14) Max Uplift 2=-221 (LC 14)	ning directly applied oplied or 8-6-15 oc)- 10), 4=-221 (LC 11 (1), 4=-708 (LC 22)	3) 4) 5) d or 6) 7))	TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct Unbalanced design. 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 L chord and ar	7-16; Pr=20.0 psf (15); Pf=20.0 psf (1 Is=1.0; Rough Cat =1.10 snow loads have b as been designed for psf or 1.00 times fla on-concurrent with as been designed for ad nonconcurrent w has been designed n chord in all areas by 2-00-00 wide will by other members.	(roof LL Lum DC B; Fully eeen cor or greate at roof lo other lis or a 10.0 <i>i</i> th any for a liv s where I fit betw	:: Lum DOL= IL=1.15 Plate Exp.; Ce=0.1 asidered for t er of min rool bad of 20.0 p re loads. D psf bottom other live loa e load of 20.1 a rectangle veen the bott	1.15 9; 9; f live sf on ads. 0psf om					
FORCES	(lb) - Maximum Compre Tension 1-2=0/17, 2-3=-901/594	ession/Maximum 4, 3-4=-901/594,	_,	recommende UPLIFT at jt(and does no	ed to connect truss (s) 2 and 4. This co t consider lateral fo	to bear nnectio rces.	ing walls due n is for uplift	e to only					
BOT CHORD WEBS	4-5=0/17 2-6=-458/775, 4-6=-458 3-6=-116/268	8/775	LO	AD CASE(S)	Standard								un.
NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II: Exp B:	ed roof live loads have be n. CE 7-16; Vult=130mph (3- 3mph; TCDL=6.0psf; BCDI Enclosed: MWFRS (envel	en considered for -second gust) IL=6.0psf; h=25ft; (lope) exterior zone	Cat.							C	tu	OR TH CA	ROUNTIN

and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-8, Exterior(2R) 3-11-8 to 9-11-8, Interior (1) 9-11-8 to 11-9-8, Exterior(2E) 11-9-8 to 14-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

SEAL 45844 104 mmm March 25,2025

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	DGE	Common Supported Gable	1	1	I72215046 Job Reference (optional)

2-9-13

2-11-0

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:02 ID:UUQhZhEGk9Im0a6ieC968izF_pT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



0-4-	0 13-11-0	
0-4-	0 13-7-0	

Scale = 1:33.5

Plate Offsets (X, Y): [2:E	dge,0-0-14], [2:0-2-5,Edge], [8:E	dge,0-0	0-14], [8:0-2-5,Ec	lge]								
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 IRC20	21/TPI2014	CSI TC BC WB Matrix-MSH	0.29 0.19 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.01	(loc) - - 8	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 59 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N Left: 2x4 Structura 10-0-0 oc Rigid ceil bracing. (size) Max Horiz Max Uplift Max Grav	0.2 0.2 0.3 SP No.3 4 SP No.3 I wood sheat purlins. ing directly 2=13-3-0, 11=13-3-0 14=13-3-0 2=41 (LC 2=-1 (LC 2 10=-44 (Ll 10=-44 (Ll 10=-44 (Ll 10=-47 (Ll 14=-75 (Ll 2=0 (LC 1 10=302 (Ll 11=302 (Ll 11=302 (Ll 11=302 (Ll 11=2420 (Ll 14=437 (Ll 14=437 (Ll	athing directly applied applied or 6-0-0 oc 8=13-3-0, 10=13-3-0 0, 12=13-3-0, 13=13-3 14) 21), 8=-71 (LC 36), C 15), 11=-35 (LC 11 C 10), 13=-23 (LC 14 C 10) 0), 8=128 (LC 22), .C 22), 11=205 (LC 2 .C 21), 13=123 (LC 2 .C 21)	d or), 3-0,)),)), 2),	 Wind: ASCE Vasd=103mp II; Exp B; En and C-C Cor to 3-11-8, Cc 9-11-8 to 11- cantilever lef right expose- for reactions DOL=1.60 Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Cs=1.00; Cs=1.00; Cs=1.00; Ctubalanced design. This truss ha load of 12.0 overhangs n All plates are 	7-16; Vult=130mp bh; TCDL=6.0psf; closed; MWFRS (ner(3E) -0-10-8 to orner(3E) 3-11-8 to 9-8, Corner(3E) 1 t and right expose d;C-C for members shown; Lumber D ted for wind loads ids exposed to wird d Industry Gable E ialified building dei 7-16; Pr=20.0 psf (15); Pf=20.0 psf (15);	bh (3-sec BCDL=6 envelope 2-1-8, E o 9-11-8, I o 9-11-9, I o 9-11-9, I o 9-11-9, I o 9-11-9, I o 9-11-9, I o 9-10-9, I o 9-10-	and gust) approximate the second sec	; Cat. ne 2-1-8) nd RS iss)), bble, PI 1. 1.15 9; his f live sf on				WITH CA	NROVIN
FORCES	(lb) - Max Tension	timum Com	pression/Maximum		 Gable studs This truss has 	spaced at 2-0-0 or	c. for a 10.0) psf bottom					OFFESS	an An
TOP CHORD	1-2=0/17 4-5=-123 7-8=-217	, 2-3=-220/4 /411, 5-6=- /405, 8-9=0	432, 3-4=-165/401, 122/395, 6-7=-170/39 //17	92,	chord live loa 10) * This truss h	ad nonconcurrent v nas been designed	with any for a liv	other live loa e load of 20.0	ads. Opsf		V	vvc	and	The second second
BOT CHORD	2-14=-36 12-13=-3 10-11=-3	5/260, 13-1 65/260, 11- 65/260, 8-1	4=-365/260, 12=-365/260, 0=-365/260		3-06-00 tall t chord and ar	by 2-00-00 wide winy other members.	ill fit betv	veen the bott	om				SEA 4584	L 14
WEBS	5-12=-36 3-14=-27 7-10=-21	0/181, 4-13 5/153, 6-11 2/127	=-146/110, =-183/128,	L								E.T.	NGIN'	EEP. ON
NOTES												11	AF	UNS II
 Unbalance this design 	ed roof live n.	loads have	been considered for									1.0	SW J	Orinin



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	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	E	Common	3	1	Job Reference (optional)

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:02 ID:wb1oEU3ot9zDodjcIXhweSzF_Yu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





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

Scale = 1:46.6

	, , L ,,	1) E = = 1												
Loading FCLL (roof) Snow (Pf) FCDL 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	0.80 0.36 0.13	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.06 0.01	(loc) 7-8 7-8 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 77 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 30T CHORD WEBS BRACING TOP CHORD 30T CHORD 30T CHORD REACTIONS FORCES TOP CHORD 30T CHORD WEBS NOTES 1) Unbalance this design WASA=103 II; Exp B; F and C-C E to 3-6-0, E to 3-6-0, E 10-9-14, E 20-9-14, E 10-9-14, E 10-9-14, E 10-9-14, E 10-9-14, E 10-9-14, E 10-115 20-41-00L	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep Structural wood she: 6-0-0 oc purlins, exit Rigid ceiling directly bracing. (size) 6=0-5-8, & Max Horiz 8=168 (LC Max Grav 6=648 (LC (Max Grav	t* 8-2,6-4:2x6 SP No athing directly applie cept end verticals. applied or 10-0-0 or 3=0-5-8 2 13) 5 (15), 8=-54 (LC 14) 2 (2), 8=-648 (LC 21) pression/Maximum 129, 3-4=-593/129, 173, 4-6=-593/129, 173, 4-6=-593/129, 174,	4) 5) o.2 ed or 6) c 7) 8)) LC r Cat. le 2-2 D to d .S i.15 y;	Unbalanced design. This truss ha load of 12.0 overhangs n This truss ha chord live loi * This truss lo on the bottor 3-06-00 tall H chord and ar One H2.5A \$ recommended UPLIFT at jtt and does no DAD CASE(S)	snow loads have t snow loads have t as been designed f psf or 1.00 times fl on-concurrent with is been designed in chord in all areas by 2-00-00 wide wi yy 2-00-00 wide wi yy other members. Simpson Strong-Tit ed to connect truss (s) 8 and 6. This co t consider lateral fo Standard	been cor or great at roof le other li or a 10. with any l for a liv s where ll fit betw e conne to bear onnectio orces.	nsidered for t er of min roo bad 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 n is for uplift	his f live sf on Opsf om e to only		Continue.		SEA 4584	ROLL A L EER.SOT	Ammunit

- 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 DOI = 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

mmm March 25,2025

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	E2	Common	1	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:02 ID:UVm5OFFw26J43YNC5QT_bbypar_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:45.7	
Plate Offsets (X, Y):	[1:0-1-4.0-1-8], [3:0-1-4.0

Plate Offsets ((X, Y): [1:0-1-4,0-1-8],	[3:0-1-4,0-1-8]											
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	0.91 0.35 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.06 0.00	(loc) 4-5 5-6 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 74 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep Structural wood shea 2-2-0 oc purlins, exc Rigid ceiling directly bracing. (size) 4=0-5-8, 6 Max Horiz 6=148 (LC Max Uplift 4=-33 (LC Max Grav 4=584 (LC	t* 6-1,4-3:2x6 SP No athing directly applie cept end verticals. applied or 10-0-0 oc 6=0-5-8 C 11) 2 15), 6=-33 (LC 14) C 21), 6=584 (LC 20)	5) 6) 2 ^{cd or} 7) 5 LC	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar One H2.5A \$ recommende UPLIFT at jt(and does no DAD CASE(S)	s been designed f ad nonconcurrent has been designed in chord in all area by 2-00-00 wide w by other members Simpson Strong-Ti ed to connect truss s) 6 and 4. This cr t consider lateral f Standard	for a 10.0 with any d for a liv is where is where ill fit betv ie conne s to bear onnectio orces.	D psf bottom other live loa e load of 20. a rectangle veen the bott ctors ing walls due n is for uplift	ads. Opsf om e to only					
FORCES TOP CHORD	(lb) - Maximum Com Tension 1-2=-586/126, 2-3=- 3-4=-529/127	pression/Maximum 586/126, 1-6=-529/1	29,										
BOT CHORD	5-6=-184/342, 4-5=- 2-5=0/262, 1-5=-85/	123/322											
NOTES	2-3-0/202, 1-303/2	200, 3-3											
1) Unbalance	ed roof live loads have	been considered for											011.
this design	n.											WHALL CA	Palli
 Wind: ASC Vasd=103 II; Exp B; and C-C E 3-2-12 to 9 cantilever right expo for reactio DOL=1.60 TCLL: AS Plate DOL DOI = 1.15 	CE 7-16; Vult=130mph mph; TCDL=6.0psf; B(Enclosed; MWFRS (en Exterior(2E) 0-2-12 to 3 9-9-4, Exterior(2E) 9-9- left and right exposed sed;C-C for members a ns shown; Lumber DO) CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L =1.15); Pf=20.0 psf (L	(3-second gust) CDL=6.0psf; h=25ft; ivelope) exterior zom i-2-12, Exterior(2R) -4 to 12-9-4 zone; ; end vertical left and and forces & MWFR L=1.60 plate grip roof LL: Lum DOL=1 um DOL=1.15 Plate t: Fully Exp : Co=0	Cat. e d S .15							Commun.		SEA 4584	L H4
Cs=1.00; (4) Unbalance	Ct=1.10 ed snow loads have be	en considered for th	is								11	REW J	OHN
design.			-									in min	inin.

mm March 25,2025

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	EGE	Common Supported Gable	1	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:02

Page: 1

ID:hs_OLPz9_OqUDEXuG81pmYzF_Z1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -0-10-8 1<mark>,3-10-</mark>8 6-6-0 13-0-0 0-10-8 6-6-0 6-6-0 0-10-8 3x5 = 6 5 7 12 10 Г 4 8 6-3-8 6-5-4 20 21 3 9 10 2 p-10-8 11 1.0 18 17 16 15 14 13 3x8 II 3x8 II

13-0-0

Scale = 1:42.4 Plate Offsets (X, Y): [6:0-2-8,Edge], [12:0-5-0,0-1-8], [19:0-5-0,0-1-8]

-						-								
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-MR	0.17 0.08 0.09	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: 81 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Structura 6-0-0 oc Rigid ceil bracing.	0.2 0.3 0.3 I wood shea purlins, exi ing directly	athing directly applie cept end verticals. applied or 6-0-0 oc	2 ed or) Wind: ASCE Vasd=103mp II; Exp B; En and C-C Cor to 3-6-0, Cor 10-9-14, Cor left and right exposed;C-C reactions sho DOL=1.60	7-16; Vult=130mp bh; TCDL=6.0psf; closed; MWFRS (ner(3E) -0-9-14 to ner(3E) 3-6-0 to 9 ner(3E) 10-9-14 to exposed; end ve c for members and own; Lumber DOL	ph (3-sec BCDL=6 envelope b 2-2-2, E b-6-0, Ext o 13-9-14 dritical left d forces a _=1.60 pl	cond gust) .0psf; h=25ft exterior zon xterior(2N) 2 terior(2N) 9-6 4 zone; cantil and right & MWFRS for ate grip	; Cat. ne -2-2 G-0 to ever r	13) Pro bea 19, upli join LOAD (vide me ring plat 36 lb up ft at join t 13. CASE(S	chanic te capa lift at j t 18, 8) Sta	al connection (by able of withstand oint 12, 84 lb upl 6 lb uplift at joint ndard	v others) of truss to ing 54 lb uplift at joint ift at joint 17, 120 lb 14 and 116 lb uplift at
REACTIONS	(size) Max Horiz Max Uplift Max Grav	12=13-0-C 15=13-0-C 18=13-0-C 19=166 (L 12=-36 (L 14=-86 (L 18=-120 (12=142 (L 14=269 (L 16=198 (L 18=189 (L), 13=13-0-0, 14=13-), 16=13-0-0, 17=13-), 19=13-0-0 C 11), 13=-116 (LC C 15), 17=-84 (LC 1- LC 14), 19=-54 (LC 2- C 25), 13=182 (LC 2- C 22), 15=198 (LC 2- C 21), 17=269 (LC 2- C 25), 19=156 (LC 2- C 2- C 25), 19=156 (LC 2- C 2- C 2- C 2- C 2- C 2- C 2- C 2-	-0-0, 3 -0-0, 4 15), 4 4), 10) 26), 5 22), 5 21), 6) Truss design only. For stu see Standarc or consult qu) TCLL: ASCE Plate DOL=1) DOL=1.15); Cs=1.00; Ct=) Unbalanced design.) This truss ha load of 12.0 j 	ed for wind loads ids exposed to wind J Industry Gable E alified building de 7-16; Pr=20.0 ps .15); Pf=20.0 psf s=1.0; Rough Cat 1.10 snow loads have I s been designed f psf or 1.00 times f	In the pland (norm End Deta esigner as if (roof LL (Lum DC t B; Fully been cor for greate flat roof lo	ane of the true al to the face ils as applica is per ANS//TI i: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 asidered for the er of min roof pad of 20.0 p	ss), ble, PI 1. 1.15 9; his flive sf on					1111
TOP CHORD	(Ib) - Max Tension 2-19=-12 3-4=-72/7 6-7=-73/1 9-10=-90	8/62, 1-2=0 6, 4-5=-89/ 53, 7-8=-8 /81, 10-11=	pression/Maximum //37, 2-3=-110/103, /196, 5-6=-74/153, 9/196, 8-9=-59/76, 9/37, 10-12=-116/56	7 8 9	overhangs no All plates are Gable require Truss to be f braced again	on-concurrent with 2x4 MT20 unless es continuous both ully sheathed from ust lateral moveme	h other liv s otherwi tom chor n one fac ent (i.e. d	ve loads. se indicated. d bearing. e or securely iagonal web)			(); 沙	ORTH CA	ROLIN
BOT CHORD	18-19=-7 16-17=-7 14-15=-7 12-13=-7	8/157, 17-1 8/157, 15-1 8/157, 13-1 8/157	8=-78/157, 6=-78/157, 4=-78/157,	1	 Chie studs This truss ha chord live loa This truss h This truss h 	spaced at 2-0-0 o is been designed f ad nonconcurrent has been designed n chord in all area	for a 10.0 with any d for a liv) psf bottom other live loa e load of 20.0 a rectangle	ids. Opsf		11111		SEA 4584	L 44
WEBS	5-16=-16 3-18=-15 9-13=-15	6/9, 7-15=- 5/153, 8-14 0/160	166/0, 4-17=-226/16 =-226/165,	6,	3-06-00 tall b chord and ar	by 2-00-00 wide will are an area will be will	rill fit betv	veen the botto	om			N.P.	V. ENGIN	EER ON
NOTES 1) Unbalance this design	ed roof live l n.	oads have	been considered for	r								11	Marcl	OHN5 n 25,2025

NOTES

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	F	Monopitch	6	1	I72215050 Job Reference (optional)

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:03 ID:9J?nSM2QtleiTNQUoeql4rzF_lq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:37.6

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	0.45 0.42 0.51	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.05 -0.08 0.01	(loc) 6-9 6-9 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 49 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD FORCES TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shr 5-8-1 oc purlins, ex Rigid ceiling directly bracing. (size) 2=0-3-0, Max Horiz 2=148 (L Max Uplift 2=-148 (L Max Grav 2=539 (L (lb) - Maximum Cor Tension 1-2=0/17, 2-3=-952 4-5=-184/101 2-6=-472/880 5-6=	eathing directly applie ccept end verticals. y applied or 8-3-12 oc 5=0-1-8 C 13) _C 10), 5=-169 (LC 10 C 21), 5=555 (LC 21) npression/Maximum /493, 3-4=-104/66, -472/880	5) 6) d or 7) 8) 9) 9) 10) LO	This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Bearings are Bearing at joi using ANSI/T designer sho Provide mech bearing plate 0 One H2.5A S recommende UPLIFT at jt(: and does not AD CASE(S)	s been designed fo d nonconcurrent w as been designed fa chord in all areas y 2-00-00 wide will y other members. assumed to be: , J nt(s) 5 considers p Pl 1 angle to grain uld verify capacity of nanical connection at joint(s) 2, 5. impson Strong-Tie d to connect truss fa s) 2 and 5. This cor consider lateral for Standard	or a 10.0 ith any for a liv where fit betw oint 5 S arallel t formula of beari (by oth connection rces.	D psf bottom other live loa e load of 20.0 a rectangle veen the botto SP No.3 . o grain value a. Building ng surface. ers) of truss t ctors ing walls due n is for uplift of	ds. Dpsf om o to only					
WEBS	3-6=-105/242, 3-5=	-918/562											
NOTES		() accord suct)											
 Wind: ASC Vasd=103i II; Exp B; E and C-C E to 7-7-12, I cantilever I right expos members a Lumber DC TCLL: ASC Plate DOL= DOL=11.15 Cs=1.00; C Unbalance design. This truss I load of 12 	E_{-} 7-16; Vult=130mpl mph; TCDL=6.0psf; E Enclosed; MWFRS (e xterior(2E) -0-10-8 to Exterior(2E) 7-7-12 to left and right exposed sed; porch left and rig and forces & MWFRS DL=1.60 plate grip DC CE 7-16; Pr=20.0 psf =1.15; Pf=20.0 psf (I); Is=1.0; Rough Cat Ct=1.10 d snow loads have b has been designed fo 0 psf or 1.00 times fit	n (3-second gust) GCDL=6.0psf; h=25ft; i nvelope) exterior zone 2-1-8, Interior (1) 2-1 b 10-7-12 zone; 1; end vertical left and ht exposed;C-C for for reactions shown; DL=1.60 (roof LL: Lum DOL=1. SF Fully Exp.; Ce=0.9; een considered for thi or greater of min roof I at roof load of 20.0 pet	Cat. 9 8 1 15 s							Comme	A STATES	SEAL 4584	A ER. ONIN

- 2) 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.
- 4) 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.



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mmm March 25,2025

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	F1GE	Monopitch Supported Gable	1	1	I72215051 Job Reference (optional)

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:03 ID:05Rb2nqdzWbg0FxJai2r9FzF_oh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1







Scale = 1:25.4

Loading TCLL (roof) Snow (Pf) TCDI	(psf) 20.0 20.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES		CSI TC BC WB	0.16 0.11 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	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	GRIP 244/190
BCLL BCDL	0.0*	Code	IRC20	21/TPI2014	Matrix-MP	0100		0.00		n/a		Weight: 14 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 3-7-8 oc purlins, ex Rigid ceiling directly bracing. (size) 2=3-5-8, . Max Horiz 2=53 (LC Max Uplift 2=-50 (LC 5=-87 (LC Max Grav 2=246 (L) 5=-246 (L)	Pathing directly applied cept end verticals. r applied or 10-0-0 oc 4=3-5-8, 5=3-5-8 11) 2 10), 4=-255 (LC 21) 2 14) 2 21), 4=53 (LC 14), 2 21)	d or 6	 Unbalanced design. This truss ha load of 12.0 overhangs n Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Provide mec bearing plate 4, 50 lb uplifit 	snow loads have s been designed portion of the standard spaced at 2-0-0 c is been designed ad nonconcurrent has been designed n chord in all area by 2-00-00 wide w hy other members hanical connectio c capable of withs at joint 2 and 50	been cor for great flat roof I h other Ir oc. for a 10. with any d for a Iiv as where vill fit betv s. n (by oth tanding 2 Ib uplift a	nsidered for t er of min roo bad of 20.0 p ve loads. 0 psf bottom other live loa e load of 20. a rectangle veen the bott ers) of truss 255 lb uplift a tt joint 2.	his f live osf on ads. Opsf com to t joint					
FORCES	(lb) - Maximum Con	npression/Maximum	L	OAD CASE(S)	Standard								
TOP CHORD	1-2=0/24, 2-3=-61/5 3-5=-428/353	8, 3-4=-88/63,											
BOT CHORD	2-5=-15/66												
NOTES													
 Wind: AS Vasd=100 II; Exp B; and C-C (to 3-7-8 z vertical le forces & M DOL=1.6(Truss des only. For see Stanc or consult TCLL: AS Plate DOI DOL=1.1(Constants) 	CE 7-16; Vult=130mpf 3mph; TCDL=6.0psf; B Enclosed; MWFRS (er Corner(3E) -0-10-8 to 2 one; cantilever left and ft and right exposed; C- MWFRS for reactions s UNFRS for reactions s tuds exposed to wind ladd for wind loads ir studs exposed to wind ladd industry Gable En - qualified building desi CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L =1.15); Rough Cat E C = 1.0; Rough Cat E	a (3-second gust) CDL=6.0psf; h=25ft; to velope) exterior zone 2-1-8, Exterior(2N) 2-2 1 right exposed; end -C for members and thown; Lumber a the plane of the trus d (normal to the face), d Details as applicab gner as per ANSI/TP (roof LL: Lum DOL=1. 1.00L=1.15 Plate 3; Fully Exp.; Ce=0.9;	Cat. e 1-8 s , le, 11. .15							C		SEA 4584	ROLANE LA

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

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818 Soundside Road Edenton, NC 27932

Month Month

March 25,2025

EN JOH

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	FGE	Monopitch Supported Gable	1	1	I72215052 Job Reference (optional)

0-10-8

0-10-8

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:03 ID:_?Pus1XWS1h0GXUA82Y8iGzF_IC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

10-9-8 10-9-8 7 6 5 6



10-8-0	10-9-8
10-8-0	0-1-8

Scale = 1:35

-

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing2:Plate Grip DOL1.Lumber DOL1.Rep Stress IncrYCodeIF	0-0 15 15 ES 2C2021	/TPI2014	CSI TC BC WB Matrix-MSH	0.18 0.06 0.05	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 8	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 49 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood shee 6-0-0 oc purlins, exe Rigid ceiling directly bracing. (size) 2=10-7-8, 10=10-7-8 Max Horiz 2=148 (LC Max Uplift 2=-26 (LC 9=-34 (LC 11=-32 (L) Max Grav 2=155 (LC 9=227 (LC 11=189 (L) (lb) - Maximum Com Tension 1-2=0/17, 2-3=-132// 4-5=-78/105 5-6=-7	athing directly applied or cept end verticals. applied or 10-0-0 oc 8=10-7-8, 9=10-7-8, 3, 11=10-7-8, 12=10-7-8 2 (13) 10), 8=-13 (LC 11), 10), 10=-34 (LC 14), C 10), 12=-44 (LC 14), 21), 18=84 (LC 21), 221), 19=223 (LC 21), C 21), 12=216 (LC 1) pression/Maximum 137, 3-4=-92/116, 0(92 6-7=-56/71)	2) 3) 4) 5) 6) 7) 8) 9)	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. This truss ha load of 12.0 p overhangs nc All plates are Gable studs a This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Provide mech	ed for wind loads in ds exposed to wind l Industry Gable Er alified building des 7-16; Pr=20.0 psf (15); Pf=20.0 psf (15	n the pla d (norm nd Deta iigner as (roof LL Lum DC B; Fully eeen cor or great at roof la other lii other lii other lii other lii other lii other lii other lii other lii for a liv s where l fit betv (by oth anding 2	ane of the trus al to the face; als a sapplicat is a per ANSI/TF is per ANSI/TF is Lum DOL=' L=1.15 Plate Exp.; Ce=0.9 asidered for the er of min roof bad of 20.0 ps ve loads. se indicated. D psf bottom other live loa e load of 20.0 a rectangle veen the bottos to furus to 6 lb uplift at jo	ss), ble, pl 1. 1.15 j; his live sf on ds. opsf om o on					111.
TOP CHORD BOT CHORD WEBS 1) Wind: ASI Vasd=103 II; Exp B; and C-C (to 7-7-12, left and rig exposed;(reactions DOL=1.60	1-2=0/17, 2-3=-132/ 4-5=-78/105, 5-6=-7/ 7-8=-68/38 2-12=-46/82, 11-12= 9-10=-46/82, 8-9=-4/ 6-9=-186/114, 5-10= 3-12=-164/143 CE 7-16; Vult=130mph Bmph; TCDL=6.0psf; BK Enclosed; MWFRS (en Corner(3E) -0-10-8 to 2 Corner(3E) -0-10-8 to	137, 3-4=-92/116, 3/92, 6-7=-56/71, -46/82, 10-11=-46/82, 6/82 -181/133, 4-11=-159/12 (3-second gust) CDL=6.0psf; h=25ft; Cat velope) exterior zone -1-8, Exterior(2N) 2-1-8 0-7-12 zone; cantilever cal left and right orces & MWFRS for 1.60 plate grip	LO4 3,	bearing plate 2 and 26 lb u AD CASE(S)	capable of withsta plift at joint 2. Standard	anding 2	6 lb uplift at jo	oint		Comme		SEA 4584	ROLAR AND



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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	G	Monopitch	9	1	Job Reference (optional)

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:03 ID:Dy_JjEEKvGAptckEgqDBdczF_tK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



0-10-8 4-7-4 8-8-0 4-7-4 4-0-12 0-10-8 2x4 II 12 4 Г 4 5 3x5 🚅 P 12 2-4-11 3 3x5 = 3-5-14 F\$ 1-0-0 8 6 0-9-0 5x6 = 4x5 = __3 12 4x5 ₌ 0-5-8 8-8-0 4-5-8 8-4-12 0-3-4 4-0-0 3-11-4 0-5-8



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818 Soundside Road Edenton, NC 27932

Scale = 1:35

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

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 IRC2021	1/TPI2014	CSI TC BC WB Matrix-MP	0.33 0.39 0.43	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.09 0.03	(loc) 8 8 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 41 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD WEBS NOTES 1) Wind: ASC Vasd=103 II; Exp B; I and C-C E 1-11-13 to cantilever right expo for reactio DOL=1.60 2) TCLL: ASS	2x4 SP No.2 2x6 SP No.2 *Excep 2x4 SP No.3 Structural wood shea 4-8-12 oc purlins, er Rigid ceiling directly bracing. (size) 2=0-5-8, 7 Max Horiz 2=108 (LC Max Uplift 2=-75 (LC Max Uplift 2=-75 (LC Max Grav 2=462 (LC (lb) - Maximum Com Tension 1-2=0/17, 2-3=-1495 4-5=-8/0, 4-7=-179/9 2-8=-600/1432, 7-8= 3-8=-108/410, 3-7=- CE 7-16; Vult=130mph imph; TCDL=6.0psf; B(5-8-0, Exterior(2E) 5-4 left and right exposed sed;C-C for members a ns shown; Lumber DO CE 7-16; Pr=20.0 psf (t* 8-6:2x4 SP No.2 athing directly applied xcept end verticals. applied or 7-10-7 oc 7= Mechanical C 11) C 10), 7=-67 (LC 14) C 21), 7=478 (LC 21) pression/Maximum 5/573, 3-4=-60/53, 94 -558/1308, 6-7=0/0 1332/607 (3-second gust) CDL=6.0pst; h=25f; (welope) exterior zone (1-11-13, Interior (1) 8-0 to 8-8-0 zone; ; end vertical left and and forces & MWFRS L=1.60 plate grip roof LL: Lum DDL=1.	4) 5) d or 6) 7) 8) 9) 10 10 Cat. 2 5	This truss ha load of 12.0 overhangs n This truss ha chord live loa* * This truss f on the bottor 3-06-00 tall b chord and ar Refer to gird Bearing at jo using ANSI/T designer sho Provide mec bearing plate 7.) One H2.5A S recommende UPLIFT at jt(does not con DAD CASE(S)	s been designed for opsf 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. er(s) for truss to tru- int(s) 2 considers p TPI 1 angle to grain uld verify capacity hanical connection e capable of withsta Simpson Strong-Tie ed to connect truss s) 2. This connection sider lateral forces Standard	or greats at roof lo other linor or a 10.0 vith any for a linu where fit betw ss conre- trarallel 1 formula of bear (by oth anding 6 conne- to bear on is for	er of min roof pad of 20.0 p re loads. 0 psf bottom other live loa e load of 20.0 a rectangle reen the botth ections. o grain value a. Building ng surface. ers) of truss t 7 lb uplift at j ctors ng walls due uplift only an	f live sf on ds. Opsf om to joint to nd		Continue		SEA	ROLINA DUST	
Plate DOL DOL=1.15 Cs=1.00; (.=1.15);	um DOL=1.15 Plate 3; Fully Exp.; Ce=0.9;									- 7	ENIS	RIA	in in

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

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	GSE	Monopitch Structural Gable	1	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:03 ID:j7LOAWWFe1s7RV5MhJbHFGzF_qO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



C)-5-8				8-8-0
Ĭ	Ŭ	4-5-8	5-5-8	8-4-12	ĨĨ
6)-5-8	4-0-0	1-0-0	2-11-4	0-3-4
U.	-3-0				0-0-4

Scale = 1:35

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

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.23	Vert(LL)	-0.01	8-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.19	Vert(CT)	-0.03	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES		WB	0.22	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC202	21/TPI2014	Matrix-MP								
BCDL	10.0											Weight: 42 lb	FT = 20%
LUMBER FOP CHORI 30T CHORI WEBS DTHERS 3RACING FOP CHORI BOT CHORI	 2x4 SP No.2 2x6 SP No.2 *Excep 2x4 SP No.3 2x4 SP No.3 Structural wood sheat 6-0-0 oc purlins, ext Rigid ceiling directly bracing. (size) 2=0-5-8, 8 Max Horiz 2=108 (LC Max Uplift 2=-44 (LC 9=-70 (LC 	t* 9-7:2x4 SP No.2 athing directly applie cept end verticals. applied or 10-0-0 oc 3= Mechanical, 9=0- 2 11) 10), 8=-30 (LC 14), 14)	3 4 9d or 5 6 11-8 8	 TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct Unbalanced design. This truss ha load of 12.0 overhangs n Gable studs This truss ha chord live loa * This truss ha on the bottor 3-06-00 tall t 	5 57-16; Pr=20.0 psf 1.15); Pf=20.0 psf 1s=1.0; Rough Cat =1.10 snow loads have t as been designed f psf or 1.00 times fl on-concurrent with spaced at 2-0-0 or as been designed f ad nonconcurrent to has been designed n chord in all area: ny 2-00-00 wide with 2000 wide with 2000 wide with 2000 wide with 1000 with wi	f (roof LL (Lum DC B; Fully been cor for greate lat roof lo o other liv c. or a 10.0 with any I for a liv s where II fit het	: Lum DOL= IL=1.15 Plate Exp.; Ce=0. Isidered for t er of min roo bad of 20.0 p re loads.) psf bottom other live loa e load of 20. a rectangle even the bott	1.1.15 e 9; his f live sf on ads. Opsf om					
	Max Grav 2=242 (LC 9=468 (LC	2 21), 8=230 (LC 21) 2 21)),	chord and ar	by other members.			.0111					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	9	0) Bearing at jo	int(s) 2 considers	parallel t	o grain value Building	e					
TOP CHORI	0 1-2=0/17, 2-3=-162/5 4-5=-39/45, 5-6=-8/0	58, 3-4=-59/41,), 5-8=-136/67	1	designer sho	buld verify capacity	of beari	ng surface.	to					
BOT CHORI WEBS	4-5=-39/45, 5-6=-8/0, 5-8=-136/67 DT CHORD 2-9=-114/205, 8-9=-68/106, 7-8=0/0 EBS 3-9=-339/189, 3-10=-103/104, 8-10=-115/113, 4-10=-62/52				 bearing plate capable of withstanding 30 lb uplift at joint 8 and 70 lb uplift at joint 9. 12) One H2 5A Simpson Strong-Tie connectors 								
NOTES	DTES				ed to connect truss	to bear	ng walls due	e to			-51	1	in MARY
1) Wind: As Vasd=10	Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph: TCDL=6.0osf: BCDL=6.0osf: h=25ft: Cat.				UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.								alina
II; Exp B	; Enclosed; MWFRS (en	velope) exterior zon 1-11-13 Interior (1)	e L	OAD CASE(S)	Standard							Q. 05A	

- Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Ca 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 5-8-0, Exterior(2E) 5-8-0 to 8-8-0 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
- 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 45844 WGINEEP, OTHIN March 25,2025

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ERENCO A MiTek Affiliate

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	H1	Jack-Closed	3	1	I72215055 Job Reference (optional)

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:03 ID:jzudvf5?HySB7qACgSkvP7y94VX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(2 1 1	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	0.46 0.60 0.22	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.16 -0.32 0.00	(loc) 4-5 4-5 4	l/defl >640 >321 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 76 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x6 SP No.2 Structural woo 6-0-0 oc purlir Rigid ceiling d bracing. 1 Row at midd (size) 4=0 Max Horiz 5=2 Max Uplift 4=- Max Grav 4=8 (b) - Maximur	od shea ns, exc directly ot 3 2-5-8, 5 275 (LC 146 (LC 349 (LC m Comp	athing directly applied rept end verticals. applied or 10-0-0 oc 3-4 = Mechanical 11) C 14) 20), 5=390 (LC 20) pression/Maximum	4) 5) d or 6) 7) 8) 9) 1(This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar All bearings a Refer to gird Bearing at jo using ANSI designer sho One H2.5A S recommende UPLIFT at jt(does not con)) Hanger(s) or provided suff	s been designed for ad nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will by other members. are assumed to be er(s) for truss to tru int(s) 4 considers p TPI 1 angle to grain uld verify capacity of simpson Strong-Tie d to connect truss s) 4. This connectic sider lateral forces. other connection d icient to support co	or a 10. vith any for a liv where l fit betw User D ss conr arallel formul of bear conne to bear on is for levice(soncentra	D psf bottom other live loa e load of 20. a rectangle veen the bott efined . nections. o grain value a. Building ng surface. ctors ing walls due uplift only a) shall be ated load(s) 4	ads. Opsf nom e to nd 461					
TOP CHORD	1-5=-201/77, 3-4=-615/121 4-5=-131/297	1-2=-19	94/57, 2-3=-198/139,	1	 a down and 113 is up at 8-11-0 on top chord. The design/selection of such connection device(s) is the responsibility of others. 11) In the LOAD CASE(S) section, loads applied to the face 									
 WEBS 2-5=-218/191, 2-4=-298/210 NOTES 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25f; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2R) 4-2-5 to 3-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C- C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) 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) Urbalanced show loade have been considered for this 			L(1) Cat. -12 eft t;C- .15	of the truss are noted as front (F) or back (B). LOAD CASE(S) Standard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-3=-60, 4-5=-20 Concentrated Loads (lb) Vert: 3=-380 (F) SEAL 45844						ROLAR MUNICIPALITY				

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 2) 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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818 Soundside Road Edenton, NC 27932

March 25,2025

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	H2	Jack-Closed	2	1	I72215056 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:03 ID:A?EbZVSK3TRLQ4LGGcpFRfy94Xe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:53

					-								
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 NO IRC2021/TPI2014	CSI TC BC WB Matrix-MP	0.66 0.76 0.22	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.25 -0.50 0.00	(loc) 4-5 4-5 4	l/defl >401 >201 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 74 lb	GRIP 244/190 FT = 20%	
JUMBER FOP CHORD 30T CHORD WEBS 3THERS 3RACING FOP CHORD 30T CHORD 30T CHORD 30T CHORD 30T CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Wind: ASC Vasd=103 II; Exp B; I and C-C E to 4-1-13, left and ric exposed;C reactions : DOL=1.60 2) TCLL: ASC Plate DOL DOL=1.51 CS=1.00; (3) Unbalance design. 4) This truss chord live	2x4 SP No.2 2x4 SP No.1 2x4 SP No.3 2x6 SP No.2 Structural wood she 6-0-0 oc purlins, exx Rigid ceiling directly bracing. (size) 4= Mecha Max Horiz 5=275 (LC Max Uplift 4=-149 (L Max Grav 4=866 (LC (lb) - Maximum Com Tension 1-5=-123/67, 1-2=-7: 3-4=-637/121 4-5=-142/282 2-5=-296/127, 2-4=- CE 7-16; Vult=130mph mph; TCDL=6.0psf; Bi Enclosed; MWFRS (er ixterior(2R) 4-1-13 to 3) Exterior(2R) 4-1-13 to 3) Exterior(2R) 4-1-13 to 3) Exterior(2R) 4-1-13 to 3) Exterior(2R) 4-1-13 to 3) Exterior(2R) 4-1-13 to 3) CE 7-16; Pr=20.0 psf (L); Is=-1.0; Rough Cat E C1=1.10 ad snow loads have be has been designed for load nonconcurrent wi	athing directly applie cept end verticals. applied or 10-0-0 oc (11) C 14) C 14) C 20), 5=380 (LC 20) pression/Maximum 8/99, 2-3=-184/169, 302/235 (3-second gust) CDL=6.0psf; h=25ft; ivelope) exterior zonu L-1-12, Interior (1) 3-1 8-5-4 zone; cantileve cal left and right orces & MWFRS for 1.60 plate grip roof LL: Lum DOL=1 um DOL=1.15 Plate ; Fully Exp.; Ce=0.9; een considered for thi r a 10.0 psf bottom th any other live load	5) * This trus on the bot 3-06-00 ta chord and 6) Refer to g 7) Provide m bearing pl 4. 8) Hanger(s) provided s Ib down al design/sel responsib LOAD CASE(1) Dead + S Increase Uniform Vert: 1 Concenti Vert: 3 Cat. e 1-12 er	s has been designe tom chord in all area II by 2-00-00 wide w any other members irder(s) for truss to the echanical connection sufficient to support of al 118 lb up at 8-5- ection of such connellity of others. S) Standard Snow (balanced): Lu =1.15 Loads (lb/ft) -3=-60, 4-5=-20 rated Loads (lb) B=-380	d for a liv as where vill fit betv russ conr n (by oth tanding 1 a device(s concentra 4 on top ection de umber Inc	e load of 20.1 a rectangle veen the bott nections. ers) of truss : 49 lb uplift ar) shall be ated load(s) 4 chord. The vice(s) is the rease=1.15,	Opsf om to t joint 461 Plate		Continue.		SEA 4584	POL HA L CHNSON	L'ummun,
											March	25,2025	



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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	l1	Monopitch	2	1	Job Reference (optional)

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:03 ID:TVTffuiZsp7mVnXghlb00Ay94Qs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

5-1-0 10-2-0 5-1-0 5-1-0 3x5 II 4⁵ 912 3x5 🍫 10 3 10-1-8 10-1-8 X 3x5 2 2-6-0 ₩7 9 ⊠ 8 6 2x4 II 3x5= 3x10= 10-2-0 || 0-3-4 5-1-0 9-10-12 5-1-0 4-9-12

Scale = 1:61.1

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/TPI20	4	CSI TC BC WB Matrix-MSH	1.00 0.30 0.50	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.04 0.01	(loc) 7-8 7-8 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 80 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, exi Rigid ceiling directly bracing. 1 Row at midpt (size) 7= Mecha Max Horiz 9=355 (LC Max Uplift 7=-156 (L Max Grav 7=561 (LC (lb) - Maximum Com	uss has 12.0 pr ings nor uss has live load truss ha bottom 0 tall by and any o girdel e mech g plate o SE(S)	been designed for sf or 1.00 times fla n-concurrent with been designed for d nonconcurrent was been designed chord in all areas / 2-00-00 wide will / other members. r(s) for truss to tru anical connection capable of withsta Standard	or great at roof le other liv or a 10.4 vith any for a liv s where I fit betv iss conr (by oth anding 1	er of min roo bad of 20.0 p ve loads.) psf bottom other live load e load of 20. a rectangle veen the bott nections. ers) of truss 56 lb uplift a	f live sisf on ads. Opsf tom t joint							
TOP CHORD BOT CHORD	Tension 1-2=0/35, 2-3=-375/9 4-5=-17/0, 4-7=-238, 8-9=-334/480, 7-8=-	95, 3-4=-208/189, /80, 2-9=-444/145 141/373, 6-7=0/0											
WEBS	3-8=0/172, 3-7=-445	5/201, 2-8=-120/273											
 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) -0-9-15 to 2-2-1, Interior (1) 2-2-1 to 7-2-0, Exterior(2E) 7-2-0 to 10-2-0 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 2) 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. 													

- 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 2) 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.



Mon March 25,2025

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	J1	Piggyback Base	1	1	Job Reference (optional)

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:03

17-11-8

9-0-12

Page: 1



8-10-12

Scale = 1:69.2		I	8-10-1	2
Plate Offsets (X, Y):	[4:0-3-12,0-1-12], [6:0-1-8,0-1-8]			

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 IRC2027	I/TPI2014	CSI TC BC WB Matrix-MSH	0.89 0.95 0.50	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.20 -0.31 0.01	(loc) 6-8 6-8 6	l/defl >999 >682 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 154 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 30T CHORD WEBS DTHERS BRACING TOP CHORD 30T CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep No.3 2x6 SP No.2 Structural wood she 6-0-0 oc purlins, ex 2-0-0 oc purlins, ex 2-0-0 oc purlins (5-3 Rigid ceiling directly bracing. 1 Row at midpt (size) 6=0-5-8, 9 Max Horiz 9=304 (LC Max Uplift 6=-248 (L Max Grav 6=1305 (LC)	t* 9-2,9-3,8-3:2x4 SF athing directly applie cept end verticals, ar -4 max.): 4-5. applied or 2-2-0 oc 5-6, 4-6, 3-9 9=0-5-8 C 14) C 14), 9=-10 (LC 14) .C 43), 9=955 (LC 44	3) 4) 5) d or 1d 6) 7) 8) 9)	TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 j overhangs n Provide aded This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha chord ad ar One H2.5A S recommende	7-16; Pr=20.0 ps .15); Pf=20.0 ps ls=1.0; Rough Cat =1.10 snow loads have l s been designed f psf or 1.00 times f on-concurrent with quate drainage to is been designed ad nonconcurrent has been designed n chord in all area by 2-00-00 wide wi by other members, Simpson Strong-Ti ad to connect truss	f (roof LL (Lum DC B; Fully been cor for great lat roof lo or a 10.0 with any f for a liv s where ill fit betw with BC e conne s to bear	:: Lum DOL= DL=1.15 Plate Exp.; Ce=0.1 asidered for t er of min rool bad of 20.0 p re loads. water pondin. 0 psf bottom other live loa e load of 20.1 a rectangle veen the bott DL = 10.0ps ctors ing walls due	1.15 e 9; his f live sf on g. ds. Opsf om f.						
TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=10 II; Exp B; and C-C I to 7-1-1, 1 14-4-4 to vertical le MWFRS	(II) - Wialmit Com Tension 1-2=0/37, 2-3=-249/ 4-5=-31/1, 5-6=-778, 8-9=-251/668, 6-8=- 4-6=-735/220, 3-9=- 3-8=-283/258 ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Bt Enclosed; MWFRS (er Exterior(2E) -0-10-8 to : Exterior(2E) -0	125, 3-4=-800/100, /145, 2-9=-309/141 109/391 733/0, 4-8=-113/705, been considered for (3-second gust) CDL=6.0psf; h=25ft; ivelope) exterior zone 2-1-8, Interior (1) 2-1 I-4-4, Exterior(2E) Ieft exposed ; end mbers and forces & mber DOL=1.60 plat	10 11 12 Cat. e LC -8 1) e	 OFELFT at JI(and does not or the orienta bottom chorc Hanger(s) or provided suff lb down and design/selec responsibility In the LOAD of the truss a DAD CASE(S) Dead + Snc Increase=1 Uniform Loc Vert: 1-2: Concentrate 	s) 6 and 9. This cit rlin representation ation of the purlin a coher connection ficient to support c 70 lb up at 28356 tion of such connec of others. CASE(S) section, are noted as front (Standard bw (balanced): Lur ads (lb/ft) =-60, 2-4=-60, 4-5 ed Loads (lb)	i does no along the device(s oncentra 8622 on ection de loads al (F) or ba mber Inc =-60, 6-1	t depict the set top and/or) shall be ated load(s) 4 top chord. ∃ vice(s) is the cplied to the ck (B). rease=1.15, 9=-20	size 145 The face Plate		Continue	A A A A A A A A A A A A A A A A A A A	SEA 4584	A HNS	

Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-1-1, Exterior(2R) 7-1-1 to 14-4-4, Exterior(2E) 14-4-4 to 17-4-4 zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- of the truss are noted as front (F) or back (B). LOAD CASE(S) Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate 1) Increase=1.15



.10

mmm March 25,2025

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



Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	J1T	Piggyback Base	2	1	Job Reference (optional)

11-4-0

4-5-4

6-10-12

4-7-0

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:04 ID:Nc3tSbUTdtzhFoU2aKqC93y92D7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

17-6-0

6-2-0

17-11-8

2-3-12 -0-10-8 0-10-8 0-5-8 , 2-3-12 3x6= 5x6= 5 17 6 11-0-0 1-11-2 M 9¹² 3x5 🖌 4 16 15 11-0-0 9-0-14 7-9-6 2x4 ı 9-0-14 3 3x5 2 2-6-0 -9-6ģ 18 10 20 19 13 8 12 X 3x5= Ø 7 2x4 II 3x5= 2x4 II 5x8= 5x8= 5x8= 2-5-8 2-5-8 17-11-8 11-2-4 15-6-0 ⊢ 8-8-12 2-5-8 4-3-12

			2-5-0	0-0-12		-	-0-12	2-0	5-0				
12,0-1-1	2], [7:0-1-12,0-2-12], [9:0-5-8,0	-2-8], [11:0-2-	-12,0-3-0]									
(psf) 20.0 20.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES		CSI TC BC WB	0.86 0.82 0.47	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.25 -0.41 0.03	(loc) 10-11 10-11 7	l/defl >839 >502 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190	
0.0*	Code	IRC2021	1/TPI2014	Matrix-MSH							Woight: 170	h ET - 20%	
*Excep *Excep 2400F 2 2400F 2 2400F 2 2400F 2 2400F 2 2400F 2 2400F 2 240F 240F 2005 2 240F 2005 2 25 25 25 25 25 25 25 25 25 25 25 25 25	L bt* 12-3,9-8:2x4 SP No. bt* 9-5:2x4 SP No.2, .0E athing directly applied cept end verticals, and l-0 max.): 5-6. applied or 10-0-0 oc 2-13. 6-7, 5-9 13=0-5-8 _C 14), 13=-10 (LC 14) _C 43), 13=943 (LC 44 hpression/Maximum 127, 3-4=-1016/252, 59/34, 6-7=-1405/255, 2=0/40, 3-11=-252/157, 10=-111/456, 8-9=-16/1 0=-426/248, =-732/191, 7-9=-16/41, 3=-291/221, 2-11=-81/7 been considered for	2) .3 or 3) 4) 5) () 6) 7) 8) 19, 9) 774 10 11	Wind: ASCE Vasd=103m II; Exp 8; Er and C-C Exi (2E) 14-2-8 vertical left e MWFRS for grip DOL=1. TCLL: ASCI Plate DOL= DOL=1.15); Cs=1.00; Ct Unbalanced design. This truss h: load of 12.0 overhangs r Provide ade This truss h: chord live lo * This truss h: chord and a One H2.5A recommend UPLIFT at jt and does nc) Graphical pu or the orient bottom chor) Hanger(s) o provided sul lb down and lb up at 283 of such conn others.	E 7-16; Vult=130mp ph; TCDL=6.0psf; hclosed; MWFRS (i terior(2E) -0-10-8 to 9-12, Exterior(2E) 0 to 17-2-8 zone; cal exposed;C-C for mi reactions shown; L 60 E 7-16; Pr=20.0 psf 1.15); Pf=20.0 psf 1.15); Pf=20.0 psf 1.15); Pf=20.0 psf 1.15); Pf=20.0 psf 1.15); Pf=20.0 psf 1.15); Pf=20.0 psf 1.15); or nough Cat =1.10 as been designed f psf or 1.00 times fi non-concurrent with quate drainage to p as been designed f and nonconcurrent with quate drainage to p as been designed f and nonconcurrent to has been designed m chord in all area by 2-00-00 wide wi ny other members, Simpson Strong-Ti ed to connect truss (s) 7 and 13. This 0 to consider lateral four in representation ration of the purlin a d. r other connection fficient to support c 169 lb up at 17-2-8 S568622 on top cho nection device(s) is	oh (3-sec BCDL=6 envelope o 2-2-11 5-9-12 tc Lumbers : Lumber I f (roof LL (Lum DC B; Fully been cor or great lat roof ld order lin prevent v or a 10.0 with any I for a liv s where I fit betw with BC e connect a to bear connects a to bear co	L cond gust) 5.0psf; h=25ft 9) exterior zon 1, Interior (1) 0 14-2-8, Exte eft exposed; and forces & DOL=1.60 pla .: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 nsidered for th er of min roof poad of 20.0 pr we loads. water ponding 0 psf bottom other live load a rectangle ween the botth DL = 10.0psf ctors ing walls due on is for upliff bot depict the s e top and/or s) shall be a design/selec ponsibility of	; Cat. ne erior end ate 1.15 9; his f live sf on g. dds. 0psf om f. t only size 223 nd 70 ction	12) In the of the second secon	he LOAI he truss CASE(S ead + Sr crease= inform Lo Vert: 1-: 9-11=-2 oncentra Vert: 6=	D CAS are nc) Sta tow (b) 22=-60, 0, 7-8- tted Lo 436 (veight: 1791 E(S) section, lc ted as front (F) ndard alanced): Lumb b/ft) 2-5=-60, 5-6=- -20 rads (Ib) F) F) SE SE 458	AROUNT AROUNTA A	o the face
	12,0-1-1 (psf) 20.0 20.0 10.0 0.0* 10.0 *Excep: *Excep	12,0-1-12], [7:0-1-12,0-2-12], [1 (psf) Spacing 20.0 Plate Grip DOL 20.0 Lumber DOL 10.0 Rep Stress Incr 0.0* Code 10.0 Code *Except* 12-3,9-8:2x4 SP No.2, 2400F 2.0E Stress Incr cod sheathing directly applied lins, except end verticals, and lins, except end verticals, and ins, except end verticals, and ins, 6-0-0 max.): 5-6. directly applied or 10-0-0 oc coept: cing: 12-13. dpt -5-8, 13=0-5-8 3=304 (LC 14) =-244 (LC 14), 13=-10 (LC 14) =-244 (LC 14), 13=-40 (LC 14) =-242 (LC 43), 13=943 (LC 44) un Compression/Maximum 3=-902/127, 3-4=-1016/252, , 5-6=-159/34, 6-7=-1405/255, 148 0, 11-12=0/40, 3-11=-252/157 705, 9-10=-111/456, 8-9=-16/2 27, 4-10=-426/248, 13, 5-9=-732/191, 7-9=-16/41, 6, 11-13=-291/221, 2-11=-81/2 ds have been considered for	$12,0-1-12]$, $[7:0-1-12,0-2-12]$, $[9:0-5-8,0]$ 20.0 Plate Grip DOL 1.15 20.0 Lumber DOL 1.15 20.0 Lumber DOL 1.15 20.0 Lumber DOL 1.15 20.0 Rep Stress Incr YES 0.0^* Code IRC202: 10.0 2) * * Except* $12-3,9-8:2x4$ SP No.3 * Except* $9-5:2x4$ SP No.2, 2400F 2.0E 20 bod sheathing directly applied or lins, except end verticals, and lins (6-0-0 max.): 5-6. 3) directly applied or 10-0-0 oc :cept: 3) cing: $12-13$ 4) $40+6-7, 5-9$ 4) 5) $=-544$ (LC 14) 5) $=-244$ (LC 14), 13=-10 (LC 14) $=1273$ (LC 43), 13=943 (LC 44) 6) 11 $20-79/2127, 3-4=-1016/252, 148$ 70 $3=-902/127, 3-4=-1016/252, 157, 705, 9-10=-111/456, 8-9=-16/19, 9) 27, 4-10=-426/248, 13, 5-9=-732/191, 7-9=-16/41, 6, 11-13=-291/221, 2-11=-81/774 10 ds have been considered for 11 $	$12,0-1-12], [7:0-1-12,0-2-12], [9:0-5-8,0-2-8], [11:0-2-10,0(psf)Spacing2-0-020.0Plate Grip DOL1.1520.0Plate Grip DOL1.1520.0Lumber DOL1.1520.0Rep Stress IncrYES0.0^*CodeIRC2021/TPI201410.0CodeIRC2021/TPI20140.0^*CodeIRC2021/TPI201410.02)Wind: ASCE0.0^*CodeIRC2021/TPI201410.02)Wind: ASCE0.0^*CodeIRC2021/TPI201410.02)Wind: ASCE0.0^*CodeIRC2021/TPI201410.02)Wind: ASCE0.0^*Sode sheathing directly applied orII; Exp B; Erand C-C Ex2-2-11 to 6-2400F 2.0ECodeWWFRS forgrip DOL=13)TCLL: ASCEbod sheathing directly applied orTCLL: ASCElins (6-0-0 max.): 5-6.Hate DOLdift 6-7, 5-9Code=0-5-8, 13=0-5-8S=304 (LC 14)=0-25-8, 13=0-5-8S=304 (LC 14)=1273 (LC 43), 13=943 (LC 44)G)1273 (LC 43), 13=943 (LC 44)G)3=-902/127, 3-4=-1016/252, 5, 5-6=-159/34, 6-7=-1405/255, 14-281480, 11-12=0/40, 3-11=-252/157, 705, 9-10=-111/456, 8-9=-16/19, 900, 11-12=-0/40, 3-11=-252/157, 70.5, 9-10=-111/456, 8-9=-16/19, 900, 11-13=-291/221, 2-11=-81/774ds have been considered for111112$	12,0-1-12], $[7:0-1-12,0-2-12]$, $[9:0-5-8,0-2-8]$, $[11:0-2-12,0-3-0]$ $[2,0,0]$ Spacing Plate Grip DOL Lumber DOL Lumber DOL 1.15CSI TC BC WB Matrix-MSH $10,0$ CodeIRC2021/TPI2014CSI TC BC WB Matrix-MSH $10,0$ CodeIRC2021/TPI2014CSI TC BC WB Matrix-MSH $10,0$ CodeIRC2021/TPI2014CSI TC BC WB Matrix-MSH $10,0$ CodeIRC2021/TPI2014CSI TC BC WB Matrix-MSH $10,0$ CodeIRC2021/TPI2014Matrix-MSH $10,0$ CodeIRC2021/TPI2014Matrix-MSH $10,0$ CodeIRC2021/TPI2014Matrix-MSH $10,0$ CodeIRC2021/TPI2014Matrix-MSH $10,0$ CodeIRC2021/TPI2014Matrix-MSH $20,0$ CodeIRC2021/TPI2014Matrix-MSH $20,0$ CodeIRC2021/TPI2014Matrix-MSH 200 Simple for 12.0Simple for 10.0Matrix-MSH 200 Simple for 12.0Simple for 10.0MWFRS for reactions shown; L $212,13,$ Optical field exposed; C-C for mMWFRS for reactions shown; L $212,12,13,$ Optical field exposed; C-C for mMWFRS for reactions shown; L $212,13,$ Optical field exposed; C-C for mMWFRS for reactions shown; L $212,13,$ Optical field exposed; C-C for mMWFRS for reactions shown; L $212,13,$ Optical field exposed; C-C for mMWFRS for reactions shown; L $32-902/127,3-4=-1016/252,$ This truss has been designed fo	2.00 0.012 $[2,0-1-12], [7:0-1-12,0-2-12], [9:0-5-8,0-2-8], [11:0-2-12,0-3-0][pst][pst][2,0-1-12], [7:0-1-12,0-2-12], [9:0-5-8,0-2-8], [11:0-2-12,0-3-0][2,0-1-12], [Piete Grip DOL[1,15][2,0-1-12], [Piete Grip DOL[1,15][1,0-1][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,0-1,0][2,$	2.000 2.001 2.001 2.001 (psf) Spacing $2.0-0$ CSI TC 0.861 20.00 Plate Grip DOL 1.15 TC 0.861 20.01 Lumber DOL 1.15 TC 0.861 20.01 Rep Stress IncrYES WB 0.471 10.01 Rep Stress IncrYES 0.0^{+} CodeIRC2021/TPI2014Matrix-MSH 10.01 CodeIRC2021/TPI2014Matrix-MSH 2005 Streagt and the symptotic or increas an of cores & and C-C Exterior(2E) -0-10-8 to 2-2-11, Interior (1) $2-2.01$ Interior (2E) -0-10-8 to 2-2-2-11, Interior (1) $2-2.01$	LocLocLocLoc $[2,0^{-1}-12], [7:0^{-1}-12,0-2-12], [9:0-5-8,0-2-8], [11:0-2-12,0-3-0][psh]Plate Grip DOL1.15D0.0Plate Grip DOL1.15[Rep Stress InorYESCodeIRC2021/TPI2014[10,0]Code[10,0]Code[10,0]Code[10,0]Code[10,0]Code[11,0]Code$	12.0112.0310.0110.0111.0510.0111.0510.0110.0110.01Plate Grip DOL1.151.1510.01<	LocLocLocLoc $[2,0-1-12], [7:0-1-12,0-2-12], [9:0-5-8,0-2-8], [11:0-2-12,0-3-0][2,0-1]$	2.0-1-12], [7.0-1-12,0-2-12], [9:0-5-8,0-2-8], [11:0-2-12,0-3-0](pst)Spacing Call2-0-0 LinfsCSIDEFL TCin 0.0-8,0-2(loc) </td <td>12.0-1-12]. [7:0-1-12.0-2-12]. [9:0-5-8,0-2-8]. [11:0-2-12.0-3-0] [rst] Spacing 2-0-0 [rst] Spacing 2-0-10</td> <td>2.001 2.001 2.001 2.001 2.001 (ps) Spacing 2.0-0 CSI TC 0.082 Vert(LL) -0.25 10-11 >.839 240 (ps) Date Grp DOL 1.15 BC 0.022 Vert(LL) -0.25 10-11 >.839 240 (D0 Rep Stress Incr TRC 2021/TPI2014 Matrix-MSH Vert(2CT) 0.03 7 ra r/a 10.0 Code IRC2021/TPI2014 Matrix-MSH Vert(2CT) 0.03 7 ra r/a 10.0 Rep Stress Incr IRC2021/TPI2014 Matrix-MSH Vert(2CT) 0.03 7 ra r/a 11.0 Code IRC2021/TPI2014 Matrix-MSH Vert(2E) Code Stations Vert(2E) Vert(2E) Code Stations Vert(2E) Vert(2E) Code Stations Vert(2E) Vert(2E) Vert(2E) Code Stations Vert(2E) Vert(2E) Vert(2E) Vert(2E) Vert</td>	12.0-1-12]. [7:0-1-12.0-2-12]. [9:0-5-8,0-2-8]. [11:0-2-12.0-3-0] [rst] Spacing 2-0-0 [rst] Spacing 2-0-10	2.001 2.001 2.001 2.001 2.001 (ps) Spacing 2.0-0 CSI TC 0.082 Vert(LL) -0.25 10-11 >.839 240 (ps) Date Grp DOL 1.15 BC 0.022 Vert(LL) -0.25 10-11 >.839 240 (D0 Rep Stress Incr TRC 2021/TPI2014 Matrix-MSH Vert(2CT) 0.03 7 ra r/a 10.0 Code IRC2021/TPI2014 Matrix-MSH Vert(2CT) 0.03 7 ra r/a 10.0 Rep Stress Incr IRC2021/TPI2014 Matrix-MSH Vert(2CT) 0.03 7 ra r/a 11.0 Code IRC2021/TPI2014 Matrix-MSH Vert(2E) Code Stations Vert(2E) Vert(2E) Code Stations Vert(2E) Vert(2E) Code Stations Vert(2E) Vert(2E) Vert(2E) Code Stations Vert(2E) Vert(2E) Vert(2E) Vert(2E) Vert

March 25,2025

Page: 1

818 Soundside Road Edenton, NC 27932

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BC2E Building Component Schut beformation, available from the Structure Building Component Advanciation (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	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	J02	Jack-Closed	3	1	I72215060 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:04 ID:5qqpIGIqPiFCjIDmL6TpVlypb7j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:26.2

2-0-0	l

Loading (psf) TCLL (roof) 20.0 Snow (Pf) 20.0 TCDL 10.0 BCLL 0.0* BCDL 10.0	Spacing2-0Plate Grip DOL1.11Lumber DOL1.11Rep Stress IncrYE1CodeIRC	-0 5 5 5 S 2021/TPI2014	CSI TC BC WB Matrix-MP	0.22 0.06 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 16 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x6 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING TOP CHORD Structural wood sheat 2-0-0 oc purlins, exc BOT CHORD Rigid ceiling directly bracing. REACTIONS (size) 2=0-5-8, 4 Max Horiz 2=57 (LC Max Uplift 2=-80 (LC Max Grav 2=417 (LC	athing directly applied or sept end verticals. applied or 10-0-0 oc = Mechanical 13) 14), 4=-38 (LC 20) 5 21), 4=34 (LC 10)	 6) * This truss h on the botton 3-06-00 tall b chord and an 7) Bearings are 8) Refer to gird 9) One H2.5A S recommende UPLIFT at jt(and does not LOAD CASE(S) 	as been designed in n chord in all areas y 2-00-00 wide will y other members. assumed to be: Jo ar(s) for truss to tru- truss on Strong-Tie d to connect truss i s) 4 and 2. This con consider lateral for Standard	for a liv where fit betv int 2 Us uss con conne to bear nnectio rces.	e load of 20.0 a rectangle veen the botto ser Defined . nections. ctors ng walls due t n is for uplift o	psf m to nly					
FORCES (lb) - Maximum Comp Tension TOP CHORD 1-2=0/89, 2-3=-166/1 BOT CHORD 2-4=-161/133	pression/Maximum 185, 3-4=-62/32										
 Wind: ASCE 7-16; Vult=130mph Vasd=103mph; TCDL=6.0psf; BC II; Exp B; Enclosed; MWFRS (enr and C-C Exterior(2E) zone; cantil exposed ; end vertical left and rig members and forces & MWFRS f Lumber DOL=1.60 plate grip DOI TCLL: ASCE 7-16; Pr=20.0 psf (r Plate DOL=1.15); Is=1.0; Rough Cat B; Cs=1.00; Ct=1.10 Unbalanced snow loads have be design. This truss has been designed for load of 12.0 psf or 1.00 times flat overhangs non-concurrent with o This truss has been designed for chord live load nonconcurrent with 	(3-second gust) CDL=6.0psf; h=25ft; Cat. velope) exterior zone lever left and right ht exposed;C-C for for reactions shown; L=1.60 voof LL: Lum DOL=1.15 Jm DOL=1.15 Plate ; Fully Exp.; Ce=0.9; en considered for this greater of min roof live roof load of 20.0 psf on ther live loads. a 10.0 psf bottom h any other live loads.							Comme	A A A A A A A A A A A A A A A A A A A	SEA 4584	L EER. OTIM

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March 25,2025

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	J02A	Jack-Closed	3	1	I72215061 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:04 ID:VtS5FgNOjBLcVXLp15PXIDypb8C-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





2-0-0

Scale = 1:25.7

Loading		(psf)	Spacing	2-0-0		CSI	0.00	DEFL	in	(loc)	l/defl	L/d		GRIP
TULL (root)		20.0	Plate Grip DOL	1.15			0.08	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Show (Pt)		20.0		1.15		BC	0.03	Vert(CT)	0.00	4-7	>999	180		
TCDL		10.0	Rep Stress Incr	IDC0004		WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BOLL		10.0	Code	IRC2021	/1912014	Matrix-IVIP								FT 200/
BCDL		10.0		-									weight: 9 lb	FT = 20%
LUMBER				6)	* This truss h	nas been designed	l for a liv	e load of 20.0)psf					
TOP CHORD	2x4 SP No	.2			on the bottor	n chord in all areas	s where	a rectangle						
BOT CHORD	2x4 SP No	.2			3-06-00 tall b	y 2-00-00 wide wi	II fit betv	veen the botto	om					
WEBS	2x4 SP No.3 chord and any other members. 7) Bearings are assumed to be: Joint 2 User Defined													
BRACING				()	Bearings are	assumed to be: Jo	oint 2 Us	ser Defined .						
TOP CHORD	HORD Structural wood sheathing directly applied or 8) Refer to girder(s) for truss to truss connections. 00RD Structural wood sheathing directly applied or 8) One H2 56 Simpson Structure connections.													
	2-0-0 oc purlins, except end verticals. 9) One H2.5A simpson Strong-Tie connectors													
BOT CHORD	Rigid ceilin bracing.	g directly	applied or 10-0-0 oc		UPLIFT at jt(s) 4. This connecti	ion is for	uplift only an	nd					
REACTIONS	(size)	2=0-5-8, 4	l= Mechanical	10	does not con	sider lateral forces	S.		440					
	Max Horiz	2=48 (LC	13)	10	Oppost trus	on Strong-Tie con	nectors i due te Ll	PLIET of it(c)	2 10					
	Max Uplift 2=-26 (LC 14), 4=-14 (LC 14)													
	Max Grav 2=192 (LC 21), 4=81 (LC 21)													
FORCES	(lb) - Maxir Tension	num Com	pression/Maximum	LO	AD CASE(S)	Standard								
TOP CHORD	1-2=0/34.2	2-3=-62/6	5. 3-4=-65/37											
BOT CHORD	2-4=-36/50													
NOTES														
1) Wind AS	CE 7-16 [.] Vult	=130mph	(3-second gust)											
Vasd=103	Smph; TCDL=	6.0psf; B(CDL=6.0psf; h=25ft;	Cat.										
II; Exp B;	Enclosed; MV	VFRS (en	velope) exterior zon	е										
and C-C E	Exterior(2E) z	one; canti	lever left and right											111.
exposed ;	end vertical I	eft and rig	ht exposed;C-C for										White CA	Delle
members	and forces &	MWFRS	for reactions shown;									1	athor	10/11
Lumber D	OL=1.60 plat	e grip DO	L=1.60	45								51	Oriers	All Alle
2) TOLL: AS	-1 15) Pf=2	20.0 pst (I	INTERPOL	.15								XR	riotic	enno
	_=1.15), PI=2 5): ls=1 0: Roi	uah Cat B	: Fully Exp : Co-0 9										:0 7	K
Cs=1 00	Ct=1 10	ugii Cat D	, i ully Exp., Ce=0.3,											
3) Unbalance	ed snow load	s have be	en considered for thi	is								:	SEA	
design.											=		458	44 E
4) This truss	has been de	signed for	greater of min roof I	ive									-50-	TT 1 S -
load of 12	.0 psf or 1.00	times flat	roof load of 20.0 ps	fon								1 3		1. 1. 1. 1.
overhang	s non-concurr	ent with c	ther live loads.									-7	1. ENIO	-cRi AS
5) This truss	has been de	signed for	a 10.0 psf bottom									11	GIN	EF. GUN
chord live	load noncone	current wi	in any other live load	IS.								1	REIAL	OHN
													TIT V J	Ulin
														1111.

March 25,2025

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	K1	Roof Special	5	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:04 ID:jzudvf5?HySB7qACgSkvP7y94VX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1







Scale = 1:50.9			
Plate Offecte (X	V١٠	[3.0-4-4 Edge]	[1.0

Plate Offsets ((X, Y): [3:0-4-4,Edge],	[4:0-2-8,0-0-14]												
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	I/TPI2014	CSI TC BC WB Matrix-MP	0.56 0.38 0.49	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.05 -0.08 0.06	(loc) 5 5-6 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 48 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS DTHERS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Wind: ASG Vasd=103 II; Exp B; and C-C E to 4-9-7, E and right 6 C for men shown; Lu 2) TCLL: AS Plate DOL DOL=1.15 Cs=1.00; 3) Unbalance design.	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x6 SP No.2 Structural wood shea 4-9-8 oc purlins, exx Rigid ceiling directly bracing. (size) 4=0-5-8, 6 Max Horiz 6=-200 (L Max Uplift 4=-30 (LC Max Grav 4=371 (LC (lb) - Maximum Com Tension 1-6=-208/158, 1-2=- 3-4=-318/46 5-6=-49/947, 4-5=-5i 2-6=-966/223, 2-5=0 CE 7-16; Vult=130mph Enclosed; MWFRS (en Exterior(2E) 4-9-7 to 7- exposed; end vertical 1 bers and forces & MW imber DOL=1.60 plate CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L =1.10) ed snow loads have be	athing directly applie cept end verticals. applied or 6-0-0 oc 5=0-5-8 C 10) (15), 6=-70 (LC 15) (21), 6=445 (LC 21) pression/Maximum 171/96, 2-3=-1308/9 9/28 (3-second gust) CDL=6.0psf; h=25ft; ivelope) exterior zonu- L-1-12, Interior (1) 3-1 10-4 zone; cantilever left and right exposed /FRS for reactions grip DDL=1.60 roof LL: Lum DDL=1 um DDL=1.15 Plate ; Fully Exp.; Ce=0.9; een considered for thi	4) 5) d or 6) 7) LC 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, 1, 1, 2, 1, 2, 1, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 2, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Bearing at jo using ANSI/T designer sho One H2.5A S recommende UPLIFT at jt(and does not DAD CASE(S)	s been designed fo ad nonconcurrent w has been designed n chord in all areas y 2-00-00 wide wil y other members. init(s) 4 considers p TPI 1 angle to grain uld verify capacity Simpson Strong-Tie d to connect truss s) 6 and 4. This co t consider lateral fo Standard	or a 10.0 vith any for a liv s where I fit betw barallel t a formula of beari e conne- to bear nnectio rces.	D psf bottom other live loa e load of 20.0 a rectangle veen the botto o grain value a. Building ng surface. ctors ing walls due n is for uplift of some state of the state	ids. Dpsf om to only				SEA 4584 March	RO 9 4 4 5 5,2025	- Summing



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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	L01	Common Girder	1	2	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:04 ID:22T36Dt8B0CinE4y4jVg5VypZpe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:46.6

Plate Offsets (X, Y): [6:0-8-0,0-8-0], [7:0-8-0,0-8-0]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDI	(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 NO IRC2021	/TPI2014	CSI TC BC WB Matrix-MSH	0.27 0.29 0.61	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.08 0.01	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190	
LUMBER TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD REACTIONS (1 M FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) 2-ply truss to (0.131"x3") Top chords staggered a Bottom chords staggered a Bottom chords staggered a Bottom chords staggered a Bottom chords staggered a Bottom chords staggered a Unbalanced this design.	2x6 SP No.2 2x10 SP 2400F 2.0E 2x4 SP No.2 *Excep Structural wood shee 5-7-1 oc purlins. Rigid ceiling directly bracing. size) 1=0-5-8, 5 4ax Horiz 1=-124 (L) Aax Grav 1=8010 (L (lb) - Maximum Com Tension 1-2=-7515/0, 2-3=-74 4-5=-7409/0 1-7=0/5701, 6-7=0/4 3-6=0/4630, 4-6=-40 2-7=-62/232 o be connected toget nails as follows: connected as follows: connected as follows: t 0-9-0 oc. cted as follows: 2x4 - e considered equally ted as front (F) or baz extion. Ply to ply conn distribute only loads I rwise indicated.	t* 6-4,7-2:2x4 SP No athing directly applie applied or 10-0-0 oc 5=0-5-8 C 36) .C 5), $5=6474$ (LC 6) pression/Maximum 402/0, $3-4=-7287/0$, 092, $5-6=0/5606$ //245, $3-7=0/4892$, ther with 10d s: 2x6 - 2 rows pows: 2x10 - 4 rows 1 row at 0-9-0 oc. applied to all plies, ck (B) face in the LO. nections have been noted as (F) or (B), been considered for	4) .3 d or 5) 6) 7) 8) 9) 10) LO 1) AD	Wind: ASCE Vasd=103m; II; Exp B; En. cantilever lef right exposed TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha chord live loa * This truss ha chord live loa * This truss ha chord of live loa * This truss ha chord and ar Use Simpsor 26-10dx1 1/2 spaced at 2-1 end to 10-8-0 chord. Fill all nail ho AD CASE(S) Dead + Snc Increase=1. Uniform Loa Vert: 1-33 Concentrate Vert: 7=- 17=-1905	7-16; Vult=130mph 7-16; Vult=130mph tr TCDL=6.0psf; E closed; MWFRS (e and right exposed t; Lumber DOL=1.6 7-16; Pr=20.0 psf (I sel 0; Rough Cat I 1.10 snow loads have b s been designed for d nonconcurrent w as been designed for the nord in all areas y 2-00-00 wide will y other members. Strong-Tie HTU28 Truss, Single Ply (0-0 oc max. starting 0 to connect truss(e les where hanger i Standard w (balanced): Lum 15 ads (lb/ft) =-60, 3-5=-60, 8-11 ad Loads (lb) 1909 (B), 18=-1909 (B)	n (3-sec SCDL=6 nvelope I; end v 50 plate Lum DC B; Fully een cor or a 10.0 vith any for a liv where I fit betw 8 (20-16 Girder) g at 0-8 es) to ba s in cor ober Inc =-20 2 (B), 16 , 19=-19	cond gust) .0psf; h=25f; a) exterior zoo vertical left ar grip DOL=1 .: Lum DOL= DL=1.15 Plate Exp.; Ce=0. Isidered for the D psf bottom other live load e load of 20. a rectangle veen the bott Sd Girder, or equivalen -0 from the le ack face of b Itact with lum rease=1.15, S=-1909 (B), 909 (B)	t; Cat. ine; nd .60 e1.15 e 9; ihis ads. 0psf tom t eft ottom nber. Plate		Continue.		VYEIGHT 220 ID SEA 4584	RO/11/1	

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TRENCO A MITEK ATTILIATE

818 Soundside Road Edenton, NC 27932

March 25,2025

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	L02	Common Supported Gable	1	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:04 ID:VKOF62y3jk3RPIIH2yoZM2ypb8k-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:41.8

Plate Offsets (X, Y): [6:0-2-8,Edge], [12:0-5-0,0-1-8], [19:0-5-0,0-1-8]

															_
Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)		20.0	Plate Grip DOL	1.15		тс	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.08	Vert(CT)	n/a	-	n/a	999			
TCDL		10.0	Rep Stress Incr	YES		WB	0.07	Horz(CT)	0.00	12	n/a	n/a			
BCLL		0.0*	Code	IRC2021	/TPI2014	Matrix-MR									
BCDL		10.0											Weight: 82 lb	FT = 20%	
				2)	Wind: ASCE	7-16: Vult=130mpt	1 (3-sec	ond aust)		13) Pro	vide mer	chanic	al connection (by	others) of truss to	
TOP CHORD	2v4 SP N	0.2		-/	Vasd=103mm	h^{-} TCDI =6 0psf ⁻ E	CDI = 6	Onsf: h=25ft	Cat	bea	ring plat	e capa	able of withstandi	ng 41 lb uplift at joint	
BOT CHORD	2x4 SP N	0.2 n 2			II: Exp B: End	closed: MWFRS (e	nvelope	e) exterior zor	ne	19.	26 lb up	lift at i	oint 12. 70 lb upli	it at joint 17. 125 lb	
WEBS	2x4 SP N	0.3			and C-C Corr	ner(3E) -0-10-8 to 2	2-4-0, E	xterior(2N) 2	-4-0	upli	ft at joint	18, 7	2 lb uplift at joint	14 and 122 lb uplift at	
OTHERS	2x4 SP N	0.3			to 3-4-0, Cori	ner(3R) 3-4-0 to 9-	4-0, Ex	erior(2N) 9-4	-0 to	join	t 13.				
BRACING					10-4-0, Corne	er(3E) 10-4-0 to 13	-6-8 zo	ne; cantilever	r left	LOAD	CASE(S)	Sta	ndard		
TOP CHORD	Structural	wood she	athing directly applie	d or	and right exp	osed ; end vertical	left and	I right expose	ed;C-		. ,				
	6-0-0 oc r	ourlins, exc	cept end verticals.		C for membe	rs and forces & MV	VFRS f	or reactions							
BOT CHORD	Rigid ceili	ng directly	applied or 6-0-0 oc		shown; Lumb	er DOL=1.60 plate	grip D	OL=1.60							
REACTIONS	(size)	12=12-8-0) 13=12-8-0 14=12-	.8-0 3)	Truss design	ed for wind loads ir	n the pla	ane of the tru	SS						
	(0120)	15=12-8-0), 16=12-8-0, 17=12-), 16=12-8-0, 17=12-	·8-0.	only. For stu	ds exposed to wind	d (norm	al to the face),						
		18=12-8-0), 19=12-8-0	,	see Standard	I Industry Gable Er	nd Deta	ils as applical	ble,						
	Max Horiz	19=-164 (LC 12)	4)	or consult qu	alified building des	igner as		-11.						
	Max Uplift	12=-26 (L	C 11), 13=-122 (LC ²	15), ⁴⁾	Plate DOI -1	15): Pf=20.0 psf (I		.: LUM DOL=	1.15						
		14=-72 (L	C 15), 17=-70 (LC 14	4),	PIALE DOL=1	s=1.0: Rough Cat I		$E_{\text{VD}} \cdot C_{\text{O}} = 0.0$; 						
		18=-125 (LC 14), 19=-41 (LC 1	10)	$C_{s=1} 00^{\circ} C_{t=1}$	1 10, Rough Cat i	D, T uny	Lxp., 06-0.3	<i>,</i>						
	Max Grav	12=158 (L	.C 25), 13=217 (LC 2	22), 5)	Unbalanced	snow loads have h	een cor	sidered for th	nis						
		14=221 (L	.C 22), 15=137 (LC 2	22), 07	design.										
		16=137 (L	.C 21), 17=221 (LC 2	21), 6)	This truss ha	s been designed fo	or great	er of min roof	live						
		18=218 (L	.C 25), 19=170 (LC 2	26) ´	load of 12.0 p	osf or 1.00 times fla	at roof le	ad of 20.0 ps	sf on					11.	
FORCES	(lb) - Max	imum Com	pression/Maximum		overhangs no	on-concurrent with	other liv	/e loads.					White CA	DUL	
	Tension		0/00 0 0 107/01	7)	All plates are	2x4 MT20 unless	otherwi	se indicated.			-	1	THUA	TOM	
TOP CHORD	2-19=-140)/110, 1-2=	0/39, 2-3=-107/91,	8)	Gable require	es continuous botto	m chor	d bearing.				1	ONESS	A. All	
	3-4=-79/1	38, 4-5=-1	14/240, 5-6=-84/165,	, 9)	Truss to be fu	ully sheathed from	one fac	e or securely				5 2	orter	Minano	
	0-7=-04/1	00,7-0=-1 74 10 11_	0/20 10 12- 125/10	,)5	braced again	st lateral movemer	nt (i.e. d	iagonal web)				\mathcal{N}	NO.	1. 5	
	18-107	1/1/2 17-1	8_71/1/2	^{/5} 10)	Gable studs	spaced at 2-0-0 oc					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
	16-17=-74	1/142, 17-1	6=-74/142, 6=-74/142	11)	This truss ha	s been designed fo	or a 10.0) psf bottom			=		SEA	L 1 1	
	14-15=-74	4/142 13-1	4=-74/142	10)	chord live loa	d nonconcurrent w	ith any	other live loa	ds.		-	:	150/	G : =	
	12-13=-74	1/142	,,	12)	n inis truss n	as been designed	for a liv	e load of 20.0	Jpst		=		4064	4 ; :	
WEBS	5-16=-126	6/21, 7-15=	-125/21, 4-17=-188/	144,	3-06-00 tall b		fit boty	a reclarigie	h					1 - 1 - S	
	3-18=-184	4/176, 8-14	=-188/143,		chord and an	y other members	in bett		5111			- 7	·	a:25	
	9-13=-180	0/182				,						11	VGIN	EFICON	
NOTES												11	A	INS IN	
1) Unbalance	ed roof live l	oads have	been considered for									100	11,5W J	01111	
this desigr	າ.												in min	unin.	

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)

818 Soundside Road Edenton, NC 27932

March 25,2025

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	M01	Common Girder	1	2	I72215065

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:05 ID:bqiN8p7pNAdJ5qliznrIdjypZmk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Plate Offsets (X, Y): [1:Edge,0-3-11]	, [3:0-2-4,0-3-0], [7:0	-3-8,0-3-	-0], [13:Edge,	0-3-11], [16:0-5-8,	0-1-8], [17	:0-8-0,0-7-12], [24:0-	8-0,0-7-4	1]							
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	1-11-4 1.15 1.15 NO IRC202	21/TPI2014	CSI TC BC WB Matrix-MSH	0.93 0.30 0.68	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.11 0.01	(loc) 15-16 15-16 1	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 567 I	GRIP 244/190 b FT = 20%	6			
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD	2x4 SP No.2 2x10 SP 2400F 2.0E 2x4 SP No.3 *Except 2400F 2.0E 2x4 SP No.3 Structural wood shea	t* 24-3,17-7:2x4 SP athing directly applied	W d or	VEBS	3-24=-459/4979, 3-25=-3374/375, 21-26=-5158/0, 17-27=0/6344, 1 10-28=-1824/0, 3-23=0/549, 6-20 7-18=0/1034, 8- 16-28=0/2417, 1 4-6=0/1666	, 2-24=-25 , 21-25=-3 7-26=-468 7-28=-259 4-25=-151 6=-1396/0 27=0/228, 1-15=0/85	6/177, 728/410, 1/0, 7-27=0/6 10/0, 4/0, 22-25=-1 , 20-26=-883/ 9-28=0/1548, 8, 12-14=-19:	210, 118/0, 0, 2/89,	 7) Unit des 8) Gail 9) This cho 10) * Th 3-0 cho 	balanced sign. ble studs s truss h ord live lo nis truss the botto 6-00 tall ord and a	d snow s space as bee bad nor has be om cho by 2-0	loads have be ad at 2-0-0 oc. en designed for nconcurrent wit een designed for rd in all areas v 0-00 wide will f	a 10.0 psf bc h any other li or a live load where a recta fit between th	d for this ottom ve loads. of 20.0psf ngle e bottom			
	4-2-15 oc purlins. Rigid ceiling directly bracing, Except: 6-0-0 oc bracing: 23- 1 Brace at It(c): 25	applied or 10-0-0 oc -24,22-23,21-22.	N 1	 4-6=0/1666 NOTES 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chards connected as follows: 2x4 - 1 row at 0-9-0 							11) LGT2 Simpson Strong-Tie connectors recommended connect truss to bearing walls due to UPLIFT at jt(s) This connection is for uplift only and does not conside lateral forces.						
REACTIONS	26 (size) 1=0-5-8, 1 Max Horiz 1=244 (LC Max Uplift 1=-605 (LC Max Grav 1=4270 (L 21=11033	3=0-5-8, 21=0-5-8 ; 9) C 12) C 5), 13=5443 (LC 2 (LC 21)	2), 2	 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 3 rows staggered at 0-5-0 oc. Web connected as follows: 2x4 - 1 row at 0-9-0 oc. All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD 						e Simpso ss, Sing max. sta connect t e Simpso 10dx1 1/ x startin	on Stro le Ply (rting a russ(e on Stro /2 Trus	ong-Tie LUS26 (4-10d Girder, 3-10 'Girder) or equivalent spaced at 2- at 18-10-3 from the left end to 20-1 es) to front face of bottom chord. rong-Tie HTU26 (10-16d Girder, uss) or equivalent spaced at 2-0-0 o 0-6-0 from the left end to 8-6-0 to					
FORCES	(lb) - Maximum Com Tension	pression/Maximum		CASE(S) s	ection. Ply to ply o distribute only loa	connectior ads noted	s have been as (F) or (B),		con	inect trus	ss(es)	to back face of	bottom chord	J.			
TOP CHORD	1-2=-2110/549, 2-4= 4-5=-171/38, 5-6=-16 8-9=-3171/0, 9-10=-4 11-12=-4729/0, 12-1	-2016/2130, 67/47, 6-8=-3017/203 4149/0, 10-11=-4151, 3=-4654/0	35, 3 /0, 4) Unbalance this design) Wind: ASC	d roof live loads h E 7-16; Vult=130r	ave been	considered fo	r		ſ.	A. C.	ORTH C	AROLIA				
BOT CHORD	 1-24=-553/1624, 23-24=-406/136, 22-23=-406/134, 21-22=-406/134, 20-21=0/669, 18-20=0/669, 17-18=0/674, 16-17=0/3517, 15-16=0/3517, 14-15=0/3517, 13-14=0/3517 13-14=0/3517 13-14=0/3517 13-14=0/3517 13-14=0/3517 14-15=0/3517, 14-15=0/3517, 13-14=0/3517 15-16=0/3517, 14-15=0/3517, 13-14=0/3517 15-16=0/3517, 14-15=0/3517, 13-14=0/3517 16-17=0/3517, 14-15=0/3517, 13-14=0/3517 17-18=0/3517 18-10 19-17=0/3517 19-14=0/3517 10-15=0/3517, 14-15=0/3517, 13-14=0/3517 10-17=0/3517 10-17=0/3517 11-15=0/3517 12-14=0/3517 13-14=0/3517 13-14=0/3517 14-15=0/3517, 14-15=0/3517, 13-14=0/3517 13-14=0/3517 14-15=0/3517 14-15=0/3517 14-15=0/3517 15-16=0/3517 15-16=0/3517 16-17=0/3517 17-14-15=0/3517 17-14-15=0/3517 18-16-17=0/3517 19-16-10 19-16-10 19-16-10 19-16-10 19-16-10 19-17 10-17 10-17 10-17 10-17 10-17 11-10 11-10								Continue	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	SE 458	AL 344	Nummer N				

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;



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Continued on page 2

Scale = 1:84.1

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)

Cs=1.00; Ct=1.10

6)

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	M01	Common Girder	1	2	I72215065 Job Reference (optional)

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 13:32:05

ID:bqiN8p7pNAdJ5qliznrIdjypZmk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

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

- 14) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 10-6-0 from the left end to 18-6-0 to connect truss(es) to back face of bottom chord.
- 15) Use Simpson Strong-Tie HGUS28-2 (36-10d Girder, 12-10d Truss) or equivalent at 19-5-0 from the left end to connect truss(es) to back face of bottom chord.
- 16) Use Simpson Strong-Tie HTU26 (20-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-1-8 oc max. starting at 20-4-8 from the left end to 24-6-0 to connect truss(es) to back face of bottom chord.
- 17) Fill all nail holes where hanger is in contact with lumber.
- 18) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 19) LGT2 Hurricane ties must have two studs in line below the truss.

- LOAD CASE(S) Standard Dead + Snow (balanced): Lumber Increase=1.15, Plate 1)
 - Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-5=-58, 5-13=-58, 29-32=-19

- Concentrated Loads (lb)
- Vert: 24=-1415 (B), 17=-2285 (B), 20=4 (F), 18=4
- (F), 16=-61 (F), 15=-61 (F), 14=-61 (F), 31=-1424
- (B), 35=-1415 (B), 36=-1415 (B), 37=-1415 (B), 38=-370 (B), 39=-370 (B), 40=-370 (B), 41=-360 (B),
- 42=-360 (B), 43=4 (F), 44=-1814 (B), 45=-1814 (B),
- 46=-1814 (B)

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	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	PB1	Piggyback	15	1	I72215066 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:05 ID:iEW3YzpCkaFU49jPj8F7u4y94Qj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:33.4	
Plate Offsets (X, Y): [2:0-2-13,0-1-8], [4:0-2-13,0-1-8]	_

	(,,,,,): [2:0 2 10;0 1 0],[1.0 2 10,0 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 IRC2021,	/TPI2014	CSI TC BC WB Matrix-MP	0.47 0.45 0.03	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 2	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 37 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=9-0-0, 4 Max Horiz 2=87 (LC Max Uplift 2=-48 (LC Max Grav 2=358 (LC 6=288 (LC (lb) - Maximum Com Tension 1-2=0/16, 2-3=-266/ 4-5=0/16 2-6=-41/118, 4-6=-2	athing directly applied applied or 10-0-0 oc 4=9-0-0, 6=9-0-0 13) 2 14), 4=-59 (LC 15) 2 21), 4=358 (LC 22), 2 21) apression/Maximum 124, 3-4=-266/124, 9/118	4) 5) d or 6) 7) 8) 9) 7 10) 11)	TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 overhangs n Gable requir Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar N/A	7-16; Pr=20.0 p .15); Pf=20.0 ps is=1.0; Rough Ci =1.10 snow loads have s been designed on-concurrent wi es continuous be spaced at 4-0-0 is been designed at onocnocurren has been designed n chord in all are by 2-00-00 wide v by other member	esf (roof LL f (Lum DC at B; Fully e been cor d for greats flat roof k ith other liv toon chor oc. d for a 10.0 t with any ed for a liv eas where will fit betw 's.	: Lum DOL= IL=1.15 Plate Exp.; Ce=0.9 asidered for the er of min roof bad of 20.0 p: re loads. d bearing. b psf bottom other live loa e load of 20.0 a rectangle reen the bottom	1.15 ; ; live sf on ds. Dpsf om					
 NOTES 1) Unbalance this design 2) Wind: ASG Vasd=103 II; Exp B; and C-C E to 7-1-9, E and right e C for men shown; Lu 3) Truss des only. For see Stand or consult 	ed roof live loads have n. CE 7-16; Vult=130mph mph; TCDL=6.0psf; B Enclosed; MWFRS (er Exterior(2E) 0-3-1 to 3- Exterior(2E) 0-3-1 to 3- Exterior(2E) 7-1-9 to 10 exposed ; end vertical hobers and forces & MW imber DOL=1.60 plate igned for wind loads in studs exposed to wind lard Industry Gable En qualified building desi	been considered for (3-second gust) CDL=6.0psf; h=25ft; (welope) exterior zone 3-1, Exterior(2R) 3-3-)-1-9 zone; cantilever left and right exposed VFRS for reactions grip DOL=1.60 the plane of the trust (normal to the face), d Details as applicabl gner as per ANSI/TPI	12) LO. 2 1 left l;C- s le, 1.	See Standar Detail for Co consult quali AD CASE(S)	d Industry Piggyl nnection to base fied building des Standard	back Truss truss as a igner.	s Connection applicable, or			Continue	the second secon	SEA 4584	L DHNSON OHNSON

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	PB1GR	Piggyback	3	2	I72215067 Job Reference (optional)

4-6-0

4-6-0

0-8-0

0-8-0

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

Scale = 1:33.4

Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

TOP CHORD

BOT CHORD

WEBS

NOTES

2)

TCDL

BCLL

BCDL

Run: 8 73 S. Feb 19 2025 Print: 8 730 S Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 13:32:05 ID:nQ3TCLvnvyfTTDuVPZSo4yy90TY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

> 4x5 =3

9-0-0

4-6-0



9-8-0

0-8-0

12 9 Г 14 15 3-10-12 3-9-2 2 0-4-10 6 2x4 = 2x4 = 2x4 II 9-0-0 Plate Offsets (X, Y): [2:0-5-0,0-0-14], [4:0-5-0,0-0-14] 2-0-0 CSI DEFL l/defl L/d PLATES GRIP (psf) Spacing in (loc) 20.0 Plate Grip DOL 1.15 TC 0.24 Vert(LL) 999 MT20 244/190 n/a n/a 20.0 Lumber DOL 1.15 BC 0.22 Vert(CT) n/a n/a 999 10.0 Rep Stress Incr WB Horz(CT) 2 YES 0.01 0.00 n/a n/a 0.0 IRC2021/TPI2014 Matrix-MP Code 10.0 Weight: 74 lb FT = 20% 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. 2x4 SP No 2 II; Exp B; Enclosed; MWFRS (envelope) exterior zone 2x4 SP No 2 and C-C Exterior(2E) 0-3-1 to 3-3-1, Exterior(2R) 3-3-1 2x4 SP No.3 to 7-1-9, Exterior(2E) 7-1-9 to 10-1-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-Structural wood sheathing directly applied or C for members and forces & MWFRS for reactions 6-0-0 oc purlins. shown; Lumber DOL=1.60 plate grip DOL=1.60 Rigid ceiling directly applied or 10-0-0 oc bracing. 5) Truss designed for wind loads in the plane of the truss **REACTIONS** (size) 2=9-0-0, 4=9-0-0, 6=9-0-0 only. For studs exposed to wind (normal to the face), Max Horiz 2=-87 (LC 12) see Standard Industry Gable End Details as applicable, Max Uplift 2=-48 (LC 14), 4=-59 (LC 15) or consult qualified building designer as per ANSI/TPI 1. 2=357 (LC 21), 4=357 (LC 22), Max Grav TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 6) 6=289 (LC 21) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate (Ib) - Maximum Compression/Maximum DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Tension Cs=1.00; Ct=1.10 1-2=0/16, 2-3=-265/124, 3-4=-265/124, 7) Unbalanced snow loads have been considered for this 4-5=0/16design. 2-6=-51/145, 4-6=-35/145 8) This truss has been designed for greater of min roof live 3-6=-104/2 load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 9) Gable requires continuous bottom chord bearing. 1) 2-ply truss to be connected together as follows: 10) Gable studs spaced at 4-0-0 oc. Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc. 11) This truss has been designed for a 10.0 psf bottom C Bottom chords connected with 10d (0.131"x3") nails as chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf follows: 2x4 - 1 row at 0-9-0 oc. on the bottom chord in all areas where a rectangle All loads are considered equally applied to all plies, 3-06-00 tall by 2-00-00 wide will fit between the bottom except if noted as front (F) or back (B) face in the LOAD SEAL chord and any other members. CASE(S) section. Ply to ply connections have been 5844 provided to distribute only loads noted as (F) or (B), 13) N/A unless otherwise indicated.

- 3) Unbalanced roof live loads have been considered for this design.
- 14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	PB2	Piggyback	2	1	Job Reference (optional)

3-10-12

3-9-2

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:05 ID:Rmslk9DbSapxNulK2kUs_ty916S-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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0-8-0 9-8-0 4-6-0 9-0-0 4-6-0 4-6-0 0-8-0 0-8-0 4x5 = 4 12 9 Г 2x4 II 2x4 II 3 5 6 2 0-4-10 Р 10 9 8 2x4 = 2x4 II 2x4 🛛 2x4 II 2x4 =

9-0-0

Scale = 1:33.4

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 IRC202	1/TPI2014	CSI TC BC WB Matrix-MP	0.11 0.09 0.06	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 6	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 42 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=9-0-0, (10=9-0-0 Max Uplift 2=-8 (LC 10=-98 (L Max Grav 2=170 (LC 8=344 (LC 10=-94 4)	athing directly applie applied or 10-0-0 or 5=9-0-0, 8=9-0-0, 9= 12) 15), 8=-97 (LC 15), C 14) C 21), 6=170 (LC 22 C 21), 9=100 (LC 28) C 21)	3) 4) c 5) -9-0-0, 6) 7)), 9)	Truss design only. For stu see Standar or consult qu TCLL: ASCE Plate DOL= DOL=1.15); Cs=1.00; Ct: Unbalanced design. This truss ha load of 12.0 overhangs n Gable requir Gable studs This truss ha chord live loo	ned for wind load uds exposed to v d Industry Gable Jalified building y E 7-16; Pr=20.0 µ I.5); Pf=20.0 p Is=1.0; Rough C =1.10 snow loads hav as been designe psf or 1.00 time ion-concurrent w res continuous b spaced at 2-0-0 as been designe ad nonconcurrer	Is in the pl vind (norm end Deta designer a ossf (roof Ll st (Lum DC tat B; Fully e been cor d for great s flat roof l ith other li ottom chor oc. d for a 10. nt with any	ane of the tru- nal to the face ills as applica s per ANSI/T _: Lum DOL= DL=1.15 Plate Exp.; Ce=0. hsidered for t er of min roo oad of 20.0 p ve loads. rd bearing. 0 psf bottom other live loa	ess ab), bble, PI 1. 1.15 9; 9; 9; his f live sf on					
FORCES	(lb) - Maximum Com Tension 1-2=0/16, 2-3=-76/5	8, 3-4=-107/97,	10) * This truss I on the bottor 3-06-00 tall I	has been desigr m chord in all ar by 2-00-00 wide	ed for a liv eas where will fit betv	ve load of 20. a rectangle ween the bott	0psf om					
BOT CHORD	4-5=-107/97, 5-6=-6 2-10=-25/76, 9-10=- 6-8=-25/76	7/52, 6-7=0/16 25/76, 8-9=-25/76,	1	I) N/A		15.							11111
NOTES 1) Unbalance this design	4-9=-69/7, 3-10=-26 ed roof live loads have n.	b/150, 5-8=-266/150	, 12 r	 See Standar Detail for Co consult qual 	rd Industry Piggy onnection to base ified building des	/back Trus e truss as a signer.	s Connectior applicable, or	1		(i.	ORTH CA	ROLIN

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) 0-3-1 to 3-2-5, Exterior(2R) 3-2-5 to 7-2-5, Exterior(2E) 7-2-5 to 10-1-9 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

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	PB3	Piggyback	3	1	I72215069 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:05 ID:0KFbCGKRzmVpAJmH?1sNG4ypb9Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:39.3

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

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.30	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	0.28	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC202	21/TPI2014	Matrix-MP								
BCDL	10.0											Weight: 28 lb	FI = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exc Rigid ceiling directly bracing.	athing directly applie ept end verticals. applied or 10-0-0 oc	3 4 d or 5 6	 Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct=1 Unbalanced design. 	ned for wind loads i uds exposed to win d Industry Gable E alified building des 7-16; Pr=20.0 psf (1.15); Pf=20.0 psf (Is=1.0; Rough Cat =1.10 snow loads have b as been designed fi	in the pl id (norm nd Deta signer as (roof Ll Lum DC B; Fully been cor or great	ane of the tru al to the face ils as applica s per ANSI/TI .: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 nsidered for the er of min roof	liss e), ible, PI 1. 1.15 e 9; his f live					
REACTIONS	(size) 2=5-11-3, Max Horiz 2=121 (LC Max Uplift 2=-15 (LC 6=-47 (LC Max Grav 2=194 (LC 6=373 (LC	5=5-11-3, 6=5-11-3 : 13) 14), 5=-105 (LC 25) 14) : 21), 5=21 (LC 11), : 25)), 7 8 9	load of 12.0 overhangs n) Gable requir) Gable studs) This truss ha chord live loa	psf or 1.00 times fl on-concurrent with es continuous both spaced at 4-0-0 oc as been designed f	at roof le other li om chor c. or a 10.0	oad of 20.0 p ve loads. d bearing. 0 psf bottom other live loa	sfon					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	1	0) * This truss h	has been designed	for a liv	e load of 20.0	0psf					
TOP CHORD	1-2=0/16, 2-3=-122/1 4-5=-45/69	05, 3-4=-54/89,	3-06-00 tall t	46-00 tall by 2-00-00 wide will fit between the bottom									
BOT CHORD	2-6=-44/105, 5-6=-37	7/54	1	1) N/A	.,								
WEBS	3-6=-218/64		-	/ -								11"" CA	Dille
NOTES											2.0	TH UA	n0/11
1) Unbalance this design	ed roof live loads have n.	been considered for	1	2) See Standar	d Industry Piggyba	ick Trus	s Connection	ı			E	OTHEFSS	ON NE

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) 0-3-1 to 3-3-1, Exterior(2R) 3-3-1 to 5-2-5, Exterior(2E) 5-2-5 to 5-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	V03	Valley	1	1	I72215070 Job Reference (optional)

Run: 8.73 E Dec 5 2024 Print: 8.730 E Dec 5 2024 MiTek Industries, Inc. Tue Mar 25 14:59:35 ID:gMSi8YGJ8DtW4YuKCUHCZ1ypb9d-fyhn1WjBsWheMSrn2NN05PAtgfmKAUhcugYYhyzXWuO

3-8-7

Page: 1



Scale = 1:24.3

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	0.10 0.09 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 BRACING TOP CHORD BOT CHORD REACTIONS FORCES	2x4 SP No. 2x4 SP No. Structural w 3-8-7 oc pu Rigid ceiling bracing. (Ib/size) 1 Max Horiz 1 Max Horiz 1 Max Grav 1 (Ib) - Maxim Tension 1-2=-227/8F	2 2 2 3 3 directly =148/3-8 =32 (LC =-12 (LC =174 (LC uum Com 5 2-3=-12	athing directly applied applied or 10-0-0 oc 3-7, 3=148/3-8-7 11) : 14), 3=-12 (LC 15) 2 20), 3=174 (LC 21) pression/Maximum 27/61	7) 8) 9) d or 10) LO	Gable studs : This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Provide mecl bearing plate 1 and 12 lb u AD CASE(S)	spaced at 4-0-0 od s been designed f id nonconcurrent v as been designed n chord in all area: y 2-00-00 wide wi y other members. nanical connection capable of withst plift at joint 3. Standard	c. for a 10.0 with any f for a liv s where ill fit betw n (by oth anding 1) psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 2 lb uplift at j	ds.)psf om o oint					
BOT CHORD	1-3=-52/165	5												
 NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103i II; Exp B; E and C-C E exposed; ; members a Lumber D0 3) Truss des only. For s see Standa or consult 4) TCLL: ASC Plate DOL DOL=1.15 Cs=1.00; C 5) Unbalance design. 6) Gable required 	ad roof live loa CE 7-16; Vult= mph; TCDL=6 Enclosed; MW ixterior(2E) zo end vertical le and forces & I OL=1.60 plate signed for wind studs exposed ard Industry G CE 7-16; Pr=2 =1.15); Pf=20 i); Is=1.0; Rou Ct=1.10 ed snow loads uires continuo	ads have 130mph 5.0psf; BC /FRS (en ne; canti ff and rig WWFRS f g grip DO d loads in d to wind Gable Enc ling desig 0.0 psf (Lu gh Cat B have be us bottor	been considered for (3-second gust) CDL=6.0psf; h=25ft; (velope) exterior zone lever left and right jht exposed;C-C for for reactions shown; L=1.60 n the plane of the trus (normal to the face), d Details as applicabl gner as per ANSI/TPI roof LL: Lum DOL=1.15 Plate t; Fully Exp.; Ce=0.9; een considered for thi m chord bearing.	Cat. e ss le, 11. 15 s							O. THINK	CON THE REAL	SEA 4584 March	ROK 14 14 0HN5011111 0HN5011111 0HN5011111 0HN5011111

ENGINEERING BY RENCO

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 **ANSUTPI1 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	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	V06	Valley	1	1	I72215071 Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:06 ID:FnmZWXEQrIVxD49IXMjVxOypb9g-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



6-3-6

Scale = 1:27.5

00010 = 1.27.0													
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.20	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.07	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/T	PI2014	Matrix-MP								
BCDL	10.0											Weight: 23 lb	FT = 20%
LUMBER			5) L	Jnbalanced s	snow loads have	been cor	sidered for th	nis					
TOP CHORD	2x4 SP No.2		, d	lesign.									
BOT CHORD	2x4 SP No.2		6) G	Sable require	es continuous bot	tom chor	d bearing.						
OTHERS	2x4 SP No.3		7) G	Bable studs	spaced at 4-0-0 o	юс.							
BRACING			8) T	his truss ha	s been designed	for a 10.0) psf bottom						
TOP CHORD	Structural wood she	athing directly applie	ed or C	hord live loa	d nonconcurrent	with any	other live loa	ds.					
	6-3-6 oc purlins.		9) ^	I his truss h	as been designed	d for a liv	e load of 20.0	Jpst					
BOT CHORD	Rigid ceiling directly bracing.	applied or 6-0-0 oc	0 3	-06-00 tall b	y 2-00-00 wide w	ill fit betv	a rectangle veen the botto	om					
REACTIONS	(size) 1=6-3-15,	, 3=6-3-15, 4=6-3-15		hord and an	y other members								
	Max Horiz 1=-57 (LC	C 12)	10) P	rovide mech	nanical connectio	n (by oth	ers) of truss t	0 					
	Max Uplift 1=-3 (LC	21), 3=-3 (LC 10), 4	=-56 ^D	earing plate	capable of withs	nlift at ioi	nt 4	int I,					
	(LC 14)		11) F	Reveled plate	or shim required	to provi	de full bearing	a					
	Max Grav 1=99 (LC	20), 3=99 (LC 21), 4	4=438 11/ B	urface with t	russ chord at joir	1(s) 1.3.	ac fail bearing	9					
	(LC 21)		LOAI	D CASE(S)	Standard								
FORCES	(lb) - Maximum Com	npression/Maximum	20/1	0,102(0)	otandara								
	Tension												
TOP CHORD	1-2=-87/180, 2-3=-8	37/180											
BOICHORD	1-4=-144/131, 3-4=-	144/131											
WEBS	2-4=-341/163												
NOTES													
1) Unbalance	ed roof live loads have	been considered to	r									minin	1111.
this design	1. CE 7 16: \/ult_120mph	(2 accord quat)									6	I'' H CA	ROUL
 Z) Wind: ASC Vasd=103 	= 7-16; Vuit=130mpn	CDI =6 Opef: b=25ft:	Cat								\wedge	allin	
II: Exp B: I	Enclosed: MWERS (er	velope) exterior zor	le								-	O' EESS	ici. Viz
and C-C E	Exterior(2E) zone: cant	ilever left and right	10								XX	in h	ann
exposed ;	end vertical left and right	ght exposed;C-C for										:2	· K
members	and forces & MWFRS	for reactions shown	;								6	CEA	Y 19 8 8
Lumber D	OL=1.60 plate grip DC	DL=1.60								-	- 1	SEA	
Truss desi	igned for wind loads in	the plane of the true	SS							=	:	4584	14 : :
only. For	studs exposed to wind	(normal to the face)),										
see Stand	ard Industry Gable En	d Details as applicat	ole,										1. 1. 5
or consult	qualified building design	gner as per ANSI/TH	11.								27	1. SNOW	-ERI AS
4) ICLL: AS	-1 15) PI=20.0 PSI (um DOI -1 15 Plata	1.15								1	O GIN	F.F. GUN
	1. 13), F1=20.0 PSI (L 5): Is-1 0: Rough Cat F	$3 \cdot \text{Fully Eyn} \cdot \text{Ce}_0 \circ$) .								1	TEM	OHN
Cs=1.00 0	Ct=1.10	2, 1 any Exp., 06-0.3	',									The J	in the second se
												iviarci	1 25,2025



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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	V07	Valley	1	1	Job Reference (optional)

3-7-13

3-7-13

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

Run: 8 73 S. Feb 19 2025 Print: 8 730 S Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 13:32:06 ID:JPfp5rCAKhFEzn?MPxh1szypb9i-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4x5 =

6-11-8

3-3-11

3

PLATES

Weight: 27 lb

MT20

GRIP

244/190

FT = 20%



2 9 10 3-0-12 5-6-2 12 10 Г 4 2x4 ı 3x5 🍫 3x5 💊 7-3-10 Scale = 1:29.3 2-0-0 CSI DEFL l/defl L/d (psf) Spacing in (loc) 20.0 Plate Grip DOL 1.15 TC 0.26 Vert(LL) n/a 999 n/a 20.0 1 15 BC Lumber DOL 0.27 Vert(TL) n/a n/a 999 10.0 Rep Stress Incr YES WB 0.09 Horiz(TL) 0.00 4 n/a n/a 0.0 Code IRC2021/TPI2014 Matrix-MP 10.0 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 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 Unbalanced snow loads have been considered for this 5) desian. Structural wood sheathing directly applied or Gable requires continuous bottom chord bearing. 6) 7-3-10 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=7-3-10, 3=7-3-10, 4=7-3-10 9) Max Horiz 1=67 (LC 13) on the bottom chord in all areas where a rectangle Max Uplift 1=-19 (LC 21), 3=-19 (LC 20), 3-06-00 tall by 2-00-00 wide will fit between the bottom 4=-75 (LC 14) chord and any other members. Max Grav 1=105 (LC 20), 3=105 (LC 21), 10) Provide mechanical connection (by others) of truss to 4=540 (LC 20) bearing plate capable of withstanding 19 lb uplift at joint (lb) - Maximum Compression/Maximum 1, 19 lb uplift at joint 3 and 75 lb uplift at joint 4. Tension LOAD CASE(S) Standard TOP CHORD 1-2=-90/233, 2-3=-90/233 1-4=-182/153, 3-4=-182/153 BOT CHORD 2-4=-428/202

WFBS NOTES

FORCES

Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

TCDL

BCLL

BCDL

- Unbalanced roof live loads have been considered for 1) this design
- 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 and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 4-3-15, Exterior(2E) 4-3-15 to 7-3-15 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 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.

WWWWWWWWWWW Contraction of the SEAL minin March 25,2025

818 Soundside Road

Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	V09	Valley	1	1	Job Reference (optional)

4-1-10

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:06 ID:N0X2g9Bwo4?WkTszIWeZmYypb9k-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



9-10-9

Scale = 1:33.6

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	0.48 0.45 0.20	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 38 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalancee this design. 2) Wind: ASCI Vasd=103n II; Exp B; E and C-C Ex, to 6-10-14, cantilever la right expose for reaction DOL=1.60 3) Truss desig only. For s see Standa or consult of	2x4 SP No 2x4 SP No 2x4 SP No 2x4 SP No Structural 9-10-9 oc Rigid ceilin bracing. (size) Max Horiz Max Uplift Max Grav (Ib) - Maxi Tension 1-2=-120/ 1-4=-256/ 2-4=-664/2 d roof live lo E 7-16; Vult nph; TCDL= inclosed; M toterior(2E) (E xterior(2E) (E xterior(2E) (E xterior(2E) (eft and right ed;C-C for i is shown; Li gned for win tuds exposi- and low stry qualified bui	2.2 2.2 3.3 wood sheat purlins. 1g directly 1=9-10-9, 1=-93 (LC 1=-56 (LC 4=-114 (LC (LC 20) mum Com 392, 2-3=- 178, 3-4=- 280 weights (en -0-5 to 3-(5) -0-5 to 3-(5) -0-5 to 3-(5) -0-10 to 3-(5) -0-5 to 3-(5)	athing directly applie applied or 6-0-0 oc 3=9-10-9, 4=9-10-9 12) 21), 3=-56 (LC 20), C14) 20), 3=94 (LC 21), 4 pression/Maximum 120/392 256/178 been considered for (3-second gust) CDL=6.0psf; h=25ft; velope) exterior zon 3-5, Exterior(2R) 3-0 to 9-10-14 zone; end vertical left and and forces & MWFR L=1.60 plate grip the plane of the trus (normal to the face) d Details as applicat gner as per ANSI/TF	4) 5) ed or 6) 7) 8) 9 9 9 9 9 4=804 1(L(L(L(Cat. ne -5 5 d Ss 5), 9 9 1.	TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. Gable requir Gable studs This truss han chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar 0) Provide mec bearing plate 1, 56 lb uplift DAD CASE(S)	7-16; Pr=20.0 psf (15); Pf=20.0 psf (1 s=1.0; Rough Cat (1.10) snow loads have b es continuous botto spaced at 4-0-0 oc s been designed for d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide wil y other members. nanical connection capable of withsta at joint 3 and 114 Standard	(roof LL Lum DC B; Fully een cor or a 10.0 vith any for a liv s where I fit betw (by oth anding 5 Ib uplift	: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 Isidered for the d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the botth ers) of truss to 6 lb uplift at j at joint 4.	1.15 e) 9; his ads. 0psf om to joint				SEA 4584 Wonew Ju March	ROL L L I 4 OHNSUIII 25,2025	Summing.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BC2E Building Component Schut beformation, available from the Structure Building Component Advanciation (www.tpinst.org) 818 Soundside Road Edenton, NC 27932 and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	V10	Valley	1	1	Job Reference (optional)

5-5-7

5-5-7

13

2x4

2

12 10 Г

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

4-6-12

(psf)

20.0

20.0

10.0

, Υ

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:06 ID:FzBHp5cRse4BbFmx28JXNeypbAT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

10-6-12

5-1-5

14

2x4 I

4

4x5 = 3

10-10-14 0-4-2

1156₅ 0-0-4 8 7 6 2x4 🛛 3x5 🍫 2x4 u 2x4 II 3x5 💊 10-10-14 Spacing 2-0-0 CSI DEFL in l/defl L/d (loc) Plate Grip DOL 1.15 тс 0.33 Vert(LL) n/a n/a 999 Lumber DOL BC 1 15 0.13 Vert(TL) 999 n/a . n/a Rep Stress Incr YES WB 0.09 Horiz(TL) 0.00 5 n/a n/a ne of the truss I to the face), s as applicable, per ANSI/TPI 1. Lum DOL=1.15 _=1.15 Plate Exp.; Ce=0.9; sidered for this bearing. psf bottom ther live loads. load of 20.0psf rectangle een the bottom rs) of truss to

b uplift at joint int 8 and 133 lb



Page: 1

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Scale = 1:39.7

Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL BCDL		0.0* 10.0	Code	IRC2	2021	/TPI2014	Matrix-MSH
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N Structura 6-0-0 oc Rigid ceil bracing. (size) Max Horiz Max Uplift Max Grav	o.2 o.2 o.3 I wood she: burlins. ing directly 1=10-10-1 6=10-10-1 8=10-10-1 1=102 (LC 1=-49 (LC 6=-133 (L 1=70 (LC (LC 21), 7 20)	athing directly appli applied or 10-0-0 c 14, 5=10-10-14, 4, 7=10-10-14, 14 : 12), 5=-37 (LC 21 C 15), 8=-139 (LC 11), 5=61 (LC 15), '=248 (LC 20), 8=4	ied or bc), 14) 6=450 54 (LC	 3) 4) 5) 6) 7) 8) 9) 	Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced s design. Gable require Gable studs s This truss ha chord live loa * This truss ha on the bottom 3-06-00 tall b chord and an	d for wind loads in the plat s exposed to wind (norma ndustry Gable End Details ified building designer as -16; Pr=20.0 psf (roof LL: 5); Pf=20.0 psf (Lum DOL =1.0; Rough Cat B; Fully E 10 now loads have been cons continuous bottom chord baced at 4-0-0 oc. been designed for a 10.0 nonconcurrent with any c s been designed for a live chord in all areas where a 2-00-00 wide will fit betwe other members.
FORCES	(lb) - Max Tension	imum Com	pression/Maximum		10)	bearing plate	anical connection (by othe capable of withstanding 49
TOP CHORD	1-2=-138/ 4-5=-116/	/105, 2-3=-: /75	227/105, 3-4=-227/	106,		uplift at joint (t joint 5, 139 ib uplift at joi
BOT CHORD	1-8=-39/7 5-6=-49/7	70, 7-8=-20/ 1	/70, 6-7=-20/70,		LO	AD CASE(S)	Standard
WEBS	3-7=-159	7, 2-8=-47	4/271, 4-6=-473/26	4			
NOTES							
 Unbalanc this desig Wind: AS 	ed roof live l n. CE 7-16; Vu	loads have	been considered for (3-second gust)	or			

Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 7-6-10, Exterior(2E) 7-6-10 to 10-6-10 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



Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	V13	Valley	1	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:06 ID:u0OOmNZI25RuVUt_FbjMgaypbAY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



13-5-12

Scale = 1:41.7

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	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	* Code	IRC202	1/TPI2014	Matrix-MSH								
BCDL	10.0							-				Weight: 57 lb	FT = 20%
LUMBER			3)	Truss desig	ned for wind load	s in the pl	ane of the tru	SS					
TOP CHORD	2x4 SP No.2			only. For st	uds exposed to w	ind (norm	al to the face),					
BOT CHORD	2x4 SP No.2			see Standa	rd Industry Gable	End Deta	ils as applica	ble,					
OTHERS	2x4 SP No.3			or consult q	ualified building d	esigner a	s per ANSI/T	PI 1.					
BRACING			4)	TCLL: ASC	E 7-16; Pr=20.0 p	sf (roof Ll	L: Lum DOL=	1.15					
TOP CHORD	Structural wood sh	neathing directly appli	ed or	Plate DOL=	1.15); Pf=20.0 ps	f (Lum DC	DL=1.15 Plate	9					
	6-0-0 oc purlins.			DOL=1.15);	Is=1.0; Rough C	at B; Fully	Exp.; Ce=0.9	9;					
BOT CHORD	Rigid ceiling direct	tly applied or 6-0-0 oc	5	Us=1.00; Ci	i=1.10 Langur lagda havr	hoon oo	anidarad far t	hio					
	bracing.		5	design	I SHOW IDaus have	been coi		115					
REACTIONS	(size) 1=13-5-	12, 5=13-5-12, 6=13-	5-12, 6 ¹	Gable requi	res continuous bo	ttom cho	d bearing						
	7=13-5-	12, 8=13-5-12	7	Gable studs	spaced at 4-0-0		a bearing.						
	Max Horiz 1=-128	(LC 12)	. 8	This truss h	as been designed	for a 10.	0 psf bottom						
	Max Uplift 1=-27 (I	LC 10), 6=-145 (LC 15	5), -,	chord live lo	ad nonconcurren	t with any	other live loa	ids.					
	8=-149	(LC 14)	9	* This truss	has been designe	ed for a liv	e load of 20.0	Opsf					
	Max Grav 1=112 (LC 30), 5=89 (LC 24)	, 	on the botto	m chord in all are	as where	a rectangle						
	0=441 (8–441 (LC 21), 7=263 (LC 21),	3-06-00 tall	by 2-00-00 wide	will fit betw	ween the bott	om					
FORCES		morecoion/Mevimum		chord and a	ny other member	s.							
FURCES	(ID) - Maximum CO	mpression/maximum	10	 Provide me 	chanical connecti	on (by oth	ers) of truss t	to					
	1_2140/116 2_3	196/115 3-4196/	114	bearing plat	e capable of with	standing 2	27 lb uplift at j	oint					
	4-5=-111/77	= 150/115, 5 4= 150/	114,	1, 149 lb up	lift at joint 8 and 1	45 lb upli	ft at joint 6.						
BOT CHORD	1-8=-46/109.7-8=	-46/88, 6-7=-46/88,	L	DAD CASE(S)	Standard								
	5-6=-46/88	,,										mun	1111
WEBS	3-7=-200/0, 2-8=-3	376/193, 4-6=-376/19	3									WHY CA	Pa'l
NOTES												alla	10/
1) Unbalance	ed roof live loads hav	a been considered fo	.r.							/	1	O'ES	10:11

- Unbalanced roof live loads have been considered for this design.
 Wind: ASCE 7-16; Vult=130mph (3-second gust)
- Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 2-9-3, Interior (1) 2-9-3 to 3-9-3, Exterior(2E) 10-6-1 to 13-6-1 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



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Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	V17	Valley	1	1	Job Reference (optional)

7-1-10

(psf)

20.0

20.0

10.0

0.0

10.0

-6-9

-0 0

Spacing

Code

Plate Grip DOL

Rep Stress Incr

Lumber DOL

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 13:32:06 ID:URiG8MWQIA3Je09PaT9f2yypbAb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

8-6-8 16-8-13 8-6-8 8-2-6 4x5= 3 2x4 II 2x4 II 16 15 2 14 _12 10∟ 9 1 9 8 7 6 2x4 II 2x4 II 3x5= 3x5 🖌 3x5、 2x4 🛛 17-0-15 2-0-0 CSI DEFL l/defl L/d PLATES GRIP in (loc) 1.15 тс 0.36 Vert(LL) n/a n/a 999 MT20 244/190 BC 1 15 0.19 Vert(TL) n/a n/a 999 YES WB 0.29 Horiz(TL) 0.00 5 n/a n/a IRC2021/TPI2014 Matrix-MSH Weight: 76 lb FT = 20%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 (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate or 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) desian. 6) Gable requires continuous bottom chord bearing. 7) Gable studs spaced at 4-0-0 oc. 8) 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 9) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1, 188 lb uplift at joint 9 and 184 lb uplift at joint 6. 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5. LOAD CASE(S) Standard



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Scale = 1:51

Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL

BCDL

LUMBER					
TOP CHORD	2x4 SP No.2				
BOT CHORD	2x4 SP No.2				
OTHERS	2x4 SP No.3				
BRACING					
TOP CHORD	Structural wood sheathing directly applied o 6-0-0 oc purlins.				
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.				
REACTIONS	(size)	1=17-1-9, 5=17-1-9, 6=17-1-9, 8=17-1-9, 9=17-1-9			
	Max Horiz	1=162 (LC 11)			
	Max Uplift	1=-21 (LC 10), 6=-184 (LC 15), 9=-188 (LC 14)			
	Max Grav	1=119 (LC 25), 5=82 (LC 21), 6=524 (LC 25), 8=511 (LC 24), 9=531 (LC 24)			
FORCES	(lb) - Maximum Compression/Maximum Tension				
TOP CHORD	1-2=-147/268, 2-3=-98/200, 3-4=-98/181, 4-5=-109/235				
BOT CHORD	1-9=-143/133, 8-9=-143/133, 6-8=-143/133, 5-6=-143/133				
WEBS	3-8=-328/0. 2-9=-399/222. 4-6=-398/221				
NOTES					

- Unbalanced roof live loads have been considered for 1) this design. 2)
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-6-12, Exterior(2R) 5-6-12 to 11-6-12, Interior (1) 11-6-12 to 13-8-11, Exterior(2E) 13-8-11 to 16-8-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1000 Serenity-Roof-B330 E BNS CP TMB GRH
25030124-01	V20	Valley	1	1	Job Reference (optional)

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 13:32:06 ID:bfTII_TvhyZu9PreLd5jt6ypbAf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

818 Soundside Road

Edenton, NC 27932



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