

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 23080111-01 91 Serenity-Roof-B330 E COP TMB

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

Pages or sheets covered by this seal: I60702977 thru I60703022

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



September 12,2023

# Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	A01	Common Supported Gable	1	1	Job Reference (optional)	160702977

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:03:57 ID:94aeZ53wRfHxaJ4LIBSgWSzF\_tZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale =	1:73
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Plate Offsets (	X, Y): [2:0-2-8,0-0-5	, [6:0-3-0,0-3-0], [20:0-3	3-0,0-3-0], [24:0-3-1	,0-0-5], [33:	0-3-0,0-3-0], [37:0	-3-0,0-3-0]							
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 IRC2018/TPI2014	CSI TC BC WB Matrix-	0.08 0.05 0.15 MSH	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc) - - 24	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 285 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.3 *Exce 0-0,0-0,0-0,0-0,0-0 Left 2x4 SP No.3 1-6-0 Structural wood sh 6-0-0 oc purlins. Rigid ceiling directl bracing. T-Brace: Fasten (2X) T and of web with 10d (0. o.c.,with 3in minimm Brace must cover	pt* 35-13:2x4 SP No.2, 2x4 SPF No.2(flat) 1-6-0, Right 2x4 SP No eathing directly applied of y applied or 10-0-0 oc 2x4 SPF No.2 - 13-35, 12-36, 11-37, 14-34, 15-33 I braces to narrow edge 131"x3") nails, 6in m end distance. 90% of web length.	.3 or	Max Uplift Max Grav	2=-21 (LC 10), 2 27=-31 (LC 15), 29=-47 (LC 15), 31=-44 (LC 15), 33=-48 (LC 15), 36=-39 (LC 14), 40=-43 (LC 14), 42=-46 (LC 14), 42=-46 (LC 14), 42=-46 (LC 14), 26=159 (LC 26), 28=158 (LC 26), 30=159 (LC 22), 36=246 (LC 21), 36=246 (LC 21), 42=159 (LC 21), 42=159 (LC 21),	6=-81 (LC 18 28=-45 (LC 1 30=-43 (LC 3 32=-43 (LC 3 34=-36 (LC 3 39=-44 (LC 4 41=-47 (LC 4 41=-47 (LC 4 41=-47 (LC 2 41=-41 (LC 2 27=152 (LC 2)=-168 (LC 3)=-233 (	5), 15), 15), 15), 15), 14), 14), 14), 14), 14), 14), 22), 22), 22), 22), 21), 34), 1), 34), 21)	BOT CH WEBS	IORD	2-44= 42-43 40-41 38-39 35-36 32-34 30-31 28-29 26-27 13-35 11-37 9-39= 6-42= 14-34 16-32 18-30 20-28 22-26	42/164, 43-44=- =-42/164, 41-42= =-45/168, 39-40= =-45/168, 36-38= =-45/168, 24-35= =-45/168, 27-28= =-45/168, 27-28= =-203/44, 12-36= =-103/83, 10-38= -120/78, 8-40=-1 -118/76, 5-43=-1 =-105/66, 15-33= =-140/76, 17-31= =-119/76, 19-29= =-118/76, 21-27= =-115/136	12/164, -45/168, -45/168, -45/168, -45/168, -45/168, -45/168, -45/168, -42/164, -205/66, -140/76, 19/76, 7-41=-128/ 13/75, 4-44=-115/ -193/83, -120/78, -128/82, -113/75,	/82, /136,
REACTIONS	(size) 2=39-11 26=39-1 28=39-1 30=39-1 32=39-1 32=39-1 34=39-1 38=39-1 40=39-1 40=39-1 44=39-1 44=39-1 44=39-1 Max Horiz 2=-165 (	0, 24=39-11-0, 1-0, 27=39-11-0, 1-0, 29=39-11-0, 1-0, 31=39-11-0, 1-0, 35=39-11-0, 1-0, 35=39-11-0, 1-0, 39=39-11-0, 1-0, 43=39-11-0, 1-0, 43=39-11-0, 1-0, 45=39-11-0, 1-0, 45=-165 (LC 15)	FORCES TOP CHORD	(lb) - Maı Tension 1-2=0/23 5-7=-128 9-10=-65 11-12=-1 13-14=-1 15-16=-8 17-18=-4 21-22=-9	42=138 (LC 34), 49=141 (LC 22) kimum Compression , 2-4=-213/77, 4-5 /106, 7-8=-73/130 /176, 10-11=-83/2 02/268, 12-13=-11 9/308, 14-15=-10 3/220, 16-17=-65/ 7/129, 18-19=-40/ 6/32, 22-24=-141/	43=132 (LC 45=162 (LC on/Maximum =-164/80, , 8-9=-60/15: 20, 19/308, 19/308, 12/268, 175, 84, 19-21=-6 57, 24-25=0/	21), 26), 3, 3, 67/38, /23	1) Unt	alancec design.	d roof li	Ve loads have be	en considered for ROJULIA	1 million

September

# 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	91 Serenity-Roof-B330 E COP TMB	
23080111-01	A01	Common Supported Gable	1	1	Job Reference (optional)	160702977
Carter Components (Sanford, N	C), Sanford, NC - 27332.	Run: 8.63 S Aug 30 2	2023 Print: 8.	630 S Aug 3	0 2023 MiTek Industries, Inc. Tue Sep 12 06:03:57	Page: 2

ID:94aeZ53wRfHxaJ4LIBSgWSzF\_tZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

- Wind: ASCE 7-16: Vult=130mph (3-second aust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II: Exp B: Enclosed: MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 3-1-6, Exterior(2N) 3-1-6 to 15-11-8, Corner(3R) 15-11-8 to 23-11-8, Exterior(2N) 23-11-8 to 36-9-10, Corner(3E) 36-9-10 to 40-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss 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.
- 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 5) design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated. 7)
- Gable requires continuous bottom chord bearing. 8)
- Gable studs spaced at 2-0-0 oc. 9)
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 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 36, 47 lb uplift at joint 37, 44 lb uplift at joint 38, 44 lb uplift at joint 39, 43 lb uplift at joint 40, 47 lb uplift at joint 41, 46 lb uplift at joint 42, 28 lb uplift at joint 43, 96 lb uplift at joint 44, 36 lb uplift at joint 34, 48 lb uplift at joint 33, 43 lb uplift at joint 32, 44 lb uplift at joint 31, 43 lb uplift at joint 30, 47 lb uplift at joint 29, 45 lb uplift at joint 28, 31 lb uplift at joint 27, 81 lb uplift at joint 26 and 21 lb uplift at joint 2
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design and the second design much reacting of design and the second design much reacting and and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	A02	Common	4	1	Job Reference (optional)	160702978

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:03:59 ID:CttcSzQgwNcSj9X9hY?FsHzF\_uO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	-0 <mark>-10-8 6</mark> 0-10-8 6	-10-3 -10-3	<u>13-4-13</u> 6-6-11	3	<u>19-11-8</u> 6-6-11		26-6-3 6-6-11	1	<u>33-0-1</u> 6-6-1	<u>3</u> 1		9-11-0 -10-3	40-9-8 0-10-8
10-8-15	21 1 2	5x6 ≠	6]2	3x5 - 22 4	23	5x6=	26 27	3x5 <b>.</b> 6			5x6s 7	28	8 9
	5x6=		14 4x5 <b>=</b>	24	13 4x8=	12 4x8=	11 4x8=	25	10 4x5:	=			5x6=
Scale = 1:73		<u>10-1-8</u> 10-1-8		1	9-11-8 9-10-0		<u>29-9-8</u> 9-10-0				<u>39-11-0</u> 10-1-8		
Plate Offsets (X, Y	′): [3:0-3-0,0-3-0],	[7:0-3-0,0-3-0]											
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/	TPI2014	CSI TC BC WB Matrix-MSH	0.72 0.84 0.61	DEFL         in           Vert(LL)         -0.23           Vert(CT)         -0.41           Horz(CT)         0.10	(loc) 12-14 12-14 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 243 lb	<b>GRIP</b> 244/190 FT = 20	0
LUMBER TOP CHORD 25 BOT CHORD 25 WEBS 25 WEDGE Le TOP CHORD S BOT CHORD R DOT CHORD R WEBS 1 REACTIONS (siz Ma Ma FORCES (lt TOP CHORD 1- 5 BOT CHORD 1- 5 B	44 SP No.2 *Except 66 SP No.2 44 SP No.3 off: 2x4 SP No.3 off: 2x4 SP No.3 ght: 2x4 SP No.3 tructural wood shea 7-10 oc purlins. igid ceiling directly racing. Row at midpt tep 2=0-5-8, 8 x Horiz 2=-165 (L0 x Uplift 2=-170 (L0 x Grav 2=1799 (L b) - Maximum Comp ension 2=0/23, 2-4=-3117, 6=-2067/334, 6-8= 14=-336/2715, 12- 0-12=-107/2271, 8- 12=-118/1480, 6-1: 10=-29/618, 7-10= 12=-794/244, 4-14: bof live loads have	* 3-5,7-5:2x4 SP No athing directly applied applied or 10-0-0 oc 6-12, 4-12 E-0-5-8 C 15) C 14), 8=-170 (LC 15 C 3), 8=1799 (LC 3) pression/Maximum /325, 4-5=-2067/334 -3117/325, 8-9=0/23 14=-188/2271, 10=-189/2715 2=-794/244, -345/202, =-28/618, 3-14=-345 been considered for	2) .1 d or 3) 4) 5) 7) /202 8) 9) LOA	Wind: ASCE Vasd=103mp Cat. II; Exp B zone and C-C 3-1-6 to 15-1 Interior (1) 23 40-9-8 zone; vertical left an forces & MW DOL=1.60 pl TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced - design. This truss ha load of 12.0 tj overhangs no This truss ha chord live loa * This truss ha chord live loa * This truss ha on the bottom on H2.5A S recommende UPLIFT at jt( and does not This truss is of International R802.10.2 ar AD CASE(S)	7-16; Vult=130m h; TCDL=6.0psf; ; Enclosed; MVI0 2 Exterior(2E) -0 1-10, Exterior(2E) 3-11-6 to 36-9-10 cantilever left an nd right exposed FRS for reaction: ate grip DOL=1.6 7-16; Pr=20.0 psf s=1.0; Rough Ca 1.10 snow loads have s been designed dosf or 1.00 times on-concurrent wit s been designed d nonconcurrent as been designed d nonconcurrent wit s been designed d nonconcurrent as been designed d nonconcurrent s been designed d nonconcurrent s been designed d nonconcurrent as been designed t nonconcurrent as been d nonconcurrent as been d nonconcurrent	ph (3-sec BCDL=6 FRS (enve- 10-8 to 3 8) 15-11-1 , Exteriori d right ex C-C for m s shown; 1 0 sf (roof LL (Lum DC t B; Fully been con for greate flat roof Ich of a 10.0 with any d for a liv- as where with any d for a liv- as where s, with BC Fie connection forces. rdance wi a sections indard AN	ond gust) .0psf; h=25ft; elope) exterior 1-6, Interior (1) 0 to 23-11-6, (22) 36-9-10 to posed; end nembers and Lumber : Lum DOL=1.15 IL=1.15 Plate Exp.; Ce=0.9; asidered for this er of min roof live bad of 20.0 psf on re loads. 0 psf bottom other live loads. e load of 20.0 psf a rectangle recen the bottom DL = 10.0psf. stors ng walls due to n is for uplift only th the 2018 R502.11.1 and ISI/TPI 1.		Winnin		SEA 0363	AR AL B22 EEER EILBE	

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 United for the Structure Buckling Component Advance Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

NGINEERING

September 12,2023



Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B01	Common Supported Gable	1	1	Job Reference (optional)	160702979

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:00 ID:HSVLvMXIBUOh6UIn9Dc1gjzEzgn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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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)

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B01	Common Supported Gable	1	1	Job Reference (optional)	160702979
Carter Components (Sanford, N	C), Sanford, NC - 27332,	Run: 8.63 S Aug 30 2	2023 Print: 8.	630 S Aug 3	0 2023 MiTek Industries, Inc. Tue Sep 12 06:04:00	Page: 2

- All plates are 2x4 MT20 unless otherwise indicated. 7)
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. \* This truss has been designed for a live load of 20.0psf 11) 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 37 lb uplift at joint 2, 39 lb uplift at joint 33, 44 lb uplift at joint 34, 42 lb uplift at joint 35, 44 lb uplift at joint 36, 40 lb uplift at joint 37, 49 lb uplift at joint 38, 28 lb uplift at joint 39, 99 lb uplift at joint 40, 35 lb uplift at joint 31, 47 lb uplift at joint 30, 42 lb uplift at joint 28, 43 lb uplift at joint 27, 42 lb uplift at joint 26, 46 lb uplift at joint 25, 36 lb uplift at joint 24, 121 lb uplift at joint 23 and 37 lb uplift at joint 2.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:00 ID:HSVLvMXIBUOh6UIn9Dc1gjzEzgn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B02	Common	2	1	Job Reference (optional)	160702980

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:00 ID:MV7Qc?M0dtQGkhooWQpRIZzEzeQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Max Grav 2=1583 (LC 3), 8=1541 (LC 3) FORCES (Ib) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/22, 2-4=-2573/299, 4-5=-2305/375, 5-6=-2306/376, 6-8=-2576/305 BOT CHORD 2-8=-304/2238 WEBS 5-10=-204/1098, 5-9=-204/1099, 3-10=-346/189, 4-10=-496/222, 6-9=-494/222, 7-9=-351/191

#### NOTES

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) -0-9-14 to 2-8-7. Interior (1) 2-8-7 to 14-1-3, Exterior(2R) 14-1-3 to 21-1-13, Interior (1) 21-1-13 to 31-8-11, Exterior(2E) 31-8-11 to 35-3-0 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

- Refer to girder(s) for truss to truss connections. 8)
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 135 lb uplift at
- joint 8. 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B03	Common	4	1	Job Reference (optional)	160702981



Loading		(psr)	Spacing	2-0-0		CSI		DEFL	IN	(IOC)	i/defi	L/a	PLATES	GRIP	
TCLL (roof)		20.0	Plate Grip DOL	1.15		TC	0.31	Vert(LL)	-0.25	13-14	>999	240	MT20	244/190	
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.60	Vert(CT)	-0.50	13-14	>839	180			
TCDL		10.0	Rep Stress Incr	YES		WB	0.66	Horz(CT)	0.06	8	n/a	n/a			
BCLL		0.0*	Code	IRC201	8/TPI2014	Matrix-MSH							]		
BCDL		10.0											Weight: 271 lb	FT = 20%	
				-									Ű		
LUMBER				2)	Wind: ASCE	7-16; Vult=130mp	oh (3-seo	cond gust)							
TOP CHORD	2x6 SP No.2	2			Vasd=103mp	h; TCDL=6.0psf;	BCDL=6	6.0psf; h=25ft	t;						
BOT CHORD	2x6 SP 2400	)F 2.0E *	*Except* 16-12:2x4 S	SP	Cat. II; Exp E	; Enclosed; MWF	RS (env	elope) exteri	or						
	No.2				zone and C-0	C Exterior(2E) -0-9	9-14 to 2	-8-7, Interior	(1)						
WEBS	2x4 SP No.3	6			2-8-7 to 14-1	-3, Exterior(2R) 14	4-1-3 to	21-1-13, Inte	rior						
WEDGE	Left: 2x4 SP	No.3			(1) 21-1-13 to	o 31-8-11, Exterio	r(2E) 31	-8-11 to 35-3	-0						
	Right: 2x4 SI	P No.3			zone; end ve	rtical left exposed	;C-C for	members an	nd						
BRACING					forces & MW	FRS for reactions	shown;	Lumber							
TOP CHORD	Structural wo	ood shea	athing directly applied	d or	DOL=1.60 pl	ate grip DOL=1.60	0								
	3-10-7 oc pu	urlins.	3 ,	3)	TCLL: ASCE	7-16; Pr=20.0 pst	f (roof LL	.: Lum DOL=	1.15						
BOT CHORD	Rigid ceiling	directly	applied or 10-0-0 oc		Plate DOL=1	.15); Pf=20.0 psf	(Lum DC	DL=1.15 Plate	е						
	bracing.				DOL=1.15); I	s=1.0; Rough Cat	t B; Fully	Exp.; Ce=0.	9;						
REACTIONS	(size) 2=	-0-5-8 8	= Mechanical		Cs=1.00; Ct=	:1.10									
	Max Horiz 2=	=153 (I C	(14)	4)	Unbalanced	snow loads have l	been cor	nsidered for t	his						
	Max Grav 2=	=1884 (I	(0.3) 8=1842 (1 $(0.3)$	_	design.										
FORCES				5)	This truss ha	s been designed f	for great	er of min roo	flive						
FURGES	(ID) - Maximu	um Com	pression/iviaximum		load of 12.0	osf or 1.00 times f	lat roof lo	oad of 20.0 p	osf on						
		1 2000	10 4 5 2020/0		overhangs no	on-concurrent with	n other liv	ve loads.							
TOP CHORD	I-Z=0/ZZ, Z-4	6 0 20	/0, 4-5=-3020/8,	6)	200.0lb AC u	nit load placed on	the bott	om chord, 1	7-7-8						
	5-6=-3022/9	, 0-0=-32	238/0		from left end	supported at two	points,	5-0-0 apart.							
BUICHORD	2-18=-74/28	25, 15-1	0 = -21/2020, 0/2024, 0, 0, 10/202	7)	This truss ha	s been designed f	for a 10.0	0 psf bottom							
	11-15=0/192	12 14	=0/2024, 0-9=-10/202		chord live loa	id nonconcurrent	with any	other live loa	ads.				minin	1111.	
WERE	14-10=-9/31,	, 13-14≕ 11 16 1	-9/31, 12-13=-9/31	8)	* This truss h	as been designed	d for a liv	e load of 20.	0psf				IN'LY CA	Rall	
WEDS	4-17=-473/2 5 16_ 12/17	11, 10-1 50 2 17	/=-33/1432, _ 212/242		on the botton	n chord in all area	s where	a rectangle				1	alt	1011	
	5 10=-12/14	61 10 1	=-313/242, 224/142E		3-06-00 tall b	y 2-00-00 wide wi	III fit betv	veen the bott	iom				O' FSS	ich	1
	5-12=-12/14	01, 10-1.	Z=-34/1433, 212/245 2 10 61	/20	chord and an	y other members,	, with BC	DL = 10.0ps	it.			$\epsilon \in$	120	N. T	1-1
	7 0 105/0	14 15 1	=-313/243, 3-10=-01	/20, 9)	Refer to girde	er(s) for truss to tr	uss conr	nections.			4	2		nil	
	7-9=-105/0,	14-15=-	191/0, 11-13=-192/0	10	)) This truss is	designed in accord	dance w	ith the 2018			-	( )			-
NOTES					International	Residential Code	sections	8 R502.11.1 a	and				SFA	L 🕴	=
1) Unbalance	ed roof live load	ds have	been considered for		R802.10.2 ar	nd referenced star	ndard AN	ISI/TPL1.			=	:	0202		
this desig	n.			L	DAD CASE(S)	Standard					1		0363	ZZ :	-
												0	<b>1</b>		1
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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B03A	Common	3	1	Job Reference (optional)	160702982

1)

2)

forces & MWFRS for reactions shown; Lumber

DOL=1.60 plate grip DOL=1.60

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818 Soundside Road

Edenton, NC 27932

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(1111111) September 12,2023

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B04	Common	1	1	Job Reference (optional)	160702983

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September 12,2023

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B05	Common	4	1	Job Reference (optional)	160702984



2) Wind: ASCE 7-16; Vult=130mph (3-second gust) LUMBER Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; TOP CHORD 2x6 SP No 2 Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 2x4 SP No.1 \*Except\* 2-11:2x4 SP 2400F BOT CHORD zone and C-C Exterior(2E) -0-9-14 to 2-9-10, Interior (1) 2.0E 2-9-10 to 14-0-0. Exterior(2R) 14-0-0 to 21-3-0. Interior WEBS 2x4 SP No.3 \*Except\* 9-8:2x6 SP No.2, (1) 21-3-0 to 30-1-12, Exterior(2E) 30-1-12 to 33-9-4 11-5,10-5:2x4 SP No.2 WEDGE Left: 2x4 SP No.3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & BRACING MWFRS for reactions shown; Lumber DOL=1.60 plate TOP CHORD Structural wood sheathing directly applied or grip DOL=1.60 4-6-15 oc purlins, except end verticals. 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate bracing. DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; WEBS 1 Row at midpt 7-9 Cs=1.00; Ct=1.10 REACTIONS (size) 2=0-5-8, 9= Mechanical 4) Unbalanced snow loads have been considered for this Max Horiz 2=152 (LC 18) desian. Max Uplift 2=-149 (LC 14), 9=-122 (LC 15) 5) This truss has been designed for greater of min roof live Max Grav 2=1518 (LC 3), 9=1480 (LC 3) load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on FORCES (lb) - Maximum Compression/Maximum overhangs non-concurrent with other live loads. Tension This truss has been designed for a 10.0 psf bottom 6) TOP CHORD 1-2=0/22, 2-4=-2444/293, 4-5=-2188/368, chord live load nonconcurrent with any other live loads. 5-6=-2061/358, 6-8=-2047/255, 8-9=-264/58 7) \* This truss has been designed for a live load of 20.0psf BOT CHORD 2-9=-296/2122 on the bottom chord in all areas where a rectangle WEBS 7-9=-1749/244, 4-11=-495/222, 3-06-00 tall by 2-00-00 wide will fit between the bottom 5-11=-204/1101, 3-11=-353/189, chord and any other members, with BCDL = 10.0psf. 5-10=-181/902, 6-10=-489/215, 7-10=-44/187 8) Refer to girder(s) for truss to truss connections. NOTES 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 122 lb uplift at 1) Unbalanced roof live loads have been considered for joint 9. this design.

10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

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

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B06	Half Hip	1	1	Job Reference (optional)	160702985

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:03 Page: 1 ID:6tPM5Ir?FJUMxDStPvqO5SzF\_Wb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -0-10-8 0-10-8 34-0-0 H 0-3-8 9-1-14 17-10-11 25-10-7 33-8-8 7-11-13 9-1-14 8-8-12 7-10-1 2x4 II 5x6= 8x10= 9-8-13 0-1-15 1-15 H 67 4 20 215 22 12 6 19 8x10 🞜 18 3 9-6-14 9-10-1 9-6-14 9-6-1 17 9-9-9 Þ 13 12 23 10 24 11 98 2x4 🛛 4x6= 3x5= 8x10= 3x6= 4x6= 34-0-0 || 0-3-8 9-1-14 17-8-15 25-6-15 33-8-8 9-1-14 8-7-0 7-10-1 8-1-9 Scale = 1:65.4 Plate Offsets (X, Y): [2:Edge,0-0-11], [3:0-5-0,0-4-8], [4:0-2-12,0-1-12], [5:0-5-0,0-4-8], [9:0-2-0,0-1-8], [10:0-5-0,0-4-8]

							-							
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 IRC2018	8/TPI2014	CSI TC BC WB Matrix-MSH	0.62 0.61 0.86	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.20 0.06	(loc) 11-13 11-13 9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 260 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig (2) Wind: AS Vasd=103 Cat. II; Ex zone and	2x6 SP No.2 2x6 SP No.2 2x4 SP No.3 *Excep Structural wood shea 4-5-4 oc purlins, exc 2-0-0 oc purlins, exc 1 Row at midpt 2 Rows at 1/3 pts (size) 2=0-5-8, § Max Horiz 2=337 (LC Max Uplift 2=-126 (L Max Grav 2=1546 (L (lb) - Maximum Com Tension 1-2=0/22, 2-4=-2556 6-7=0/0 2-13=-381/2204, 11- 9-11=-219/1424, 8-9 4-11=-30/787, 6-9=-: 5-10=-3/884, 5-9=-1 3-13=0/350 ed roof live loads have n. CE 7-16; Vult=130mph Bmb; TCDL=6.0psf; BM; p B; Enclosed; MWFR3 C-C Exterior(2E) -0-9-	t* 4-10,5-9:2x4 SP N athing directly applie cept -0 max.): 4-7. applied or 10-0-0 oc 6-9, 4-10, 3-11 5-9 =0 Mechanical C 14), 9=-176 (LC 1 -C 38), 9=1720 (LC 3 -00 292/80, 4-10=-638/1 774/211, 3-11=-917/ been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterion 14 to 2-9-10, Interior	3) lo.2 4) dor 5) c 6) 7) 8) 1) 37) 9) 10 3, 11 44, 12 255, 12 . 13 . LC r (1)	TCLL: ASCI Plate DOL= DOL=1.15); Cs=1.00; Ct Unbalanced design. This truss hi- load of 12.0 overhangs r Provide ade This truss hi- chord live lo * This truss on the botto 3-06-00 tall chord and a Refer to girc Provide med bearing plat joint 9. ) One H2.5A recommend UPLIFT at jt does not coo :) This truss is Internationa R802.10.2 a i) Graphical pu or the orient bottom chor DAD CASE(S)	E 7-16; Pr=20.0 ps 1.15); Pf=20.0 ps Is=1.0; Rough Ca =1.10 snow loads have as been designed psf or 1.00 times ion-concurrent wit quate drainage to as been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide w ny other members ler(s) for truss to t chanical connection e capable of withs Simpson Strong-T ed to connect trus (s) 2. This connect nsider lateral force designed in accoil I Residential Code and referenced sta urlin representation ation of the purlin d. Standard	f (roof LI (Lum DC t B; Fully been cor for great flat roof li h other li prevent for a 10. with any d for a liv as where vill fit betv s, with BC russ conne s, with BC russ conne s to bear tion is for s. rdance w e sections n does no along the	L: Lum DOL= DL=1.15 Plate Exp.; Ce=0. asidered for t er of min roo bad of 20.0 p ve loads. water pondin 0 psf bottom other live loa e load of 20. a rectangle veen the bott DL = 10.0ps hections. ers) of truss 76 lb uplift a ctors ing walls due r uplift only a s R502.11.1 a JSI/TPI 1. ot depict the e top and/or	11.15 e 9; his f live sf on g. ads. 0psf om f. to t t to t and size				ORTH CA ORTHESS SEA 0363	ROUTE L	
(1) 21-6-3 end vertic	to 30-4-8, Exterior(2E) al left exposed;C-C for	) 30-4-8 to 34-0-0 zo members and force	ne; s &								14	AUGIN	REPLIN	

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-9-14 to 2-9-10, Interior (1) 2-9-10 to 14-3-3, Exterior(2R) 14-3-3 to 21-6-3, Interior (1) 21-6-3 to 30-4-8, Exterior(2E) 30-4-8 to 34-0-0 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



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September 12,2023

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Job	Truss	Truss Type	Qty Ply 91 Serenity-Roof-B330 E COP TMB		91 Serenity-Roof-B330 E COP TMB	
23080111-01	B07	Half Hip	1	1	Job Reference (optional)	160702986



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Plate Offsets (X, Y):	[2:0-1-4,0-2-3], [3:0-4-0,Edge]	, [4:0-5-0,0-4-8], [6:0-1-12,0-1-12]	, [11:0-2-0,0-1-8],	[13:0-3-0,0-3-0], [15:0-4-8,0-2	-8]
-----------------------	---------------------------------	--------------------------------------	---------------------	---------------------------------	-----

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	<b>CSI</b> TC BC WB Matrix-MSH	0.75 0.92 0.81	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.33 -0.61 0.34	(loc) 3-16 3-16 11	l/defl >999 >662 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 282 lb	<b>GRIP</b> 244/190 FT = 20%	
BODE         10.0           LUMBER         2x6 SP No.2 *Except* 1-4:2x8 SP 2400F           TOP CHORD         2x4 SP No.2 *Except* 1-4:2x8 SP 2400F           BOT CHORD         2x4 SP No.2 *Except* 2-17:2x6 SP No.2,           3-15:2x4 SP No.1, 5-14:2x4 SP No.3           WEBS         2x4 SP No.2 *Except* 4-16,15-4,13-15:2x4           SP No.3           BRACING           TOP CHORD         Structural wood sheathing directly applied or           4-1-1 oc purlins, except           2-0-0 oc purlins (6-0-0 max.): 6-9.           BOT CHORD         Rigid ceiling directly applied or 2-2-0 oc           bracing.           WEBS         1 Row at midpt           4-15, 6-12, 6-13, 8-11           WEBS         2 Rows at 1/3 pts           7-11           REACTIONS         (size)           2=0-5-8, 11=           Max Horiz         2=387 (LC 14)           Max Uplift         2=1540 (LC 38), 11=1613 (LC 37)           FORCES         (lb) - Maximum Compression/Maximum           Tension         Tension				<ul> <li>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) -0-7.14 to 2-11-10. Interior (1) 2-11-10 to 16-11-11, Exterior(2R) 16-11-11 to 24-2-11, Interior (1) 24-2-11 to 30-4-8, Exterior(2E) 30-4-8 to 34-0-0 zone; end vertical left exposed; C-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: 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</li> <li>4) Unbalanced snow loads have been considered for this design.</li> <li>5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.</li> <li>6) Provide adequate drainage to prevent water ponding.</li> <li>7) This truss has been designed for a 10.0 psf bottom</li> </ul>						s not depict the siz the top and/or	ze			
FORCES	(Ib) - Maximum Com	pression/Maximum	37) 7)	This truss has chord live loa	s been designed for d nonconcurrent v	or a 10.0 vith any	) psf bottom other live load	ds.						
TOP CHORD	1-2=0/18, 2-3=-800/0 5-6=-2090/305, 6-7= 8-9=0/0	), 3-5=-2997/274, -830/113, 7-8=0/0,	8)	on the bottom 3-06-00 tall b	as been designed i chord in all areas y 2-00-00 wide wil	tor a liv s where Il fit betw	e load of 20.0 a rectangle leen the botto	ipst om				TH CA	ROUN	
BOT CHORD	2-17=-204/401, 3-17 3-16=-551/2808, 15- 14-15=0/75, 5-15=-4 12-14=-187/1157, 11	=-80/365, 16=-545/2808, 24/185, -12=-112/828, 10-11	9) 10 =0/0	<ul> <li>Refer to girde</li> <li>Provide mech</li> <li>bearing plate</li> <li>ioint 11.</li> </ul>	er(s) for truss to tru- nanical connection capable of withsta	uss conr (by oth anding 1	ections. ers) of truss to 62 lb uplift at	D		4		O. OFESS		2
WEBS 4-16=0/233, 4-15=-1133/274, 13-15=-163/1143, 6-15=-322/1410, 6-12=-770/164, 7-12=-47/986, 6-13=-89/127, 8-11=-249/68, 7-11=-1568/212 NOTES 1) Unbalanced roof live loads have been considered for this design.				<ul> <li>11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 2. This connection is for uplift only and does not consider lateral forces.</li> <li>12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.</li> </ul>							ER. KI	anna 199		

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818 Soundside Road Edenton, NC 27932

September 12,2023

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B08	Half Hip	1	1	Job Reference (optional)	160702987

TCDL

BCLL

BCDL

WEBS

WEBS

WEBS

WEBS

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:04 ID:jCQDRPFmxy5us2K9CGvbovzF\_Un-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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818 Soundside Road

Edenton, NC 27932

1111111111

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B09	Half Hip	1	1	Job Reference (optional)	160702988

TCDL

BCLL

BCDL

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B10	Half Hip	1	1	Job Reference (optional)	160702989

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:05 ID:jCQDRPFmxy5us2K9CGvbovzF\_Un-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:63.8

Plate Offsets (	(X, Y): [2:0-3-8,Edge],	[3:0-4-4,Edge], [4:0-5	5-0,0-4-8]	, [5:0-3-0,0-1-1	2], [8:0-4-12,0-4-	8], [12:0-	2-0,0-1-8], [16	5:0-2-12	2,0-3-0],	[17:0-3-8	3,0-1-8	;]		
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.72 0.92 0.87	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.29 -0.53 0.33	(loc) 16-17 3-17 12	l/defl >999 >765 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 261 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD	2x6 SP No.2 *Excep 2.0E 2x4 SP No.2 *Excep No.3, 3-16:2x4 SP N 2x4 SP No.3 Left: 2x4 SP No.3 Structural wood she	t* 4-1:2x8 SP 2400F t* 18-3,6-15:2x4 SP lo.1	2)	Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-0 (1) 2-11-10 tr Interior (1) 17 34-0-0 zone; and forces & DOL=1.60 pl	7-16; Vult=130m h; TCDL=6.0psf; b; Enclosed; MWF C Exterior(2E) -0- b 10-4-8, Exterior 7-7-8 to 30-4-8, E end vertical left e MWFRS for reac ate grip DOL=1.6	ph (3-sec BCDL=6 FRS (enve 7-14 to 2 (2R) 10-4 (xterior(2R exposed;0 ttions sho	cond gust) .0psf; h=25ft; elope) exterio -11-10, Interio -8 to 17-7-8, =) 30-4-8 to C-C for memb wn; Lumber	r or eers	13) Gra or ti bott	phical print he orient com chor CASE(S)	urlin re tation o rd. ) Sta	epresentation do of the purlin alor ndard	es not depict the siz g the top and/or	ze
BOT CHORD	3-8-4 oc purlins, exc 2-0-0 oc purlins (4-9 Rigid ceiling directly bracing, Except: 2-2-0 oc bracing: 3-1	ept -9 max.): 5-10. applied or 10-0-0 oc 17.	3)	TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced	7-16; Pr=20.0 ps .15); Pf=20.0 psf s=1.0; Rough Ca 1.10 snow loads have	of (roof LL (Lum DC t B; Fully been cor	:: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9 hsidered for th	1.15 ); nis						
WEBS REACTIONS	1 Row at midpt (size) 2=0-5-8, 1 Max Horiz 2=266 (LC Max Uplift 2=-105 (L Max Grav 2=1516 (L	8-12  2= Mechanical C 14) C 14), 12=-192 (LC 1 .C 38), 12=1687 (LC 3	5) 1) 6) 37) 7)	design. This truss ha load of 12.0 j overhangs no Provide adeo This truss ha	s been designed osf or 1.00 times on-concurrent wit quate drainage to s been designed	for greate flat roof lo h other liv prevent v for a 10 (	er of min roof bad of 20.0 ps /e loads. water ponding ) psf bottom	live sf on J.						
FORCES	(lb) - Maximum Com Tension 1-2=0/18, 2-3=-743/3 5-6=-2108/289, 6-7= 7-9=-1762/194, 9-10	pression/Maximum 8, 3-5=-3236/453, 2094/288, ==0/0	8)	chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar	ad nonconcurrent has been designe in chord in all area by 2-00-00 wide w	with any d for a liv as where vill fit betw with BC	other live load e load of 20.0 a rectangle veen the botto	ds. )psf om				TH CA	ROLI	
BOT CHORD	2-18=-139/356, 3-18 3-17=-453/2848, 16- 15-16=0/109, 6-16=- 13-15=-136/1213, 12 11-12=-00	=-33/221, 17=-298/1964, 460/118, 2-13=-135/1219,	9) 10	Refer to gird Provide mec bearing plate joint 12.	er(s) for truss to the hanical connection connection capable of withs	russ conr n (by oth tanding 1	ections. ers) of truss to 92 lb uplift at	D		4	it	SEA		
WEBS	4-17=-971/305, 7-16 7-14=-769/199, 8-14 14-16=-179/1733, 8- 5-17=-277/1449, 5-1 9-12=-253/67, 8-12=	=-136/609, =-121/871, 13=0/344, 6=-93/598, -1871/207	12	) One H2.5A s recommende UPLIFT at jt( does not con ?) This truss is	to connect trus s) 2. This connec sider lateral force designed in accol	s to bear tion is for es. rdance w	uplift only an B502 11 1 a	to id		IIII.		0363	EER A	UTITY.
NOTES 1) Unbalance this design	ed roof live loads have n.	been considered for		R802.10.2 a	nd referenced sta	ndard AN	ISI/TPI 1.				11	CA.	ALBERTIN'	

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September 12,2023

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B11	Half Hip	1	1	Job Reference (optional)	160702990

16

2x4 II

21-6-8

6-1-0

5x8=

15-5-8

4-7-12

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

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15

6x10=

27-7-8

6-1-0

14

2x4 II

33-8-8

6-1-0

132

3x8=

34-0-0 || 0-3-8

Page: 1 ID:jCQDRPFmxy5us2K9CGvbovzF\_Un-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 34-0-0 || 0-3-8 6-6-12 10-8-0 15-7-4 21-6-8 27-7-8 33-8-8 6-6-12 4-1-4 4-11-4 5-11-4 6-1-0 6-1-0 3x10= 6x8= 3x5= 2x4 II 2x4 II 4x6= 0-1-15 H 7 101 5 26 ⊠ 6 27 28 29 8 9 \_<u>3</u>0  $\boxtimes$ 4x5 💋 6<sup>12</sup> 4<sup>25</sup> <u>3-11-8</u> 5-11-9 24 2 C <del>ال</del>ج ا 115



0-1-15 6-1-8

6-2-12

5-11-9

5-11-9

0-9-8

--

6-6-12

4-1-4

20

2x4 🛛

6x8=

5x8 🛛

2-5-8

2-5-8

19

2x4 🛛

10-9-12

4-3-0

18

3x5=

Plate Offsets (	(X, Y): [2:0-2-8,0-1-4],	[3:0-4-4,Edge], [5:0-5	5-4,0-3-0],	[15:0-3-12,0-3	3-0], [17:0-2-12,0-3	8-4]							
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	J/TPI2014	CSI TC BC WB Matrix-MSH	0.62 0.87 0.84	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.20 -0.39 0.28	(loc) 17-18 17-18 13	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 246 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING	2x6 SP No.2 *Excep 2.0E 2x4 SP No.2 *Excep No.3, 3-17:2x4 SP N 2x4 SP No.3 Left: 2x4 SP No.3	t* 1-5:2x8 SP 2400F t* 20-3,6-16:2x4 SP lo.1	1) 2)	Unbalanced this design. Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-( (1) 2-11-10 tr Interior (1) 14	roof live loads have 7-16; Vult=130mp bh; TCDL=6.0psf; E 3; Enclosed; MWFF C Exterior(2E) -0-7 o 7-0-8, Exterior(2F 4-3-8 to 30-4-8, Ex	e been of h (3-sec 3CDL=6 RS (env -14 to 2 R) 7-0-8 terior(21	considered fo cond gust) copsf; h=25ft elope) exterio -11-10, Interi to 14-3-8, E) 30-4-8 to	or ; or or	13) Gra or ti bott LOAD (	phical p he orient com chor CASE(S)	urlin re ation d. ) Sta	epresentation doe of the purlin along ndard	s not depict the size the top and/or
TOP CHORD	Structural wood shea 5-0-0 oc purlins, exc 2-0-0 oc purlins (4-2 Rigid ceiling directly bracing, Except:	athing directly applied rept -3 max.): 5-11. applied or 10-0-0 oc	d or 3)	34-0-0 zone; and forces & DOL=1.60 pl TCLL: ASCE Plate DOL=1 DOL=1 15)	end vertical left ex MWFRS for reacti ate grip DOL=1.60 7-16; Pr=20.0 psf .15); Pf=20.0 psf (// S=1 0; Pouch Cat	posed;( ons sho (roof LL Lum DC	C-C for memb wn; Lumber L: Lum DOL= DL=1.15 Plate	oers 1.15					
WEBS REACTIONS	8-9-10 oc bracing: 3: 8-11-9 oc bracing: 1: 1 Row at midpt (size) 2=0-5-8, 1 Max Horiz 2=204 (LC Max Uplift 2=-83 (LC	4) 5)	Cs=1.00, IS=1.0, Rough Cat B, Fully Exp., Ce=0.9, Cs=1.00; Ct=1.10 ) Unbalanced snow loads have been considered for this design. ) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on										
FORCES	Max Grav 2=1391 (L (Ib) - Maximum Com Tension	C 2), 13=1644 (LC 3)	5) 6) 7)	Provide adec This truss ha chord live loa	quate drainage to p is been designed fo ad nonconcurrent v	or a 10.0 vith any	vater ponding ) psf bottom other live loa	g. ids.					Route
TOP CHORD	1-2=0/18, 2-3=-676/2 4-5=-2607/343, 5-6= 6-7=-2775/345, 7-9= 10-11=0/0	29, 3-4=-3037/390, -2793/346, -2155/272, 9-10=0/0,	8) ,	* This truss h on the bottor 3-06-00 tall b chord and ar	nas been designed n chord in all areas by 2-00-00 wide wil ny other members.	for a liv where I fit betv	e load of 20.0 a rectangle veen the bott	0psf om		4	z	OR TES	Real Providence
BOT CHORD	2-20=-118/325, 3-20 3-19=-500/2930, 18- 17-18=-333/2311, 16 6-17=-496/142, 14-1	)=-30/194, 19=-497/2921, 6-17=0/110, 6=-184/1461,	9) 10)	Refer to gird Provide mec bearing plate joint 13.	er(s) for truss to tru hanical connection capable of withsta	iss conr (by oth inding 2	nections. ers) of truss t 202 lb uplift at	to t		THILL IN		SEA 0363	L 22
WEBS	13-14=-184/1461, 12 5-17=-141/658, 7-17 7-15=-858/201, 9-15 15-17=-266/2032, 9-	2-13=0/0 7=-149/783, 5=-119/948, 14=0/272, 5-18=-47/0	11) 654,	One H2.5A S recommende UPLIFT at jt( does not con	Simpson Strong-Tie ed to connect truss s) 2. This connecti sider lateral forces	conne to bear on is foi	ctors ing walls due · uplift only ar	to nd		111.		& MGINE	ERA
NOTES	4-19=-97/78, 4-18=- <sup>-</sup> 10-13=-247/65, 9-13	1077/208, =-1984/250	12)	This truss is International R802.10.2 ar	designed in accord Residential Code s nd referenced stan	lance w sections dard AN	ith the 2018 R502.11.1 a ISI/TPI 1.	and			11	C A. G	ILBE IIII

September 12,2023

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B12	Half Hip Girder	1	2	Job Reference (optional)	160702991

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Scale = 1:62.7

Plate Offsets (	X, Y): [2:0-2-8,0-1-4],	[3:0-6-8,Edge], [4:0-	5-4,0-3-0	], [14:0-2-0,0-2-	-12], [15:0-5-0,0-4-	8], [17:0	)-3-8,0-3-0], [*	19:0-5-8	3,Edge]					
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.78 0.72 0.66	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.32 -0.50 0.29	(loc) 19-20 19-20 14	l/defl >999 >808 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 513	<b>GRIP</b> 244/190 lb FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD	2x6 SP No.2 *Except 2.0E 2x4 SP No.2 *Except 3-19:2x6 SP 2400F 2 SP No.2 2x4 SP No.3 *Except Left: 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exce 2-0-0 oc purlins, exce 2-0 oc purlins	** 1-4:2x8 SP 2400F ** 22-3:2x4 SP No.3, 2.0E, 15-13,15-18:2x ** 17-19:2x4 SP No.2 athing directly applied ept -2 max.): 4-12. applied or 10-0-0 oc 4= Mechanical : 12) C 9), 14=-1037 (LC S C 1), 14=2996 (LC 3 pression/Maximum /399, 3-4=-6982/230 Fr8034/2704, -4946/1717, -414=000, 11-12=0/0 =134/441 -2 -297/872, 4-16=-1009/2914, 0=-082/1818, =387/180.	N 11 16 2 d or 22 33 33) 45 10, 55 11 11 11 12 13 13 13 13 13 13 13 13 13 13	2-ply truss to (0.131*x3") n Top chords c staggered at oc. Bottom chorc O-9-0 oc, 2x6 Web connect Except memi All loads are except if note CASE(S) sec provided to d unless other Unbalanced this design. Wind: ASCE Vasd=103mg Cat. II; Exp E zone; end ve grip DOL=1.6; TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 p overhangs no	be connected tog ails as follows: connected as follow 0-9-0 oc, 2x6 - 2 r ds connected as follow 0-9-0 oc, 2x6 - 2 r ds connected as follows: 2x4 ber 4-21 2x4 - 1 ro considered equally ed as front (F) or bi- tion. Ply to ply cor listribute only loads wise indicated. roof live loads have 7-16; Vult=130mp bh; TCDL=6.0psf; E 8; Enclosed; MWFF rtical left exposed; 50 7-16; Pr=20.0 psf ( s=1.0; Rough Cat =1.10 snow loads have b s been designed for por-concurrent with yuate drainage to p	ether wi vs: 2x8 - ows sta llows: 2 d at 0-9 - 1 row w at 0-5 y applie ack (B) nection s noted e been of h (3-sec BCDL=6 RS (env Lumbe (roof LI Lum DC B; Fully been con or great at roof h other lip revent of	th 10d 2 rows ggered at 0-9 x4 - 1 row at -0 oc. at 0-9-0 oc, i-0 oc. d to all plies, face in the LC s have been as (F) or (B), considered fo considered fo cond gust) .0psf; h=25ft; elope) exterior r DOL=1.60 p L=1.15 Plate Exp.; Ce=0.9 sidered for th er of min roof bad of 20.0 ps ve loads. water ponding back the ponding	DAD r Jate 1.15 ; ; his live sf on g.	<ul> <li>11) Ref</li> <li>12) Pro</li> <li>beaz</li> <li>join</li> <li>13) LG<sup>2</sup></li> <li>con</li> <li>Thia</li> <li>late</li> <li>14) Thia</li> <li>late</li> <li>15) Grat</li> <li>or t</li> <li>bott</li> <li>16) Use</li> <li>11-</li> <li>spa</li> <li>ence</li> <li>bott</li> <li>17) Fill</li> <li>18) "NA</li> <li>(0.1</li> </ul>	er to girr vide mer ving plat t 14. T2 Simpi nect trus s connec ral force s truss is rinationa 02.10.2 a phical p he orient tom chora e Simpso 10dx1 1. 10dx1 1. 10dx1 2. 1 to 15-4 tom chor all nail h ULED" in ULED" in 148"x3.2	Jer(s) I cchanic e capa son St is sto bittion is s. s desigg I Resis and ref d. on Stroo 2 Trus -0-0 or -12 to - d. oles w dicate 5") toe	tor truss to trus al connection i able of withstar rong-Tie conne earing walls du for uplift only ned in accorda dential Code s erenced stand opresentation of the purlin ald ong-Tie HTU26 iss, Single Ply C c max. starting connect truss( where hanger is is 3-10d (0.148 -nails per NDS	ss connections. (by others) of truss to hding 1037 lb upliff a ectors recommended ue to UPLIFT at jt(s) and does not consid ance with the 2018 ections R502.11.1 at lard ANSI/TPI 1. loes not depict the s ong the top and/or (20-10d Girder, Girder) or equivalent at 9-4-12 from the le es) to front face of a in contact with lumb "X3") or 3-12d S guidlines.	o at 1 to 2. ler nd ize eft ber.
	77-19=1875/5407, 7 7-17=979/410, 7-16 9-16=516/283/10-1 10-15=0/276, 10-14= 11-14=303/1374	7-19=-827/2521, =-1621/553; 6 <del>1</del> =996/2685 -3903/1351 GIL	1	chord live loa ) * This truss h on the bottom 3-06-00 tall b chord and an	ad nonconcurrent v las been designed n chord in all areas by 2-00-00 wide will by other members.	vith any for a liv s where I fit betw	other live load e load of 20.0 a rectangle veen the botto	ds. Opsf om				Septemb	per 12,2023	

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

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	B12	Half Hip Girder	1	2	Job Reference (optional)	160702991

19) LGT2 Hurricane ties must have two studs in line below the truss.

20) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 626 lb down and 269 lb up at 7-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

## LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-60, 3-4=-60, 4-12=-60, 22-23=-20, 3-19=-20, 13-18=-20

Concentrated Loads (lb)

Vert: 8=-109 (F), 21=-626 (F), 20=-233 (F), 19=-233

(F), 15=-33 (F), 10=-109 (F), 27=-109 (F), 28=-109

(F), 29=-109 (F), 30=-109 (F), 31=-109 (F), 32=-109

(F), 33=-120 (F), 34=-233 (F), 35=-233 (F), 36=-33 (F), 37=-33 (F), 38=-33 (F), 39=-33 (F), 40=-33 (F),

41=-33 (F), 42=-33 (F), 43=-37 (F)

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:07 ID:jCQDRPFmxy5us2K9CGvbovzF\_Un-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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	C01	Common Supported Gable	1	1	Job Reference (optional)	160702992

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:08 ID:5YHGUO?uH32kl2tSfhna\_0yeUUd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



#### Scale = 1:41.8

													-	
Loading		(psf)	Spacing	2-0-0 1 15		CSI	0 15	DEFL	in n/a	(loc)	l/defl	L/d	PLATES	<b>GRIP</b> 244/190
Spow (Pf)		20.0		1.15		BC	0.13	Vert(CT)	n/a		n/a	000	101120	244/130
		10.0	Ren Stress Incr	VES		WB	0.07	Horz(CT)	0.00	10	n/a	000 n/a		
BCU		0.0*	Code	IRC2	18/TPI2014	Matrix-MR	0.21	11012(01)	0.00	10	n/a	n/a		
BCDL		10.0	Code	INCZ	16/11/2014	INIAULX-INIX							Weight: 77 lb	FT = 20%
					2) Wind ASCE	7-16: Vult=130mr	h (3-sec	cond qust)		14) Thi	s truss is	desio	ned in accordance	ce with the 2018
TOP CHORD	2v4 SP N	0.2			Vasd=103m	oh: TCDL=6.0psf:	BCDL=6	0.0psf: h=25ft:		Inte	rnationa	l Resi	dential Code sec	tions R502.11.1 and
BOT CHORD	2x4 SP N	0.2			Cat. II; Exp E	3; Enclosed; MWF	RS (env	elope) exterio	r	R80	2.10.2 a	and ref	erenced standar	d ANSI/TPI 1.
WEBS	2x4 SP N	0.3			zone and C-	C Corner(3E) -0-1	0-8 to 2-	3-8, Exterior(2	2N)	LOAD	CASE(S	) Sta	ndard	
OTHERS	2x4 SP N	0.3			2-3-8 to 3-3-	8, Corner(3R) 3-3-	-8 to 9-3	-8, Exterior(2N	) (I			,		
BRACING					9-3-8 to 10-3	8-8, Corner(3E) 10	-3-8 to 1	3-5-8 zone; ei	nd					
TOP CHORD	Structura	l wood she	athing directly applie	ed or	vertical left a	nd right exposed;	C-C for r	nembers and						
	6-0-0 oc	purlins. ex	cept end verticals.		forces & MW	FRS for reactions	shown;	Lumber						
BOT CHORD	Rigid ceil	ina directly	applied or 6-0-0 oc		DOL=1.60 p	ate grip DOL=1.60	0							
	bracing.	5,			<ol> <li>Truss desig</li> </ol>	ned for wind loads	in the p	lane of the tru	SS					
REACTIONS	(size)	10=12-7-0	), 11=12-7-0, 12=12-	-7-0.	only. For stu	ids exposed to wir	nd (norm	al to the face)	·.					
	. ,	13=12-7-0	), 14=12-7-0, 15=12-	-7-0,	see Standard	a industry Gable E	ind Deta	lis as applicat						
		16=12-7-0	)			7 16 Duilding de	f (roof L		11. 15					
	Max Horiz	16=171 (L	-C 13)		Plate DOI –1	15) Pf-20.0 ps		Luin DOL= i )I –1 15 Plate	.15					
	Max Uplift	10=-56 (L	C 14), 11=-118 (LC	15),	DOI = 1.15	Is=1 0: Rough Cat	B' Fully	Exp : Ce=0.9						
		12=-65 (L	C 15), 14=-65 (LC 1-	4),	Cs=1.00: Ct	=1.10	. D, r uny	шлр., <b>О</b> О-0.0	,					
		15=-121 (	LC 14), 16=-61 (LC	10)	5) Unbalanced	snow loads have	been cor	nsidered for th	is					
	Max Grav	10=168 (L	-C 24), 11=215 (LC 2	25),	design.									
		12=273 (L	-C 22), 13=194 (LC 3	31),	6) This truss ha	s been designed	for great	er of min roof	live					
		14=273 (L	C 21), 15=220 (LC 2	24),	load of 12.0	psf or 1.00 times f	lat roof l	bad of 20.0 ps	sf on					
505050		10=170 (L	.C 25)		overhangs n	on-concurrent with	n other li	ve loads.						
FORCES	(Ib) - Max	umum Com	pression/Maximum		<ol><li>All plates are</li></ol>	e 2x4 MT20 unless	s otherwi	se indicated.						11
	2 16- 14	2/165 1 2-	0/20 2 2 100/102		<ol> <li>Gable requir</li> </ol>	es continuous bot	tom chor	d bearing.					1111 CA	D'III
TOF CHORD	3-486/2	2/103, 1-2= 209 4-51	33/306 5-6-134/30		9) Truss to be f	ully sheathed from	n one fac	e or securely					N'TH UP	NON'I
	6-7=-85/2	200, 4 0 1	7/90 8-9=0/39	<i>,</i> ,	braced agair	ist lateral moveme	ent (i.e. c	liagonal web).				1	ON JERG	N. MAR
	8-10=-13	5/157	1700, 0 0-0700,		10) Gable studs	spaced at 2-0-0 0	C.					12		The and
BOT CHORD	15-16=-8	0/96. 14-15	=-80/96. 13-14=-80/	/96.	chord live lo	ad popeopeurropt	with any	other live lear	de		9			NºU/
	12-13=-8	0/96, 11-12	=-80/96, 10-11=-80/	/96	12) * This trues h		tor a liv	e load of 20.0	us. Inef		-		· × ·	1 1 1 E -
WEBS	5-13=-30	6/69, 4-14=	-234/128,		on the bottor	n chord in all area	s where	a rectangle	psi		=		SEA	L : :
	3-15=-16	1/164, 6-12	=-234/125,		3-06-00 tall b	ov 2-00-00 wide w	ill fit bety	veen the botto	m		=	:	0262	22 : -
	7-11=-16	1/175			chord and ar	y other members			-		1		0363	22 : 2
NOTES					13) Provide mec	hanical connectior	n (by oth	ers) of truss to	С		-	0	N	1.1.1
1) Unbalance	ed roof live	loads have	been considered for	r	bearing plate	e capable of withst	anding 6	61 lb uplift at jo	oint		5	-	·	airs
this desig	n.				16, 56 lb upl	ft at joint 10, 65 lb	o uplift at	joint 14, 121 I	lb			15	A VGIN	EFILAN
					uplift at joint	15, 65 lb uplift at j	oint 12 a	nd 118 lb upli	ft at			11	710	COLUN
					ioint 11							1.00		

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

- 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 16, 56 lb uplift at joint 10, 65 lb uplift at joint 14, 121 lb uplift at joint 15, 65 lb uplift at joint 12 and 118 lb uplift at joint 11.

11111111 September 12,2023

818 Soundside Road Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	C02	Common Girder	1	2	Job Reference (optional)	160702993

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:08 ID:uSJPwhbhvE6qYckO26D8zGyeUXj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:47.6

Plate Offsets	(X, Y): [1:Edge,0-5-7],	[5:Edge,0-5-7], [6:0	)-6-0,0-6-0]	, [7:0-6-0,0-6-0	0]									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCCL	(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 IRC2018	8/TPI2014	CSI TC BC WB Matrix-MSH	0.25 0.26 0.81	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.07 0.01	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 213 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS 1) 2-ply trus: (0.131"x3 Top chore staggerec Bottom ch staggerec Web conr	2x6 SP No.2 2x8 SP 2400F 2.0E 2x4 SP No.3 Left: 2x6 SP No.2 Right: 2x6 SP No.2 Structural wood shea 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=0-5-8, 5 Max Horiz 1=123 (LC Max Grav 1=6513 (L (lb) - Maximum Com Tension 1-2=-5760/0, 2-3=-50 4-5=-5408/0 1-7=0/4301, 6-7=0/3 3-6=-87/3020, 4-6=0 2-7=0/253 s to be connected toget ") nails as follows: ts connected as follows: ta t 0-9-0 oc. nected as follows: 2x4 -	athing directly appli applied or 10-0-0 o 5=0-5-8 2 11) .C 5), 5=4826 (LC 6 pression/Maximum 619/0, 3-4=-5241/0, .057, 5-6=0/3991 /322, 3-7=0/3894, ther with 10d s: 2x6 - 2 rows pws: 2x8 - 2 rows 1 row at 0-9-0 oc.	2) ed or 4) c 5) () () () () () () () () () (	All loads are except if not CASE(S) se provided to d unless other Unbalanced this design. Wind: ASCE Vasd=103m Cat. II; Exp I zone; cantile and right exp DOL=1.60 TCLL: ASCE Plate DOL= <sup>2</sup> DOL=1.15); Cs=1.00; Ct: Unbalanced design. This truss ha chord live lox * This truss ha chord live lox * This truss is International R802.10.2 a	considered equally ed as front (F) or ba ction. Ply to ply con distribute only loads wise indicated. roof live loads have 7-16; Vult=130mp ph; TCDL=6.0psf; E 3; Enclosed; MWFF wer left and right ey bosed; Lumber DOI 5; 7-16; Pr=20.0 psf (.15); Pf=20.0 psf(.15); Pf=20.0 psf (.15); Pf=20.0 psf(.15	/ applie ack (B) innection is noted a been of h (3-sec 3CDL=6 3CDL=6 3CDL=6 (roof LL Lum DC B; Fully een cor or a 10. <i>i</i> th any for a liv s where I fit betw lance w sections dard AN	d to all plies, face in the LC s have been as (F) or (B), considered for sond gust) .0psf; h=25ft elope) exteric elope) exteric plate grip .: Lum DOL= JL=1.15 Plate Exp.; Ce=0.5 nsidered for th D psf bottom other live loa e load of 20.0, a rectangle veen the bott ith the 2018 s R502.11.1 a USI/TPI 1.	DAD or ; or left 1.15 ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	10) Use 11- spa enc bott 11) Fill LOAD ( 1) De In: Ur Co	e Simpso 10dx1 1. iced at 2 to 10-7 tom chorall nail H <b>CASE(S</b> ead + Sr crease= niform Lo Vert: 1-: oncentra Vert: 6= 16=-158	on Stro /2 Trus t-0-0 oc -0 to cc nd. now (ba 1.15 boads (II) 1389 36 (B),	ng-Tie HTU26 (2 is, Single Ply Girc c max. starting at onnect truss(es) t here hanger is in ndard alanced): Lumber b/ft) 3-5=-60, 8-11=-2 ads (lb) (B), 7=-1586 (B), 18 H CA OB (B), 17=-1586 (B), 18 G (B), 17=-1586 (B), 18 G (B	0-10d Girder ler) or equiva 0-7-0 from ti o back face contact with Increase=1. 0 10=-1591 (E =-1389 (B) RO L 22 L 22	alent he left of 1umber. 15, Plate

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	CJ16	Jack-Open	1	1	Job Reference (optional)	160702994

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:09 ID:HFaSqRqh06dEOT2RDGo9vryegJR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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-0-10-8	1-6-5
0-10-8	1-6-5



1-6-5

#### Scale = 1:25.1

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 IRC2018/TPI2014	CSI TC BC WB Matrix-MR	0.23 0.09 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 8 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 1-6-5 oc purlins, ex Rigid ceiling directly bracing. (size) 3= Mecha 5=0-5-8 Max Horiz 5=57 (LC Max Uplift 3=-40 (LC Max Grav 3=35 (LC (LC 21) (lb) - Maximum Con Tension 2-5=-185/84, 1-2=0/	Pathing directly applied cept end verticals. rapplied or 10-0-0 oc anical, 4= Mechanical, 14) 214), 4=-12 (LC 14) 21), 4=25 (LC 7), 5=2 appression/Maximum 60, 2-3=-59/36	<ul> <li>6) * This truss on the botto 3-06-00 tall chord and a</li> <li>7) Bearings an crushing ca</li> <li>8) Refer to girc</li> <li>9) Provide men bearing plat 4 and 40 lb</li> <li>10) This truss is Internationa R802.10.2 a</li> <li>205</li> </ul>	has been designed m chord in all areas by 2-00-00 wide wil ny other members. e assumed to be: , , pacity of 425 psi. der(s) for truss to tr chanical connection e capable of withste uplift at joint 3. designed in accord I Residential Code s and referenced stan ) Standard	for a liv s where Il fit betv Joint 5 L uss con (by oth anding 1 dance w sections dard AN	e load of 20.0 a rectangle /een the botto Jser Defined nections. ers) of truss to 2 lb uplift at jo ith the 2018 ; R502.11.1 at JSI/TPI 1.	ipsf om o pont nd					
<ol> <li>NOTES</li> <li>Wind: ASC Vasd=103 Cat. II; Exp zone and C exposed;C reactions s DOL=1.60</li> <li>TCLL: ASC Plate DOL: DOL=1.15 Cs=1.00; C</li> <li>Unbalance design.</li> <li>This truss I load of 12. overhangs</li> <li>This truss I chord live I</li> </ol>	4-5=0/0 CE 7-16; Vult=130mph mph; TCDL=6.0psf; B b B; Enclosed; MWFR C-C Exterior(2E) zone C-C for members and f shown; Lumber DOL= CE 7-16; Pr=20.0 psf (L ); Is=1.0; Rough Cat I Ct=1.10 ed snow loads have be has been designed fo 0 psf or 1.00 times fla non-concurrent with has been designed fo load nonconcurrent w	a (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; end vertical left forces & MWFRS for 1.60 plate grip (roof LL: Lum DOL=1. Lum DOL=1.15 Plate 3; Fully Exp.; Ce=0.9; een considered for this r greater of min roof li t roof load of 20.0 psf other live loads. r a 10.0 psf bottom ith any other live loads	15 s ve on s.						A CHIMME		SEA 0363	

September 12,2023



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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	CJ28	Jack-Open	1	1	Job Reference (optional)	160702995

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#### Scale = 1:39.8

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 IRC2018	/TPI2014	<b>CSI</b> TC BC WB Matrix-MP	0.15 0.04 0.06	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.01 -0.01 0.00	(loc) 7 7 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 19 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 2-8-12 oc purlins, ex Rigid ceiling directly bracing.	athing directly applied coept end verticals. applied or 10-0-0 oc	5) 6) f or 7) 8) 9)	This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Bearings are crushing cap Refer to girde Provide mect	s been designed for d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. assumed to be; , J acity of 425 psi. er(s) for truss to fur anical connection	or a 10. vith any for a liv s where I fit betv Joint 9 L uss con (by oth	) psf bottom other live loa e load of 20.0 a rectangle veen the botto Jser Defined nections. ers) of truss t	ds. )psf om o					
REACTIONS	(size) 4= Mecha 9=0-5-8 Max Horiz 9=92 (LC Max Uplift 4=-75 (LC Max Grav 4=129 (LC (LC 21)	nical, 5= Mechanical, 14) : 21), 5=10 (LC 7), 9=	10) =272	bearing plate 4. This truss is a International R802.10.2 ar	capable of withsta designed in accord Residential Code s and referenced stand	anding 7 lance w sections dard AN	5 lb uplift at j ith the 2018 R502.11.1 a ISI/TPI 1.	oint					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	10	AD CASE(S)	Stanuaru								
TOP CHORD	2-9=-252/34, 1-2=0/6 3-4=-101/84	65, 2-3=-97/39,											
BOT CHORD WEBS	8-9=-195/54, 7-8=0/0 2-8=-59/213, 6-8=-72	), 5-6=0/0 2/53, 3-6=-69/63											
NOTES 1) Wind: ASC Vasd=103 Cat. II; Exj zone and i exposed;C reactions s DOL=1.60 2) TCLL: ASC Plate DOL DOL=1.15	CE 7-16; Vult=130mph mph; TCDL=6.0psf; BG b B; Enclosed; MWFR3 C-C Exterior(2E) zone; C-C for members and fc shown; Lumber DOL=1 CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L ); Is=1.0; Rough Cat B	(3-second gust) DL=6.0psf; h=25ft; 6 (envelope) exterior end vertical left prces & MWFRS for .60 plate grip oof LL: Lum DOL=1. Im DOL=1.15 Plate ; Fully Exp.; Ce=0.9;	15							A Manual	A MARINE	SEA 0363	

Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this 3)

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.

SPIC A. ( A. GI A. GIL September 12,2023

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	CJ310	Jack-Open	1	1	Job Reference (optional)	160702996

3-10-9

3-10-9

3-10-9

-0-10-8

0-10-8

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

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Scale	=	1:25.2

														_
Loading TCLL (roof) Snow (Pf)	(psf) 20.0 20.0	<b>Spacing</b> Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15		CSI TC BC	0.28 0.16	<b>DEFL</b> Vert(LL) Vert(CT)	in 0.01 -0.02	(loc) 4-5 4-5	l/defl >999 >999	L/d 240 180	PLATES MT20	<b>GRIP</b> 244/190	
TCDL BCLL BCDL	10.0 0.0* 10.0	Rep Stress Incr Code	YES IRC201	8/TPI2014	WB Matrix-MR	0.00	Horz(CT)	0.01	3	n/a	n/a	Weight: 15 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x6 SP No.2 Structural wood she 3-10-9 oc purlins, e Rigid ceiling directly bracing. (size) 3= Mecha 5=0-5-8 Max Horiz 5=76 (LC Max Uplift 3=-55 (LC Max Grav 3=145 (LC (LC 21)	athing directly applie xcept end verticals. applied or 10-0-0 oc inical, 4= Mechanica 14) 2 14), 5=-19 (LC 14) 2 21), 4=67 (LC 7), 5	6, d or 8, 9, l, 1, =326 L	<ul> <li>* This truss h on the bottor 3-06-00 tall b chord and ar</li> <li>Bearings are crushing cap</li> <li>Refer to girdd</li> <li>Provide mec bearing plate 5 and 55 lb u</li> <li>This truss is International R802.10.2 ar</li> </ul>	has been designer in chord in all area by 2-00-00 wide w by other members assumed to be: , acity of 425 psi. er(s) for truss to t hanical connection e capable of withst plift at joint 3. designed in accor Residential Code and referenced star Standard	d for a liv is where ill fit betv Joint 5 L russ con n (by oth tanding 1 dance w sections ndard AN	e load of 20.0 a rectangle veen the bott Jser Defined nections. ers) of truss i 9 lb uplift at j ith the 2018 s R502.11.1 a ISI/TPI 1.	Opsf om to joint and						
FORCES	(lb) - Maximum Com Tension 2-5=-300/145, 1-2=0	pression/Maximum )/47, 2-3=-87/49												
BOT CHORD	4-5=0/0	,												
NOTES 1) Wind: AS Vasd=100 Cat. II; Ex zone and exposed ; members Lumber D 2) TCLL: AS Plate DOI DOL=1.1! Cs=1.00; 3) Unbalanc design. 4) This truss	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Bi qp B; Enclosed; MWFR C-C Exterior(2E) zone ; end vertical left and rig and forces & MWFRS JOL=1.60 plate grip DC ICE 7-16; Pr=20.0 psf (L L=1.15); Pf=20.0 psf (L L=1.15); Pf=20.0 psf (L Ct=1.10 ed snow loads have be that been designed for 0.0 psf or 1.00 times for	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and ri jht exposed;C-C for for reactions shown; iL=1.60 roof LL: Lum DOL=1 um DOL=1.15 Plate 8; Fully Exp.; Ce=0.9 een considered for th r greater of min roof 1	ight .15 ; is							William		OR FESE SEA 0363	ROLUZZ	-

load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 5)

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



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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	D01	Common Supported Gable	1	1	Job Reference (optional)	160702997

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:10 ID:UUQhZhEGk9Im0a6ieC968izF\_pT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale	=	1:32

2-11-3

2-10-1

## Plate Offsets (X, Y): [2:Edge,0-0-15], [2:0-2-6,Edge], [8:Edge,0-0-15], [8:0-2-6,Edge]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDI		(psf) 20.0 20.0 10.0 0.0*	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	<b>CSI</b> TC BC WB Matrix-MSH	0.30 0.20 0.08	<b>DEFL</b> 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	<b>GRIP</b> 244/190	
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No. 2x4 SP No. 2x4 SP No. Left: 2x4 SF Right: 2x4 SF Structural w 10-0-0 cp Rigid ceiling bracing. (size) 2 Max Uplift 2 Max Uplift 2 Max Grav 2 Max Grav 2 1 1 2	2 2 3 5 No.3 5 P No.3 5 P No.3 5 P No.3 5 P No.3 9 directly 2=13-3-0, 11=13-3-0 2=42 (LC 2=-1 (LC 2 20=-44 (LC 21=-73 (LC	athing directly applied applied or 6-0-0 oc 8=13-3-0, 10=13-3-0, 12=13-3-0, 13=13-3, 14), 18=42 (LC 14) 21), 8=-73 (LC 34), C 15), 11=-35 (LC 12 C 10), 18=-22 (LC 14) C 10), 18=-1 (LC 21), C 34) 0), 8=130 (LC 22), C 22), 11=204 (LC 2 C 21), 13=121 (LC 2 C 21), 13=0 (LC 10), C 22)	1) 2) d or , , , , , , , , , , , , ,	Unbalanced this design. Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-( 2-1-8 to 4-0-( 10-0-0 to 11- cantilever lef right exposed for reactions DOL=1.60 Truss design only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 p overhangs no	roof live loads hav 7-16; Vult=130mp bh; TCDL=6.0psf; I 3; Enclosed; MWFI C Corner(3E) -0-10 0, Corner(3R) 4-0- 10-8, Corner(3E) ' t and right exposed d;C-C for members shown; Lumber D hed for wind loads tds exposed to wind d Industry Gable E alified building des 7-16; Pr=20.0 psf (15); Pf=20.0 psf	e been of h (3-sec 3CDL=6 RS (env)-8 to 2- 0 to 10- 11-10-8 d; end v and for OL=1.6( in the p d (norm nd Deta signer as (roof LL Lum DC B; Fully been cor or great at roof la other lin other vit	considered fo ond gust) .0psf; h=25ft; elope) exteric 1-8, Exterior(: 0-0, Exterior(: 0-0, Exterior(: 1-8, Exterior(: 0-0, Ext	r pr 2N) 2N) 2N) pne; dd RS Jss ), ble, Pl 1. 1.15 2 ; his live sf on	11) Prov bea 2, 7, 44 II at jc 12) Non 13) This Inte R80 LOAD C	vide mea ring plat 3 lb upliti int 13, 7 5 uplift a int 8. Standa truss is 2.10.2 a ASE(S)	chanic e capa ft at joi f lb uj t joint rd bea d desig I Resis and ref Sta	al connection (by able of withstand int 8, 48 lb uplift at 10, 1 lb uplift at joint 14, 3 10, 1 lb uplift at j aring condition. F ned in accordand dential Code sec erenced standar ndard	others) of truss ng 1 lb uplift at joint it joint 12, 22 lb 3 lb uplift at joint oint 2 and 73 lb Review required. with the 2018 tions R502.11.1 d ANSI/TPI 1.	<pre>&gt; to joint uplift t11, uplift 3 and</pre>
TOP CHORD	(ID) - Maxin Tension 1-2=0/17, 2 4-5=-123/4 7-8=-217/40	2-3=-220/4 14, 5-6=-1	135, 3-4=-165/403, 122/397, 6-7=-170/39	8) 9) <sup>94,</sup> 10	Gable studs This truss ha chord live loa ) * This truss h	spaced at 2-0-0 oc s been designed fo ad nonconcurrent v nas been designed	:. or a 10.0 vith any for a liv	) psf bottom other live loa e load of 20.0	ds. Opsf		N''''		SEA	L	Non III
BOT CHORD WEBS	2-14=-367/2 12-13=-367 10-11=-367 5-12=-362/ 3-14=-278/	260, 0 3-0 260, 13-1 7/260, 11- 7/260, 8-1 181, 4-13 154, 6-11	 4=-367/260, 12=-367/260, 0=-367/260 =-144/108, =-182/127,		on the botton 3-06-00 tall b chord and an	n cnord in all areas by 2-00-00 wide wil by other members.	s where Il fit betv	a rectangle veen the botto	om		1111			EER. AL	ninne.
NOTES	7-10=-214/	128											11, A. C	illumin	

September 12,2023

Page: 1

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

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	D02	Common	4	1	Job Reference (optional)	160702998

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:10 ID:nqLL14Jf5JAmMe82YAnlwAzF\_pM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

06:04:10 Page: 1





Scale = 1:34.3

# Plate Offsets (X, Y): [2:Edge,0-0-15], [2:0-2-6,Edge], [4:Edge,0-0-15], [4:0-2-6,Edge]

,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 0 , I	0 /	1.1	÷.									
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 IRC2018	8/TPI2014	CSI TC BC WB Matrix-MSH	0.72 0.54 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.12 0.02	(loc) 6-11 6-11 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 52 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD 30T CHORD WEBS WEDGE BRACING TOP CHORD 30T CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood she 4-1-5 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-0, 2 Max Horiz 2=42 (L Max Uplift 2=-223 (L Max Grav 2=712 (LC (lb) - Maximum Com Tension 1-2=0/17, 2-3=-893/ 4-5=0/17 2-6=-927/766, 4-6=- 3-6=-419/265	athing directly applie applied or 5-10-2 oc 4=0-3-0 18) C 10), 4=-223 (LC 1 C 21), 4=712 (LC 22) pression/Maximum 1088, 3-4=-893/1088 927/766	3) 4) 5) 5 6) 7) 1) 8, 9) LC	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 chord and ar One H2.5A S recommende UPLIFT at jt( and does no This truss is International R802.10.2 at DAD CASE(S)	7-16; Pr=20.0 psf .15); Pf=20.0 psf ( Is=1.0; Rough Cat =1.10 snow loads have b s been designed for port of the transformation of the transformation is been designed for ad nonconcurrent with s been designed for a concert russ s) 2 and 4. This con- t consider lateral for designed in accord Residential Codes and referenced stan Standard	(roof LL Lum DC B; Fully een cor or great at roof lo other lin or a 10.0 in a 10.0 in a lin in any for a lin in the two sevents to bear nnection rces. lance w dard AN	L: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 Asidered for the er of min roof bad of 20.0 p re loads of 20.0 p re loads of 20.0 a rectangle veen the bottor ctors ing walls due n is for uplift of ith the 2018 R502.11.1 a ISI/TPI 1.	1.15 e); his live sf on ds. Dpsf com to conly				WH CA	BO MA	
<ol> <li>Unbalance this design</li> <li>Wind: ASC</li> </ol>	ed root live loads have	(3-second qust)									A	ORFESS	Ni	

c) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 4-0-0, Exterior(2R) 4-0-0 to 10-0-0, Interior (1) 10-0-0 to 11-10-8, Exterior(2E) 11-10-8 to 14-10-8 zone; 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 036322 A. GILBERT

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	91 Serenity-Roof-B330 E COP TMB	
23080111-01	E01	Common Supported Gable	1	1	Job Reference (optional)	160702999

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:10 ID:hs\_OLPz9\_OqUDEXuG81pmYzF\_Z1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:42.4

# Plate Offsets (X, Y): [6:0-2-8,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 IRC201	8/TPI2014	<b>CSI</b> TC BC WB Matrix-MR	0.15 0.09 0.11	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: 85 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No 2x4 SP No 2x6 SP No 2x4 SP No Structural 6-0-0 oc p Rigid ceili bracing. (size) Max Horiz Max Uplift Max Grav	0.2 0.2 0.2 0.3 wood sheat ourlins, exc ng directly 12=12-11- 16=12-11- 18=12-11- 19=-177 (l 12=-61 (Lt 14=-87 (Lt 18=-135 (l 12=158 (L 14=208 (L 16=208 (L 18=-108 (l)	athing directly applie ept end verticals. applied or 6-0-0 oc 0, 13=12-11-0, 0, 15=12-11-0, 0, 17=12-11-0 .C 12) C 11), 13=-131 (LC C 21), 17=-85 (LC 1 C 24), 13=190 (LC 2 C 22), 15=208 (LC 2 C 21), 17=268 (LC 2 C 21), 17=268 (LC 2 C 21), 17=272 (LC 2)	1) 2) ed or 3) 15), 4) 4), 10) 25), 5) 21), 6)	Unbalanced this design. Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-C 2-1-8 to 3-5-5 9-2-4 to 10-9 vertical left ai forces & MW DOL=1.60 pl. 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	roof live loads have 7-16; Vult=130mp h; TCDL=6.0psf; E ;; Enclosed; MWFF C Corner(3E) -0-10 3, Corner(3E) 10- nd right exposed; D FRS for reactions ate grip DOL=1.60 hed for wind loads ds exposed to wind l Industry Gable El alified building des 7-16; Pr=20.0 psf (s=1.0; Rough Cat 1.10 snow loads have b s been designed for	e been of h (3-sec 3CDL=6 RS (enve) -8 to 2-2 9-8 to 1 2-C for n shown; in the pi d (norm nd Deta signer as (roof LL Lum DC B; Fully been cor	considered for ond gust) .0psf; h=25ft; elope) exterior 1-8, Exterior(2N 3-9-8 zone; en- nembers and Lumber ane of the tru al to the face) Is as applicat construction of the tru ane of the tru al to the face) Is as applicat construction of the tru ane of the tru and the face) is dered for the er of min roof	r 2N) √) nd ss , , le, , 15 ; is	13) Prov bear 19, ( uplif joint 14) This Inter R80 LOAD C	vide mee ring plat 61 lb up t at joint 13. truss is rnationa 2.10.2 a <b>ASE(S</b> )	chanic e cap lift at j t 18, 8 s desig l Resi and rei ) Sta	al connection (by able of withstandi oint 12, 85 lb upli 7 lb uplift at joint gned in accordand dential Code sec ferenced standar indard	others) of truss ng 78 lb uplift at ft at joint 17, 13: 14 and 131 lb up re with the 2018 ions R502.11.1 J ANSI/TPI 1.	to t joint 5 lb plift at and
FORCES	(lb) - Maxi Tension	imum Com	pression/Maximum	23) 7)	load of 12.0 p overhangs no All plates are	osf or 1.00 times fla on-concurrent with 2x4 MT20 unless	at roof lo other liv otherwi	oad of 20.0 ps /e loads. se indicated.	fon			5	TH CA	ROLIN	
TOP CHORD	2-19=-136 3-4=-67/9 6-7=-76/1 9-10=-95/	6/75, 1-2=0 1, 4-5=-91/ 64, 7-8=-9 <sup>-</sup> 91, 10-11=	/42, 2-3=-111/109, 215, 5-6=-76/164, l/215, 8-9=-54/93, 0/42, 10-12=-125/60	8) 9)	Gable require Truss to be fi braced again	es continuous botto ully sheathed from st lateral movement	om chor one fac nt (i.e. d	d bearing. e or securely iagonal web).			4	i	O. FESS		Marin
BOT CHORD	18-19=-89 16-17=-89 14-15=-89 12-13=-89	9/161, 17-1 9/161, 15-1 9/161, 13-1 9/161	8=-89/161, 6=-89/161, 4=-89/161,	11	<ol> <li>Cable studs :</li> <li>This truss ha chord live loa</li> <li>This truss h</li> <li>on the botton</li> </ol>	spaced at 2-0-0 00 s been designed for a nonconcurrent v as been designed n chord in all areas	or a 10.0 vith any for a liv s where	) psf bottom other live load e load of 20.0 a rectangle	ds. psf		TITLE .		SEA 0363	L 22	unnun
WEBS	5-16=-175 3-18=-138 9-13=-134	5/6, 7-15=-′ 3/151, 8-14 1/168	175/0, 4-17=-225/17 =-225/169,	2,	3-06-00 tall b chord and an	y 2-00-00 wide wil y other members.	ll fit betv	een the botto	m				S. SNGIN	EERER	11.
NOTES													A. C	ILBUILT	

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A MiTek Affili 818 Soundside Road Edenton, NC 27932

September 12,2023

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	E02	Common	3	1	Job Reference (optional)	160703000

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:11 ID:wb1oEU3ot9zDodjcIXhweSzF\_Yu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



	-	6-5-8 6-5-8	<u>12-11-0</u> 6-5-8	-
ale = 1:47.5				
te Offsets (X, Y): [2:0-2-4,0-1-8], [4:0-2-4,0-1-8]				

Scale = 1:47.5	i			000			000					
Plate Offsets	(X, Y): [2:0-2-4,0-1-8], [4:0-2-4,0-1-8]											
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf)         Spacing         2           20.0         Plate Grip DOL         2           20.0         Lumber DOL         2           10.0         Rep Stress Incr         2           0.0*         Code         1	2-0-0 1.15 1.15 YES RC2018	8/TPI2014	CSI TC BC WB Matrix-MSH	0.79 0.34 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.06 0.00	(loc) 7-8 7-8 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 78 lb	<b>GRIP</b> 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 *Except* 8-2,6-4:2x6 SP No.2 Structural wood sheathing directly applied of 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. (size) 6=0-5-8, 8=0-5-8 Max Horiz 8=177 (LC 13) Max Uplitf 6=-53 (LC 15), 8=-53 (LC 14) Max Grav 6=648 (LC 22), 8=648 (LC 21) (lb) - Maximum Compression/Maximum Tension 1-2=0/42, 2-3=-573/133, 3-4=-573/133, 4-5=0/42, 2-8=-594/176, 4-6=-594/171 7-8=-221/280 6-7=-156/263	4) 5) or 6) 7) 8) 9)	Unbalanced design. This truss ha load of 12.0 overhangs n This truss ha chord live lo. * This truss lo on the bottoo 3-06-00 tall 1 chord and al One H2.5A s recommend UPLIFT at jt and does no This truss is International R802.10.2 a	snow loads have as been designed psf or 1.00 times ion-concurrent wii as been designed ad nonconcurrent has been designe m chord in all are by 2-00-00 wide v ny other members Simpson Strong-T ed to connect trus (s) 8 and 6. This d t consider lateral designed in accord I Residential Code nd referenced sta	l for great flat roof li th other li flat roof li th other li for a 10.0 t with any d for a liv as where will fit betv s. Fie conne ss to bear connectio forces. ordance w e sections andard AN	sidered 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 ith the 2018 ; R502.11.1 ; SI/TPI 1.	this if live ssf on ads. .0psf tom e to only and					
WEBS	3-7=0/252, 2-7=-118/259, 4-7=-124/262		JAD CASE(S)	Stanuaru								
<ol> <li>Unbalanc this desig</li> <li>Unbalanc this desig</li> <li>Wind: AS Vasd=10? Cat. II; Eb zone and 2-1-8 to 3 9-5-8 to 1 cantilever right expo for reactic DOL=1.60</li> <li>TCLL: AS Plate DOD DOI = 1.11</li> </ol>	ed roof live loads have been considered for n. CE 7-16; Vult=130mph (3-second gust) 3mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; qp B; Enclosed; MWFRS (envelope) exterior C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 5-5-8, Exterior(2R) 3-5-8 to 9-5-8, Interior (1) 0-9-8, Exterior(2E) 10-9-8 to 13-9-8 zone; r left and right exposed ; end vertical left and osed;C-C for members and forces & MWFRS ons shown; Lumber DOL=1.60 plate grip 0 SCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Di ls-10, Pungh Cat B; Eully Exp : Ca-0 9: 15 ls-10, Pungh Cat B; Eully Exp : Ca	5									ORTH CA ORTEES SEA 0363	ROLING INTERNET

- 2-1-8 to 3-5-8, Exterior(2R) 3-5-8 to 9-5-8, Interior (1) 9-5-8 to 10-9-8, Exterior(2E) 10-9-8 to 13-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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

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)



818 Soundside Road Edenton, NC 27932

GI

11111111 September 12,2023

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	E03	Common	1	1	Job Reference (optional)	160703001

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:11 ID:ssJ2UzApkWqvvAw32wqVjTyegKH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



## Plate Offsets (X, Y): [2:0-2-4,0-1-8], [4:0-2-4,0-1-8]

Loading TCLL (roof) Snow (Pf) TCDL 3CLL 3CDL	(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 IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.90 0.34 0.09	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.06 0.00	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 77 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHOR BOT CHOR WEBS BRACING TOP CHOR BOT CHOR REACTION	<ul> <li>D 2x4 SP No.2</li> <li>D 2x4 SP No.2</li> <li>2x4 SP No.3 *Excep</li> <li>D Structural wood she 2-2-0 oc purlins, ex</li> <li>D Rigid ceiling directly bracing.</li> <li>S (size) 5=0-5-8, 7 Max Horiz 7=155 (LC Max Uplift 5=-32 (LC</li> </ul>	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 One H2.5A S recommende UPLIFT at jtt	is been designed for psf or 1.00 times fla on-concurrent with is been designed for ad nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will by 0 ther members. Simpson Strong-Tie ed to connect truss s) 7 and 5. This con-	or great at roof k other liv or a 10. vith any for a liv where l fit betw conne- to bear nnectio	er of min roo bad of 20.0 p ve loads. D psf bottom other live loa e load of 20. a rectangle veen the bott ctors ing walls due n is for uplift	f live lisf on ads. Opsf com e to only								
FORCES	Max Grav 5=579 (LC (lb) - Maximum Com Tension D 1-2=0/42, 2-3=-575/ 2-7=-595/175, 4-5=- D 6-7=-250/360, 5-6=-	This truss is International R802.10.2 a	designed in accord Residential Code s nd referenced stand Standard	lance w sections dard AN	ith the 2018 8 R502.11.1 a ISI/TPI 1.	and								
NEBS	3-6=0/248, 2-6=-117	7/257, 4-6=-52/212												
I) Unbalar	nced roof live loads have	been considered for	r										11111	
2) Wind: A Vasd=11 Cat. II; E zone an 2-1-8 to 9-8-4 to member	SCE 7-16; Vult=130mph 03mph; TCDL=6.0psf; B( Exp B; Enclosed; MWFR: d C-C Exterior(2E) -0-10 3-5-8, Exterior(2R) 3-5-6 12-8-4 zone; end vertica rs and forces & MWFRS	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior -8 to 2-1-8, Interior ( 3 to 9-8-4, Exterior(2 al left exposed;C-C ft for reactions shown	; or (1) 2E) ;							4	A A	SEA		Month

- Lumber DOL=1.60 plate grip DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

THURSDAY. 036322 GI 11111111 September 12,2023

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	E04	Common Girder	1	2	Job Reference (optional)	160703002



[1:0-3-12,0-4-12], [3:0-5-0,0-6-0], [4:0-0-12,0-2-0], [5:0-6-11,0-1-0], [6:0-4-0,0-2-12], [6:0-4-0,0-4-0], [7:0-6-7,0-1-4], [9:0-5-0,0-6-0], [11:0-6-14,0-4-0], [12:0-8-0,0-3-0], [11:0-6-14,0-4-0], [12:0-8-0,0-3-0], [11:0-6-14,0-4-0], [12:0-8-0,0-3-0], [11:0-6-14,0-4-0], [11:0-6-14,0-4-0], [11:0-8-0,0-3-0], [11:0-8-0,0 Plate Offsets (X, Y): [13:0-8-0,0-7-8], [14:0-8-0,0-4-0], [15:0-8-0,0-2-8], [16:0-8-0,0-7-8], [17:0-8-0,0-2-8]

coading         (ps)         Spacing         2-0-0         CSI         D         D         CSI         D <th></th>															
JUMEERWEBS15-20-883/6137, 18-20-870/6134, 5-1834/32459, 14-53-784/5581, 19-53-784/5581, 17-19-289/2071, 19-289/2080, 619-52/7384, 11-19-289/2080, 619-52/7384, 11-19-58, 11-00-0 cb 19-0 cb50Total designed for wind loads in the plane of the truss or or study eadined industry Galable End Details as applicable, or or study eadined industry Galable End Details as applicable, or or study eadined industry Galable End Details as applicable. 19-289/20466, 8-14-2783/440, 8-13-378/63, 20-53-598/8550TOE Chroid Signed for a tool op ob toom chroid ing directly applied or 10-0-0 cb bracing.NOTES 112-219 truss to be connected together with 100 (0.131*37) nails as tollows: 2x6 - 2 rows staggered at 0-9-0 oc. Staggered at 0-9-0 oc. Cocket prember 3-17 2x4 - 2 rows staggered at 0-5-0 oc. Except member 3-17 2x4 - 2 rows staggered at 0-5-0 oc. Except member 3-17 2x4 - 2 rows staggered at 0-5-0 oc. Except member 3-17 2x4 - 2 rows staggered at 0-5-0 oc. Except member 3-17 2x4 - 2 rows staggered at 0-5-0 oc. Except member 3-17 2x4 - 2 rows staggered at 0-5-0 oc. Excep	<b>Loading</b> TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC2018/T	TPI2014	CSI TC BC WB Matrix-MSH	0.23 0.37 0.90	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.19 0.06	(loc) 16-17 16-17 11	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 856 lb	<b>GRIP</b> 244/190 FT = 20%	
	LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD WEBS JOINTS REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD	2x8 SP 2400F 2.0E 2x10 SP 2400F 2.0E 2x4 SP No.3 *Excep 2x4 SP No.3 *Excep 2x4 SP No.3 Left 2x6 SP No.2 2 2-6-0 Structural wood shea 6-0-0 oc purlins. Rigid ceiling directly bracing. 1 Row at midpt 1 Brace at Jt(s): 18, 20, 53 (size) 1=0-5-8, 1 Max Horiz 1=-251 (LI Max Uplift 1=-1764 (I Max Grav 1=10010 ( (Ib) - Maximum Com Tension 1-4=-12896/2260, 4- 5-6=-7700/1234, 6-7 7-8==9052/1376, 8-1 1-17=-1737/9372, 15 14-15=-888/6862, 12 11-12=-1084/8808	* 5-15,7-14:2x4 SP 1 2-6-0, Right 2x6 SP N athing directly applied applied or 10-0-0 oc 4-15 (LC 12), 11=-1279 (Lt (LC 18), 11=10176 (L pression/Maximum 5=-8981/1386, =-7958/1251, 1=-12001/1551 5-17=-1755/9427, 2-14=-1087/8844,	WEE No.2 dor 1) 2 (1) 2	3S 1 5 5 5 5 5 5 5 5 5 5 5 5 5	15-20=-883/5137, 1 5-18=-343/2459, 14 19-53=-788/5611, 7 18-19=-49/378, 14- 5-18=-557/3090, 6- 4-15=-3739/876, 4- 3-16=-1078/599, 3- 3-14=-2783/440, 8- 3-14=-2783/440, 8- 3-14=-2783/440, 8- 3-14=-2783/440, 8- 3-14=-2783/440, 8- 3-14=-2783/440, 8- 3-14=-2783/440, 8- 3-14=-2783/440, 8- 3-14=-2783/470, 8- 3-14=-2783/440, 8- 3-14=-2783/470, 8- 3-14=-2783/470, 8- 3-14=-2783/470, 8- 15, 15, 15, 15, 15, 15, 15, 15, 15, 15,	8-20=-1 1-53=-71 7-19=-22 20=-42 19=-52 116=-87 17=-80 13=-36 2=-162 ether wi rs: 2x8 - llows: 2 - 1 row ws stag 2 rows s r applied ack (B) f nection 5 roted = 6 been of h (3-sec 8 CDL=6 8 (envi cposed = =1.60 p	870/5434, 84/5581, 89/2071, 470, 7/3584, 5/4327, 8/2466, 1/3366, 1/3366, 1/3366, 1/3366, 1/3366, 1/3366, 1/3366, 1/3366, 1/36, 1/36, 1	0 DAD r sor left	<ol> <li>Tri onl see or (6)</li> <li>TC Plat DC Cs:</li> <li>TO Unl dess</li> <li>All 9) Ga</li> <li>T1) * TI on 3-0 cho</li> </ol>	uss desig y. For st Standar consult q LL: ASC ite DOL= 1.10; Cr balancec sign. plates ar ble studs s truss h ord live Ic his truss the botto 6-00 tall ord and a	ned fo uds ex rd Indu ualified E 7-16 1.15); Is=1.0 Is snow e 2x4 I a space as bee bad nor has be m cho by 2-0 iny oth	rr wind loads in the posed to wind (nestry Gable End Ed building designed; Pr=20.0 psf (roor Pr=20.0 p	e plane of th ormal to the Details as apper AN of LL: Lum D toDL=1.15 I ully Exp.; Ce considered erwise indica 10.0 psf both any other live load of ere a rectan between the L 22	ne truss face), policable, SI/TPI 1. OL=1.15 Plate e=0.9; for this ated. toom e loads. 20.0psf gle bottom

G 11111111 September 12,2023

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#### Continued on page 2

Scale = 1:105

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	91 Serenity-Roof-B330 E COP TMB	
23080111-01	E04	Common Girder	1	2	Job Reference (optional)	160703002

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:12

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Page: 2

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

- 12) LGT2 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 11. This connection is for uplift only and does not consider lateral forces.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Use Simpson Strong-Tie HGUS28-2 (36-10d Girder, 6-10d Truss) or equivalent at 4-1-8 from the left end to connect truss(es) to back face of bottom chord.
- 15) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 11-7-8 oc max. starting at 6-0-12 from the left end to 23-8-4 to connect truss(es) to back face of bottom chord.
- 16) Use Simpson Strong-Tie HTU28 (26-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 20-0 oc max. starting at 15-8-4 from the left end to 17-8-4 to connect truss(es) to back face of bottom chord.
- 17) Fill all nail holes where hanger is in contact with lumber.
- 18) WARNING: The following hangers are manually applied but fail due to geometric considerations: HGUS28-2 on back face at 4-1-8 from the left end.
- 19) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 20) LGT2 Hurricane ties must have two studs in line below the truss.
- LGT2 Hurricane tie uses 1/4x1-1/4 Titen masonry screws into wall.
- 22) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1650 lb down and 191 lb up at 10-0-12, and 1591 lb down and 175 lb up at 12-0-12, and 1593 lb down and 174 lb up at 14-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-6=-60, 6-11=-60, 54-58=-20 Concentrated Loads (lb)

Vert: 16=-1614 (B), 15=-1481 (B), 14=-1483 (B), 17=-2976 (B), 13=-1330 (B), 12=-1375 (F=-45, B=-1330), 66=-1624 (B), 67=-1587 (B), 68=23 (F), 69=-1570 (B), 70=23 (F), 71=23 (F), 72=-1330 (B), 73=-45 (F), 74=-1330 (B), 75=-45 (F)

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	EJ2	Jack-Closed	3	1	Job Reference (optional)	160703003

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:13 ID:HFaSqRqh06dEOT2RDGo9vryegJR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1







#### Scale = 1:27.8

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.12 0.04 0.01	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 11 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING	UMBER           OP CHORD         2x4 SP No.2           OT CHORD         2x4 SP No.2           /EBS         2x6 SP No.2 *Except* 3-6:2x4 SP No.3           /PACING         PACING			as been designe n chord in all area by 2-00-00 wide w by other members assumed to be: .	d for a liv as where vill fit betw s. Joint 7 Us	e load of 20.0 a rectangle veen the botto ser Defined	0psf om						

#### TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. **REACTIONS** (size) 5= Mechanical, 7=0-5-8 Max Horiz 7=42 (LC 14) Max Uplift 5=-24 (LC 14), 7=-19 (LC 14) Max Grav 5=65 (LC 21), 7=221 (LC 21) FORCES (lb) - Maximum Compression/Maximum Tension 2-7=-184/101, 1-2=0/43, 2-3=-39/19, TOP CHORD 3-4=-11/0

BOT CHORD 6-7=0/0, 5-6=0/0 WEBS 3-6=-66/40

#### 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) zone; end vertical left 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
- Unbalanced snow loads have been considered for this 3) 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.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections. 8)
- Provide mechanical connection (by others) of truss to 9) bearing plate capable of withstanding 19 lb uplift at joint 7 and 24 lb uplift at joint 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

## LOAD CASE(S) Standard



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	EJ2A	Jack-Closed	3	1	Job Reference (optional)	160703004

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:14 ID:HFaSqRqh06dEOT2RDGo9vryegJR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







#### Scale = 1:27.9

BOT CHORD

FORCES

TOP CHORD

BOT CHORD

WEBS

NOTES

2)

3)

4)

5)

**REACTIONS** (size)

bracing.

Tension

3-4=-12/0

3-6=-64/72

6-7=0/0, 5-6=0/0

 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) -2-4-8 to 0-7-8, Interior (1) 0-7-8 to 2-0-0 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown;

Lumber DOL=1.60 plate grip DOL=1.60

Cs=1.00: Ct=1.10

design.

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

Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate

DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;

Unbalanced snow loads have been considered for this

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.

chord live load nonconcurrent with any other live loads.

This truss has been designed for a 10.0 psf bottom

Max Horiz 7=73 (LC 14)

2-0-0 oc purlins, except end verticals.

Max Uplift 5=-80 (LC 20), 7=-82 (LC 14)

Max Grav 5=30 (LC 10), 7=523 (LC 21)

(lb) - Maximum Compression/Maximum

2-7=-458/278, 1-2=0/109, 2-3=-96/26,

Rigid ceiling directly applied or 10-0-0 oc

5= Mechanical, 7=0-5-8

Loading TCLL (roof) Snow (Pf) TCDL BCLL	(psf) 20.0 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/	TPI2014	CSI TC BC WB Matrix-MSH	0.77 0.22 0.03	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190	
BCDL	10.0											Weight: 13 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x6 SP No.2 *Excep Structural wood shea	t* 3-6:2x4 SP No.3 athing directly applied	6) 7) or	* This truss I on the bottor 3-06-00 tall I chord and ar Bearings are crushing cap	has been designe n chord in all are by 2-00-00 wide v by other members assumed to be: acity of 425 psi.	ed for a liv as where vill fit betw s. Joint 7 Us	e load of 20. a rectangle veen the bott ser Defined	0psf .om						

- 8) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 7 and 80 lb uplift at joint 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

(www.tpinst.org) 818 Soundside Road

Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	EJ4V	JACK	5	1	Job Reference (optional)	160703005

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

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4-5-8

3-8-8 1-4-12 0-3-8

2x4 II

5 4

6

76 0-0-

2x4 =

3x6 =



3-8-8 1-3-0 0-3-8 2-5-8 2-5-8

1-1-8

4-5-8

# Scale = 1:38.2 L

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	0.09	Vert(LL)	0.00	8	>999	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	0.00	8	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01	7	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI201	4 Matrix-MSH									
BCDL	10.0										Weight: 30 lb	FT = 20%	
LUMBER			5) This tru	ss has been designed	d for a 10.	0 psf bottom							
TOP CHORD	2x4 SP No.2		chord li	ve load nonconcurren	t with any	other live loa	ads.						
BOT CHORD	2x4 SP No.2 *Except	t* 9-3:2x4 SP No.3	6) * This t	uss has been design	ed for a liv	e load of 20.	0psf						
WEBS	2x4 SP No.3		on the	ottom chord in all are	eas where	a rectangle							
BRACING			3-06-00	tall by 2-00-00 wide	will fit betw	veen the bott	iom						
TOP CHORD	Structural wood shea	athing directly applie	ed or 7) Bearing	s are assumed to be	S. Joint 10 I	Iser Defined							
	4-0-0 oc purlins, exc	cept end verticals.	r) Deaning	ane assumed to be.	50111 10 0	Joer Denneu							
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 or	8) Refer to	airder(s) for truss to	truss conr	nections.							
	6-0-0 oc bracing: 9-1	10	9) Provide	mechanical connecti	on (by oth	ers) of truss	to						
REACTIONS	(size) 7- Mecha	nical 10-0-5-8	bearing	plate capable of with	standing 1	06 lb uplift a	t						
REACTIONS	Max Horiz 10=132 (I	C 14)	joint 7.										
	Max Uplift 7=-106 (L0	C 14)	10) This tru	ss is designed in acco	ordance w	ith the 2018							
	Max Grav 7=253 (LC	2 21), 10=292 (LC 2	1) Interna	Ional Residential Cod	e sections	S R502.11.1 a	and						
FORCES	(lb) - Maximum Com	pression/Maximum		E(S) Standard	anuaru Ar	SI/TFTT.							
	Tension		LOAD CAS	E(3) Stanuaru									
TOP CHORD	2-10=-279/41, 1-2=0	/39, 2-3=-184/0,											
	3-4=-57/37, 4-5=-20/	0											
BOT CHORD	9-10=-201/100, 8-9=	-53/43, 3-8=-25/57,											
WEBS	2-9=-34/136, 4-7=-89	9/42.3-7=-163/156											
NOTES	20 01,100,11 00												
1) Wind AS	CF 7-16. Vult=130mph	(3-second gust)									minin	unin,	
Vasd=103	3mph; TCDL=6.0psf; BC	CDL=6.0psf; h=25ft;									WTH CA	Roill	
Cat. II; Ex	kp B; Enclosed; MWFRS	S (envelope) exterio	r							1	R	Alla's	
zone and	C-C Exterior(2E) zone;	end vertical left								52	FESS	ININ S'	
exposed;	C-C for members and fo	prces & MWFRS for							4			3.	/
reactions	shown; Lumber DOL=1	.60 plate grip							-		:4		2
	0 CE 7 16: Dr-20 0 pcf (r	roof LL : Lum DOL -1	1 15						-		SEA	Li	1
2) TOLL AS Plate DO	I = 1.15). Pf=20.0 psf (I	um DOI =1 15 Plate	1.15						=	:	0262	22 :	-
DOL=1.1	5); Is=1.0; Rough Cat B	; Fully Exp.; Ce=0.9	);						-		0303	~~ :	=
Cs=1.00;	Ct=1.10								-				
3) Unbalanc	ed snow loads have be	en considered for th	nis							2	N.E.	Rin :	
design.										25	S. GIN	EFRAN	
4) I his truss	s has been designed for	greater of min roof	live							1	CA C	BEIN	
		1001 10au 01 20.0 ps									1. A (-		

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.

A. GILB A. GILDIN September 12,2023



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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	EV4	Jack-Open	9	1	Job Reference (optional)	160703006

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:14 ID:HFaSqRqh06dEOT2RDGo9vryegJR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:30.2

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MR	0.35 0.34 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.03 -0.02 -0.04	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 18 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Wind: AS( Vasd=103 Cat. II; Ex, zone and exposed ; members Lumber D 2) TCLL: AS( Plate DOL DOL=1.15 Cs=1.0; ( 3) Unbalancc design. 4) This truss load of 12 overhangs 5) This truss	2x4 SP No.2 2x4 SP No.2 2x6 SP No.2 Structural wood she 4-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 3= Mecha 5=0-5-8 Max Horiz 5=130 (LC Max Uplift 3=-91 (LC Max Grav 3=169 (LC (LC 21) (lb) - Maximum Com Tension 2-5=-305/88, 1-2=0/ 4-5=0/0 CE 7-16; Vult=130mph mph; TCDL=6.0psf; Bip p B; Enclosed; MWFRS OL=1.60 plate grip DC CE 7-16; Pr=20.0 psf (L :1.15); Pf=20.0 psf (L :1.15); Pf=20.0 psf (L :1.15); Pf=20.0 psf (L :1.10) ad snow loads have be has been designed foi .0 psf or 1.00 times flat s non-concurrent with c has been designed foi .0 psf or 1.00 times flat	athing directly applie cept end verticals. applied or 10-0-0 oc anical, 4= Mechanical C 14) C 14), 4=-9 (LC 14) C 21), 4=70 (LC 7), 5 apression/Maximum 53, 2-3=-142/83 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and ri ght exposed;C-C for for reactions shown; VL=1.60 roof LL: Lum DOL=1.15 Plate B; Fully Exp.; Ce=0.9; sen considered for thi r greater of min roof I t roof load of 20.0 psi other live loads. r a 10.0 psf bottom	<ul> <li>6) * This trus on the bot 3-06-00 ta chord and 7) Bearings a crushing of crushing of 8) Refer to g</li> <li>9) Provide m bearing pl 3 and 9 lb 10) This truss Internation R802.10.2</li> <li>i=326 LOAD CASE(</li> </ul>	s has been designed tom chord in all area Il by 2-00-00 wide wi any other members. are assumed to be: , apacity of 425 psi. rider(s) for truss to t echanical connectior ate capable of withst uplift at joint 4. is designed in accom- al Residential Code and referenced star <b>S</b> ) Standard	d for a liv s where ill fit betv Joint 5 L russ con h (by oth anding 9 dance w sections hdard AN	e load of 20.1 a rectangle veen the bott Jser Defined nections. ers) of truss i 11 lb uplift at j ith the 2018 5 R502.11.1 a ISI/TPI 1.	Opsf to joint and				SEA 0363	ROUL L 22 ILBERTIN	
												Trees.	

chord live load nonconcurrent with any other live loads.

September 12,2023



Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	F01	Monopitch Supported Gable	1	1	Job Reference (optional)	160703007

Scale = 1:35.3

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:14 ID:\_\_?Pus1XWS1h0GXUA82Y8iGzF\_IC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Plate Offsets (	late Offsets (X, Y): [2:Edge,0-0-15], [2:0-2-6,Edge]													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	8/TPI2014	CSI TC BC WB Matrix-MSH	0.07 0.06 0.05	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 14-19 14-19 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 55 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Left: 2x4 Structura 6-0-0 oc Rigid ceil bracing. (size) Max Horiz Max Uplift Max Grav	o.2 o.2 o.3 SP No.3 I wood sheat burlins. ing directly 2=0-4-8, 8 10=8-8-0, 13=8-8-0, 2=153 (LC 2=-6 (LC 7), 10 10), 12=-3 10), 14=-7 2=228 (LC (LC 14), 1 (LC 21), 1 (LC 21), 1	athing directly applied applied or 10-0-0 oc 3=8-8-0, 9=8-8-0, 11=8-8-0, 12=8-8-0, 14=8-8-0 > 10), 8=-2 (LC 21), 9= =-11 (LC 14), 11=-34 37 (LC 14), 13=-24 (L 11 (LC 14), 13=-24 (L 12 (LC 14), 13=-24 (L 12 (LC 21), 13=-14), 9= 0=121 (LC 21), 11=2 2=223 (LC 21), 13=-14 4=180 (LC 1)	1 d or 2 -20 4 4 (LC 5 -216 6 7 97 8	<ul> <li>Wind: ASCE Vasd=103mj Cat. II; Exp E zone and C- 2-1-8 to 8-4- members an Lumber DOL</li> <li>Truss desig only. For stu see Standard or consult qu</li> <li>TCLL: ASCE Plate DOL=1.15; CS=1.00; Ct- Unbalanced design.</li> <li>This truss ha load of 12.0 overhangs n</li> <li>All plates are Gable studs</li> <li>This truss ha chord live loa</li> </ul>	7-16; Vult=130mp bh; TCDL=6.0psf; E 3; Enclosed; MWFF C Corner(3E) -0-10 8, Corner(3E) -0-10 8, Corner(3E) -0-10 8, Corner(3E) -0-10 8, Corner(3E) -0-10 8, Corner(3E) -0-10 ned for wind loads uds exposed to wind loads wind loads ids exposed to wind d Industry Gable En- tailfied building des 5, 7-16; Pr=20.0 psf (.15); Pf=20.0 psf(.15); Pf=20.0 psf (.15); Pf=20.0 psf(.15); Pf=20.0 psf (.15	h (3-sec 3CDL=6 SS (env- -8 to 2- 3 to 11 3 to 11 3 for rea DL=1.6( in the p d (norm nd Deta igner a: (roof LL Lum DC B; Fully een cor br great at roof k other lin other lin other vii.	ond gust) .0psf; h=25ft; elope) exterior 1-8, Exterior(; 4-8 zone;C-C ctions shown ) ane of the tru al to the face) is as applicate per ANSI/TF .: Lum DOL=1 is as applicate per ANSI/TF .: Lum DOL=1 is as applicate per ANSI/TF .: Lum DOL=1 is as applicate per ANSI/TF .: Lum DOL=1 bit as a per ANSI/TF .: Lum DOL=1 .: Lum DOL=1	or 2N) for ; sss ), ole, 1.15 1.15 ); live sf on ds.				WH CA	ROM
FORCES	(lb) - Max Tension 1-2=0/17 4-5=-122	imum Com 2-3=-222/^ /39, 5-6=-74	pression/Maximum 122, 3-4=-165/49, 4/28, 6-7=-29/15,	9	) * This truss f on the bottor 3-06-00 tall t chord and ar	has been designed in chord in all areas by 2-00-00 wide wil by other members.	for a liv where I fit betv	e load of 20.0 a rectangle veen the botto	)psf om		4	i	OFESS	
BOT CHORD WEBS NOTES	7-8=-9/0 2-14=-10 11-12=0/0 6-11=-17 4-13=-16	5/144, 13-1 0, 10-11=0/ 8/124, 5-12 0/113, 3-14	4=0/0, 12-13=0/0, 0, 9-10=0/0 =-182/127, =-132/158, 7-10=-89	1 )/62 1	<ol> <li>Provide mec bearing plate</li> <li>8, 20 lb uplifi at joint 12, 2: 11 lb uplift at</li> <li>This truss is International R802.10.2 a</li> </ol>	hanical connection capable of withsta at joint 9, 34 lb up 4 lb uplift at joint 13 t joint 10 and 6 lb u designed in accorc Residential Code s and referenced stan	(by oth inding 2 lift at joi 8, 71 lb plift at jo lance w sections dard AN	ers) of truss to the uplift at joint 11, 37 lb up uplift at joint 1 pint 2. th the 2018 . R502.11.1 a ISI/TPI 1.	o int plift 4, nd		THILIN'S	A A A A A A A A A A A A A A A A A A A	SEA 0363	L 22 BERING
				L	UAD CASE(S)	Standard							11111 C	in in its

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818 Soundside Road Edenton, NC 27932

September 12,2023

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	F02	Monopitch	6	1	Job Reference (optional)	160703008

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Page: 1





Scolo - 1:41 6			0-7-12						0	-0-0				
	(X X): [2:Edge 0-0-15	1 [2:0-2-6 Edge]												
	(X, T). [Z.Luge,0-0-13	], [2.0-2-0,Luge]			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 IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.50 0.43 0.45	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.09 -0.07 0.01	(loc) 5-6 5-6 12	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 59 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Left: 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 2=0-4-8, Max Horiz 2=150 (LC Max Uplift 2=-190 (L Max Grav 2=600 (LC	athing directly applia cept end verticals. applied or 6-1-9 oc 12=0-1-8 C 10) C 10), 12=-176 (LC C 21), 12=529 (LC 2	4) 5) ed or : 7) : 10) 9) 21) 9)	This truss ha load of 12.0 overhangs n This truss ha chord live loa * This truss I on the botto 3-06-00 tall I chord and a Bearing at jo using ANSI/ designer sho Provide meo bearing plate One H2.5A S recommende	as been designed psf or 1.00 times to on-concurrent with as been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide w hy other members int(s) 12 consider TPI 1 angle to grai buld verify capacity chanical connection at joint(s) 12.	for great flat roof li h other li for a 10. with any d for a liv s where ill fit betv s paralle in formul y of bear n (by oth ie conne s to bear	er of min roop oad of 20.0 p ve loads. D psf bottom other live loa e load of 20. a rectangle veen the bott I to grain valu a. Building ing surface. ers) of truss ctors	f live isf on ads. Opsf om ue to						
FORCES TOP CHORD BOT CHORD	(Ib) - Maximum Com Tension 1-2=0/17, 2-3=-823/ 4-5=-439/322 2-6=-770/741, 5-6=-	pression/Maximum 674, 3-4=-149/24, 770/741	10	UPLIFT at jt only and doe ) This truss is International R802.10.2 a	(s) 2 and 12. This as not consider lat designed in accor Residential Code nd referenced stal	connecti eral force rdance w sections ndard AN	on is for uplif es. ith the 2018 s R502.11.1 a JSI/TPI 1.	t and						
WEBS NOTES	3-6=-286/207, 3-5=-	724/755, 4-12=-531	l/565 L	DAD CASE(S)	Standard	induita / ii						Min CA	Politi	
<ol> <li>Wind: AS Vasd=100 Cat. II; Eb zone and 2-1-8 to 8 left and ri MWFRS i grip DOL</li> <li>TCLL: AS Plate DOI DOL=1.1! Cs=1.00;</li> <li>Unbalanco design</li> </ol>	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B qp B; Enclosed; MWFR C-C Exterior(2E) -0-10 5-1-0, Exterior(2E) 8-1-1 ght exposed;C-C for m for reactions shown; Lu =1.60 SCE 7-16; Pr=20.0 psf (L L=1.15); Pf=20.0 psf (L L=1.15); Is=1.0; Rough Cat E Ct=1.10 red snow loads have be	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior -8 to 2-1-8, Interior to 11-1-0 zone; po embers and forces 8 imber DOL=1.60 plat roof LL: Lum DOL=: um DOL=1.15 Plate 3; Fully Exp.; Ce=0.9 even considered for the	; or (1) orch & ate 1.15 e 9; his							<b>A</b>	The second secon	SEA 0363	L L L L BERTIN	7

- 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.

11111111 September 12,2023

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	F03	Monopitch Structural Gable	1	1	Job Reference (optional)	160703009

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:15 ID:05Rb2nqdzWbg0FxJai2r9FzF\_oh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:30.4

## Plate Offsets (X, Y): [2:Edge,0-0-7], [2:0-0-14,0-8-15]

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 IRC2018	8/TPI2014	CSI TC BC WB Matrix-MP	0.17 0.19 0.01	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.02 0.02 0.00	(loc) 7-8 7-8 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 19 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Left: 2x4 SP No.3 Structural wood shea 4-2-8 oc purlins, exa Rigid ceiling directly bracing. (size) 2=0-4-8, 7 Max Horiz 2=65 (LC Max Uplift 2=-100 (LI Max Grav 2=359 (LC	athing directly applie cept end verticals. applied or 10-0-0 oc 7= Mechanical 10) C 10), 7=-53 (LC 10) C 21), 7=178 (LC 21)	4) 5) 6) 7) d or 8) 9) 10	Unbalanced design. This truss ha load of 12.0 overhangs n Gable studs This truss ha chord live loa * This truss ha chord and ar Refer to gird ) Provide mec bearing plate 7.	snow loads have b as been designed for psf or 1.00 times fit on-concurrent with spaced at 2-0-0 oc is been designed fit ad nonconcurrent v has been designed in chord in all areas by 2-00-00 wide will by other members. er(s) for truss to tru- hanical connection a capable of withsta	been cor or great at roof k other lin or a 10.0 vith any for a liv s where ll fit betv uss conr (by oth anding 5	nsidered for t er of min rool pad of 20.0 p re loads. D psf bottom other live loa e load of 20. a rectangle veen the bott nections. ers) of truss t 3 lb uplift at j	his f live sf on dds. Opsf om to joint					
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Wind: ASC Vasd=103r Cat. II; Exg zone and C	(lb) - Maximum Com Tension 1-2=0/25, 2-3=-201/ 4-5=-8/0, 4-7=-122/1 2-8=-152/223, 7-8=0 3-8=-63/36 EE 7-16; Vult=130mph mph; TCDL=6.0psf; BC DE Enclosed; MWFR3 C Comm(2E) zopp:	pression/Maximum 177, 3-4=-51/26, 139 //0, 6-7=0/0 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior parch left and right	11 12 LC	) One H2.5A S recommende UPLIFT at jtt does not cor ) This truss is International R802.10.2 a	Simpson Strong-Tie ed to connect truss (s) 2. This connecti isider lateral forces designed in accord Residential Code ind referenced stan Standard	e conner to bear on is for s. dance w sections dard AN	ctors ing walls due · uplift only ar ith the 2018 i R502.11.1 a ISI/TPI 1.	to nd and		4		ORTH CA	ROUN

- Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  Turks designed for wind loads in the plane of the trus
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

September 12,2023

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818 Soundside Road Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	G01	Monopitch Structural Gable	1	1	Job Reference (optional)	160703010

### Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:15 ID:j7LOAWWFe1s7RV5MhJbHFGzF\_qO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





0-5-8			8-8-0
ĨĨ	4-5-8	8-4-12	ĬĬ
0.5 9	4-0-0	3-11-4	
0-3-0			0-3-4

#### Scale = 1:35

## Plate Offsets (X, Y): [2:0-5-11,0-0-7]

Loading ICLL (roof) Snow (Pf) ICDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.84 0.57 0.21	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.14 -0.22 0.06	(loc) 10 10 8	l/defl >719 >454 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 40 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD SOT CHORD WEBS DTHERS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Wind: ASC Vasd=103 Cat. II; Exp zone and C 1-11-4 to 5 members a Lumber DC 2) Truss des apply Error	2x4 SP No.2 2x6 SP No.2 *Excep 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood shea 2-11-15 oc purlins, or Rigid ceiling directly bracing. (size) 2=0-5-8, & Max Horiz 2=120 (LC Max Uplift 2=-66 (LC Max Uplift 2=-66 (LC Max Grav 2=463 (LC (Ib) - Maximum Com Tension 1-2=0/17, 2-3=-969/3 4-5=-82/9, 5-6=-8/0, 2-10=-397/888, 9-10 8-9=-348/769, 7-8=0 3-10=-105/318, 4-9= CE 7-16; Vult=130mph mph; TCDL=6.0psf; BC p B; Enclosed; MWFRS OL=1.60 plate grip DO signed for wind loads ir stude arrowed to wind	t* 10-7:2x4 SP No.2 athing directly applie except end verticals. applied or 9-8-7 oc 3= Mechanical C 10) 10), 8=-75 (LC 14) C 21), 8=478 (LC 21) pression/Maximum 301, 3-4=-736/257, 5-8=-35/82 =-348/769, /0 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior -8 to 1-11-4, Interior -0 to 8-8-0 zone;C-C for reactions shown; L=1.60 the plane of the true (acremal to the face)	4) 5) d or 7) 8) 9) 10) 11) 51 12) 51 13) for LO ss	Unbalanced design. This truss ha load of 12.0 p overhangs nd Gable studs : This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and ar Refer to girdd Bearing at jo using ANSI/T designer sho Provide mecl bearing plate 8. One H2.5A S recommende UPLIFT at jt( does not con ) This truss is International R802.10.2 ar	snow loads have b s been designed fi port 1.00 times fi do nonconcurrent with spaced at 2-0-0 oc s been designed in chord in all areas y 2-00-00 wide will be of the state of the state of the the state of the state of the state of the state of the state of the state state of the state of the state state of the state of the state state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of	peen cor or great at roof lo other liv or a 10.0 with any for a liv s where Il fit betw uss conr parallel fi formula of bearin of bearin to bear to bear to bear to bear to bear to bear to bear to bear to bear to bear to bear to bear to bear to bear to bear to bear to bear to be	sidered for t er of min roo pad of 20.0 p ve loads. ) psf bottom other live loa e load of 20. a rectangle veen the bott ections. o grain value a. Building ng surface. ers) of truss 5 lb uplift at ctors ng walls due uplift only a ith the 2018 R502.11.1 a ISI/TPI 1.	this f live sof on ads. 00psf tom e to joint e to nd and		M. HILLIN		NUTH CA OF SEA OSEA OSEA	ROJUU	N. M.
see Standa or consult 3) TCLL: ASC Plate DOL	ard Industry Gable End qualified building desig CE 7-16; Pr=20.0 psf (I .=1.15); Pf=20.0 psf (L	d Details as applicab gner as per ANSI/TP roof LL: Lum DOL=1 um DOL=1.15 Plate	le, I 1. .15							3		S. ENGINE	EREAL	11.

#### 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

3) 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

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September 12,2023

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	G02	Monopitch	6	1	Job Reference (optional)	160703011

#### Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:16 ID:Dy\_JjEEKvGAptckEgqDBdczF\_tK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



C?f



0-5-8			8-8-0
	4-5-8	8-4-12	
0-5-8	4-0-0	3-11-4	0-3-4
000			001

#### Scale = 1:35

## Plate Offsets (X, Y): [2:0-5-11,0-0-7]

														_
Loading TCLL (roof) Snow (Pf) TCDL BCLL	(psf) 20.0 20.0 10.0 0.0*	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/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	<b>GRIP</b> 244/190	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD	2x4 SP No.2 2x6 SP No.2 *Excep 2x4 SP No.3 Structural wood shea	t* 8-6:2x4 SP No.2 athing directly applie	5) 6) ed or 7)	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Pefer to gird	I s been designed f ad nonconcurrent v has been designed in chord in all areas by 2-00-00 wide wi by other members.	for a 10.0 with any I for a liv s where Il fit betw	) psf bottom other live loa e load of 20.0 a rectangle veen the botto	ads. Opsf om				Weight: 41 lb	F1 = 20%	
BOT CHORD	4-8-13 oc purlins, e: Rigid ceiling directly bracing. (size) 2=0-5-8, 7 Max Horiz 2=120 (LC Max Uplift 2=-66 (LC Max Grav 2=463 (LC	xcept end verticals. applied or 7-5-12 or 7= Mechanical 2 10) 2 10), 7=-75 (LC 14) 2 21), 7=478 (LC 21)	9)	Bearing at jo using ANSI/I designer sho Provide mec bearing plate 7.	int(s) 2 considers   IPI 1 angle to grain puld verify capacity hanical connection a capable of withsta Simpson Strong-Ti	parallel f n formula of bearing n (by oth anding 7	o grain value a. Building ng surface. ers) of truss t 5 lb uplift at j	to joint						
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Maximum Com Tension 1-2=0/17, 2-3=-1490 4-5=-8/0, 4-7=-179/1 2-8=-665/1426, 7-8= 3-8=-123/407, 3-7=-	pression/Maximum /561, 3-4=-58/38, 07 -619/1303, 6-7=0/0 1328/631	11	PLIFT at jt does not con This truss is International R802.10.2 at	ed to connect truss s) 2. This connect sider lateral forces designed in accorr Residential Code nd referenced star	to bear ion is for s. dance w sections	ing walls due uplift only ar th the 2018 R502.11.1 a ISI/TPI 1.	nd and						
VOTES ) Wind: ASV Vasd=103 Cat. II; Ex zone and 1-11-4 to members Lumber D	CE 7-16; Vult=130mph mph; TCDL=6.0psf; BC p B; Enclosed; MWFRS C-C Exterior(2E) -0-10 5-8-0, Exterior(2E) 5-8- and forces & MWFRS OL=1.60 plate grip DO	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio -8 to 1-11-4, Interior -0 to 8-8-0 zone;C-C for reactions shown; L=1.60	r (1) for	DAD CASE(S)	Standard					G	in	ORTH CA	ROUT	-

- 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.
- 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.

SEAL 036322 September 12,2023

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	G03	Monopitch	3	1	Job Reference (optional)	160703012

#### Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:16 ID:Dy\_JjEEKvGAptckEgqDBdczF\_tK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1







Scale =	1:35.4
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## Plate Offsets (X, Y): [2:0-5-11,0-0-7]

Loading TCLL (roof) Snow (Pf) TCDL BCLL	() 2 2 1	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 IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.27 0.36 0.39	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.05 -0.08 0.03	(loc) 8 8 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL	1	10.0											Weight: 42 lb	FT = 20%
LUMBER TOP CHORD 3OT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x6 SP No.2 * 2x4 SP No.3 Structural woo 4-11-10 oc pu Rigid ceiling of bracing	*Except od shea urlins, e directly	* 8-6:2x4 SP No.2 athing directly applied except end verticals. applied or 8-0-13 oc	5) 6) or 7) 8)	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/7	s been designed f ad nonconcurrent v as been designed n chord in all area: by 2-00-00 wide wi by other members. er(s) for truss to tru int(s) 2 considers int(s) 2 considers IPI 1 angle to grain	for a 10.0 with any I for a liv s where Il fit betw uss conr parallel t n formula	) psf bottom other live loa e load of 20.0 a rectangle veen the botto nections. o grain value a. Building	ads. Opsf om					
REACTIONS	(size) 2=0 Max Horiz 2=1 Max Uplift 2=- Max Grav 2=4	0-5-8, 7 130 (LC -60 (LC 432 (LC	<ul> <li>Mechanical</li> <li>10)</li> <li>10), 7=-100 (LC 14)</li> <li>21), 7=561 (LC 21)</li> </ul>	9)	designer sho Provide mec bearing plate joint 7.	build verify capacity hanical connection capable of withst	of beari (by oth anding 1	ng surface. ers) of truss t 00 lb uplift at	to t					
FORCES	(lb) - Maximur	m Com	pression/Maximum	10	recommende	ed to connect truss	to bear	ng walls due	to					
TOP CHORD	1-2=0/17, 2-3	=-1350	/435, 3-4=-91/56,		does not con	s) 2. This connect isider lateral forces	ion is for 5.	uplift only ar	nd					
BOT CHORD	2-8=-574/129	5, 7-8=	-531/1183, 6-7=0/0	11	International	Residential Code	dance w sections	R502.11.1 a	and					
	3-0=-111/375	, 3-7=-	1205/541	10	AD CASE(S)	Standard	idard AN	ISI/TPLT.						
<ol> <li>Wind: ASC Vasd=103 Cat. II; Ex zone and 1-11-4 to 0 members Lumber D</li> <li>TCLL: AS<sup>2</sup></li> </ol>	CE 7-16; Vult=1: imph; TCDL=6.0 p B; Enclosed; N C-C Exterior(2E 6-7-8, Exterior(2 and forces & MN OL=1.60 plate g CE 7-16; Pr=20.	30mph )psf; BC MWFRS ) -0-10- 2E) 6-7- WFRS f grip DOI .0 psf (r	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior 8 to 1-11-4, Interior (* 8 to 9-7-8 zone;C-C fr tor reactions shown; L=1.60 roof LL: Lum DOL=1.1	1) or 5							Winn		OR FESS	

- 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.
- 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.

SEAL 036322 A. GILBERT

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	HJ76	Diagonal Hip Girder	1	1	Job Reference (optional)	160703013

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:16 ID:IR8q1nrJnPI5?dddmzJOS3yegJQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



NAILED

0-0	-10 2-4-7	4-6-13	7-3-5	7-6-13
ا 0-0	-10 <sup>2-3-13</sup>	2-2-7	2-8-7	0-3-8

Scale = 1:44.3

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

Loading	(psf)	Spacing Plate Grip DO	2-0-0 1 15	CSI TC	0.30	DEFL Vert(LL)	in -0.01	(loc) 10	l/defl	L/d 240	PLATES MT20	<b>GRIP</b> 244/190	
Snow (Pf)	20.0	Lumber DOI	1.15	BC	0.00	Vert(CT)	-0.01	10	>999	180	101120	244/100	
	10.0	Ren Stress Incr	NO	WB	0.10	Horz(CT)	0.01	8	>000 n/a	n/a			
BCU	0.0*	Code	IRC2018/TPI2014	Matrix-MP	0.11	11012(01)	0.01	0	n/a	11/04			
BCDI	10.0		11(02010/11/2014								Weight: 53 lb	FT = 20%	6
DODL	10.0										Weight: 55 lb	11 = 207	0
LUMBER			<ol><li>This truss</li></ol>	has been designed	l for a 10.0	) psf bottom							
TOP CHORD	2x4 SP No.2		chord live	load nonconcurrent	t with any	other live loa	ads.						
BOT CHORD	2x4 SP No.2 *Excep	ot* 10-4:2x4 SP No.3	, 6) * This trus	s has been designe	ed for a liv	e load of 20.	.0psf						
	9-7:2x6 SP No.2		on the bo	tom chord in all are	as where	a rectangle							
WEBS	2x4 SP No.3 *Excep	ot* 12-2:2x6 SP No.2	3-06-00 ta	II by 2-00-00 wide v	will fit betw	veen the both	tom						
BRACING			chord and	any other members	S.								
TOP CHORD	Structural wood she	athing directly applie	ed or 7) Refer to g	irder(s) for truss to t	truss conr	ections.	4						
	6-0-0 oc purlins, ex	cept end verticals.	8) Provide m	echanical connection	on (by oth	ers) of truss	10						
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	; bearing p	ate capable of withs	standing i	27 ib upilit a	IC						
	bracing.		0) One PT8	MiTek connectors	recomme	nded to con	nect						
REACTIONS	(size) 8= Mecha	anical, 12=0-9-7	truss to b	aring walls due to I	IPI IFT at	it(s) 12 Thi	e e e e e e e e e e e e e e e e e e e						
	Max Horiz 12=129 (I	LC 12)	connectio	h is for uplift only an	nd does no	of consider la	ateral						
	Max Uplift 8=-127 (L	.C 12), 12=-78 (LC 8)	) forces.	no for apint only a									
	Max Grav 8=431 (L0	C 19), 12=493 (LC 19	9) 10) This truss	is designed in acco	ordance w	ith the 2018							
FORCES	(lb) - Maximum Corr	pression/Maximum	Internatio	nal Residential Code	e sections	R502.11.1	and						
	Tension		R802.10.2	and referenced sta	andard AN	ISI/TPI 1.							
TOP CHORD	2-12=-475/89, 1-2=0	)/46, 2-3=-348/53,	11) "NAILED"	indicates 3-10d (0.1	148"x3") c	or 2-12d							
	3-4=-509/126, 4-5=-	80/35, 5-6=-11/0	(0.148"x3	25") toe-nails per N	IDS guidli	nes.							
BOT CHORD	11-12=-135/18, 10-1	11=-4/13, 9-10=0/32,	12) In the LO	AD CASE(S) section	n, loads a	oplied to the	face						
WEBS	4-9=-20/104, 0-9=-1	72/400, 7-0=0/0 36/107 2-11-50/20	of the trus	s are noted as front	t (F) or ba	ск (В).							
WLDO	3-11-215/73 9-11-	124/301 3-968/1		S) Standard							munn	11111	
NOTES	0 11- 210/10, 0 11-	- 124/001, 0 0= 00/1	1) Dead + 1	Snow (balanced): Lu	umber Inc	rease=1.15,	Plate				WAH CA	Ro."	1
	CE 7 16: \/ult_120mph	(2 second quist)	Increase	=1.15						AN	R		4
Vasd-103	Smoh: TCDI -6 Opef: B	CDI = 6 Onef h = 25ft	Unitorin		12 20	7 0 20				55	FESS	TON!	in
Cat II: Ex	n B' Enclosed: MWFR	S (envelope) exterior	r Concont	-2=-00, 2-0=-00, 10	J-12=-20,	7-9=-20			9				
zone: end	vertical left exposed: I	Lumber DOL=1.60 pl	late Vort	5 = 22 (P) 16 = 50 (P)	(E) 17_1	(E) 19_ 10 (	(D)		1		.2.	- ~ .	
grip DOL=	=1.60		ven.	5=-55 (D), 10=-59 (	(F), 17=1	(F), 18=-10 (	(D)				CEA	î.	1 =
2) TCLL: AS	CE 7-16; Pr=20.0 psf (	roof LL: Lum DOL=1	.15						=	:	JL-		: =
Plate DOL	_=1.15); Pf=20.0 psf (L	um DOL=1.15 Plate									0363	22	÷ =
DOL=1.15	5); Is=1.0; Rough Cat E	3; Fully Exp.; Ce=0.9	;						-			G	3
Cs=1.00; 0	Ct=1.10									1	·	· ·	1
3) Unbalance	ed snow loads have be	een considered for th	is							2.0	N. SNOW	EER	53
design.	has been dealers. If		P							1	SU. GIN	5. 68	1
<li>4) This truss lood of 12</li>	nas been designed to	r greater of min roof	live							1	A CA	IL BY	1
ioau of 12	psi or 1.00 unies ha	t 1001 10au 01 20.0 ps									11111		
overnangs											Contombo	- 10 000	<b>^</b>
											Septempe	112,202	ა

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	VLC1	Valley	1	1	Job Reference (optional)	160703014

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:17 ID:7vqOFxVgnn5zbO7saQ4GeayeUXr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

20%



Scale = 1:39.2

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	0.31	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	0.08	Horiz(TL)	0.00	5	n/a	n/a						
BCLL		0.0*	Code	IRC20	18/TPI2014	Matrix-MSH												
BCDL		10.0											Weight: 50 lb	FT = 20 <sup>6</sup>				
LUMBER				3	) Truss desig	ned for wind load	ls in the p	lane of the tr	JSS									
TOP CHORD	2x4 SP N	lo.2			only. For stu	uds exposed to w	ind (norm	al to the face	),									
BOT CHORD	2x4 SP N	lo.2			see Standar	d Industry Gable	End Deta	ils as applica	ble,									
OTHERS	2x4 SP N	lo.3			or consult qu	alified building d	esigner a	s per ANSI/T	PI 1.									
BRACING				4	) TCLL: ASCE	7-16; Pr=20.0 p	sf (roof Ll	_: Lum DOL=	1.15									
TOP CHORD	Structura	I wood she	athing directly applie	d or	Plate DOL=1	1.15); Pf=20.0 ps	f (Lum DC	DL=1.15 Plate	)									
	6-0-0 oc	purlins.			DOL=1.15);	Is=1.0; Rough Ca	at B; Fully	Exp.; Ce=0.9	9;									
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc					or 10-0-0 oc 5) Unbalanced snow loads have been considered for this													
	bracing.					5) Unbalanced snow loads have been considered for this design.												
REACTIONS	(size)	1=12-0-11	, 5=12-0-11, 6=12-0	-11, 6	) Cable requir	es continuous ho	ttom cho	d bearing										
		7=12-0-11	, 8=12-0-11	7	) Gable studs	snaced at 4-0-0		u bearing.										
	Max Horiz	1=-114 (L	C 12)	, 8	) This truss ha	as been designed	l for a 10	0 psf bottom										
	Max Uplift	1=-33 (LC	10), 5=-5 (LC 11),		chord live lo	ad nonconcurrent	t with any	other live loa	ids.									
		6=-136 (L	C 15), 8=-140 (LC 14	<sup>4)</sup> 9	) * This truss I	has been designe	ed for a liv	e load of 20.	Opsf									
	Max Grav	1=92 (LC	24), 5=71 (LC 23), 6	=434	on the bottor	n chord in all are	as where	a rectangle										
		(LC 21), 7	=260 (LC 21), 8=434	+ (LC	3-06-00 tall I	oy 2-00-00 wide v	will fit betw	veen the bott	om									
	(11.) • • •	20)			chord and a	ny other members	s.											
FORCES	(lb) - Max	kimum Com	pression/Maximum	1	<ol><li>Provide med</li></ol>	hanical connection	on (by oth	ers) of truss	to									
		101 2 2	017/116 0 4 017/1	16	bearing plate	e capable of with	standing 3	33 lb uplift at j	oint									
TOP CHORD	1-2=-115	/101, 2-3=-	217/110, 3-4=-217/1	10,	1, 5 lb uplift	at joint 5, 140 lb ι	uplift at joi	int 8 and 136	lb									
	4-0=-09/0	76 7-821	/73 6-731/73		uplift at joint	6.												
DOT CHORD	5-631/7	73, 7-0= <b>-</b> 31,	13, 0-1 =-31/13,	1	1) This truss is	designed in acco	ordance w	rith the 2018						111.				
WEBS	3-7=-173	/0 2-8=-40	0/219 4-6=-400/219		International	Residential Cod	e sections	3 K502.11.1 a	ind				N' U CA	D'''				
NOTES	R802.10.2 and referenced standard ANSI/TPT1.											"aTH UP	10n					
NULES						L'tondord							V	••••••				

- 1) Unbalanced roof live loads have been considered for 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 9-1-0, Exterior(2E) 9-1-0 to 12-1-0 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
- OAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	VLC2	Valley	1	1	Job Reference (optional)	160703015

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C?f

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9-7-14

Scale = 1:33.2

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.45 0.43 0.18	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: 37 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 9-7-14 oc purlins. Rigid ceiling directly bracing. (size) 1=9-7-14, Max Horiz 1=91 (LC Max Uplit 1=-50 (LC 4=-109 (L Max Grav 1=95 (LC (LC 21) (lb) - Maximum Com Tension 1-2=-115/375, 2-3=- 1-4=-215/173, 3-4=- 2-4=-599/272	athing directly applie applied or 6-0-0 oc 3=9-7-14, 4=9-7-14 11) 21), 3=-50 (LC 20), C 14) 20), 3=95 (LC 21), 4 pression/Maximum 115/375 215/173	4) 5) d or 6) 7) 8) 9) =776 1( 1 <sup>-1</sup>	TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. Gable require Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar D) Provide mec bearing plate 1, 50 lb upliff 1) This truss is International R802.10.2 ar DAD CASE(S)	7-16; Pr=20.0 p: .15); Pf=20.0 psi ls=1.0; Rough Ca est.10; Rough Ca est.1	sf (roof LL (Lum DC at B; Fully been cor ttom chor oc. for a 10.1 with any d for a liv as where with any d for a liv as where vill fit betv s. on (by oth standing 5 9 lb uplift rdance w e sections andard AN	:: Lum DOL= DL=1.15 Plate Exp.; Ce=0.1 asidered for t d bearing. D psf bottom other live loa e load of 20.1 a rectangle ween the bott ers) of truss 1 0 lb uplift at j at joint 4. ith the 2018 k F502.11.1 a JSI/TPI 1.	1.15 99; his Opsf om to joint					
<ol> <li>Unbalance this design</li> <li>Wind: ASC Vasd=103r</li> </ol>	d roof live loads have ⊾ ≿E 7-16; Vult=130mph mph; TCDL=6.0psf; B0	been considered for (3-second gust) CDL=6.0psf; h=25ft;									an'	WITH CA	ROLIN

 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 6-8-3, Exterior(2E) 6-8-3 to 9-8-3 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

 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.





Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB				
23080111-01	VLC3	Valley	1	1	Job Reference (optional)	160703016			

3-0-9

#### Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:17 ID:7vqOFxVgnn5zbO7saQ4GeayeUXr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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7-3-2

Scale	_	1.29.2
Scale	_	1.23.2

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.26 0.27 0.09	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 27 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 7-3-2 oc purlins. Rigid ceiling directly bracing. (size) 1=7-3-2, 3 Max Horiz 1=-67 (LC Max Uplift 1=-18 (LC 4=-74 (LC Max Grav 1=105 (LC 4=535 (LC (lb) - Maximum Com Tension 1-2=-89/230, 2-3=-8 1-4=-162/152, 3-4=- 2-4=-381/200	athing directly applied applied or 6-0-0 oc 3=7-3-2, 4=7-3-2 10) 2 1), 3=-18 (LC 20), 2 4) 2 20), 3=105 (LC 21), 2 20) pression/Maximum 9/230 162/152	<ul> <li>4) TCLL: ASCE Plate DOL= DOL=1.15); Cs=1.00; Ct:</li> <li>5) Unbalanced design.</li> <li>6) Gable requir</li> <li>7) Gable studs</li> <li>8) This truss he chord live loc</li> <li>9) * This truss lon</li> <li>on the botton</li> <li>3-06-00 tall H chord and an</li> <li>10) Provide mec bearing plate</li> <li>1, 18 lb uplif</li> <li>11) This truss is International R802.10.2 a</li> <li>LOAD CASE(S)</li> </ul>	57-16; Pr=20.0 psf 1.15); Pf=20.0 psf ( Is=1.0; Rough Cat =1.10 snow loads have b es continuous botte spaced at 4-0-0 oc as been designed fr ad nonconcurrent v nas been designed n chord in all areas by 2-00-00 wide will y other members. hanical connection e capable of withsts t at joint 3 and 74 II designed in accord Residential Code nd referenced stan Standard	(roof LL Lum DC B; Fully been cor om chor con chor con a 10.0 vith any for a liv s where I fit betw (by oth anding 1 o uplift a Jance w sections dard AN	L: Lum DOL= L=1.15 Plate Exp.; Ce=0.9 asidered for the d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss to 8 lb uplift at ju t joint 4. ith the 2018 ; R502.11.1 a ISI/TPI 1.	I.15 ); ds. opsf om oint nd					
<ol> <li>Unbalance this design</li> </ol>	ed roof live loads have n.	been considered for										unin,

- 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) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 4-3-6, Exterior(2E) 4-3-6 to 7-3-6 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 036322 September 12,2023

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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB							
23080111-01	VLC4	Valley	1	1	Job Reference (optional)	160703017						

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4-10-5

3

2x4 💊

Page: 1





4-10-5

Scale = 1:26.1

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.04	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC201	8/TPI2014	Matrix-MP		. ,						
BCDL	10.0											Weight: 17 lb	FT = 20%
LUMBER			5)	Unbalanced	snow loads have l	been cor	sidered for th	his					
TOP CHORI	2x4 SP No.2		0)	design.									
BOT CHORI	2x4 SP No.2		6)	Gable requir	es continuous bott	om chor	d bearing.						
OTHERS	2x4 SP No.3		()	Gable studs	spaced at 4-0-0 of	C.							
BRACING			8)	I his truss ha	s been designed t	or a 10.0	) pst bottom	da					
TOP CHORI	O Structural wood sheat 4-10-5 oc purlins.	athing directly applie	ed or 9)	* This truss h	as been designed	for a liv	e load of 20.0	las. Opsf					
BOT CHORI	<ul> <li>Rigid ceiling directly bracing.</li> </ul>	applied or 6-0-0 oc		on the bottor 3-06-00 tall b	n chord in all area by 2-00-00 wide wi	s where Il fit betv	a rectangle /een the botto	om					
REACTIONS	<ul> <li>bracing.</li> <li>ACTIONS (size) 1=4-10-5, 3=4-10-5, 4=4-10-5 Max Horiz 1=44 (LC 11) Max Uplifit 3=-7 (LC 15), 4=-33 (LC 14) Max Grav 1=88 (LC 20), 3=88 (LC 21), 4=295 (LC 20)</li> <li>Brown and any other members.</li> <li>Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 3 and 33 lb uplift at joint 4.</li> <li>This truss is designed in accordance with the 2018</li> </ul>												
FORCES	(lb) - Maximum Com	pression/Maximum		R802.10.2 a	nd referenced star	dard AN	ISI/TPI 1.	ina					
	1 ension 1 1-281/104 2-38	1/104	LC	DAD CASE(S)	Standard								
BOT CHORE	1-4=-80/88 $3-4=-80/88$	/88											
WFBS	2-4=-183/97	00											
NOTES	2 1 100/01												
1) Unbalan	ced roof live loads have	been considered for											
this dosi	nn	been considered for											
2) Wind As	SCF 7-16: Vult=130mph	(3-second qust)										, uninnin	1111.
Vasd=10	3mph TCDI =6 0psf B(	CDI = 6 Opsf: h=25ft										"TH CA	Rollin
Cat. II: E	xp B: Enclosed: MWFR	S (envelope) exterio	r								x	R	- Inter
zone and	C-C Exterior(2E) zone;	cantilever left and r	ight								6	U. FESS	Of Vin
exposed	exposed ; end vertical left and right exposed;C-C for												
member	s and forces & MWFRS	for reactions shown;	;								-	27	
Lumber	DOL=1.60 plate grip DO	L=1.60										CEA	1 1 1
3) Truss de	esigned for wind loads ir	the plane of the tru	SS							=	:	SLA	<u>-</u> : =
only. Fo	r studs exposed to wind	(normal to the face)										0363	22 : =
see Star	idard Industry Gable End	d Details as applicab	ole,							-			1 3
or consu	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

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A. GILB

A. GIL September 12,2023

C

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	VLE1	Valley	1	1	Job Reference (optional)	160703018

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:18 ID:YAsodc7jWLZ7Fhb1mtP4RQyeUQb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

# 6-11-15 2x4 🛛 3 ø 9 2x4 II 5-10-3 5-10-3 2 12 10 Г 1<sup>8</sup>1 0-0-4 0 4 5 2x4 🛛 2x4 🛛 2x4 🍫 6-11-15

Scale = 1:37.6

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	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL		10.0	Rep Stress Incr	YES		WB	0.09	Horiz(TL)	0.00	4	n/a	n/a		
BCLL		0.0*	Code	IRC2018	3/TPI2014	Matrix-MP								
BCDL 10.0											Weight: 34 lb	FT = 20%		
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3 BRACING TOP CHORD Structural wood sheathing directly applied or $6-0 \circ c$ purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. REACTIONS (size) 1=6-11-15, 4=6-11-15, 5=6-11-15 Max Horiz 1=187 (LC 14) Max Uplift 1=-7 (LC 12), 4=-47 (LC 14), 5=-145 (LC 14) Max Grav 1=124 (LC 14), 4=199 (LC 20), 5=-461 (LC 20) EORCES (b) Maximum Compression/Maximum					Gable require Gable studs s This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Provide mech bearing plate 4, 7 lb uplift a This truss is of International R802.10.2 ar AD CASE(S)	es continuous botto spaced at 4-0-0 oc s been designed fo d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. nanical connection capable of withsta ti joint 1 and 145 lb designed in accord Residential Code s ad referenced stand Standard	om chor or a 10.0 vith any for a liv s where l fit betw (by oth o uplift a ance w sections dard AN	d bearing. ) psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 7 lb uplift at j t joint 5. ith the 2018 i R502.11.1 a ISI/TPI 1.	ids. Dpsf om ro oint					
FORCES	(lb) - Maxim Tension	ium Com	pression/Maximum											
TOP CHORD	1-2=-304/16	60. 2-3=- <sup>-</sup>	154/81, 3-4=-167/114											
BOT CHORD	1-5=-62/64,	4-5=0/0	,											
WEBS	2-5=-382/29	90												
NOTES														CT CT
<ol> <li>Wind: ASC Vasd=103 Cat. II; Ex zone and forces &amp; M DOL=1.60</li> <li>Truss des only. For see Stand or consult</li> <li>TCLL: AS Plate DOL DOL=1.15 Cs=1.00;</li> <li>Unbalance design.</li> </ol>	CE 7-16; Vult= mph; TCDL=6 p B; Enclosed C-C Exterior(2 MVFRS for ree ) plate grip DC signed for wind studs exposed lard Industry C qualified build CE 7-16; Pr=2 =1.15); Pf=20 i); Is=1.0; Rou Ct=1.10 ed snow loads	130mph 6.0psf; BC ; MWFRS 2E) zone; actions sl DL=1.60 DL=1.60 DL=1.60 d loads ir d to wind Gable End ing desig 0.0 psf (L gh Cat B have be	(3-second gust) DL=6.0psf; h=25ft; S (envelope) exterior C-C for members and hown; Lumber the plane of the trus (normal to the face), d Details as applicabl ner as per ANSI/TPI toof LL: Lum DOL=1. Jm DOL=1.15 Plate ; Fully Exp.; Ce=0.9; en considered for this	d s e, 1. 15							Contraction of the second seco		SEA O363	ROUL L 22 EER-FATTURE

September 12,2023



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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB				
23080111-01	VLE2	Valley	1	1	Job Reference (optional)	160703019			

5-9-9

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:18 ID:MnADI1n96k16uOSf7?vWJXyeUR1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-10-3

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Page: 1

2x4 II 3 4-10-3 2x4 II 2 12 10 Г gB 1 -0-0 5 2x4 🛛 2x4 🍫 2x4 II 5-9-9

Scale = 1:33.4

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.34	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	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC201	8/TPI2014	Matrix-MP								
BCDL	10.0											Weight: 27 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 5-9-9 oc purlins, ex Rigid ceiling directly bracing. (size) 1=5-9-9, / Max Horiz 1=158 (L0 Max Uplift 1=-48 (L0 5=-130 (L Max Grav 1=128 (L0	athing directly appli cept end verticals. applied or 10-0-0 c 4=5-9-9, 5=5-9-9 C 14) C 14), 4=-61 (LC 14) C 14), 4=-69 (LC 20	5) 6) 7) 8) ed or 9) 10 1, 1, 1,	Gable requir Gable studs This truss ha chord live loa * This truss f on the bottor 3-06-00 tall b chord and ar Provide mec bearing plate 4, 48 lb upliff 0) This truss is International R802.10.2 ar <b>CADE CASE(S)</b>	es continuous bo spaced at 4-0-0 is been designed ad nonconcurrent nas been designed been designed y 2-00-00 wide v hanical connection e capable of with at joint 1 and 13 designed in accor Residential Cod nd referenced stat Standard	ottom chornoc. d for a 10.0 t with any ed for a livias where will fit betw s. on (by othe standing 6 80 lb uplift ordance wi e sections andard AN	d bearing. ) psf bottom other live loa e load of 20. a rectangle reen the bott ers) of truss 1 lb uplift at at joint 5. th the 2018 R502.11.1 a SI/TPI 1.	ads. Opsf om to joint and					
FORCES	5=450 (L0 (lb) - Maximum Com	C 20) pression/Maximum											

#### F Tension TOP CHORD 1-2=-335/171, 2-3=-156/79, 3-4=-165/125

BOT CHORD 1-5=-55/0, 4-5=0/0 WEBS 2-5=-425/341

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) zone;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 2) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15

3) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

Unbalanced snow loads have been considered for this 4) design.



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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB		
23080111-01	VLE3	Valley	1	1	Job Reference (optional)	160703020	

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4-7-2

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

3-10-3

0-0-4

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2x4 II

Page: 1

2x4 II 3x5 \* 2x4 II 3x5 \* DEFL in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(TL) n/a - n/a 999 Vert(TL) n/a - n/a 999 MT20 244/190

Scale = 1:29.2

e = 1:29.2															
ling . (roof) / (Pf) -		(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.43 0.43 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 20 lb	<b>GRIP</b> 244/190 FT = 20%	%
BER CHORD CHORD S CING CHORD CHORD CHORD	2x4 SP No. 2x4 SP No. 2x4 SP No. 2x4 SP No. Structural w 4-7-2 oc pu Rigid ceiling bracing. (size) 1 Max Horiz 1 Max Horiz 1 Max Grav 1	2 2 3 vood shea rlins, exc g directly =4-7-2, 3 =121 (LC =-79 (LC =219 (LC	athing directly applie sept end verticals. applied or 10-0-0 oc s=4-7-2 2 14) 14) 2 20), 3=267 (LC 20)	8) 9) d or 10	* This truss h on the bottor 3-06-00 tall k chord and ar Provide mec bearing plate 3. ) This truss is International R802.10.2 ai AD CASE(S)	has been designe m chord in all are by 2-00-00 wide v by other members hanical connection e capable of withs designed in accor Residential Code nd referenced sta Standard	ed for a live as where vill fit betw s. on (by othe standing 7 ordance wi e sections andard AN	e load of 20.0 a rectangle veen the botto ers) of truss tr 9 lb uplift at jo th the 2018 R502.11.1 a SI/TPI 1.	Dpsf om oint nd						
CES	(lb) - Maxim Tension	ium Com	pression/Maximum												
CHORD	1-2=-280/94	4, 2-3=-18	35/142												
CHORD	1-3=-146/22	20													
ES Vind: ASC /asd=103 Cat. II; Exp cone and ( prces & M	CE 7-16; Vult= mph; TCDL=6 b B; Enclosed C-C Exterior(2 IWFRS for rea	=130mph 5.0psf; B0 ; MWFRS 2E) zone; actions sł	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior C-C for members an nown; Lumber	d											
OL=1.60 Truss des only. For s ee Stand	plate grip DC signed for wind studs exposed ard Industry C	)L=1.60 d loads in d to wind Gable End	the plane of the trus (normal to the face), Details as applicab	ss le,							4	ALL A	ORTHOR	ich	N.
CLL: ASC CLL: ASC Plate DOL OOL=1.15 Cs=1.00; 0	qualified build CE 7-16; Pr=2 =1.15); Pf=20 ); Is=1.0; Rou Ct=1.10	20.0 psf (r 20.0 psf (r 20.0 psf (Lu 20.0 psf (Lu 20.0 psf (Lu	roof LL: Lum DOL=1 um DOL=1.15 Plate ; Fully Exp.; Ce=0.9;	.15									SEA 0363	L 22	
Inbalance	ed snow loads	have be	en considered for thi	s							-				
iesign. Gable regi	uires continuo	ous bottor	n chord bearing.									3.5	NGIN	EER	53
Sable stud	ds spaced at 4	4-0-0 oc.										11	710	DE	JII .
his truss hord live	has been des load nonconc	igned for urrent wit	a 10.0 psf bottom th any other live load	s.									A. G	ILDIN	<b>N</b> (1)
	ing (roof) (Pf) BER CHORD CHORD S CHORD CHO	<pre>ing ing . (roof) / (Pf) - BER CHORD 2x4 SP No CHORD 2x4 SP No CHORD 2x4 SP No CHORD 2x4 SP No CING CHORD Structural w</pre>	g = 1.29.2ing(psf). (roof)20.0/ (Pf)20.0/ (Pf)20.0-10.0-0.0*-10.0-10.0-10.0BERCHORDCHORD2x4 SP No.2S2x4 SP No.2CHORDStructural wood sheat4-7-2 oc purlins, excCHORDRigid ceiling directly bracing.CTIONS(size)1=4-7-2, 3 Max HorizMax Horiz1=121 (LC Max GravMax Grav1=219 (LCCES(lb) - Maximum Com TensionCHORD1-2=-280/94, 2-3=-14CHORD1-3=-146/220ESVind: ASCE 7-16; Vult=130mph rasd=103mph; TCDL=6.0psf; BC cat. II; Exp B; Enclosed; MWFRS for reactions si DOL=1.60 plate grip DOL=1.60Truss designed for wind loads in nly. For studs exposed to wind ee standard Industry Gable Enc r consult qualified building desig (CLL: ASCE 7-16; Pr=20.0 psf (Li DOL=1.15); Is=1.0; Rough Cat B $s=1.00;$ Ct=1.10Inbalanced snow loads have be esign. able requires continuous bottor Sable studs spaced at 4-0-0 co. his truss has been designed for hord live load nonconcurrent with hard inve load nonconcurrent with hard inve load nonconcurrent	ing       (psf)         . (roof)       20.0         / (Pf)       20.0         . (roof)       20.0         / (Pf)       20.0	a = 1.29.2ing(psf). (roof)20.0/ (Pf)20.0. (roof)20.0/ (Pf)20.0	ing       (psf)       Spacing       2-0-0         ((Pf)       20.0       Plate Grip DOL       1.15         ((Pf)       20.0       Lumber DOL       1.15         (Pf)       20.0       Lumber DOL       1.15         (Pf)       20.0       Lumber DOL       1.15         (Pf)       0.0*       Code       IRC2018/TPI2014         Server       10.0       Structural wood sheathing directly applied or A-7-2 oc purlins, except end verticals.       a)         CHORD       Structural wood sheathing directly applied or A-7-2 oc purlins, except end verticals.       a)       This truss is International R802.10.2 at Code Code Code Code Code Code Code Code	Ing       (psf)         .(roof)       20.0         .(roof)       20.0         .(roof)       20.0         .(roof)       20.0	Ing       (psf)       Spacing       2-0-0       CSI         .(roof)       2.0.0       Plate Grip DOL       1.15       BC       0.43	<ul> <li>Ing (ps) (r0ef) 20.0</li> <li>Plate Grip DOL 1.15</li> <li>Plate Grip DOL 1.15</li> <li>C 0.03</li> <li>Plate Grip DOL 1.15</li> <li>BC 0.43</li> <li>WB 0.00</li> <li>Matrix-MP</li> <li>DeFL</li> <li>Unber DOL 1.15</li> <li>BC 0.43</li> <li>Wert(LL) Vert(TL)</li> <li>Horiz(TL)</li> <li>Ho</li></ul>	<ul> <li>Ing (psf) ((root) 20.0 Plate Grip DOL 1.15 TC 0.43 BC 0.44 Ver(TL) n/a BC 0.45 Ver(TL) n/a BC 0.45 Ver(TL) n/a BC 0.45 Ver(TL) n/a CC 0.45 PL 0.00 Matrix-MP</li> <li>0.00 Code (RC2018/TPI2014) BC 0.44 Ver(TL) n/a Ver(TL) n/a Ver(TL) 1.00 Code (RC2018/TPI2014) Ver(TL) n/a Ver(TL) 0.01 Ver(TL) 0.</li></ul>	Ing       (psf)         (roof)       20.0         (roof)       20.0         (P)       20.0         -       0.0*         0.0*       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         -       0.0*         BER       Code         CHORD       2x4 SP No.2         Structural wood sheathing directly applied or 10*0*0 oc         bracing.       -         Rigid celling directly applied or 10*0*0 oc         bracing.       -         Size X SP No.2       -         CHORD       Structural wood sheathing directly applied or 10*0*0 oc         bracing.       -         Max Foriz 1=121 (C 14)       -         Max Foriz 1=221 (C 14)       -         Max Foriz 1=221 (C 14)<	<ul> <li>Ing (psf) (psf) 20.0 Plate Grip DOL 1.15 TC 0.43 Vert(LL) n/a - n/a (psf) Plate Grip DOL 1.15 TC 0.43 Vert(LL) n/a - n/a (psf) Plate Grip DOL 1.15 BC 0.43 Vert(LL) n/a - n/a (psf) Plate Grip DOL 1.15 BC 0.43 Vert(LL) n/a - n/a (psf) Plate Grip DOL 1.15 BC 0.43 Vert(LL) n/a - n/a (psf) Plate Grip DOL 1.15 BC 0.43 Vert(LL) n/a - n/a (psf) Plate Grip DOL 1.00 Vert(LL) n/a - n/a (psf) Plate Grip DOL 24 SP No.2 Code IRC2018/TPI2014 Vert(LL) n/a - n/a (psf) Plate Grip DOL 24 SP No.2 Code IRC2018/TPI2014 Vert(DL) 0.01 3 n/a (psf) Plate Grip DOL 24 SP No.2 Code IRC2018/TPI2014 Vert(DL) 0.01 3 n/a (psf) Plate Grip DOL 24 SP No.2 Code Units, except end verticals. Code DR Rigid celling directly applied or 10-0-0 Code Verticals. CINOS (size) 14-47-2, 3-47-2 Max Horiz 1-121 (LC 14) Max Grav 1-219 (LC 20), 3-267 (LC 20) CES (b) 1-447-2, 3-47-2 (b) (b) 1-427-230-94, 2-3-185/142 Code Section Plate Grip DOL 1.60 Tist russ is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. LOAD CASE(S) Standard MSI/TPI 1. CL: ASCE 7-16; Vult=130mph (3-second gust) (psf) for reactions shown; Lumber OOL=1.60 Truss designed for wind loads in the plane of the fruss hy, For stude seposed to wind (normal to the face), ee Standard hulstry Gable End Details as applicable, roorsult qualified building designer as per ANSI/TPI 1. CL: ASCE 7-16; Pr=20.00 psf (true DL=1.15 Plate Second gust) (psf) for reactions shown; Lumber OL=1.60 Truss designed for wind loads in the plane of the fruss designed as a policable, roorsult qualified building designer as per ANSI/TPI 1. List as bas base been considered for this easign. Sabel requires continuous bottom chord bearing. Sabel study spoced to wind normal to the face), ee Sign and thustry Gable Chord Desing. Sabel requires continuous bottom chord bearing. Sabel requires continuous bottom chord bearing. Sabel requires contin</li></ul>	<ul> <li>Ing. (psf) (psf</li></ul>	Instruct         Spacing         2-0-0         CSI         DEFL         in         (loc)         Videt         L/d           (IPT)         20.0         Lumber DOL         1.15         TC         0.43         Vert(LL)         n/a	<ul> <li>ing (psf)</li> <li>(pr)</li> <li>(p</li></ul>

September 12,2023



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Job	Truss	Truss Type	Qty	Ply	91 Serenity-Roof-B330 E COP TMB	
23080111-01	VLE4	Valley	1	1	Job Reference (optional)	160703021

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

2-10-3

0-0-4

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2x4 II

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Page: 1

2-10-3 3 2x4 II

Scale = 1:25.2	2						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 IRC2018/TPI20	CSI TC BC WB Matrix-MP	0.19 0.22 0.00	<b>DEFL</b> 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: 14 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORE BOT CHORE WEBS BRACING TOP CHORE BOT CHORE REACTIONS FORCES	<ul> <li>2x4 SP No.2</li> <li>2x4 SP No.2</li> <li>2x4 SP No.3</li> <li>Structural wood she 3-4-12 oc purlins, e</li> <li>Rigid ceiling directly bracing.</li> <li>(size) 1=3-4-12, Max Horiz 1=85 (LC Max Uplift 3=-56 (LC Max Grav 1=153 (LC (lb) - Maximum Com Tension</li> </ul>	athing directly applie xcept end verticals. applied or 10-0-0 or 3=3-4-12 14) 2 14) 2 20), 3=185 (LC 20 apression/Maximum	8) * This on th 3-06- chorc 9) Provi beari 3. 10) This Interr R802 LOAD C/	truss has been desig e bottom chord in all a 00 tall by 2-00-00 widd i and any other membe de mechanical connec ng plate capable of wit truss is designed in ac national Residential Co .10.2 and referenced s ASE(S) Standard	ned for a liv reas where e will fit betv ers. ttion (by oth thstanding 5 cordance w ode sections standard AN	e load of 20. a rectangle veen the bott ers) of truss i6 lb uplift at j ith the 2018 iR502.11.1 a ISI/TPI 1.	Opsf om to joint and					
TOP CHORD BOT CHORD	0 1-2=-197/64, 2-3=-1 0 1-3=-110/152	23/107										
<ol> <li>NOTES</li> <li>1) Wind: AS Vasd=10 Cat. II; E: zone and forces &amp; DOL=1.6</li> <li>2) Truss de only. Fooi see Stan or consul</li> <li>3) TCLL: AS Plate DO DOL=1.1 Cs=1.00;</li> <li>4) Unbalance design.</li> <li>5) Gable rete</li> <li>6) Gable stut</li> <li>7) This truss chord live</li> </ol>	SCE 7-16; Vult=130mph (3mph; TCDL=6.0psf; B xp B; Enclosed; MWFR 1 C-C Exterior(2E) zone MWFRS for reactions s i0 plate grip DOL=1.60 ssigned for wind loads ir r studs exposed to wind dard Industry Gable En It qualified building desi SCE 7-16; Pr=20.0 psf (L 5); Is=1.0; Rough Cat E ; Ct=1.10 ced snow loads have be quires continuous botto uds spaced at 4-0-0 oc. s has been designed fo e load nonconcurrent wi	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio ;C-C for members an hown; Lumber In the plane of the tru I (normal to the face) d Details as applicat gner as per ANSI/TF roof LL: Lum DOL=1.15 Plate B; Fully Exp.; Ce=0.9 een considered for th m chord bearing. r a 10.0 psf bottom ith any other live load	r nd iss ), ole, P11. I.15 ; is						Contraction of the second seco		SEA 0363	EER. R. L. 122 122 122 122 1222



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



Job	Truss	Truss Type Qty Ply 91 Serenity-Roof		91 Serenity-Roof-B330 E COP TMB	P TMB			
23080111-01	VLE5	Valley	1	1	Job Reference (optional)	160703022		

2-2-6

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

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Sep 12 06:04:18 ID:x7NNrlwdqw4AtUX?Ta7sxYyeUS8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2x4 II

Page: 1

GRIP

244/190

FT = 20%

G

2x4 🍬 2-2-6 Spacing 2-0-0 CSI DEFL l/defl L/d PLATES (psf) in (loc) 20.0 Plate Grip DOL 1.15 TC 0.05 Vert(LL) n/a n/a 999 MT20 BC 20.0 Lumber DOL 1 15 0.08 Vert(TL) n/a n/a 999 10.0 Rep Stress Incr YES WB 0.00 Horiz(TL) 0.00 3 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MP 10.0 Weight: 9 lb \* This truss has been designed for a live load of 20.0psf 8) on the bottom chord in all areas where a rectangle 2x4 SP No.2 2x4 SP No.2 3-06-00 tall by 2-00-00 wide will fit between the bottom 2x4 SP No.3 chord and any other members. 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint Structural wood sheathing directly applied or 2-2-10 oc purlins, except end verticals. 3 10) This truss is designed in accordance with the 2018 Rigid ceiling directly applied or 10-0-0 oc International Residential Code sections R502.11.1 and bracing. R802.10.2 and referenced standard ANSI/TPI 1. 1=2-2-6, 3=2-2-6 LOAD CASE(S) Standard Max Horiz 1=48 (LC 14) Max Uplift 3=-33 (LC 14) Max Grav 1=80 (LC 20), 3=106 (LC 20) (Ib) - Maximum Compression/Maximum Tension 1-2=-100/35, 2-3=-66/66 1-3=-67/76 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone;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. THE DAY OF TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 SEAL Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate 036322 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 Gable requires continuous bottom chord bearing. Gable studs spaced at 4-0-0 oc. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. mmm September 12,2023 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) 818 Soundside Road and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com) Edenton, NC 27932

2 12 10 \_ -10-3 1-10-3 3 2x4 u

Scale = 1:21.1

Loading

TCLL (roof)

Snow (Pf)

LUMBER

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

NOTES

1)

2)

3)

4)

5)

6)

7)

desian.

TOP CHORD

BOT CHORD

**REACTIONS** (size)

BRACING

TCDL

BCLL

BCDL

WFBS

