Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	A	Common	4	1	Job Reference (optional)	158457583

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:02 ID:CttcSzQgwNcSj9X9hY?FsHzF_uO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





May 19,2023



Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	AGE	Common Supported Gable	1	1	Job Reference (optional)	8457584

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:05 ID:94aeZ53wRfHxaJ4LIBSgWSzF_tZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



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	CS TC BC WE Ma	I 3 trix-MSH	0.08 0.05 0.15	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc) - - 26	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 285 lb	GRIP 244/190 FT = 20%	9
LUMBER TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N Left 2x4 S 1-6-0 Structural 6-0-0 oc p Rigid ceili bracing. 1 Row at (size)	0.2 0.3 *Except P No.3 1 wood shear ourlins. ng directly midpt 2=39-11-0 28=39-11- 30=39-11- 30=39-11- 32=39-11- 34=39-11- 44=39-11- 40=39-11- 40=39-11- 40=39-11- 2=-165 (LI 2=-21 (LC 29=-37 (LI 35=-48 (LI 35=-48 (LI 35=-48 (LI 44=-96 (LI 46=-96 (LI)	* 37-14:2x4 SP No.2 -6-0, Right 2x4 SP No.2 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7	2 4 or FORCES TOP CHORD 5), 5), 5), 5), 6), 4), 4), 4), 4), 4), 4), 4), 4	(lb) - Tensi 1-2=(5-6=- 8-9=- 12-13 14-18 16-17 19-2(2-2; 24-26 42-4; 42-4; 42-4; 42-4; 42-4; 37-35 32-3; 30-31 28-25	rav $2=161$ (28=158 30=160 32=161 34=180 36=245 38=245 40=180 42=161 44=160 46=158 51=161 Maximum Cc ion 223, 2-4=-21 129/94, 6-7= 61/154, 9-11 3=-103/269, 1 r=84/221, 17 r=84/221, 17 r=-44/167, 45 s=-44/167, 45 s=-44/167, 35 s=-44/167, 35 s=-44/167, 35 s=-44/167, 26	LC 26), 3 (LC 35), (LC 35), (LC 35), (LC 22), (LC 22), (LC 22), (LC 21), (LC 21), (LC 21), (LC 21), (LC 34), (LC 34), (L	26=138 (LC 2 29=160 (LC 33=160 (LC 33=160 (LC 33=2160 (LC 35=232 (LC 37=201 (LC 37=201 (LC 39=232 (LC 41=160 (LC 45=160 (LC 45=160 (LC 47=138 (LC 0n/Maximum j=-168/81, 7-8=-74/130, 7, 11-12=-84/2 20/309, 03/269, 1/176, 766, 21-22=-4 (35, 3 67, 1/165, 1/165, 1/165, 1/165, 1/165, 1/165, 1/165, 1/165, 1/165, 1/1	2), 22), 22), 35), 22), 27), 21), 34), 1), 21), 22), 221, 4/40,	WEBS NOTES 1) Unt this	alanced design.	14-37 12-39 9-41= 6-44= 15-36 17-34 20-32 22-30 24-28	204/45, 13-38= 192/83, 11-40- -120/77, 8-42=-1 205/66, 16-35= 140/76, 19-33: 121/77, 21-31= 120/77, 23-29= 114/135 ve loads have be Ve loads have be SEA 0363	205/66, 140/76, 21/77, 7-43 21/81, 4-46: 192/83, 120/77, 121/81, en consider 	=-120/77, =-114/135, red for

Page: 1



Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	AGE	Common Supported Gable	1	1	Job Reference (optional)	158457584

- 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 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 only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 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 38, 47 lb uplift at joint 39, 43 lb
- 2, 39 lb uplift at joint 38, 47 lb uplift at joint 39, 43 lb uplift at joint 40, 44 lb uplift at joint 41, 44 lb uplift at joint 42, 43 lb uplift at joint 43, 46 lb uplift at joint 44, 34 lb uplift at joint 45, 96 lb uplift at joint 46, 36 lb uplift at joint 36, 48 lb uplift at joint 35, 43 lb uplift at joint 34, 44 lb uplift at joint 33, 44 lb uplift at joint 32, 43 lb uplift at joint 31, 46 lb uplift at joint 30, 37 lb uplift at joint 29, 80 lb uplift at joint 28 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.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 sand truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:05 ID:94aeZ53wRfHxaJ4LIBSgWSzF_tZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 2

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	В	Common	5	1	Job Reference (optional)	158457585

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:06

:06 Page: 1





Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	B1	Common	1	1	Job Reference (optional)	158457586

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:06 ID:jCQDRPFmxy5us2K9CGvbovzF_Un-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

818 Soundside Road Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	B1GE	Common Supported Gable	1	1	Job Reference (optional)	158457587

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:07 ID:va6oJ_bKLZdwDLTYr9P9wpzF_UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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BCDL		10.0	Code	IRC2018/1P12014	iviat	IIX-IVIK			Weight: 262 lb FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Structura 6-0-0 oc I Rigid ceil bracing. 1 Row at (size) Max Horiz Max Uplift	0.2 0.2 0.3 0.3 I wood she purlins, exi ing directly midpt 22=36-3-(25=36-3-(22=36-3-(32=36-3-(42=36-3-(42=36-3-(42=36-3-(42=36-3-(42=36-3-(42=36-3-(42=36-3-(42=36-3-(12=-45-(L 24=-45-(L 24=-45-(L 24=-45-(L 31=-33-(L 31=-33-(L 31=-37-(L 31=-37-(L 43=-149-(athing directly applied cept end verticals. applied or 6-0-0 oc 12-32, 11-33, 13-31), 23=36-3-0, 24=36-3-), 30=36-3-0, 31=36-3-), 33=36-3-0, 34=36-3-), 40=36-3-0, 38=36-3-), 40=36-3-0, 41=36-3-), 43=36-3-0 .C 13) :14), 23=-105 (LC 15), C 15), 27=-37 (LC 15), C 15), 33=-37 (LC 14), C 14), 35=-44 (LC 14), C 14), 38=-45 (LC 14), C 14), 42=-225 (LC 14 LC 10)	Pr FORCES 0, 10P CHORD 0, 0, BOT CHORD 6, WEBS NOTES	(lb) - N Tensio 2-43= 3-4=- ⁻ 6-7=-{ 10-11 12-13 14-16 17-18 19-20 42-43 39-40 35-37 32-33 28-30 25-26 22-23 12-32 10-34 7-38= 4-41= 13-31 15-28 17-26 19-24	av 22=79 (LC 31), 24=165 (LC 22) 26=163 (LC 22) 28=174 (LC 22) 31=242 (LC 22) 33=242 (LC 21) 35=174 (LC 21) 38=162 (LC 21) 40=158 (LC 34) 42=171 (LC 12) Aaximum Compression -168/102, 1-2=0/27, 40/104, 4-5=-112/12 Maximum Compression -168/102, 1-2=0/27, 40/104, 4-5=-112/12 Maximum Compression -168/102, 1-2=0/27, 40/104, 4-5=-112/12 Maximum Compression -168/102, 1-2=0/27, 40/104, 4-5=-132/12 -35/59, 34-35=-35/6 -35/59, 34-35=-35/6 -35/69, 34-35=-35/6 -35/69, 34-35=-35/6 -35/69, 34-35=-35/6 -35/69, 34-35=-35/6 -35/69, 34-35=-35/6 -35/69, 34-35=-35/6 -35/69, 34-35=-35/6 -35/69, 34-35=-35/6 -35/69, 34-35=-36/6 -35/69, 34-35=-36/6 -35/69, 34-35=-36/6 -35/69, 34-35=-36/6 -35/69, 34-35=-36/6	23=142 (LC 25), , 25=159 (LC 1), , 27=151 (LC 35), , 30=238 (LC 22), , 32=224 (LC 15), , 37=151 (LC 34), , 39=160 (LC 1), , 41=167 (LC 21), , 43=241 (LC 26) ion/Maximum 2-3=-203/116, 25, 5-6=-94/148, 8-10=-114/296, 50/384, 34/345, 32/211, /120, 59, 40-41=-35/59, 59, 37-38=-35/59, 59, 26-27=-34/59, 59, 26-27=-34/59, 5	 1) 2) 3) 4) 5) 	Unbalanced roof live loads have been considered this design. Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=2f Cat. II; Exp B; Enclosed; MWFRS (envelope) exter zone and C-C Corner(3E) -0-10-8 to 2-9-8, Exteric 2-9-8 to 15-2-0, Corner(3R) 15-2-0 to 22-5-0, Exter (2N) 22-5-0 to 32-5-12, Corner(3E) 32-5-12 to 36- zone; cantilever left and right exposed; end vertic and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 J grip DOL=1.60 Truss designed for wind loads in the plane of the only. For studs exposed to wind (normal to the fa see Standard Industry Gable End Details as applis or consult qualified building designer as per ANSI TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=1 Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for design.	for ift; rior pr(2N) erior 1-4 al left blate truss ce), cable, TPI1. _=1.15 ift pr(2N) rthis

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	B1GE	Common Supported Gable	1	1	Job Reference (optional)	158457587

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * 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.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 22, 149 lb uplift at joint 43, 37 lb uplift at joint 35, 51 lb uplift at joint 34, 44 lb uplift at joint 35, 37 lb uplift at joint 37, 45 lb uplift at joint 38, 43 lb uplift at joint 39, 46 lb uplift at joint 40, 37 lb uplift at joint 41, 225 lb uplift at joint 42, 33 lb uplift at joint 31, 52 lb uplift at joint 30, 45 lb uplift at joint 28, 37 lb uplift at joint 27, 45 lb uplift at joint 26, 46 lb uplift at joint 25, 35 lb uplift at joint 24 and 105 lb uplift at joint 23.
- 14) 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

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:07 ID:va6oJ_bKLZdwDLTYr9P9wpzF_UL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	B1T	Roof Special	5	1	Job Reference (optional)	158457588

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:08 ID:2HcYAd?Hg5BJ59573cN8bNzF_JU-RfC?PsB70Hg3NSgPgnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

818 Soundside Road Edenton, NC 27932



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Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	BSE	Common Structural Gable	1	1	Job Reference (optional)	158457589

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:08 ID:jfMMInrRxWpjnpkdD7IdQkzF_VJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

	9-2-8	18-9-8	28-4-8	36-3-0
	9-2-8	9-7-0	9-7-0	7-10-8
Scale = 1:75.6				

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

			-	·									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.71 0.87 0.67	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.26 -0.44 0.10	(loc) 15-17 13-15 12	l/defl >999 >971 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 244 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD WEBS JOINTS REACTIONS FORCES TOP CHORD	2x4 SP No.2 2x4 SP No.1 2x4 SP No.3 2x4 SP No.3 Structural wood she 3-3-10 oc purlins, e Rigid ceiling directly bracing. 1 Row at midpt 1 Brace at Jt(s): 24 (size) 12=1-5-8, Max Horiz 18=157 (L Max Uplift 12=-150 (Max Grav 12=1644 (lb) - Maximum Com Tension 1-2=0/27, 2-3=-537/ 5-6=-1462/226 6-88	athing directly applie xcept end verticals. applied or 10-0-0 oc 4-15, 7-15, 3-18 18=0-5-8 .C 13) LC 15), 18=-160 (LC (LC 3), 18=1639 (LC pression/Maximum 144, 3-5=-2407/295, 1848/188 8-9=-152	2) d or 3) 14) 3) 5) /98 6)	Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-(2-9-0 to 15-2) (1) 22-5-0 to cantilever lef right exposed for reactions DOL=1.60 Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ba	7-16; Vult=130mp bh; TCDL=6.0psf; 13; Enclosed; MWF C Exterior(2E) -0-1 -0, Exterior(2R) 19 33-6-0, Exterior(2 t and right expose d;C-C for members shown; Lumber D hed for wind loads tds exposed to wir d Industry Gable E alified building det 7-16; Pr=20.0 psf (15); Pf=20.0 psf (15); Rough Cat =1.10 snow loads have b	h (3-sec BCDL=6 RS (env 10-8 to 2 5-2-0 to E) 33-6- E) 33-6- E] 33	ond gust) .0psf; h=25ft; elope) exterio -9-0, Interior (22-5-0, Interior 0 to 37-1-8 zo ertical left and ces & MWFR) plate grip lane of the tru al to the face) ils as applicat s per ANSI/TF .: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9 histored for th	or (1) or d S ss ss s, ble, 1.15 0; ins live	12) _N / 13) Thi Inte R8(LOAD (A s truss is rrnationa 22.10.2 đ CASE(S	s desig al Resi and ref) Sta	ned in accordand dential Code sect erenced standard ndard	e with the 2018 ions R502.11.1 and J ANSI/TPI 1.
BOT CHORD WEBS NOTES 1) Unbalanc this desig	5-6=-1462/226, 6-8 9-10=-193/63, 10-11 10-12=-263/107 17-18=-279/2147, 11 13-15=-69/1828, 12- 3-17=-190/187, 4-17 4-15=-616/208, 15-2 6-20=-90/1169, 15-2 7-21=-538/215, 13-2 3-18=-2037/139, 8-2 19-24=-2186/176, 11 7-22=-4/247, 13-22= 5-20=-491/133, 20-2 21-22=-514/134, 22- 23-24=-520/124 ed roof live loads have n.	-1848/188, 8-9=-152 =0/27, 2-18=-445/16 5-17=-153/1877, -13=-141/1862 '=-34/509, :0=-90/1186, 11=-555/220, :3=0/210, 8-23=0/213 :4=-1758/96, 2-19=-2188/196, -9/296, 9-19=-39/34, :1=-495/128, -23=-528/130, been considered for	/98, 6) 4, 7) 8) 9) 3, 10	I his truss ha load of 12.0 overhangs n Truss to be f braced again Gable studs This truss ha chord live loa 0) * This truss h on the bottor 3-06-00 tall b chord and ar) N/A	is been designed f por-concurrent with ully sheathed from ist lateral moveme spaced at 2-0-0 or is been designed f ad nonconcurrent v has been designed in chord in all areas by 2-00-00 wide wi by other members,	or great lat roof lo o toher lin o ne fac or a 10.0 with any I for a liv s where II fit betw with BC	ar of min foot vad of 20.0 ps e loads. e or securely iagonal web).) psf bottom other live load e load of 20.0 a rectangle veen the bottc ;DL = 10.0psf.	live sf on ds.)psf om		Within		SEA 0363	L 22 LBERT

NOTES

818 Soundside Road Edenton, NC 27932

May 19,2023

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	BT	Roof Special	1	1	Job Reference (optional)	158457590

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:09 ID:R0i_WWphZbMbqshyGsjrW6zF_Sm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	С	Common	5	1	Job Reference (optional)	158457591

Carter Components (Sanford), Sanford, NC - 27332, Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:10 Page: 1 ID:VP5mnZE7ejtTka?ri?H4b3zEzov-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 36-1-8 6-0-13 12-10-3 17-7-8 22-4-13 29-2-3 35-3-0 4-9-5 6-0-13 6-9-6 4-9-5 6-9-6 6-0-13 0-10-8 5x6= 6 Æ 30 31 4x8 🞜 7₃₂ 29 ⁵ 4x8**≈** 12 61 4 8 9-9-12 4x5 🍬 4x5 3 9 28 33 ¹⁰ 11 2 0-0-N N H, 18 6-0 12 П Ŧ 26 25 24 22 20 16 3415 14 13 8x10= 8x10= 4x8= 22-4-13 21-10-4 6x8= 4x6= 4x8**=**5-1-8 4x6= 6x8= 13-5-10 13-4-12 21-9-6 1-7-14 12-10-3 2-11-3 0-6-9 6-0-13 9-11-0 17-7-8 20-1-8 25-4-0 29-2-3 35-3-0 +6-0-13 3-10-3 2-6-0 2-6-0 2-11-3 3-10-3 6-0-13 0-0-14 1-7-14 0-0-14 Scale = 1:68.2 0-6-9 Plate Offsets (X, Y): [12:Edge,0-6-4], [13:0-3-8,0-3-0], [26:0-3-8,0-3-0], [27:Edge,0-6-4]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.89 0.63 0.86	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.37 -0.73 0.07	(loc) 19 19 12	l/defl >999 >574 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 264 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x6 SP No.2 2x4 SP 2400F 2.0E 2x4 SP No.3 *Except Structural wood shea 4-1-9 oc purlins, exc Rigid ceiling directly is bracing. Except: 6-0-0 oc bracing: 17- (size) 12=0-5-8, i Max Horiz 27=-129 (L	* 24-6,15-6:2x4 SP I athing directly applied ept end verticals. applied or 10-0-0 oc 23 27=0-5-8 .C 12)	2) No.2 d or 3)	Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-(2-10-0 to 14- (1) 21-1-13 to zone; cantile and right exp MWFRS for r grip DOL=1.6 TCLL: ASCE Plate DOL=1 DOL=1.15); I	7-16; Vult=130mpł h; TCDL=6.0psf; E k; Enclosed; MWFR C Exterior(2E) -0-8- 1-3, Exterior(2R) 1- 0 32-5-0, Exterior(2 ver left and right ex- osed;C-C for mem eactions shown; Li 0 7-16; Pr=20.0 psf 15); Pf=20.0 psf (l s=1.0; Rough Cat l	n (3-sec 3CDL=6 RS (env -5 to 2- 4-1-3 to 2- 2- 5 (posed bers ar umber l umber l (roof LL Lum DC B; Fully	cond gust) .0psf; h=25ft elope) exterior jo 21-1-3, Int -0 to 35-11-4; end vertical d forces & DOL=1.60 pla :: Lum DOL= JL=1.15 Plate Exp.; Ce=0.	;; or (1) erior 5 left ate :1.15 e 9;					
FORCES	(lb) - Maximum Com	bression/Maximum	3) 4)	Cs=1.00; Ct= Unbalanced	:1.10 snow loads have b	een cor	nsidered for t	his					
TOP CHORD	Tension 1-2=0/22, 2-3=-2948/ 5-6=-2733/51, 6-7=-2 9-10=-2948/0, 10-11= 10-12=-1730/66	/0, 3-5=-2734/0, 2733/51, 7-9=-2734/0 =0/22, 2-27=-1730/6	5)), 6,	design. This truss ha load of 12.0 p overhangs no	s been designed fo osf or 1.00 times fla on-concurrent with	or great at roof le other li	er of min root bad of 20.0 p ve loads.	f live osf on					
BOT CHORD	26-12=1125/581, 24-2 22-24=0/1805, 20-22 15-16=0/1805, 13-15 12-13=-10/508, 21-2: 18-19=-39/55, 17-18=	26=-17/2572, =0/1805, 16-20=0/18 =0/2569, 3=-39/55, 19-21=-39 =-39/55	6) 805, 7) 8) /55, 9)	200.00 AC u from left end, All plates are This truss ha chord live loa * This truss h	nit load placed on a supported at two p 2x4 MT20 unless s been designed fo d nonconcurrent w as been designed	othe both boints, s otherwi or a 10.0 vith any for a liv	om chord, 17 5-0-0 apart. se indicated.) psf bottom other live loa e load of 20	ads.			All	TH CA	ROUM
WEBS NOTES	2-26=0/2074, 10-13= 3-24=-300/219, 5-24= 7-15=-485/210, 9-15= 9-13=-129/38, 23-24= 6-23=-44/1304, 6-17= 15-17=-127/1165, 19 16-18=-5/37	0/2074, 3-26=-129/3 =-485/210, =-300/219, =-129/1165, =-44/1304, -20=-39/0, 21-22=-5	38, ³⁾ 10 /36, LC	on the bottom 3-06-00 tall b chord and ar) This truss is International R802.10.2 ar	a chord in all areas y 2-00-00 wide will y other members, ' designed in accord Residential Code s ad referenced stand Standard	where fit betw with BC ance w sections dard AN	a rectangle veen the bott :DL = 10.0ps :th the 2018 : R502.11.1 a ISI/TPI 1.	om f. and		Minnin.		SEA 03632	L 22

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

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	C1	Common	4	1	Job Reference (optional)	158457592

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:11 ID:MV7Qc?M0dtQGkhooWQpRIZzEzeQ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

May 19,2023

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	CGE	Common Supported Gable	1	1	Job Reference (optional)	158457593

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:12 ID:HSVLvMXIBUOh6UIn9Dc1gizEzgn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

May 19,2023

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Continued on page 2

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	150 157500
23050097-01	CGE	Common Supported Gable	1	1	Job Reference (optional)	158457593

- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated. 7)
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely 9) braced against lateral movement (i.e. diagonal web). 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * 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.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 24, 55 lb uplift at joint 44, 38 lb uplift at joint 35, 47 lb uplift at joint 36, 43 lb uplift at joint 37, 44 lb uplift at joint 39, 43 lb uplift at joint 40, 47 lb uplift at joint 41, 29 lb uplift at joint 42, 125 lb uplift at joint 43, 37 lb uplift at joint 33, 48 lb uplift at joint 32, 43 lb uplift at joint 31, 44 lb uplift at joint 29, 43 lb uplift at joint 28, 47 lb uplift at joint 27, 33 lb uplift at joint 26 and 108 lb uplift at joint 25.
- 14) 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

Run: 8,53 S Mar 9 2023 Print: 8,530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:12 ID:HSVLvMXIBUOh6UIn9Dc1gjzEzgn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	D	Common	4	1	Job Reference (optional)	158457594

6-11-8

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

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:12 ID:nqLL14Jf5JAmMe82YAnlwAzF_pM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

13-11-0

Page: 1

|14-9-8]

Scale = 1:34.2

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

-0-10-8

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	5/TPI2014	CSI TC BC WB Matrix-MSH	0.72 0.56 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.13 0.02	(loc) 6-11 6-11 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 51 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD SOT CHORD WEBS WEDGE BRACING TOP CHORD SOT CHORD REACTIONS FORCES TOP 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 shea 4-1-1 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-0,4 Max Horiz 2=41 (LC Max Uplift 2=-221 (L0 Max Grav 2=708 (LC (lb) - Maximum Com Tension 1-2=0/17, 2-3=-901/1 4-5=0/17 2-6=-943/775, 4-6=-5 3-6=-425/268	athing directly applie applied or 5-9-4 oc 14) C 10), 4=-221 (LC 1 2 21), 4=708 (LC 22) pression/Maximum 1104, 3-4=-901/1104 943/775	3) 4) 5) d or 6) 7) 1) 8) , 9) LO	TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 J overhangs n This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar One H2.5A S recommende UPLIFT at jt(and does noi This truss is International R802.10.2 ar AD CASE(S)	7-16; Pr=20.0 psf (15); Pf=20.0 psf (s=1.0; Rough Cat B 1.10 snow loads have be s been designed for bosf or 1.00 times fla on-concurrent with a s been designed for ad nonconcurrent with as been designed for ad nonconcurrent with as been designed for a nonconcurrent with s been designed for a nonconcurrent with as been designed for a nonconcurrent with a nonconcurrent with	(roof LL Jum DC 3; Fully een cor or great that roof k other liv other liv other liv ith any fit betw connection rces. ance w ance w dard AN	L: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 Asidered for the er of min roof Dad of 20.0 p re loads of 20.0 p re loads of 20.0 p other live load ther live load a rectangle reen the botth ctors ing walls due in is for uplift the the 2018 R502.11.1 a ISI/TPI 1.	1.15 e); his f live sf on dds. Opsf om to only				WH CA	NIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
this design 2) Wind: ASC	a roor live loads have CE 7-16: Vult=130mph	(3-second aust)								1	المبر حاف	OHEESE	Privile Internet

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) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-8, Exterior(2R) 3-11-8 to 9-11-8, Interior (1) 9-11-8 to 11-9-8, Exterior(2E) 11-9-8 to 14-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 SEAL 036322 May 19,2023

> ENGINEERING BY EREPTION A MITEK Affiliate 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	DGE	Common Supported Gable	1	1	Job Reference (optional)	158457595

Run: 8,53 S Mar 9 2023 Print: 8,530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:13 ID:UUQhZhEGk9Im0a6ieC968izF_pT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8 6-11-8 14-9-8 13-11-0 0-10-8 6-11-8 6-11-8 0-10-8 4x5 = 5 12 4 Г 6 4 21 22 3 7 2-9-13 2-11-0 P 8 2 9 0-9-0 0 0 þ 10 13 14 12 11 3x5 = 3x5 = 13-11-0 13-7-0 2-0-0 CSI DEFL l/defl L/d PLATES GRIP in (loc) 1.15 TC 0.11 Vert(LL) n/a n/a 999 MT20 244/190 BC 1 15 0.02 Vert(CT) n/a n/a 999 YES WB 0.04 Horz(CT) 0.00 2 n/a n/a IRC2018/TPI2014 Matrix-MSH Weight: 56 lb FT = 20%Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) 13) N/A Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 3-11-8, Corner(3R) 3-11-8 to 9-11-8, Exterior 14) Non Standard bearing condition. Review required. (2N) 9-11-8 to 11-9-8, Corner(3E) 11-9-8 to 14-9-8 zone; 15) This truss is designed in accordance with the 2018 plied or International Residential Code sections R502.11.1 and cantilever left and right exposed ; end vertical left and right exposed:C-C for members and forces & MWFRS R802.10.2 and referenced standard ANSI/TPI 1. ос for reactions shown; Lumber DOL=1.60 plate grip LOAD CASE(S) Standard DOL=1.60 -3-0 Truss designed for wind loads in the plane of the truss 3) 13-3-0. only. For studs exposed to wind (normal to the face), 13-3-0 see Standard Industry Gable End Details as applicable), or consult qualified building designer as per ANSI/TPI 1. 11) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) 1), Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate C 15), DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; C 14), Cs=1.00; Ct=1.10 C 11) 5) Unbalanced snow loads have been considered for this desian. 2), 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. MILLIN 7) All plates are 2x4 MT20 unless otherwise indicated. ORTH Gable studs spaced at 2-0-0 oc. 8) 0 This truss has been designed for a 10.0 psf bottom 9) chord live load nonconcurrent with any other live loads. 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle VIIIIIIIIIIII 3-06-00 tall by 2-00-00 wide will fit between the bottom SEAL chord and any other members. 036322 11) Solid blocking is required on both sides of the truss at joint(s), 2. 5-12=-103/63, 4-13=-182/126, 12) N/A 3-14=-208/128, 6-11=-182/126, 7-10=-208/128 G mmm

May 19,2023

			0-4-0
Scale = 1:31.9			
Loading		(psf)	Spacing
TCLL (roof)		20.0	Plate Grip DOL
Snow (Pf)		20.0	Lumber DOL
TCDL		10.0	Rep Stress Incr
BCLL		0.0*	Code
BCDL		10.0	
LUMBER			
TOP CHORD	2x4 SP N	o.2	
BOT CHORD	2x4 SP 24	400F 2.0E	
OTHERS	2x4 SP N	0.3	
BRACING			
TOP CHORD	Structura	l wood shea	athing directly app
	6-0-0 oc p	ourlins.	
BOT CHORD	Rigid ceili bracing.	ing directly	applied or 10-0-0
REACTIONS	(size)	2=13-3-0,	8=13-3-0, 10=13
		11=13-3-0	, 12=13-3-0, 13=
		14=13-3-0	, 17=13-3-0, 20=
	Max Horiz	2=61 (LC	10), 8=-61 (LC 11
		17=61 (LC	(LC
	Max Uplift	2=-45 (LC	10), 8=-45 (LC 1
		13-36 (L)	C 14) 14-40 (LC
		17=-45 (L)	(10) 20 = -45 (10)
	May Croy	2_222.00	(20, 20)

	Max Grav	2=232 (LC 21), 8=232 (LC 22), 10=255 (LC 22), 11=220 (LC 22) 12=144 (LC 21), 13=220 (LC 21) 14=255 (LC 21), 17=232 (LC 21) 20=232 (LC 22)
	Max Mom	2=260 (LC 7), 8=172 (LC 20), 17=260 (LC 7), 20=172 (LC 20)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	1-2=0/17,	2-3=-92/95, 3-4=-44/22,
	4-5=-46/7	0, 5-6=-46/70, 6-7=-44/22,
	7-8=-92/9	95, 8-9=0/17
BOT CHORD	2-14=-43	/46, 13-14=0/0, 12-13=0/0,
	11-12=0/0	0, 10-11=0/0, 8-10=-43/46
WEBS	5-12=-10	3/63, 4-13=-182/126,

NOTES

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

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	E	Common	3	1	Job Reference (optional)	158457596

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:13 ID:wb1oEU3ot9zDodjclXhweSzF_Yu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

Scale = 1:51.2

-			-		I				-				
Loading	(psf)	Spacing Blate Grip DOI	2-0-0		CSI	1 00	DEFL	in 0.02	(loc)	l/defl	L/d	PLATES	GRIP
Spow (Pf)	20.0		1.15			0.25	Vert(LL)	-0.03	7-0	>999	100	101120	244/190
	20.0	Ron Stross Incr	VES			0.35		-0.07	6-1	>999 n/o	n/o		
PCU	10.0	Codo			Motrix MOL	0.09	11012(01)	0.00	0	n/a	n/a		
BOLL	0.0	Code	IRC2016	5/1912014									FT 200/
BCDL	10.0											weight: 81 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 5-1-1 oc purlins, ex Rigid ceiling directly bracing. (size) 6=0-5-8, 8 Max Horiz 8=205 (LC Max Uplift 6=-49 (LC (Ib) - Maximum Com Tension 1-2=0/39, 2-3=-528/ 4-5=0/39, 2-8=-591/ 7-8=-205/268, 6-7=- 3-7=0/211, 2-7=-50/	athing directly applie cept end verticals. applied or 10-0-0 oc 5-8 C 13) C 15), 8=-49 (LC 14) C 22), 8=649 (LC 21) apression/Maximum 150, 3-4=-528/150, 168, 4-6=-591/168 82/168 227, 4-7=-51/227	4) 5) d or 6) 7) 8) 9)	Unbalanced design. This truss ha load of 12.0 overhangs n This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar One H2.5A § recommende UPLIFT at jtt and does no This truss is International R802.10.2 a	snow loads have l as been designed i psf or 1.00 times f on-concurrent with as been designed ad nonconcurrent has been designed n chord in all area by 2-00-00 wide w hy other members. Simpson Strong-Ti ed to connect truss (s) 8 and 6. This c t consider lateral f designed in accor Residential Code nd referenced star Standard	been cor for great lat roof lo o ther lin for a 10.0 with any d for a 10.0 with any d for a liv is where ill fit betv - e connectio orces. dance w sections ndard AN	nsidered for t er of min rooi oad 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 ith the 2018 s R502.11.1 a JSI/TPI 1.	his f live sf on ads. Opsf om e to only and					
NOTES 1) Unbalance this design	ed roof live loads have n.	been considered for										WITH CA	RO

 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-5-8, 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 DOL=1.60

 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 SEAL 036322 MGINEER May 19,2023

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Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	EGE	Common Supported Gable	1	1	Job Reference (optional)	158457597

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:13 ID:hs_OLPz9_OqUDEXuG81pmYzF_Z1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Scale = 1:47.1

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	0.20 0.10 0.39	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: 94 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2 BOT CHORD 2 WEBS 2 OTHERS 2 BRACING TOP CHORD 3 BOT CHORD 4 REACTIONS (s	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. iize) 12=12-11 16=12-11 18=12-11 18=12-11 18=-205 (14=-59 (L 17=-135 (L) 14=-270 (L) 18=-222 (L) 18=-222 (L) 18=-222 (L)	 Wind: AS Vasd=10 Cat. II; E zone and 2-1-8 to 9-5-8 to or cantileve right exp for react DOL=1.6 Truss di only. Fo see Star or consu 4) TCLL: A Truss di only. Fo see Star or consu 4) TCLL: A DOL=1.1 , CS=1.00 Unbalan design. G) This trus load of 1 	CE 7-16; Vult=130 3mph; TCDL=6.0ps kp B; Enclosed; MV C-C Corner(3E) -0 8-5-8, Corner(3R) 3 0-9-8, Corner(3E) r left and right expo sed;C-C for memb bons shown; Lumber 0 signed for wind loa studs exposed to v dard Industry Gable t qualified building a SCE 7-16; Pr=20.0 pc 5); Is=1.0; Rough C Ct=1.10 wed snow loads hav s has been designe 2.0 psf or 1.00 time to pape consurrative	mph (3-sec if; BCDL=6 VFRS (env -10-8 to 2- -5-8 to 9-5- 10-9-8 to 1 sed ; end \ ers and for DOL=1.6(ds in the p wind (norm End Deta designer a: sof (roof LL sof (Lum DC at B; Fully e been cor d for great s flat roof lc with chork in	and gust) .0psf; h=25ft; elope) exterior 1-8, Exterior(2N 3-9-8 zone; vertical left and cces & MWFR 0 plate grip lane of the tru al to the face) ils as applicat is per ANSI/TP L-1.15 Plate Exp.; Ce=0.9 sidered for th er of min roof pad of 20.0 ps	r N) J S S S S S S S S S S S S S S S S S S	14) This Inte R80 LOAD C	truss is rnationa 2.10.2 a ASE(S)	s desig al Resi and ref) Sta	ned in accordand dential Code seci ferenced standard ndard	e with the 2018 tions R502.11.1 and d ANSI/TPI 1.	
FORCES	(lb) - Maximum Com	pression/Maximum	7) All plates	are 2x4 MT20 unle	ess otherwi	se indicated.					WHILL CA	Pall
TOP CHORD	2-18=-252/250, 1-2= 3-4=-132/179, 4-5=- 6-7=-179/393, 7-8=- 9-10129/182, 10-1	=0/39, 2-3=-133/182, 132/302, 5-6=-179/393 132/302, 8-9=-125/179 11=0/39, 10-12=-244/2	 B) Gable re 9) Truss to 3, braced a 9, 10) Gable st 	quires continuous b be fully sheathed fro gainst lateral moven ids spaced at 2-0-0	ottom chor om one fac nent (i.e. d	a bearing. e or securely liagonal web).			4	- AL	ORTEESE	W. N.
BOT CHORD	17-18=-103/100, 16- 15-16=-103/100, 14- 13 14- 103/100, 12-	-17=-103/100, -17=-103/100, -15=-103/100, 12= 102/100	chord liv 12) * This trus 12) * This tru	s has been designe load nonconcurrei ss has been desigr	d for a 10.0 nt with any led for a liv) psf bottom other live load e load of 20.0	ls. psf		1111		SEA	L
WEBS	6-15=-414/126, 5-16 4-17=-194/168, 3-18	5=-233/118, 3=-325/280,	on the bo 3-06-00 chord an	ttom chord in all ar all by 2-00-00 wide d any other membe	eas where will fit betv rs.	a rectangle veen the botto	m		LITT.		0363	22
NOTES	/-14=-233/118, 8-13 9-12=-310/266	3=-191/168,	13) Provide bearing joint 18,	nechanical connect late capable of with 99 lb uplift at joint 1	ion (by oth Istanding 1 2, 58 lb upl	ers) of truss to 06 lb uplift at ift at joint 16,) 135			in the	A MGIN	EEREALIN

Ib uplift at joint 17, 59 lb uplift at joint 14 and 134 lb uplift

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
 - WARNING Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

at joint 13.

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Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	EGR	Common Girder	1	2	Job Reference (optional)	158457598

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:14 ID:ySTbSlhb7CBDnk89ITG2qHzF_9Z-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Scale = 1:53.4

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

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 NO IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.81 0.40 0.77	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.13 0.00	(loc) 5-6 5-6 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 200 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 2x4 S 30T CHORD 2x8 S WEBS 2x4 S BRACING TOP CHORD Struc 4-10 30T CHORD Struc 4-10 30T CHORD Rigic brac REACTIONS (size) Max H Max U Max C FORCES (b) - Tens TOP CHORD 1-2= 1-7= 80T CHORD 1-2= 1-7= 80T CHORD 6-7= WEBS 2-5= 1-6= NOTES 1) 2-ply truss to be (0.131*x3*) nails Top chords conn oc. Bottom chords con staggered at 0-6 Web connected a 2) All loads are con except if noted a CASE(S) section provided to distri unless otherwise 3) Unbalanced roof this design.	SP No.1 SP 2400F 2.0E SP No.3 ctural wood she -14 oc purlins, d ceiling directly ing. 4=0-5-8, 7 loriz 7=174 (LC Polifit 4=-497 (L Srav 4=5659 (I Maximum Com -4515/450, 2-3= -200/246, 5-6= -333/3722, 3-5= connected toge as follows: ected as follows: ected as follows: onnected as foll- 0 oc. as follows: 2x4 - sidered equally s front (F) or ba . Ply to ply conr bute only loads indicated. live loads have	athing directly applied except end verticals. applied or 10-0-0 oc 7=0-5-8 C 12), 7=-417 (LC 13 .C 6), 7=4789 (LC 5) pression/Maximum e-4572/458, e-4688/421 208/2175, 4-5=-88/18 e-267/2827, e-336/3716 ther with 10d s: 2x4 - 1 row at 0-9-0 ows: 2x8 - 2 rows 1 row at 0-9-0 oc. applied to all plies, ck (B) face in the LO/ nections have been noted as (F) or (B), been considered for	4) d or 5) 6) 3) 7) 8) 34 9) 10 11 AD 12 LC 1)	Wind: ASCE Vasd=103mp Cat. II; Exp B zone; cantiler and right exp DOL=1.60 TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced : design. This truss ha chord live loa * This truss ha chord and an One H2.5A S recommende UPLIFT at jt(and does not) This truss is o International R802.10.2 ar) Use Simpsor 11-10dx1 1/2 spaced at 2-c- end to 12-o-1 bottom chord) Fill all nail ho Dead + Snc Increase=1. Uniform Loa Vert: 1-2 Concentrate	7-16; Vult=130mph h; TCDL=6.0psf; B ; Enclosed; MWFR ver left and right ex osed; Lumber DOL 7-16; Pr=20.0 psf (L s=1.0; Rough Cat E 1.10 snow loads have be s been designed fo id nonconcurrent w as been designed in actord in all areas y 2-00-00 wide will y other members, y impson Strong-Tie d to connect truss f s) 7 and 4. This cor consider lateral for designed in accorda Residential Code s d referenced stanting 2 to connect truss(L les where hanger is Standard w (balanced): Lumi 15 ads (lb/ft) =-60, 2-3=-60, 4-7= ad Loads (lb)	(13-sect CDL=6 S (enviposed =1.60 f (roof LL um DC 3; Fully even cor r a 10.0 (ith any fit betw with BC connet to bear innection cces. ance w ections at 2-0 es) to t ber Inc -20	cond gust) cond gust) copsr; h=25ft; elope) interior; end vertical i olate grip .: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9 asidered for th D psf bottom other live load e load of 20.00 DL = 10.0psf ctors ing walls due n is for uplift co ith the 2018 isR502.11.1 a ISJ/TPI 1. Dd Girder, or equivalent -12 from the lub boack face of itact with lumit rease=1.15, F	left l.15); ds. om om to only nd eft per. Plate		Vert: 10.	=-1417 7 (B),	7 (B), 11=-1417 (I 16=-1417 (B), 17 16=-1417 (B), 17 16=-1417 (C), 17 17 17 17 17 17 17 17 17 17 17 17 17 1	3), 13=-1417 (B), =-1420 (B)	

May 19,2023

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Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	F	Monopitch	2	1	Job Reference (optional)	158457599

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:14 ID:9J?nSM2QtleiTNQUoegl4rzF_lq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

0-5-8	5-7-6	10-7-0	10-8-8
0-5-8	5-1-14	4-11-10	0-1-8

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.40 0.28 0.44	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.06 0.05 0.01	(loc) 5-6 5-6 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 49 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she: 6-0-0 oc purlins, exi Rigid ceiling directly bracing. (size) 2=0-3-0, 5 Max Horiz 2=147 (LC Max Uplift 2=-191 (L Max Grav 2=560 (LC (lb) - Maximum Com Tension	athing directly applie cept end verticals. applied or 6-5-10 oc 5=0-1-8 C 13) C 10), 5=-160 (LC 1 C 21), 5=-527 (LC 21) pression/Maximum	5) 6) ,, d or 7) , 8) 0) 9) 10	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall k Gearing at jo using ANSI/- designer sho Provide mec bearing plate) One H2.5A S recommende UPI IFT at it	as been designed ad nonconcurren has been designe n chord in all are yy 2-00-00 wide u hy other member assumed to be: 65 psi. int(s) 5 consider: fTP 1 angle to ge: hanical connectine at joint(s) 5. Simpson Strong- ad to connect tris (s) 2 and 5. This	I for a 10.1 t with any ed for a liv as where will fit betw s. , Joint 5 S s parallel t ain formula ty of beari on (by oth Tie conner ss to bear connection	D psf bottom other live loa e load of 20. a rectangle veen the bott SP No.3 crus o grain value a. Building ng surface. ers) of truss ctors ing walls due o is for unlift	ads. Opsf oom hing to to					
TOP CHORD BOT CHORD	1-2=0/17, 2-3=-862/3 4-5=-188/105 2-6=-743/778, 5-6=-7	772, 3-4=-104/51, 743/778	11	and does no) This truss is International	t consider lateral designed in acco Residential Cod	forces. ordance w e sections	ith the 2018 R502.11.1 a	and					

R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

BOT CHORD 2-6=-743/778, 5-6=-743/778 WEBS 3-6=-309/217, 3-5=-806/832

NOTES

Scale = 1:38.5

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-6-12, Exterior(2E) 7-6-12 to 10-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 May 19,2023

> A MITER ATFILIATE B18 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	F1	Monopitch	4	1	Job Reference (optional)	158457600

<u>5-1-14</u> 5-1-14

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

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:15 ID:GvbiD6mwqAlkl5J6aNwunUzF_nU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

10-3-0

5-1-2

Page: 1

1	5-1-14	10-1-8	10-3-0
I	5-1-14	4-11-10	0-1-8

Scale = 1:41.3									010				
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	0.41 0.28 0.45	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.05 0.04 0.01	(loc) 4-5 4-5 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 46 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 1=0-3-0, - Max Horiz 1=139 (L0 Max Uplift 1=-142 (L Max Grav 1=465 (L0 (lb) - Maximum Com Tension 1-2=-883/851, 2-3=- 1-5=-826/799, 4-5=- 2-5=-337/220, 2-4=-	athing directly applie cept end verticals. applied or 6-2-4 oc 4=0-1-8 C 13) C 10), 4=-163 (LC 1 C 21), 4=532 (LC 21) npression/Maximum 104/50, 3-4=-187/10 826/799 830/924	5; 6) ed or 7; 8; 0) 9;) 11 13 L	 * This truss I on the botton 3-06-00 tall 11 chord and ai Bearings are capacity of 5 Bearing at jousing ANSI/ designer shot Provide meoto bearing plats One H2.5A 3 recommende UPLIFT at jt and does no 0) This truss is International R802.10.2 a OAD CASE(S) 	has been designe m chord in all are by 2-00-00 wide w by other members a assumed to be: 655 psi. bint(s) 4 considers TPI 1 angle to gra build verify capaci chanical connection e at joint(s) 4. Simpson Strong- ed to connect trus (s) 1 and 4. This t consider lateral designed in acco Residential Coden nd referenced stat Standard	ed for a liv as where will fit betv s. , Joint 4 \$ s parallel 1 ain formula ty of bear on (by oth Fie connection forces. ordance we e sections andard AN	re load of 20. a rectangle veen the bott SP No.3 cruss to grain value a. Building ing surface. ers) of truss ctors ing walls due n is for uplift ith the 2018 s R502.11.1 a vSI/TPI 1.	Opsf om hing to to only and					
1) Wind: ASC Vasd=103 Cat. II; Ex zone and 3-0-0 to 7- cantilever	CE 7-16; Vult=130mph imph; TCDL=6.0psf; B p B; Enclosed; MWFR C-C Exterior(2E) 0-0-0 1-4, Exterior(2E) 7-1-4 left and right exposed	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio to 3-0-0, Interior (1) 4 to 10-1-4 zone; ; end vertical left and	r d								- A	TH CA	RO

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

right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown;

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

SEAL

036322

4. GILP

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Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	F1GE	Monopitch Supported Gable	1	1	Job Reference (optional)	158457601

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:15 ID:05Rb2nqdzWbg0FxJai2r9FzF_oh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-6-2

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3-1-0

Scale = 1:22.9

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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	1	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0		-								Weight: 11 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 3-1-0 oc purlins, exc Rigid ceiling directly bracing. (size) 1=3-1-0, 3 Max Horiz 1=43 (LC Max Uplift 1=-8 (LC 1 4=-80 (LC Max Grav 1=126 (LC 4=375 (LC) (hb) Maximum Com	athing directly applie cept end verticals. applied or 10-0-0 oc 3=3-1-0, 4=3-1-0, 5=: 13), 5=43 (LC 13) 10), 3=-183 (LC 20), 14), 5=-8 (LC 10) 2 20), 3=49 (LC 14), 2 20), 5=126 (LC 20) pression/Maximum	 6) Gable stud; 7) This truss h chord live lo 8) * This truss on the bott: 3-06-00 tall 9) Provide me bearing pla 1, 183 lb up uplift at join 10) This truss is Internationa R802.10.2 is 	s spaced at 2-0-0 d as been designed bad nonconcurrent has been designe m chord in all area by 2-00-00 wide w iny other members chanical connectic te capable of withs lift at joint 3, 80 lb t 1. s designed in acco al Residential Code and referenced sta) Standard	oc. for a 10.0 with any d for a liv as where vill fit betv 3. n (by oth tanding 8 uplift at jo rdance w e sections indard AN	D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t B b uplift at joi pint 4 and 8 lb ith the 2018 \$ R502.11.1 a USI/TPI 1.	ids. Dpsf om int o						
ONCES	Tension	pression/maximum											
TOP CHORD	1-2=-31/40, 2-3=-65/	/56, 2-4=-332/326											
BOT CHORD	1-4=-52/40												
NOTES													
 Wind: ASC Vasd=103 Cat. II; Exp zone and (exposed ; members a: Lumber D0 Truss des only. For see Stand- or consult TCLL: ASC Plate DOL DOL=1.15 Cs=1.00; (CE 7-16; Vult=130mph imph; TCDL=6.0psf; BC p B; Enclosed; MWFRS C-C Corner(3E) zone; end vertical left and rig and forces & MWFRS 1 OL=1.60 plate grip DOI signed for wind loads in studs exposed to wind ard Industry Gable Enc qualified building desig CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L i); Is=1.0; Rough Cat B Ct=1.10	(3-second gust) CDL=6.0pst; h=25ft; S (envelope) exterior cantilever left and rig ght exposed;C-C for for reactions shown; L=1.60 the plane of the true (normal to the face) d Details as applicab gner as per ANSI/TP roof LL: Lum DOL=1 true DOL=1.15 Plate ; Fully Exp.; Ce=0.9; on appeidence for the	r ght ss , le, 1 1. .15 ;						A MILLION		SEA 0363	L 22 EER	Manning
 Unbalance design. 	ed snow loads have be	en considered for th	IS							1	11, A. G	ILBEIT	
Gable requ	uires continuous botton	n chord bearing.									11111	inn.	

May 19,2023

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	FGE	Monopitch Supported Gable	1	1	Job Reference (optional)	158457602

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:15 ID:_?Pus1XWS1h0GXUA82Y8iGzF_IC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

Scale = 1:34.9

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	0.15 0.09 0.04	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 8	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 50 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No 2x4 SP No 2x4 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 0.3 0.3 wood sheat purlins, exit ng directly 2=10-3-0, 10=10-3-0 15=10-3-0 2=147 (LC 2=-41 (LC 2=-41 (LC 2=-41 (LC 2=-41 (LC 2=-41 (LC 2=247 (LC (LC 21), 1 (LC 21), 1 (LC 1)	athing directly applie cept end verticals. applied or 6-0-0 oc 8=10-3-0, 9=10-3-0), 11=10-3-0, 12=10) 13), 15=147 (LC 1) 10), 8=-13 (LC 11), 10), 10=-36 (LC 14) C 10), 12=-46 (LC 1 C 10) C 1), 8=44 (LC 21), 5 0=224 (LC 21), 11= 2=161 (LC 21), 15=	1) ed or -3-0, 3) , , , , , , , , , , , , , , , , , ,	Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-1 2-1-8 to 7-4- cantilever lef right exposed for reactions DOL=1.60 Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 overhangs n All plates are	7-16; Vult=130mp bh; TCDL=6.0psf; 3; Enclosed; MWF C Corner(3E) -0-1 4, Corner(3E) 7-4- t and right expose d;C-C for member shown; Lumber D hed for wind loads uds exposed to wird d Industry Gable E trailified building de iz7-16; 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); Pf=20.0 psf set 1.0 snow loads have I psf or 1.00 times f on-concurrent with a 2x4 MT20 unless	oh (3-sec BCDL=6 RS (envi 0-8 to 2- -4 to 10-6 d ; end v s and for ODL=1.60 s in the p nd (norm End Deta signer as f (roof LL (Lum DC t B; Fully been cor for greate lat roof la n other lin s otherwi	and gust) .0psf; h=25ft elope) exterior 1-8, Exterior 5-12 zone; vertical left ar ces & MWFF) plate grip lane of the tri al to the face ils as applica s per ANSI/T .: Lum DOL= L=1.15 Plate Exp.; Ce=0.1 nsidered for t er of min rool and of 20.0 p ve loads. se indicated	; pr (2N) nd RS uss e), ble, PI 1. 1.5 e 9; his f live sf on	13) This Inte R80 LOAD (s truss is rnationa)2.10.2 a (ASE(S)	desig I Resic and ref) Star	ned in accordand dential Code sec erenced standar ndard	xe with the 2011 ions R502.11.1 d ANSI/TPI 1.	8 I and
FORCES	(lb) - Max Tension 1-2=0/17, 4-5=-75/2 7-8=-37/2	imum Com 2-3=-131/9 8, 5-6=-65/ 5	pression/Maximum 90, 3-4=-85/28, /28, 6-7=-56/60,	7) 8) 9)	Gable studs This truss ha chord live loa * This truss h	spaced at 2-0-0 or is been designed f ad nonconcurrent has been designed	c. for a 10.0 with any d for a liv) psf bottom other live loa e load of 20.	ads. Opsf		L	z	ORTH CA	ROLIN	21
BOT CHORD	2-12=-75/ 9-10=-56/ 4-11=-177 5-10=-184	7 116, 11-12 71, 8-9=-5 7/124, 3-12 4/137, 6-9=	₽=-56/71, 10-11=-56/ 6/71 ₽=-133/141, 155/87	/71, 10	3-06-00 tall t chord and ar) N/A	by 2-00-00 wide wi by other members.	ill fit betv	veen the bott	om		ATTITUTAL CONTRACT		SEA 0363	L 22	Marine I.
NULES				11	1) N/A								A C A GIN	EER	inne.
				12	2) Non Standar	d bearing conditio	n. Revie	ew required.					Max Max	10 2022	

May 19,2023

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	G	Monopitch	9	1	Job Reference (optional)	158457603

0-10-8

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

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:16 ID:Dy_JjEEKvGAptckEgqDBdczF_tK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TF	PI2014	CSI TC BC WB Matrix-MSH	0.60 0.52 0.69	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.13 0.05	(loc) 8 7-8 7	l/defl >999 >872 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 46 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 30T CHORD WEBS BRACING TOP CHORD 30T CH	2x4 SP No.2 2x6 SP No.2 *Except 2x4 SP No.3 Structural wood sheat 4-5-5 oc purlins, exc Rigid ceiling directly bracing. size) 2=0-5-8, 7 1ax Horiz 2=121 (LC 1ax Uplift 2=-81 (LC 1ax Uplift 2=-81 (LC 1ax Grav 2=491 (LC (lb) - Maximum Com Tension 1-2=0/17, 2-3=-1714 4-5=-8/0, 4-7=-224/1 2-8=-580/1652, 7-8= 3-8=-71/407, 3-7=-14 7-16; Vult=130mph ph; TCDL=6.0psf; BC B; Enclosed; MWFRS C Exterior(2E) -0-10 to 6-8-0, Exterior(2E) ft and right exposed d;C-C for members a shown; Lumber DOI E 7-16; Pr=20.0 psf (tr 1.15); Pf=20.0 ps	** 8-6:2x4 SP No.2 athing directly applied cept end verticals. applied or 7-11-7 oc '= Mechanical (11) 10), 7=-74 (LC 14) (21), 7=524 (LC 21) pression/Maximum /550, 3-4=-154/32, 20 -550/1531, 6-7=0/0 460/563 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior 8 to 1-11-13, Interior 6-8-0 to 9-8-0 zone; end vertical left and and forces & MWFRS L=1.60 plate grip roof LL: Lum DOL=1. Jm DOL=1.15 Plate ; Fully Exp.; Ce=0.9; en considered for this	4) Tr lo ov 5) Tr cr or 3- cr 7) Rv 8) Ba de 9) Pr be 6 7, 10) O re Ul 11) Tr h b c 4 7 10) O re Ul 11) Tr b 6 7 7 10) O 10 7 10) O 10 7 10) O 10 7 10) O 10 7 10) O 10 7 10 10 10 7 10 10 10 7 10 10 7 10 10 10 10 10 10 10 10 10 10 10 10 10	his truss ha had of 12.0 g verhangs no his truss ha hord live loa This truss ha n the botton -06-00 tall b hord and an efer to girdé earing at joi sing ANSI/T esigner sho rovide mede earing plate	s been designed fo osf or 1.00 times fla on-concurrent with a s been designed fo id nonconcurrent w as been designed fo n chord in all areas y 2-00-00 wide will y other members. er(s) for truss to trus int(s) 2 considers p. PI 1 angle to grain uld verify capacity on annical connection capable of withstar Simpson Strong-Tie d to connect truss to sider lateral forces. designed in accorda Residential Code s and referenced stance Standard	r greati t roof k other lish r a 10.0 tith any or a liv where fit betw ss conrr arallel 1 formula of beari (by oth nding 7 conner o bear n is for ance w ections lard AN	er of min roo bad of 20.0 p ve loads.) psf bottom other live load e load of 20. a rectangle veen the bott nections. o grain value a. Building ng surface. ers) of truss 4 lb uplift at uplift only a th the 2018 R502.11.1 a ISI/TPI 1.	f live ssf on ads. Opsf tom e to joint e to nd and				SEA 0363	ROLL L 22 BERING	Mannung.

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

G mmm May 19,2023

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	GSE	Monopitch	1	1	Job Reference (optional)	158457604

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:16 ID:j7LOAWWFe1s7RV5MhJbHFGzF_qO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

Scale = 1:37

DOL=1.60

Plate Offsets (X, Y): [3:0-7-4,0-0-7]

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-MSH	0.42 0.22 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.02 -0.03 0.00	(loc) 10 9-10 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 41 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No 2x6 SP No 2x4 SP No 2x4 SP No Structural 6-0-0 oc p Rigid ceili	5.2 5.2 *Except 5.3 5.3 wood sheat purlins, exc ng directly	t* 11-8:2x4 SP No.2 athing directly applied cept end verticals. applied or 10-0-0 oc	2) 3) d or 4)	Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced s	ned for wind loads i ds exposed to wind d Industry Gable En alified building desi 7-16; Pr=20.0 psf (L s=1.0; Rough Cat E 1.10 snow loads have be	n the pl d (norm id Deta igner as (roof LL um DC B; Fully een cor	ane of the tr al to the face ils as applica s per ANSI/T : Lum DOL= DL=1.15 Plate Exp.; Ce=0. asidered for t	uss e), able, PI 1. :1.15 e 9; this	15) This Inte R80 16) Gra or tl bott LOAD (s truss is rnationa 02.10.2 a phical pu ne orient com chor CASE(S)	desig I Resid and refurring ation c d. Star	ned in accordanc lential Code sect erenced standard presentation doe f the purlin along ndard	e with the 2018 ions R502.11.1 and I ANSI/TPI 1. s not depict the size the top and/or
REACTIONS	Max Horiz Max Horiz Max Uplift Max Grav	2=0-5-8, 3 11=4-5-8, 3=164 (LC 2=-36 (LC 9=-26 (LC 12=-120 (l 2=-88 (LC (LC 21), 1 (LC 1)	i=4-5-8, 9= Mechanic 12=4-5-8 2 11), 12=164 (LC 11 10), 3=-120 (LC 10), 14), 11=-148 (LC 14 LC 10) 21), 3=330 (LC 1), 9= 1=628 (LC 21), 12=3	5)) 6) , 7)), 7) =256 30	design. This truss has load of 12.0 p overhangs no Gable studs s This truss has chord live loa * This truss h on the bottom 3-06-00 tall b chord and an	s been designed fo osf or 1.00 times fla on-concurrent with spaced at 2-0-0 oc. s been designed fo d nonconcurrent w as been designed in n chord in all areas y 2-00-00 wide will y other members	r greate the roof le other liv or a 10.0 for a liv where fit betw	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	f live osf on ads. Opsf					
FORCES	(lb) - Maxi Tension	imum Com	pression/Maximum	9)	Bearings are	assumed to be: Jo	int 3 SF	P No.2 crush	ing				200110	0.00
TOP CHORD	1-2=0/17, 4-5=-114/ 6-9=-168/	2-3=-149/′ 0, 5-6=-70/ 74	123, 3-4=-400/445, /33, 6-7=-8/0,	10) 11)	565 psi. Refer to girde Bearing at joi	er(s) for truss to true int(s) 3, 11, 2, 3 cor	ss conr	ections.	rain			J.	HTH CA	ROJA
BOT CHORD	3-11=-634 8-9=0/0	4/467, 10-1	1=-18/53, 9-10=-18/5	53,	value using A designer sho	NSI/TPI 1 angle to uld verify capacity (grain f	ormula. Buil	lding		C	Ì		There
WEBS	4-11=-397	7/209, 5-10	=-81/83	12)	Provide mech	nanical connection	(by oth	ers) of truss	to		-			
NOTES 1) Wind: ASC Vasd=103 Cat. II; Exp zone and (1) 1-11-1: cantilever right expor for reaction DOL=1.60	CE 7-16; Vul imph; TCDL p B; Enclose C-C Exterior 3 to 6-8-0, E left and righ sed;C-C for ns shown; L	It=130mph =6.0psf; BC ed; MWFRS r(2E) -0-10 Exterior(2E) t exposed members a umber DO	(3-second gust) DL=6.0psf; h=25ft; S (envelope) exterior 8 to 1-11-13, Interior 6-8-0 to 9-8-0 zone; ; end vertical left and and forces & MWFRS L=1.60 plate grip	13) r 14) S	bearing plate 9 and 36 lb u N/A	capable of withsta plift at joint 2.	nding 2	6 lb uplift at	joint		THE TAKE		SEA 0363 P/C A. G	E.B. K.

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818 Soundside Road Edenton, NC 27932

May 19,2023

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	V1	Valley	1	1	Job Reference (optional)	158457605

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries. Inc. Fri May 19 10:09:17 ID:F?srD3E8Afz2EulzeZOMFizF_Uo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

GRIP

244/190

FT = 20%

- 2x4 SP No.2 TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.3 OTHERS BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. **REACTIONS** (size) 1=12-6-3, 5=12-6-3, 6=12-6-3, 7=12-6-3, 8=12-6-3, 13=12-6-3 Max Horiz 1=-118 (LC 12) Max Uplift 1=-66 (LC 10), 5=-1 (LC 23), 6=-137 (LC 15), 8=-143 (LC 14), 13=-1 (LC 23) Max Grav 1=75 (LC 13), 6=438 (LC 21),
- 7=401 (LC 20), 8=421 (LC 20) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-116/212, 2-3=-103/197, 3-4=-125/175, 4-5=-24/137

BOT CHORD 1-8=-61/33, 7-8=-61/32, 6-7=-61/32, 5-6=-61/32WEBS 3-7=-317/0, 2-8=-382/212, 4-6=-385/208

NOTES

Scale = 1:40 Loading

TCLL (roof)

Snow (Pf)

LUMBER

TCDL

BCLL

BCDL

- Unbalanced roof live loads have been considered for 1) this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 9-6-8, Exterior(2E) 9-6-8 to 12-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- Unbalanced snow loads have been considered for this 5) desian.
- 6) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc. 7)
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf 9) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 1, 1 lb uplift at joint 5, 143 lb uplift at joint 8, 137 lb uplift at joint 6 and 1 lb uplift at joint 5.
- 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

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	V2	Valley	1	1	Job Reference (optional)	158457606

5-0-11

5-0-11

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

3-11-2

0-0-4

4-2-13

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:17 ID:jCQDRPFmxy5us2K9CGvbovzF_Un-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

9-9-4

4-8-9

4x5 = 2

Scale = 1:35.6

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.50 0.47 0.21	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: 39 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=10-1-6 Max Horiz 1=-95 (LC Max Uplift 1=-62 (LC 4=-119 (L Max Grav 1=92 (LC (LC 21) (lb) - Maximum Con Tension 1-2=-126/409, 2-3=: 1-4=-233/(82 3-4=)	eathing directly applied / applied or 6-0-0 oc , 3=10-1-6, 4=10-1-6 C 12) C 21), 3=-62 (LC 20), .C 14) : 20), 3=92 (LC 21), 4=4 npression/Maximum -126/409 -233/182	4 or 6 7 8 9 833 1 1	 TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. Gable requir. Gable studs This truss ha chord live load * This truss ha on the bottor 3-06-00 tall b chord and ar Provide mec bearing plate 1, 62 lb upliff This truss is International 	: 7-16; Pr=20.0 p .15); Pf=20.0 psi ls=1.0; Rough Ca =1.10 snow loads have es continuous bo spaced at 4-0-0 e s been designed an conconcurrent nas been designed n chord in all are by 2-00-00 wide v ay other member: capable of withs at joint 3 and 11 designed in acco Residential Cod	sf (roof LL f (Lum DC at B; Fully been con- bittom chor oc. d for a 10.1 t with any sed for a 110 t with any sed for a 110 t with any sed for a 10 t standing 6 9 Ib uplift pordance w e sections	L: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 nsidered for the d bearing. D psf bottom other live loa e load of 20.0 a rectangle ween the botto ers) of truss t s2 lb uplift at j at joint 4. ith the 2018 s R502.11.1 a	1.15 ; his ds.)psf om o oint nd					
WEBS	2-4=-648/288	200,102	L	OAD CASE(S)	Standard	anuaru Ar	NGI/TETT.						
NOTES													
1) Unbalance this design	ed roof live loads have	e been considered for										TH CA	RO

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 7-1-11, Exterior(2E) 7-1-11 to 10-1-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

 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 MGINEER.HT

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	V3	Valley	1	1	Job Reference (optional)	158457607

Scale = 1:30 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

REACTIONS

FORCES

WFBS

NOTES

2)

3)

TOP CHORD

BOT CHORD

this design.

DOL=1.60

2x4 SP No.2 2x4 SP No.2

2x4 SP No.3

bracing.

Max Uplift

Max Grav

Tension

2-4=-427/220

(size)

TCDL

BCLL

BCDL

Run: 8,53 S Mar 9 2023 Print: 8,530 S Mar 9 2023 MiTek Industries, Inc, Fri May 19 10:09:17 ID:_PCt1VqtCUIRorSEgzcdUCzF_Jj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

3-10-5 7-4-8 3-10-5 3-6-3 4x5 = 2 9 10 Ņ 3-2-13 2-1 12 10 Г 3 0-0-4 4 2x4 🛛 3x5 🧳 3x5 💊 7-8-10 (psf) Spacing 2-0-0 CSI DEFL l/defl L/d PLATES GRIP in (loc) 20.0 Plate Grip DOL 1.15 TC 0.30 Vert(LL) n/a n/a 999 MT20 244/190 BC 20.0 Lumber DOL 1 15 0.30 Vert(TL) n/a n/a 999 10.0 Rep Stress Incr YES WB 0.10 Horiz(TL) 0.00 4 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MP 10.0 Weight: 29 lb FT = 20%TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 5) Unbalanced snow loads have been considered for this desian. Structural wood sheathing directly applied or Gable requires continuous bottom chord bearing. 6) 7-8-10 oc purlins. 7) Gable studs spaced at 4-0-0 oc. Rigid ceiling directly applied or 6-0-0 oc 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 1=7-8-10, 3=7-8-10, 4=7-8-10 * This truss has been designed for a live load of 20.0psf 9) Max Horiz 1=72 (LC 11) on the bottom chord in all areas where a rectangle 1=-27 (LC 21), 3=-27 (LC 20), 3-06-00 tall by 2-00-00 wide will fit between the bottom 4=-84 (LC 14) chord and any other members. 1=105 (LC 20), 3=105 (LC 21), 10) Provide mechanical connection (by others) of truss to 4=588 (LC 21) bearing plate capable of withstanding 27 lb uplift at joint (lb) - Maximum Compression/Maximum 1, 27 lb uplift at joint 3 and 84 lb uplift at joint 4. 11) This truss is designed in accordance with the 2018 1-2=-102/260, 2-3=-102/260 International Residential Code sections R502.11.1 and 1-4=-179/164, 3-4=-179/164 R802.10.2 and referenced standard ANSI/TPI 1. LOAD CASE(S) Standard 1) Unbalanced roof live loads have been considered for ORT 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) WITTELL COMPANY 3-0-5 to 4-8-14, Exterior(2E) 4-8-14 to 7-8-14 zone; cantilever left and right exposed ; end vertical left and SEAL right exposed;C-C for members and forces & MWFRS 036322 for reactions shown; Lumber DOL=1.60 plate grip 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. G mmm May 19,2023

2	WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component
	Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	V4	Valley	1	1	Job Reference (optional)	158457608

2-7-14

2-7-14

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

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:18 ID:_PCt1VqtCUIRorSEgzcdUCzF_Jj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-11-11

2-3-12

5-3-13

1-11-2 12 10 ┌ 2-2-13 0-0-0 4 2x4 🍫 5-3-13

Scale = 1:25.9

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Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD BOT CHORD OTHERS	(psf) 20.0 20.0 10.0 0.0* 10.0 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018 5) 6) 7)	/TPI2014 Unbalanced design. Gable requir Gable studs	CSI TC BC WB Matrix-MP snow loads have es continuous bo spaced at 4-0-0 d	0.11 0.13 0.04 been cor ttom chor oc.	DEFL Vert(LL) Vert(TL) Horiz(TL) nsidered for the	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: 19 lb	GRIP 244/190 FT = 20%
BRACING TOP CHORD BOT CHORD REACTIONS	Structural wood she 5-3-13 oc purlins. Rigid ceiling directly bracing. (size) 1=5-3-13, Max Horiz 1=-48 (LC Max Uplift 3=-6 (LC Max Grav 1=93 (LC (LC 21)	eathing directly applie v applied or 6-0-0 oc , 3=5-3-13, 4=5-3-13 C 12) 15), 4=-40 (LC 14) 20), 3=93 (LC 21), 4	8) ed or 9) 10)	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall h chord and ar Provide mec bearing plate and 40 lb up This truss is	is been designed ad nonconcurrent nas been designe n chord in all are: by 2-00-00 wide v yy other members hanical connectid c capable of withs lift at joint 4. designed in acco	I for a 10.0 t with any ed for a liv as where will fit betv s. on (by oth standing 6 ordance w	D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t b lb uplift at jo ith the 2018	ds. Opsf om int 3					
FORCES TOP CHORD BOT CHORD WEBS NOTES	(lb) - Maximum Com Tension 1-2=-85/124, 2-3=-8 1-4=-94/101, 3-4=-9 2-4=-216/117	npression/Maximum 35/124 94/101	LO	R802.10.2 a AD CASE(S)	nd referenced sta Standard	andard AN	ISI/TPI 1.						
 Unbalance this design Wind: ASC Vasd=103 Cat. II; Exp zone and (exposed ; members Lumber Di Truss des only. For see Stand or consult TCLL: ASC Plate DOL DOL=1.15 Cs=1.00; (ed roof live loads have n. CE 7-16; Vult=130mph mph; TCDL=6.0psf; B p B; Enclosed; MWFR C-C Exterior(2E) zone end vertical left and ri and forces & MWFRS OL=1.60 plate grip DC signed for wind loads i studs exposed to winc lard Industry Gable En qualified building desi CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L 5); Is=1.0; Rough Cat E Ct=1.10	 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and r ght exposed; C-C for for reactions shown DL=1.60 n the plane of the true d Details as applicat giner as per ANSI/TF (roof LL: Lum DOL=1.15 Plate Fully Exp.; Ce=0.9 	r ight ; ss , ole, PI 1. I.15 ;							M. HILLIN.	The second secon	SEA 0363	ROW INTERNET

May 19,2023

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Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	V5	Valley	1	1	Job Reference (optional)	158457609

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:18 ID:yvQIJ7HG7lv1hWYdmKf4S6zF_A5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

3x5 =

3-0-13

Scale = 1:25.1

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

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.07	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/	TPI2014	Matrix-MP								
BCDL	10.0											Weight: 9 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 Structural wood she 3-0-13 oc purlins. Rigid ceiling directly	athing directly applie applied or 10-0-0 oc	7) 8) 9) d or	Gable studs a This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an	spaced at 4-0-0 oc s been designed for d nonconcurrent v as been designed n chord in all areas y 2-00-00 wide will y other members.	c. or a 10.0 with any l for a liv s where ll fit betv	0 psf bottom other live loa e load of 20.0 a rectangle veen the botto	ds.)psf om					
	bracing.		10)	Provide mech	nanical connection	າ (by oth	ers) of truss t	0					
REACTIONS FORCES	(size) 1=3-0-13, Max Horiz 1=-26 (LC Max Uplift 1=-10 (LC Max Grav 1=141 (LC (lb) - Maximum Com	3=3-0-13 2 12) 2 14), 3=-10 (LC 15) 2 20), 3=141 (LC 21) ppression/Maximum	11)	1 and 10 lb u This truss is o International R802.10.2 ar	plift at joint 3. designed in accord Residential Code and referenced stan	dance w sections idard AN	ith the 2018 R502.11.1 a	ind					
	Tension		LUA	AD CASE(S)	Standard								
TOP CHORD	1-2=-178/73, 2-3=-1	78/73											
BOT CHORD	1-3=-42/129												
NOTES													
1) Unbalance	ed roof live loads have	been considered for											
 Wind: ASV Vasd=103 Cat. II; Ex zone and exposed ; members Lumber D Truss des only. For see Stand or consult TCLL: AS 	 CE 7-16; Vult=130mph mph; TCDL=6.0psf; B(p B; Enclosed; MWFR: C-C Exterior(2E) zone; end vertical left and rig and forces & MWFRS OL=1.60 plate grip DO signed for wind loads ir studs exposed to wind lard Industry Gable En; qualified building desig CE 7-16; Pr=20.0 psf ((3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior; cantilever left and ri ght exposed;C-C for for reactions shown; DL=1.60 h the plane of the trus (normal to the face) d Details as applicab gner as per ANSI/TP roof LL: Lum DOL=1	ght ss le, 11. .15							Willing	in the second seco	SEA 0363	ROLANINI L 22
Plate DOL	=1.15); Pf=20.0 psf (L	um DOL=1.15 Plate										. E.	ALLE

- 3
- 4 DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.

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Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	V11	Valley	1	1	Job Reference (optional)	158457610

3-10-13

3-10-13

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

Run: 8,53 S Mar 9 2023 Print: 8,530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:18 ID:05Rb2nqdzWbg0FxJai2r9FzF_oh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

7-2-12

3-3-14

Page: 1

-9-11

0-6-15

7-9-11

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MP	0.26 0.27 0.07	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 25 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shee 7-9-11 oc purlins. Rigid ceiling directly bracing. (size) 1=7-9-11, Max Horiz 1=29 (LC Max Uplift 1=-9 (LC (LC 14) Max Grav 1=113 (LC 4=528 (LC (lb) - Maximum Com Tension 1-2=-127/270, 2-3=- 1-4=-201/154, 3-4=- 2-4=-366/213	athing directly applie applied or 6-0-0 oc 3=7-9-11, 4=7-9-11 14) 14), 3=-16 (LC 15), 4 C 20), 3=113 (LC 21) C 20) apression/Maximum 127/270 201/154	2 sd or 7 8 8 9 8 9 1 1	 TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable requir Gable studs This truss ha chord live loa * This truss ha on the bottor 3-06-00 tall h chord and ar Provide mec bearing plate 1, 16 lb uplifi This truss is International R802.10.2 a OAD CASE(S) 	7-16; Pr=20.0 p 1.15); Pf=20.0 ps Is=1.0; Rough Ci =1.10 snow loads have es continuous bo spaced at 2-0-0 is been designed an chord in all are by 2-00-00 wide y other member hanical connectii e capable of with t at joint 3 and 42 designed in accc Residential Cod nd referenced sta Standard	usif (roof LL f (Lum DC at B; Fully be been cor bottom chor oc. d for a 10.1 t with any ed for a liv as where will fit betv 's. on (by oth standing § 8 Ib upliff a ordance w le sections andard AN	: Lum DOL= L=1.15 Plate Exp.; Ce=0. asidered for t d bearing. D psf bottom other live loa e load of 20. a rectangle ween the bott ers) of truss b uplift at joint 4. ith the 2018 a R502.11.1 a ISI/TPI 1.	1.15 e 9; his ads. opsf om to pint					
NOTES 1) Unbalance	ed roof live loads have	been considered for										mm	U111.

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

DOL=1.60 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. VULLIANDAN annannana SEAL 036322 G minin May 19,2023

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Job	Truss	Truss Type	Qty	Ply	19 Serenity-Roof-B330 A	
23050097-01	V12	Valley	1	1	Job Reference (optional)	158457611

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Fri May 19 10:09:18 ID:OFXJJBg5e0puLYiHs6bBoUzF_ZP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-6-12

1-11-14

Page: 1

5-1-11

2x4 🚅

2-6-13

2-6-13

2x4 👟

5-1-11

0-6-15

Scale = 1:22.3

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MP	0.22 0.18 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: 14 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 Structural wood shea 5-1-11 oc purlins. Rigid ceiling directly bracing. (size) 1=5-1-11, Max Horiz 1=18 (LC Max Gray, 1=237 (J Max Gray, 1=237 (J	athing directly applie applied or 10-0-0 or 3=5-1-11 14), 14), 3=-20 (LC 15) 20), 3=237 (LC 15)	7) 8) 9) ed or ^C 10 11	Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar 9) Provide mec bearing plate 1 and 20 lb u) This truss is International	spaced at 4-0-0 o as been designed ad nonconcurrent has been designed n chord in all area by 2-00-00 wide w by other members hanical connection e capable of withst uplift at joint 3. designed in accor Residential Code	c. for a 10.1 with any d for a liv as where vill fit betv an (by oth tanding 2 rdance w e sections	D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 00 lb uplift at j ith the 2018 R502,11.1 a	ds. Dpsf om oint					
FORCES	(lb) - Maximum Com Tension 1-2=-419/183, 2-3=-4	pression/Maximum 419/183	Ĺ	R802.10.2 a	nd referenced star Standard	ndard An	151/1211.						
NOTES	1-3=-150/364												
 Unbalanc this desig Wind: AS Vasd=100 Cat. II; E> zone and exposed ; members Lumber D Truss de only. For see Stance 	ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B(φ B; Enclosed; MWFR3 C-C Exterior(2E) zone; c end vertical left and rig and forces & MWFRS 0DL=1.60 plate grip DO signed for wind loads in studs exposed to wind dard Industry Gable End	been considered fo (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and 1 ght exposed;C-C for for reactions shown L=1.60 the plane of the tru (normal to the face) d Details as applical	r ; right ; uss), ble,							LA. Unit		SEA	ROL

 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15)
 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this 5) design.
- 6) Gable requires continuous bottom chord bearing.

818 Soundside Road Edenton, NC 27932

