Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	А	Common	1	1	Job Reference (optional)	160054052

2)

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:15 ID:sL1H2zO6Ev519wGE9Ha53QyzB67-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	A1	Common	10	1	Job Reference (optional)	160054053

Scale = 1:61

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:17 ID:1N5k5UiLgOv7p9PHKp3jFOyzB70-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



										-	
Loading (psf) Sp TCLL (roof) 20.0 Pla Snow (Pf) 20.0 Lu TCDL 10.0 Re BCLL 0.0* Co BCDL 10.0	pacing 2-0-0 late Grip DOL 1.15 umber DOL 1.15 ep Stress Incr YES ode IRC20	018/TPI2014	CSI TC BC WB Matrix-MSH	0.80 1.00 0.63	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.31 -0.70 0.06	(loc) 10-11 10-11 7	l/defl >932 >422 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 127 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD $2x4$ SP No.1 BOT CHORD $2x4$ SP No.3 WEBS $2x4$ SP No.3 WEDGE Right: $2x4$ SP No.3 SLIDER Left $2x4$ SP No.3 1-60 BRACING TOP CHORD TOP CHORD Structural wood sheathin 2-2-0 oc purlins. BOT CHORD Structural wood sheathin 2-2-0 oc purlins. BOT CHORD Structural wood sheathin 2-2-0 oc bracing: 10-13 REACTIONS (size) $2=0-5-8, 7=0-3Max Horiz Max Grav 2=1384 (LC 5) FORCES (lb) - Maximum CompresTension TOP CHORD 1-2=0/23, 2-4=-2303/0, 45-6=-2283/0, 6-7=-2390//$ BOT CHORD $1-2=0/23, 2-4=-2303/0, 45-6=-2283/0, 6-7=-2390//$ <td>3-10:2x4 SP No.2 0 ng directly applied or blied or 10-0-0 oc -3-8 3)), 7=1340 (LC 6) ssion/Maximum 4-5=-2194/0, /0 //1479, 8-12=0/1479, 8/0, 10-11=-158/0 //800, 5-13=0/1005, 864, 6-8=-401/221, en considered for second gust) _=6.0psf; h=25ft; invelope) exterior o 2-1-8, Interior (1) to 15-1-10, Interior</td> <td> TCLL: ASCE Plate DOL=1 DOL=1.15); 1 Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 p overhangs nd 200.0lb AC u 12-1-10 from apart. This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an This truss is a International R802.10.2 ar </td> <td>7-16; Pr=20.0 psf (15); Pf=20.0 psf (1 s=1.0; Rough Cat (1.10) snow loads have b s been designed for soft or 1.00 times fit pon-concurrent with nit load placed on left end, supported s been designed for dn onconcurrent with as been designed for dn onconcurrent with nas been designed for dn onconcurrent with s been designed for dn onconcurrent with as been designed for dn onconcurrent with s been designe</td> <td>(roof LL Lum DC B; Fully een cor or greate at roof lo other liv the bott d at two or a 10.0 of a liv other liv the bott with BC lance wis sections d ard AN</td> <td>: Lum DOL=1 IL=1.15 Plate Exp.; Ce=0.9; isidered for thi er of min roof I vad of 20.0 psi ve loads. om chord, points, 5-0-0 0 psf bottom other live load e load of 20.0 a rectangle veen the botto DL = 10.0psf. R502.11.1 ar SI/TPI 1.</td> <td>.15 is ive fon is. osf m nd</td> <td></td> <td></td> <td></td> <td>SEA 0363</td> <td></td>	3-10:2x4 SP No.2 0 ng directly applied or blied or 10-0-0 oc -3-8 3)), 7=1340 (LC 6) ssion/Maximum 4-5=-2194/0, /0 //1479, 8-12=0/1479, 8/0, 10-11=-158/0 //800, 5-13=0/1005, 864, 6-8=-401/221, en considered for second gust) _=6.0psf; h=25ft; invelope) exterior o 2-1-8, Interior (1) to 15-1-10, Interior	 TCLL: ASCE Plate DOL=1 DOL=1.15); 1 Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 p overhangs nd 200.0lb AC u 12-1-10 from apart. This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an This truss is a International R802.10.2 ar 	7-16; Pr=20.0 psf (15); Pf=20.0 psf (1 s=1.0; Rough Cat (1.10) snow loads have b s been designed for soft or 1.00 times fit pon-concurrent with nit load placed on left end, supported s been designed for dn onconcurrent with as been designed for dn onconcurrent with nas been designed for dn onconcurrent with s been designed for dn onconcurrent with as been designed for dn onconcurrent with s been designe	(roof LL Lum DC B; Fully een cor or greate at roof lo other liv the bott d at two or a 10.0 of a liv other liv the bott with BC lance wis sections d ard AN	: Lum DOL=1 IL=1.15 Plate Exp.; Ce=0.9; isidered for thi er of min roof I vad of 20.0 psi ve loads. om chord, points, 5-0-0 0 psf bottom other live load e load of 20.0 a rectangle veen the botto DL = 10.0psf. R502.11.1 ar SI/TPI 1.	.15 is ive fon is. osf m nd				SEA 0363	

(1) 15-1-10 to 21-5-8, Exterior(2E) 21-5-8 to 24-5-8 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



A. GILB

A. GILD

August 10,2023

C

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	A2	Roof Special	8	1	Job Reference (optional)	160054054

TCDL

BCLL

BCDL

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Wed Aug 09 12:00:18 ID:AJ7UwEiUaOqakg5B2g1fzPyzB4Q-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

818 Soundside Road

Edenton, NC 27932



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

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	A3	Half Hip	1	1	Job Reference (optional)	160054055

Loading

TCDL

BCLL

BCDL

WEBS

WEBS

FORCES

WEBS

NOTES

SLIDER

LUMBER

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Wed Aug 09 12:00:18 ID:N_FUI7kAVpqTDsHve?dz?XyzB8G-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



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



GI mmm August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	A4	Half Hip	1	1	Job Reference (optional)	160054056

-0-10-8

0-10-8

5-5-12

5-5-12

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:19

Page: 1 ID:8_hfrEPsdpZA5tlv6Y9sy2yzB8g-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 10-8-0 17-5-0 24-5-8 5-2-4 6-9-0 7-0-8 5x6= 2x4 II 3x6 = 5 20 ⊠ 6 21 22 7 1<u>2</u> 6 Г \bowtie \bowtie \bowtie \square × F 3x5 🤞 19



	5-5-12	10-6-4	17-5-0	24-5-8
	5-5-12	5-0-8	6-10-12	7-0-8
cale = 1:48.8				

Plate Offsets (X, Y): [2:0-3-13,0-0-1], [5:0-3-0,0-2-0]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL LUMBER	(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 TCLL: ASCE	CSI TC BC WB Matrix-MSH	1.00 0.70 0.59 f (roof LL	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.16 0.04 1.15	(loc) 9-11 9-11 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 141 lb	GRIP 244/190 FT = 20%	
TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 Structural wood she 3-8-4 oc purlins, ex 2-0-0 oc purlins (2-2	1-6-0 athing directly applie cept end verticals, ar -0 max.): 5-7.	3) ed or 4) nd	Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 overhangs n	.15); Pf=20.0 psf Is=1.0; Rough Cat =1.10 snow loads have as been designed psf or 1.00 times f on-concurrent with	(Lum DC t B; Fully been cor for greate lat roof le n other lin	DL=1.15 Plate Exp.; Ce=0.9 Insidered for the er of min roof Doad of 20.0 p ve loads.	9; his f live sf on						
BOT CHORD WEBS REACTIONS	Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 8 Max Horiz 2=217 (LC Max Uplift 2=-143 (L Max Grav 2=1150 (L	applied or 10-0-0 or 7-8, 5-9 3=0-3-8 C 13) C 14), 8=-146 (LC 1 _C 38), 8=1241 (LC 3	5) 6) 7) 1) 37) 8)	Provide aded This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar One H2.5A S	quate drainage to 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	prevent v for a 10.0 with any d for a liv s where ill fit betv , with BC ie conne	vater ponding of psf bottom other live loa e load of 20.1 a rectangle veen the bott DL = 10.0ps ctors	g. ads. Opsf om f.						
FORCES	(Ib) - Maximum Com Tension 1-2=0/23, 2-4=-1789 5-6=-1115/189, 6-7= 7-8=-1122/177	pression/Maximum 9/224, 4-5=-1359/205 =-1115/189,	5, 9)	recommender UPLIFT at jt(and does no This truss is International	ed to connect truss (s) 8 and 2. This c t consider lateral f designed in accor Residential Code	s to bear onnectio orces. dance w sections	ing walls due n is for uplift ith the 2018 R502 11 1 a	to only and					1	
BOT CHORD WEBS	2-12=-229/1543, 11- 9-11=-185/1188, 8-9 4-12=0/163, 4-11=-5 5-9=-358/79, 6-9=-7	-12=-229/1543, 9=-69/105 524/135, 5-11=0/517 04/201, 7-9=-172/14	, , 14	R802.10.2 and Graphical put or the oriental bottom chore	Ind referenced star Irlin representation ation of the purlin a	ndard AN n does no along the	ISI/TPI 1. ot depict the s top and/or	size			A	OR FESS	ROUN	
NOTES 1) Wind: AS(Vasd=103 Cat. II; Ex zone and 2-1-8 to 6- (1) 14-10- zone; cani and right e MWFRS fi	CE 7-16; Vult=130mph Bmph; TCDL=6.0psf; Bf p B; Enclosed; MWFR: C-C Exterior(2E) -0-10 -5-1, Exterior(2R) 6-5-1 15 to 21-3-12, Exterior tilever left and right exp exposed;C-C for memb or reactions shown; Lu	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio -8 to 2-1-8, Interior (2E) 21-3-12 to 24-3 posed ; end vertical I poers and forces & imber DOL=1.60 pla	LO. r 1) r -12 eft te	AD CASE(S)	Standard					WITH HILL		SEA 0363		ANTITITITY,

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 6-5-1, Exterior(2R) 6-5-1 to 14-10-15, Interior (1) 14-10-15 to 21-3-12, Exterior(2E) 21-3-12 to 24-3-12 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



G mmm August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	A5GR	Half Hip Girder	1	1	Job Reference (optional)	160054057

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:20 ID:1 xI 4nxeDZSif7alvCvYAAlvzBCE-RfC?PsB70Ha3NSaPanI 8w3uITXbGKWrCDoi7.14z.IC?f

Page: 1

								- 3 - 7	,		- 5 1 -				
	-0-1 0-1	10-8 10-8	<u>3-9-12</u> 3-9-12		<u>7-4-0</u> 3-6-4		<u>11-5-10</u> 4-1-10		<u>15-9-0</u> 4-3-6		<u>20-0</u> 4-3-	-6 ·6		<u>24-5-8</u> 4-5-2	—
						NAILED 5x6 =	NAILED	NAILED 2x4 II	NAILED	NAILED 3x8	NAILED	NAILED) NAILE 2x4 II =	DNAILE	D 4x8=
4-5-3	0	2		6 ¹² 3x5 =		4	20	5	21	2223 6	24		8 25	26 26 11 11	9
		\boxtimes		2716	28	15	29	1413	30	31 12	32	33	11 34	35	⊠ 4x8 u
		5x6	=	2x4 II		3x5 =		3x8 =		2x4			6x10 =		
				HTU26	NAILED	NAILED	NAILED	4x6:	=	NAILED	NAILED	NAILED) NAILE	D	5
		⊢	<u>3-9-12</u> 3-9-12		7-2-4 3-4-8		<u>11-5-10</u> 4-3-6	NAILED	15-9-0 4-3-6		<u>20-0</u> 4-3-	-6 -6		<u>24-5-8</u> 4-5-2	
Scale = 1:48.6 Plate Offsets ()	X. Y): [2:Edae.(0-1-91.	[4:0-3-0.0-2-(0]. [10:Eda	e.0-3-81										
Looding	(r		Specing	-,,[3	0.0		681		DEEL	in	(100) //2	lofi I/d			ID
TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(r 2 2 1	20.0 20.0 0.0 0.0* 0.0*	Plate Grip E Lumber DO Rep Stress Code	DOL 1. DL 1. Incr N IR	0-0 15 15 0 8C2018/T	PI2014	CSI TC BC WB Matrix-MSH	0.87 0.62 0.77 H	Vert(LL) Vert(CT) Horz(CT)	-0.13 -0.21 0.05	(IOC) 1/0 12-14 >9 12-14 >9 10	99 240 99 240 99 180 n/a n/a	Weight:	244 164 lb FT	#/190 = 20%
LUMBER TOP CHORD2x4 SP No.222CLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pr=20.0 psf (Lum DOL=1.15); Pr=20.0 psf (Lum DOL=1.15); Pr=20.0 psf (Lum DOL=1.15); Pr=20.0 psf (Lum DOL=1.15); Pr=20.0 psf (Plate=1.15); Pr=20.0 psf (plied to the face k (B). ease=1.15, Plate (F), 4=-116 (F),), 23=-116 (F), F), 27=-259 (F), 31=-33 (F), 35=-33 (F)					
 9-10=-1922/639 BOT CHORD 2-16=-868/2770, 15-16=-868/2770, 14-15=-854/2540, 12-14=-952/2858, 11-12=-952/2858, 10-11=-122/247, 5-14=-952/2858, 10-11=-1377/453, 8-11==-613/277, 9-11=-792/2475 NOTES NOTES NOTES Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=10/28; 12-100/28; 1										2023					

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	AGE	Common Supported Gable	1	1	Job Reference (optional)	160054058

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:21 ID:_6rcLElwA7tnIXY?wa67GkyzB5f-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:48.4

Plate Offsets (X, Y): [2:0-2-8,0-0-5], [15:0-3-8, Edge]

Loading		(psf)	Spacing	2-0-0		CSI	0.09	DEFL	in n/o	(loc)	l/defl	L/d	PLATES	GRIP	
Spow (Pf)		20.0	Lumber DOL	1.15			0.06	Vert(LL)	n/a	-	n/a	999	W120	244/190	
		20.0	Lumber DOL Bon Stroop Inor	1.15 VES			0.05		11/a	-	n/a	999			
		10.0	Code	I E O			0.12		0.00	15	n/a	n/a			
BULL		0.0	Code	IRC201	8/1912014								Mainha 400 ll	FT 000	,
BCDL		10.0											weight: 139 lb	FI = 20%	3
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE SLIDER BRACING TOP CHORD	2x4 SP N 2x4 SP N 2x4 SP N Right: 2x4 Left 2x4 S Structura	o.2 o.2 o.3 4 SP No.3 SP No.3 1 I wood shea	-6-0 athing directly applied	T (B(d or	DP CHORD	1-2=0/23, 2-4=-116, 5-6=-65/78, 6-7=-54 3-9=-82/189, 9-10= 11-12=-52/98, 12-1: 14-15=-78/24 2-27=-24/91, 26-27 24-25=-24/91, 26-27 21-22=-24/90, 19-2 17-18=-24/90, 16-1	/48, 4-5 k/101, 7 -82/190 3=-47/5 =-24/91 4=-24/9 1=-24/9 7=-24/9	i=-86/55, '-8=-65/147, i, 10-11=-63/1 i3, 13-14=-59, i, 25-26=-24/9 i1, 22-23=-24, i0, 18-19=-24, i0, 15-16=-24, i0, 15-16=-24, i1, 12-24, i1, 12-24, i	144, /17, 91, /91, /90,	 6) Thi load ove 7) All 8) Gal 9) Gal 10) Thi cho cho (11) * TI 	s truss h d of 12.0 rhangs i olates ar ole requi ole studs s truss h rd live lo nis truss	as bee psf or non-co re 2x4 res co s space as bee pad noi has be	en designed for 1.00 times flat incurrent with ot MT20 unless of ntinuous bottom ed at 2-0-0 oc. en designed for nconcurrent witl een designed fo	greater of mi coof load of 2 her live load nerwise indic chord beari a 10.0 psf bo n any other li r a live load	n roof live 20.0 psf on s. ;ated. ng. ottom ve loads. of 20.0psf
BOT CHORD	Rigid ceil	ing directly	applied or 10-0-0 oc	W	EBS 9	9-22=-112/14, 8-23 6-25=-138/78, 5-26	=-198/7 =-119/7	2, 7-24=-191, 2, 4-27=-124,	/80, /112,	on 3-0	the botto 6-00 tall	m cho by 2-0	ord in all areas w 00-00 wide will fi	here a recta t between th	ngle e bottom
REACTIONS	(size) Max Horiz Max Uplift	2=24-5-8, 17=24-5-8 21=24-5-8 24=24-5-8 2=109 (LC 2=-13 (LC 17=-37 (L1 19=-44 (L1 23=-42 (L1 25=-46 (L1 27=-78 (L1	15=24-5-8, 16=24-5 , 18=24-5-8, 19=24- , 22=24-5-8, 23=24- , 28=24-5-8, 32=24- , 28=24-5-8, 32=24- , 28=24-5-8, 32=24- , 28=24-5-8, 32=24- , 28=109 (LC 18 15), 16=-69 (LC 15) C 15), 18=-45 (LC 14 C 14), 24=-45 (LC 14 C 14), 26=-35 (LC 14 C 14), 26=-13 (LC 15 (LC 14), 26=-13 (LC 15) (LC 15), 26=-13 (LC 15) (LC 15), 26=-13 (LC 15) (LC 15), 26=	$\begin{array}{cccc} -8, & & \\ 5-8, & 5-8, & & \\ 5-8, & & 1) \\ 5-8 & & 1) \\ 5-8 & & 1) \\ (1) & & 2) \\ (1) & & 2) \\ (2) & & (2) \\ (3) & & (3$	OTES Unbalanced this design. Wind: ASCE Vasd=103m Cat. II; Exp E zone and C-I (2N) 2-2-12 t Exterior(2N)	10-21=-211/78, 11- 12-18=-133/77, 13- 14-16=-130/124 roof live loads have 7-16; Vult=130mpt bh; TCDL=6.0psf; E 3; Enclosed; MWFF C Corner(3E) -0-10 to 9-1-10, Corner(3) 15-1-10 to 21-5-8,	5/79, 7/76, considered for .0psf; h=25ft; elope) exterior 2-12, Exterior 10 to 15-1-10, (3E) 21-5-8 to	r vr	chc 12) Pro bea 2, 4 upli 27, upli 16 13) Thi Inte R80	truss to lift at joint 46 lb olift at joint), 45 lb olift at joint 2018 11.1 and 1.					
FORCES	Max Grav (Ib) - Max Tension	2=151 (LC 16=191 (L 18=175 (L 21=251 (L 23=239 (L 25=178 (L 27=175 (L 32=84 (LC	C 1), 15=84 (LC 1), C 35), 17=152 (LC 1 C 22), 19=225 (LC 2 C 22), 22=152 (LC 2 C 21), 24=231 (LC 2 C 21), 26=156 (LC 1 C 34), 28=151 (LC 1)), ;2), ;7), 3) ;1), 3)),), 4) 5)	24-5-8 zone; vertical left a forces & MW DOL=1.60 pl Truss desig only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design.	cantilever left and nd right exposed;C /FRS for reactions s ate grip DOL=1.60 and for wind loads i ds exposed to wind d Industry Gable Er alified building des 7-16; Pr=20.0 psf (.15); Pf=20.0 psf (I ls=1.0; Rough Cat I =1.10 snow loads have building	right ex -C for n shown; n the pl d (norm id Detai igner as (roof LL .um DC 3; Fully een cor	posed ; end nembers and Lumber ala to the face) ils as applicat s per ANSI/TF L: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9	iss), ble, Pl 1. 1.15); his		Ch. Children		SE/ 0363	AL 322 IEER	

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	В	Monopitch	3	1	Job Reference (optional)	160054059

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:21 ID:uKtrJGkYuK_5qa1S4NLaLYyzBNI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:71.5 Plate Offsets (X, Y): [2:0-3-1,0-0-1], [5:0-4-0,0-3-0]

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.87	Vert(LL)	-0.09	9-10	>999	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.61	Vert(CT)	-0.16	9-10	>999	180			
	10.0	Rep Stress Incr	YES		WB	0.60	Horz(CT)	0.03	9	n/a	n/a			
BCLL	0.0*	Code	IRC201	8/TPI2014	Matrix-MSH								FT 000/	
BCDL	10.0								-			Weight: 124 lb	FI = 20%	
	2x4 SP No 2		3)	Unbalanced design	snow loads have b	been cor	nsidered for t	his						
BOT CHORD	2x4 SP No 2		4)	This truss ha	as been designed f	or great	er of min root	f live						
WEBS	2x4 SP No.3 *Except	t* 6-9:2x4 SP No.2	,	load of 12.0	psf or 1.00 times fl	at roof l	oad of 20.0 p	osf on						
SLIDER	Left 2x4 SP No.3 1	1-6-0		overhangs n	on-concurrent with	other li	ve loads.							
BRACING			5)	This truss ha	as been designed f	or a 10.	0 psf bottom							
TOP CHORD	Structural wood shea	athing directly applie	dor	chord live loa	ad nonconcurrent v	with any	other live loa	ads.						
	2-2-0 oc purlins, exc	cept end verticals.	6)	* This truss h	has been designed	for a liv	e load of 20.	Opst						
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	;	3-06-00 tall b	by 2-00-00 wide wi	ll fit betv	veen the bott	tom						
WEBS	1 Row at midpt	6-9, 5-9		chord and ar	ny other members,	with BC	DL = 10.0ps	f.						
REACTIONS	(size) 2=0-5-8.9)= Mechanical	7)	Refer to gird	er(s) for truss to tru	uss conr	nections.							
	Max Horiz 2=388 (LC	C 14)	8)	Provide mec	nanical connection	n (by oth	ers) of truss	to						
	Max Uplift 2=-44 (LC	, 14), 9=-231 (LC 14)	ioint 9	e capable of withsta	anding 2	231 ID uplift a	t						
	Max Grav 2=934 (LC	C 5), 9=1050 (LC 5)	, a)	One H2 54 9	Simpson Strong-Ti	e conne	ctors							
FORCES	(lb) - Maximum Com	pression/Maximum	5)	recommende	ed to connect truss	to bear	ing walls due	e to						
	Tension			UPLIFT at jt	(s) 2. This connecti	ion is fo	r uplift only a	nd						
TOP CHORD	1-2=0/23, 2-4=-1334	/20, 4-6=-812/112,		does not cor	sider lateral forces	S.								
	6-7=-12/0, 6-9=-309/	/105	1()) This truss is	designed in accord	dance w	ith the 2018	e ve al						
	2-12=-397/1130, 10-	·12=-313/1136, ·0/0		P802 10 2 a	Residential Code	sections	3 R502.11.1 8	and						
WEBS	4-12=0/253 4-10=-5	60/178 5-10=0/579	14		Stondard	iuaiu Ar	N3//TFTT.						1111	
	5-9=-946/225		, L	DAD CASE(S)	Stanuaru							TH CA	Roille	
NOTES											AN'	A wide	2.11.5	1
1) Wind: AS	CE 7-16; Vult=130mph	(3-second gust)									32	FEUU	N.	2
Vasd=103	mph; TCDL=6.0psf; B0	CDL=6.0psf; h=25ft;								- V		· · ·	Chi.	1
Cat. II; Ex	p B; Enclosed; MWFRS	S (envelope) exterior	r							-	() j	· ×		
zone and	C-C Exterior(2E) -0-10	-8 to 2-1-8, Interior (1)							=	:	SEA	L 🗄	1
2-1-8 to 1	7-5-8, Exterior(2E) 17-5	5-8 to 20-5-8 zone;								=	:	0262	22 :	-
cantilever	ient and right exposed	; end vertical left								1		0303.	~~ :	=
exposed;C	shown: Lumber DOI -1	1 60 plate grip										•		-
DOI = 1.60)	plate grip								5	1 .	N. Fr.	-Ric	2
2) TCLL: AS	CE 7-16: Pr=20.0 psf (i	roof LL: Lum DOL=1	.15								25	S. GINI	EF. a.	5
Plate DOL	=1 15): Pf=20.0 psf (L)	um DOI =1 15 Plate									11	10	DEN	

- 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 17-5-8, Exterior(2E) 17-5-8 to 20-5-8 zone; cantilever left and right exposed ; end vertical left 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 2) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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818 Soundside Road Edenton, NC 27932

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August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	B1	Monopitch	2	1	Job Reference (optional)	160054060

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:21 ID:KLIp2cdP9FdyXYyQD889fRyzBLJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1



Scale = 1:78.2

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/	/TPI2014	CSI TC BC WB Matrix-MSH	1.00 0.65 0.60	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.19 0.03	(loc) 8-9 8-9 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 122 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 3OT CHORD WEBS SLIDER BRACING TOP CHORD 3OT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Wind: ASC Vasd=103 Cat. II; Exp zone and 0 3-0-0 to 17 cantilever exposed;C reactions s DOL=1.60 2) TCLL: ASC Plate DOL	2x4 SP No.2 2x4 SP No.3 *Except Left 2x4 SP No.3 *Except Left 2x4 SP No.3 *Except Left 2x4 SP No.3 - 1 Structural wood shear Rigid ceiling directly bracing. 1 Row at midpt (size) 1=0-5-8, 8 Max Horiz 1=375 (LC Max Uplift 1=-27 (LC Max Grav 1=888 (LC (lb) - Maximum Com Tension 1-3=-1333/21, 3-5=-8 1-11=-408/1138, 9-1 8-9=-161/676, 7-8=0 3-11=0/251, 5-8=-29 4-8=-973/231, 3-9=-5 CE 7-16; Vult=130mph imph; TCDL=6.0psf; BC p B; Enclosed; MWFRS C-C Exterior(2E) 17-5 left and right exposed C-C for members and fo shown; Lumber DOL=1) CE 7-16; Pr=20.0 psf (L	t* 5-8:2x4 SP No.2 I-6-0 athing directly applied applied or 10-0-0 oc 5-8, 4-8 B= Mechanical 14), 8=-231 (LC 14) 25), 8=1044 (LC 5) pression/Maximum 814/89, 5-6=-12/0 1=-314/1138, /0 1/100, 4-9=0/590, 557/177 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior to 3-0-0, Interior (1) 5-8 to 20-5-8 zone; ; end vertical left press MWFRS for .60 plate grip roof LL: Lum DOL=1.	4) 5) d. 6) 7) 8) 9) LOA	This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Refer to girde Provide mecl bearing plate joint 8. One H2.5A S recommende UPLIFT at jt(does not con This truss is c International R802.10.2 ar AD CASE(S)	s been designed for d nonconcurrent w as been designed in h chord in all areas y 2-00-00 wide will y other members, . er(s) for truss to tru- nanical connection capable of withsta impson Strong-Tie d to connect truss is s) 1. This connection sider lateral forces. J designed in accord Residential Code s d referenced stand Standard	or a 10.0 with any for a liv where I fit betw with BC ss conre (by oth inding 2 conne to bear on is for ance w sections dard AN	 a) psf bottom other live load e load of 20.1 a rectangle veen the bott DL = 10.0ps nections. ars) of truss i 31 lb uplift ai ctors ng walls due uplift only ai ith the 2018 R502.11.1 ai (SI/TPI 1. 	ads. Opsf om f. to to and		Withhere		SEA 0363	ROLU L 22	Monunin
Cs=1.00; (Ct=1.10	, , , , , , , , , , , , , , , , , , , ,									11	C	IL BE IN	

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

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August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	B2	Monopitch	9	1	Job Reference (optional)	160054061

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:22 ID:DTBTk2iEBbrKjDFXxKE1mCyzBJw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1



Scale = 1:78.2

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018,	/TPI2014	CSI TC BC WB Matrix-MSH	1.00 0.65 0.60	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.19 0.03	(loc) 8-9 8-9 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 122 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD WEBS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep Left 2x4 SP No.3 - 1 Structural wood shea Rigid ceiling directly bracing. 1 Row at midpt (size) 1= Mecha Max Horiz 1=294 (LC Max Grav 1=888 (LC (lb) - Maximum Com Tension 1-3=-1333/0, 3-5=-8: 1-11=-341/1138, 9-1 8-9=-104/676, 7-8=0 3-11=0/251, 5-8=-29 4-8=-973/149, 3-9=-1	t* 5-8:2x4 SP No.2 I-6-0 athing directly applied applied or 10-0-0 oc 5-8, 4-8 nical, 8= Mechanical C 14) C 5), 8=1044 (LC 5) pression/Maximum 14/89, 5-6=-12/0 1=-201/1138, /0 1/92, 4-9=0/590, 557/127	4) 5) d. 6) 7) 8) LO	This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and ar Refer to girde Provide mech bearing plate 8. This truss is s International R802.10.2 ar AD CASE(S)	s been designed for ad nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will y other members, er(s) for truss to tru- hanical connection is capable of withsta designed in accord Residential Code s and referenced stan Standard	or a 10.0 vith any for a liv s where I fit betw with BC uss conr (by oth anding 9 dance w sections dard AN	D psf bottom other live loa e load of 20. a rectangle veen the bott DL = 10.0ps nections. ers) of truss 8 lb uplift at ith the 2018 R502.11.1 a ISI/TPI 1.	ads. Opsf tom f. to joint and					111.	
NOTES 1) Wind: ASC Vasd=103 Cat. II; Ex zone and i 3-0-0 to 10 cantilever exposed;C poL=1.60 2) TCLL: ASC Plate DOL DOL=1.15 Cs=1.00 (CE 7-16; Vult=130mph Bmph; TCDL=6.0psf; BC p B; Enclosed; MWFR3 C-C Exterior(2E) 0-0-0 6-2-9, Exterior(2R) 16-2 left and right exposed 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 =1.15); Pf=20.0 psf (L =1.15); R=1.0; Rough Cat B C1=1 10	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior to 3-0-0, Interior (1) 2-9 to 20-5-8 zone; ; end vertical left orces & MWFRS for I.60 plate grip roof LL: Lum DOL=1. um DOL=1.15 Plate t; Fully Exp.; Ce=0.9;	15							N. Contraction		SEA 0363		Mamming

- 3-0-0 to 16-2-9, Exterior(2R) 16-2-9 to 20-5-8 zone; cantilever left and right exposed ; 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
- 3) Unbalanced snow loads have been considered for this design.



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August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	B2GE	Monopitch Supported Gable	1	1	Job Reference (optional)	160054062

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:22 ID:pRYBEe4gu7lwx_7UFLIIXIyzBJR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:68.9

Plate Offsets (X, Y): [25:0-3-11,0-1-8]

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-MR	0.28 0.18 0.14	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a -0.02	(loc) - - 13	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 150 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep 2x4 SP No.3 *Excep 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. 1 Row at midpt (size) 13=20-5- 16=20-5- 20=20-5- 20=20-5- 23=20-5- Max Horiz 25=367 (f Max Uplift 13=-9 (LC 15=-44 (L 20=-44 (L 22=-53 (L 24=-174 H Max Grav 13=18 (LL 15=252 (l 17=171 (l 20=161 (l 24=162 (l) 24=162 (bt* 12-14:2x4 SP No.2 eathing directly applied iccept end verticals. <i>a</i> applied or 10-0-0 oc 12-14, 10-16, 11-15 8, 14=20-5-8, 15=20-1 8, 17=20-5-8, 15=20-1 8, 21=20-5-8, 22=20-1 8, 24=20-5-8, 22=20-1 8, 24=20-5-8, 22=20-1 C 14), 14=-20 (LC 14) C 14), 18=-44 (LC 14 C 14), 18=-44 (LC 14 C 14), 18=-42 (LC 14) C 14), 18=-42 (LC 14) C 14), 21=-42 (LC 14) (LC 14), 23=-9 (LC 14) (LC 20), 16=225 (LC 2 LC 20), 16=225 (LC 2 LC 20), 18=160 (LC 1 LC 20), 21=160 (LC 1 LC 20), 21=160 (LC 1 LC 20), 23=153 (LC 2 LC 1), 25=265 (LC 14) opression/Maximum 498/193, 2-3=-398/15 311/125, 5-6=-265/10 73/71, 9-10=-126/53, 2=-50/26, 12-13=-6/7,	BC 2 WE d or NC 5-8, 5-8, 5-8, 5-8, 5-8, 5-8, 5-8, 5-8,	DT CHORD 2 22 33 39 0TES Wind: ASCE Vasd=103mp Cat. II; Exp B zone and C-C 3-1-12 to 20- end vertical la MWFRS for r grip DOL=1.6 Truss design only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced s design. All plates are Gable require Truss to be fu braced again Gable studs 3 This truss ha chord live loa) * This truss ha on the bottom 3-06-00 tall b chord and an	24-25=-1/1, 23-24= 24-25=-1/1, 20-21= 7-18=-1/1, 16-17= 4-15=-1/1 -20=-120/80, 5-21: -23=-116/60, 2-24: 1-17=-131/80, 10-1: 7-16; Vult=130mpf b; TCDL=6.0psf; E; conced; MWFR Corner(3E) 0-1-1 5-8 zone; cantileve eff exposed; C-C for eactions shown; Li 0 and for wind loads in ds exposed to wind Industry Gable Er alified building des 7-16; Pr=20.0 psf (Li s=1.0; Rough Cat I 1.10 snow loads have bi- 2x4 MT20 unless as continuous botto ully sheathed from st lateral movement spaced at 2-0-0 oc. s been designed for d nonconcurrent w as been designed mill o chord in all areas y 2-00-00 wide will y other members.	-1/1, 22 -1/1, 18 -1/1, 15 =-120/7 =-136/2 6=-186/ CDL=6 CS (env, 2 to 3-1 er left ar r memb umber I in the pl d (norm ad Deta igner as (roof LL - um DC B; Fully een cor otherwi or a 10.0 vith any for a liv where I fit betw	-23=-1/1, -20=-1/1, -16=-1/1, 9, 4-22=-121 01, 7-18=-12 79, 11-15=-2 cond gust) .0psf; h=25ft elope) exterior -12, Exterior -12, Exterior oDL=1.60 pla ane of the tru al to the face ils as applicas per ANSI/TI :: Lum DOL= PL=1.15 Plate Exp.; Ce=0.9 asidered for the se indicated. d bearing. e or securely iagonal web) 0 psf bottom other live loa e load of 20.0 a rectangle veen the bottom	//84, 20/80, 208/85 ; or (2N) sed ; es & ate uss)), ble, PI 1. 1.15 9; his 9; his om	11) Bea usir des 12) Pro bea 13, upli 23, upli 23, upli 23, Inte R8(LOAD (tring at jung and jung and jung and stand at jung and stand and stand at the stand	bint(s) TPI 1 1 colld v chanic e capa ilift at jc 21, 53 plift at 17, 45 d desigg I Resi and ref Star	13 considers pa angle to grain fo pirfy capacity of al connection (b) ble of withstand joint 14, 44 lb up 5 lb uplift at joint joint 24, 44 lb up 5 lb uplift at joint ned in accordan dential Code sec erenced standar ndard	rallel to grain mula. Buildin bearing surfac (others) of tru- ing 9 lb uplift. If at joint 20, 22, 9 lb uplift 16 and 44 lb ce with the 20 tions R502.11 d ANSI/TPI 1	value ng ce. uss to at joint 42 lb at joint 43 lb uplift at 018 1.1 and
												201111	TITE	

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	С	Common	6	1	Job Reference (optional)	160054063

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:22 ID:veOhTnYilJvCs5ZfZ6xbfGyzBEy-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:60.9

Plate Offsets (X, Y): [9:0-4-0,0-3-0]

		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	3/TPI2014	CSI TC BC WB Matrix-MSH	0.49 0.90 0.59	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.17 -0.34 0.02	(loc) 8-9 8-9 8	l/defl >999 >673 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 124 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, ex Rigid ceiling directly bracing. (size) 8=0-5-8, ' Max Horiz 10=-236 (Max Grav 8=883 (LC Max Grav 8=883 (LC	athing directly applie cept end verticals. applied or 10-0-0 oc 10=0-5-8 LC 12) (15), 10=-73 (LC 14) C 22), 10=883 (LC 21	3) 4) 5) 6) 7)	TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.00 overhangs n This truss ha chord live loa * This truss h on the bottor	7-16; Pr=20.0 psf (.15); Pf=20.0 psf (L Is=1.0; Rough Cat B =1.10 snow loads have be s been designed fo psf or 1.00 times fla on-concurrent with o s been designed fo at onoconcurrent w has been designed f n chord in all areas y 2-00-00 wide will	(roof LL um DC 3; Fully een cor r great t roof k other liv r a 10.4 ith any for a liv where fit betw	: Lum DOL= L=1.15 Plate Exp.; Ce=0.9 sidered for the er of min roof pad of 20.0 p ve loads. 0 psf bottom other live loa e load of 20.1 a rectangle	1.15 e); his i live sf on ds. Dpsf					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	8)	chord and ar One H2.5A S	y other members. Simpson Strong-Tie	conne	ctors	0111					
TOP CHORD BOT CHORD WEBS	1-2=0/39, 2-3=-365/ 4-5=-756/158, 5-6=- 2-10=-380/143, 6-8= 8-10=-99/651 4-9=-82/512, 5-9=-2 3-10=-665/53, 5-8=-	131, 3-4=-756/158, 365/130, 6-7=0/39, 379/143 59/212, 3-9=-259/212 665/53	9) 2,	recommende UPLIFT at jt(only and doe This truss is International R802.10.2 at	ed to connect truss t s) 10 and 8. This co s not consider later designed in accorda Residential Code s nd referenced stanc	to bear onnecti al force ance w ections lard AN	ng walls due on is for uplif es. ith the 2018 R502.11.1 a ISI/TPI 1.	to t and					lus.
NOTES			LO	AD CASE(S)	Standard							WH CA	ROUL
 Unbalance 	ed roof live loads have	been considered for									15	- ATT	10/14

this design.
Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;

Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-9-12, Exterior(2R) 6-9-12 to 12-9-12, Interior (1) 12-9-12 to 17-6-0, Exterior(2E) 17-6-0 to 20-6-0 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

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and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



A. GILP.... August 10,2023

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binst.org) 818 Soundside Road Edenton, NC 27932

V COLOR WARNING

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	CGE	Common Supported Gable	1	1	Job Reference (optional)	160054064

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:23 ID:y?/VUHJnnTWv5Ac?yd58OGyzBFF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:59.1

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDI	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/	TPI2014	CSI TC BC WB Matrix-MR	0.20 0.11 0.19	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 16	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190	%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly	athing directly applied cept end verticals. applied or 6-0-0 oc	BOT d or WEE	CHORD 2 2 2 1 1 BS 7 5 3	27-28=-112/179, 26 25-26=-112/179, 24 23-24=-112/179, 21 20-21=-112/179, 19 8-19=-112/179, 17 16-17=-112/179 7-23=-165/14, 9-21= 5-25=-140/102, 4-26 3-27=-130/142, 10-2 14-10=-140/102, 10-2	-27=-1 -25=-1 -23=-1 -20=-1 -18=-1 =-165/1 6=-136/ 20=-22	12/179, 12/179, 12/179, 12/179, 12/179, 12/179, 4, 6-24=-222/ '113, 2/139, 27/112	/139,	8) Ga 9) Tri bra 10) Ga 11) Th ch 12) * T on 3-0	able requi uss to be aced aga able studs is truss h ord live lo 'his truss the botto 06-00 tall	ires co fully si inst lat s space bad no has be bad no has be bad no bad no ba	ntinuous bottom heathed from or eral movement ed at 2-0-0 oc. en designed for nconcurrent with een designed fo ord in all areas w 00-00 wide will fi	a chord bear ne face or se (i.e. diagona a 10.0 psf b n any other r a live load yhere a rectr t between th	ring. ecurely al web). pottom live loads. I of 20.0psf angle he bottom
WEBS REACTIONS	bracing. 1 Row at midpt (size) 16=19-7-8 19=19-7-8 23=19-7-8 26=19-7-8 Max Horiz 28=-236 (Max Uplift 16=-102 (18=-67 (L 20=-98 (L 25=-76 (L 27=-199 (L 27=-199 (L)	7-23, 9-21 3, 17=19-7-8, 18=19-7 3, 20=19-7-8, 21=19-7 3, 24=19-7-8, 25=19-7 3, 27=19-7-8, 28=19-7 LC 12) LC 13), 17=-187 (LC C 15), 19=-75 (LC 14 C 14), 26=-66 (LC 14 LC 14), 28=-147 (LC C 15), 17=186 (LC 14	7-8, NOT 7-8, 1) 7-8, 2) 15), 15),),),), 12) 3)	TES Unbalanced I this design. Wind: ASCE Vasd=103mp Cat. II; Exp B zone and C-O 2-1-8 to 6-9-1 (2N) 12-9-12 zone; cantilev and right exp	any oth chanic te capa 2 lb up bint 25, lb uplit bint 18 s desig al Resig and ref) Sta	hich nonnection (by others) of truss to ipable of withstanding 147 lb uplift at uplift at joint 16, 97 lb uplift at joint 24, 76 25, 66 lb uplift at joint 26, 199 lb uplift at plift at joint 20, 75 lb uplift at joint 19, 67 18 and 187 lb uplift at joint 17. signed in accordance with the 2018 sidential Code sections R502.11.1 and referenced standard ANSI/TPI 1. Standard								
FORCES TOP CHORD	Max Grav 16=190 (I 18=175 (I 20=264 (I 23=197 (I 25=179 (I 27=212 (I (Ib) - Maximum Com Tension 2-28=-169/107, 1-2= 3-4=-126/128, 4-5=- 6-7=-119/260, 7-8=- 9-10=-119/260, 10-1 12-13=-96/97, 13-14 14-16=-144/76	LC 15), 17=186 (LC 1 LC 25), 19=179 (LC 2 LC 22), 21=197 (LC 2 LC 21), 24=264 (LC 2 LC 21), 26=173 (LC 2 LC 21), 28=228 (LC 1 pression/Maximum e0/39, 2-3=-210/178, 105/109, 5-6=-82/157 88/182, 8-9=-88/182, 1=-65/157, 11-12=-7; I=-190/137, 14-15=0/3	3), 2), 2), 3), 3), 3), 1) 4) 5/83, 5) 3 ⁹ , 6)	MWFRS for r grip DOL=1.6 Truss desigr only. For stu see Standarco or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); 1 CS=1.00; Ct= Unbalanced : design. This truss ha load of 12.0 ţ overhangs no All plates are	eactions shown; Lu on the for wind loads in ds exposed to wind a lindustry Gable En alified building desi 7-16; Pr=20.0 psf (L s=1.0; Rough Cat E 1.10 snow loads have be s been designed fo opsf or 1.00 times fla on-concurrent with o 2x4 MT20 unlesso	n the pl I (norm Id Deta gner as (roof LL .um DC 3; Fully een cor r greate t roof k other liv otherwi	DOL=1.60 pla lane of the tru al to the face) ils as applicate s per ANS//TF .: Lum DOL=1 λ L=1.15 Plate Exp.; Ce=0.9 asidered for th er of min roof poad of 20.0 ps ve loads. se indicated.	te iss), ble, Pl 1. 1.15 D; his live sf on				SEA 0363	AD SIONAL 322	A Revenue A P

August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	CJ1	Jack-Open Structural Gable	1	1	Job Reference (optional)	160054065

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:23 ID:sO9akXcGp1tsoTjN9u??hcyzBDb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:28.9

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 IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.36 0.08 0.03	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.01 0.00	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 19 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 3OT CHORD 3OT CHORD TOP CHORD 3OT CHORD 3OT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Wind: AS(Vasd=103 Cat. II; Ex zone and exposed ; members Lumber D DOL=1.15 Cs=1.00; 3) Unbalancu design. 4) This truss load of 12 overhang:	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 2-11-10 oc purlins, of Rigid ceiling directly bracing. (size) 3= Mecha 5=0-9-7 Max Horiz 5=86 (LC Max Uplift 3=-22 (LC (LC 10) Max Grav 3=64 (LC (LC 21) (lb) - Maximum Com Tension 1-2=0/67, 2-3=-71/54 4-5=-82/78 2-4=-54/104 CE 7-16; Vult=130mph mph; TCDL=6.0psf; Bt P B; Enclosed; MWFRS OL=1.60 plate grip DO CC Corner (3) zone; c end vertical left and rig and forces & MWFRS OL=1.60 plate grip DO CE 7-16; PT=20.0 psf (L 55); Is=1.0; Rough Cat B Ct=1.10 ed snow loads have be has been designed for .0 psf or 1.00 times flat s non-concurrent with c	athing directly applied except end verticals. applied or 10-0-0 oc nical, 4= Mechanical 13) :11), 4=-2 (LC 11), 5 21), 4=54 (LC 7), 5= 21), 5= 210, 5= 210, 5= 210, 5= 210, 5= 210, 5= 210, 5= 210, 5= 210, 5= 210, 5= 210,	5) This trus chord liv 6) * This trus on the business of the second of or 7) Refer to 8) Provide bearing 1 4. 9) One H2. recomme UPLIFT does not 377 10) One RT3 truss to I connecti forces. 247 11) This trus Internatic R802.10 12) Gap bett diagonal LOAD CASE tt	s has been designed load nonconcurrent ss has been designe thom chord in all arec all by 2-00-00 wide w d any other members girder(s) for truss to nechanical connection late capable of withs 5A Simpson Strong-T ended to connect trus at jt(s) 3. This connec consider lateral force A MiTek connectors nearing walls due to L on is for uplift only an s is designed in acco onal Residential Code 2 and referenced sta ween inside of top cho or vertical web shall (S) Standard	for a 10.1 with any ed for a liv as where vill fit betw s. truss con on (by oth standing 2 Fie conne- ess to bear zition is for ess. recomme JPLIFT at d does not related and and AN ord bear in not excee	D psf bottom other live loa e load of 20.1 a rectangle veen the bott nections. ers) of truss i lb uplift at jo ctors uplift only al unded to comr it(s) 5. This of consider la ith the 2018 R 502,11.1 a ISI/TPI 1. ng and first ad 0.500in.	ads. Opsf tom bint e to nd nect ateral		Manutan		SEA 0363	EER. K	Norman

August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	EGE	Common Supported Gable	1	1	Job Reference (optional)	160054066

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:23 ID:x0ypEL3Up0yR9Rp3VsFHJqyzBIA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Jule = 1.33.3

Plate Offsets (X, Y): [8:0-2-8,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 IRC20	18/TPI2014	CSI TC BC WB Matrix-MSH	0.09 0.10 0.18	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc) - - 14	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 127 lb	GRIP 244/19 FT = 2	10	
LUMBER TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD	2x4 SP No 2x4 SP No 2x4 SP No Left 2x4 S 1-6-0 Structural 6-0-0 oc p Rigid ceili	5.2 5.3 P No.3 1 wood shea ourlins. ng directly	I-6-0, Right 2x4 SP athing directly applie applied or 10-0-0 or	E No.3 V ed or c N	OT CHORD 2 1 1 VEBS 7 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2-24=-84/253, 23-2 2-23=-84/253, 21- 9-21=-84/253, 18- 7-18=-84/253, 16- 4-16=-84/253 7-21=-174/28, 9-19 5-23=-128/96, 4-24 0-18=-215/140, 11 2-16=-152/155	4=-84/2 22=-84/ 19=-84/ 17=-84/ =-174/5 =-175/1 -17=-12	253, (253, (253, (253, (253, 55, 55, 28/96,	140,	10) This chor 11) * Th 3-06 chor 12) Prov bear 2, 2 at jo	truss had live lo is truss he botto -00 tall d and a ride med ing plat lb uplift int 22, 5	as bee ad nor has be m cho by 2-0 ny oth chanic e capa at join 55 lb up	en designed for a nconcurrent with sen designed for rd in all areas w 0-00 wide will fit er members. al connection (b bble of withstand t 14, 3 lb uplift a plift at joint 23, 1	10.0 psf any othe a live loa here a rec between y others) ling 25 lb t joint 21, 39 lb upli	bottom r live loads. td of 20.0psf trangle the bottom of truss to uplift at joint 98 lb uplift ff at joint 24,	
REACTIONS	NOTES NOTES (size) $2=18-9-0, 14=18-9-0, 16=18-9-0, 19=18-9-0, 21=18-9-0, 22=18-9-0, 24=18-9-0, 22=18-9-0, 24=18-9-0, 24=18-9-0, 22=18-9-0, 24=18-9-0, 24=18-9-0, 25=18-9-0, 24=18-9-0, 22=18-9-0, 24=18-9-0, 24=18-9-0, 22=18-9-0, 24=18-102 (LC 13), 25=201 (LC 13), 17=-56 (LC 15), 17=-56 (LC 15), 18=-102 (LC 15), 21=-3 (LC 11), 22=-98 (LC 14), 23=-55 (LC 14), 24=-139 (LC 14), 25=-25 (LC 10), 24=-139 (LC 14), 25=-25 (LC 10), 29=-2 (LC 11) NOTES Max Gray 2=-29 (LC 14), 25=-25 (LC 10), 22=-98 (LC 14), 25=-25 (LC 10), 29=-2 (LC 11) 2=-03 (LC 20), 200=-200 2=-03 Max Gray 2=-22 (LC 11) 2=-22 (LC 12), 21=-3 (LC 11), 22=-98 (LC 14), 25=-25 (LC 10), 20=-200 (LC 25), 21=-30 (LC 27). 3 $				 Unbalanced in this design. Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-C 2-4-4 to 6-4-4 12-4-12 to 16 cantilever left right exposed for reactions DOL=1.60 	roof live loads have 7-16; Vult=130mpt bh; TCDL=6.0psf; E ; Enclosed; MWFR C Corner(3E) -0-10 4, Corner(3R) 6-4-4 -4-12, Corner(3E) and right exposed d;C-C for members shown; Lumber DC	e been (a (3-sec CDL=6 CDL=6 (s (env) -8 to 2- to 12-4 16-4-12 ; end v and for DL=1.60	considered fc cond gust) .0psf; h=25ft elope) exterior 4-4, Exterior(4-12, Exterior) 2 to 19-7-8 zc vertical left ar rcces & MWFF 0 plate grip	or ; ;2N) r(2N) pne; ad RS	 uplift at joint 16, 25 lb uplift at joint 2 and 2 lb uplift at joint 14. 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 						
F ORCES TOP CHORD	29=-2 (LC 11) Max Grav 2=203 (LC 26), 14=191 (LC 27), 16=215 (LC 25), 17=164 (LC 22), 18=256 (LC 22), 19=214 (LC 22), 21=214 (LC 21), 22=256 (LC 21), 23=164 (LC 21), 24=218 (LC 24), 25=203 (LC 26), 29=191 (LC 27) (lb) - Maximum Compression/Maximum Tension 1-2=0/34, 2-4=-245/139, 4-5=-148/94, 5-6=-108/70, 6-7=-106/88, 7-8=-82/91, 8-9=-82/91, 9-10=-106/88, 10-11=-85/39, 11-12=-127/63, 12-14=-223/113, 14-15=0/34 8 Gai 9 Gai				 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 ha load of 12.0 p overhangs nd All plates are Gable require Gable studs s 	ed for wind loads i ds exposed to wind l Industry Gable Er alified building des 7-16; Pr=20.0 psf .15); Pf=20.0 psf (1,5); Pf=20.0 psf (1,10) snow loads have b s been designed fo psf or 1.00 times fla on-concurrent with 2x4 MT20 unless as continuous botto spaced at 2-0-0 oc	ane of the tri al to the face ils as applica s per ANS/TI L=1.15 Plate Exp.; Ce=0.9 asidered for the er of min roof bad of 20.0 p ve loads. se indicated. d bearing.	uss), ble, PI 1. 1.15 9; his f live sf on	SEAL 036322							

- All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	EGR	Common Girder	1	2	Job Reference (optional)	160054067

TCDL

BCLL

BCDL

WFBS

WEBS

NOTES

oc.

1)

2)

3)

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:24 ID:xqX4xngTohNCmGDs_3fFtayzBHN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



(B), 25=-811 (B)

August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	F	Common	4	1	Job Reference (optional)	160054068

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:24 Page: 1 ID:qaiA6xbzzIROKF1mhdDvcwyzBUO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -0-10-8 18-2-8 17-4-0 8-8-0 12-10-3 4-5-13 4-2-3 4-5-13 4-2-3 4-5-13 0-10-8 0-10-8 4x5 = 12 4 Г 4 T 2x4 🕿 2x4 🚅 17 16 3 5 \square 15 18 2 6 0-9-0 6 Ø 19 20 8 21 22 5x8 = 3x5 = 3x5 =

8-8-0	17-4-0	
8-8-0	8-8-0	

Scale = 1:35.9

3-5-14

3-4-11

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	(psf) Spacing 2-0-0 CSI DEFL in 20.0 Plate Grip DOL 1.15 TC 0.39 Vert(LL) 0.22 20.0 Lumber DOL 1.15 BC 0.70 Vert(CT) -0.19 10.0 Rep Stress Incr YES WB 0.24 Horz(CT) 0.03 0.0* Code IRC2018/TPI2014 Matrix-MSH Horz(CT) 0.03 2x4 SP No.2 5) This truss has been designed for greater of min roof live So for a								l/defl >949 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 73 lb	GRIP 244/190 FT = 20%	
TOP CHOR BOT CHOR WEBS BRACING TOP CHOR BOT CHOR	 D 2x4 SP No.2 D 2x4 SP No.2 2x4 SP No.3 D Structural wood she 4-4-6 oc purlins. D Rigid ceiling directly bracing. S (size) 2=0-3-0, 6 Max Horiz 2=-50 (LC Max Uplift 2=-266 (L Max Grav 2=816 (LC) 	athing directly applie applied or 4-7-0 oc 5=0-3-0 2 19) C 10), 6=-266 (LC 1 ⁻⁷ C 21), 6=816 (LC 22)	4) 5) d or 6) 7) 1) ⁸⁾	this truss ha load of 12.0 j overhangs n This truss ha chord live loa * This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar One H2.5A S recommende UPLIFT at jt(s been designed for option of the second second second s been designed for d nonconcurrent with s been designed n chord in all areas by 2-00-00 wide will y other members. Simpson Strong-Tie d to connect truss s) 2 and 6. This coo	or great at roof lo other liv or a 10.0 rith any for a liv where fit betw connectio	er of min rool bad of 20.0 p <i>re</i> loads. D psf bottom other live loa e load of 20.1 a rectangle veen the bott ctors ing walls due n is for uplift	f live sf on ads. Opsf om e to only						
FORCES	(lb) - Maximum Com Tension D 1-2=0/17, 2-3=-1656 4-5=-1134/1295, 5-6 D 2-6=-1340/1528	Max Grav 2=816 (LC 21), 6=816 (LC 22) (lb) - Maximum Compression/Maximum Tension 1-2=0/17, 2-3=-1656/1476, 3-4=-1134/1295, 4-5=-1134/1295, 5-6=-1656/1476, 6-7=0/17 2-6=-1340/1528			 and does not consider lateral forces. 9) 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. 									
WEBS	4-8=-655/461, 5-8=-	547/253, 3-8=-547/2	53 LC	DAD CASE(S)	Standard									
NOTES														
1) Unbala	nced roof live loads have	been considered for											11111	
 this designed to be a constrained of the second s	ign. SCE 7-16; Vult=130mph O3mph; TCDL=6.0psf; B/ Exp B; Enclosed; MWFR d C-C Exterior(2E) -0-10 b -5-8-0, Exterior(2E) 15 er left and right exposed posed; porch left and right rs and forces & MWFRS DOL=1.60 plate grip DC ASCE 7-16; Pr=20.0 psf (L 0L=1.15); Pf=20.0 psf (L 1.5); Is=1.0; Rough Cat E D; Ct=1.10	(3-second gust) CDL=6.0pst; h=25ft; S (envelope) exterior -8 to 2-1-8, Interior (1) to 11-8-0, Interior (1) -2-8 to 18-2-8 zone; ; end vertical left and the exposed; C-C for for reactions shown; N=1.60 roof LL: Lum DOL=1 um DOL=1.15 Plate 8; Fully Exp.; Ce=0.9;	1) 1) 1 15							Manna		SEA 0363	ER. H	Vannunn,

August 10,2023

7

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	FGE	Common Supported Gable	1	1	Job Reference (optional)	160054069

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:25 ID:blbw4E4_5X0UgfFVg5xqNryzBV3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:35.9

Plate Offsets (X, Y): [15:0-3-0,0-3-0]

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 IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.08 0.05 0.04	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 10	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 74 lb	GRIP 244/190 FT = 20%		
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	RD 2x4 SP No.2 RD 2x4 SP No.2 2x4 SP No.3 RD Structural wood sheathing directly applied or 6-0-0 oc purlins. RD Rigid ceiling directly applied or 10-0-0 oc bracing. NS (size) 2=17-4-0, 10=17-4-0, 12=17-4-0, 13=17-4-0, 14=17-4-0, 15=17-4-0, 16=17-4-0, 17=17-4-0, 18=17-4-0, 19=17-4-0, 23=17-4-0 Max Horiz 2=-50 (LC 19), 19=-50 (LC 19) Max Uplift 2=-38 (LC 10), 10=-45 (LC 11), 12=-46 (LC 15), 13=-31 (LC 11), 12=-46 (LC 15), 16=-38 (LC 14), 17=-30 (LC 10), 18=-49 (LC 14), 19=-38 (LC 10), 23=-45 (LC 11) Max Grav 2=160 (LC 1), 10=160 (LC 1), 12=249 (LC 22), 13=203 (LC 22), 14=235 (LC 22), 15=135 (LC 21), 16=235 (LC 21), 17=203 (LC 21), 18=249 (LC 21), 19=160 (LC 1), 23=160 (LC 1) (lb) - Maximum Compression/Maximum Tension RD 1-2=0/17, 2-3=-60/24, 3-4=-51/47,				 NOTES Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-8-0, Corner(3E) 5-8-0 to 11-8-0, Exterior(2N) 11-8-0 to 15-2-8, Corner(3E) 5-2-8 to 18-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (toof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.16) Unbalanced snow loads have been considered for this design. Unbalance of consoling and show been considered for this design. 						 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2, 45 lb uplift at joint 10, 38 lb uplift at joint 16, 30 lb uplift at joint 17, 49 lb uplift at joint 18, 38 lb uplift at joint 14, 31 lb uplift at joint 13, 46 lb uplift at joint 12, 38 lb uplift at joint 13, 46 lb uplift at joint 12, 38 lb uplift at joint 13, 46 lb uplift at joint 12, 38 lb uplift at joint 13, 46 lb uplift at joint 12, 38 lb uplift at joint 13, 46 lb uplift at joint 12, 38 lb uplift at joint 13, 46 lb uplift at joint 12, 38 lb uplift at joint 13, 46 lb uplift at joint 12, 38 lb uplift at joint 13, 46 lb uplift at joint 12, 38 lb uplift at joint 2 and 45 lb uplift at joint 10. 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 					
FORCES TOP CHORD BOT CHORD WEBS	(b) - Maximum Compression/Maximum Tension) $1-2=0/17, 2-3=-60/34, 3-4=-51/47, 4-5=-49/78, 5-6=-53/121, 6-7=-53/121, 7-8=-49/78, 8-9=-51/43, 9-10=-48/34, 10-11=0/17) 2-18=-22/45, 17-18=0/45, 16-17=0/45, 14-16=0/45, 13-14=0/45, 12-13=0/45, 10-12=-18/4510-12=-18/456-15=-96/12, 5-16=-193/109, 4-17=-170/86, 3-18=-190/104, 7-14=-193/109, 8-13=-170/86, 9-12=-190/104$			7 8 9 1 1 86,	 overhangs ne All plates are Gable requiri Gable studs This truss ha chord live loa * This truss fron the bottor 3-06-00 tall b chord and are 	on-concurrent with 2x4 MT20 unless es continuous bott spaced at 2-0-0 or s been designed f id nonconcurrent v has been designed n chord in all areas y 2-00-00 wide wi by other members.	other liv otherwi om chor c. or a 10. vith any for a liv s where Il fit betv	ve loads. se indicated. d bearing.) psf bottom other live load e load of 20.0 a rectangle veen the botto	ds.)psf om		Contraction of the second seco		SEA 0363	EER. KININ		

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	G	Common	2	1	Job Reference (optional)	160054070

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:25 ID:DP_INHM2klcG82JXPRIrjVyzBPX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



0.20 i



3-11-0 3-11-0	

Scale = 1:33.7							
Loading (psf) Spaci TCLL (roof) 20.0 Plate 0 Snow (Pf) 20.0 Lumba TCDL 10.0 Rep S BCLL 0.0* Code BCDL 10.0 LUMBER	ing 2-0-0 Grip DOL 1.15 er DOL 1.15 Stress Incr YES IRC2018/TPI2014 5) This truss f	CSI TC 0.36 BC 0.16 WB 0.06 Matrix-MR	DEFL ir Vert(LL) 0.01 Vert(CT) -0.01 Horz(CT) 0.00 er of min roof live	(loc) 6-7 7-8 6	l/defl L/ >999 24 >999 18 n/a n/	d PLATES MT20 a Weight: 35 lb	GRIP 244/190 FT = 20%
TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING TOP CHORD Structural wood sheathing d 6-0-0 oc purlins, except end BOT CHORD Rigid ceiling directly applied	load of 12.0 overhangs 6) This truss f chord live li directly applied or d verticals. 6 or 10-0-0 oc	b) psf or 1.00 times flat roof l non-concurrent with other li las been designed for a 10. aad nonconcurrent with any has been designed for a liv om chord in all areas where by 2-00-00 wide will fit betwo on other the prophere.	oad of 20.0 psf on ve loads. 0 psf bottom other live loads. ve load of 20.0psf a rectangle ween the bottom				
bracing. REACTIONS (size) 6=0-3-0, 8=0-3-0 Max Horiz 8=96 (LC 13) Max Uplift 6=-44 (LC 15), 8= Max Grav 6=497 (LC 22), 8: FORCES (lb) - Maximum Compression TOP CHORD 1-2=0/57, 2-3=-358/322, 3-4 4-5=0/57, 2-8=-454/(300, 4-6)	=-44 (LC 14) =-497 (LC 21) m/Maximum 4=-358/321, =-458/321, E-464/307 E-464/	Simpson Strong-Tie conne led to connect truss to bear t(s) 8 and 6. This connectio ot consider lateral forces. s designed in accordance w al Residential Code sections and referenced standard AN) Standard	ctors ing walls due to in is for uplift only vith the 2018 s R502.11.1 and NSI/TPI 1.				
 4-5=0/51, 2-5=454/309, 4-0 BOT CHORD 7-8=-119/196, 6-7=-119/196 WEBS 3-7=-224/148 NOTES 1) Unbalanced roof live loads have been co this design. 2) Wind: ASCE 7-16; Vult=130mph (3-secc Vasd=103mph; TCDL=6.0psf; BCDL=6.0 Cat. II; Exp B; Enclosed; MWFRS (envel zone and C-C Exterior(2E) -0-10-8 to 2- 	onsidered for ond gust) 0psf; h=25ft; lope) exterior 1-8, Exterior(2R)				(n)	UNTH CA	ROLIN

members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;

 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

Unbalanced snow loads have been considered for this design.



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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB				
23070130-01	G1	Common	1	1	Job Reference (optional)	160054071			

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:25 ID:?D?Cdqfjr_mjeujLNBFiEnyzBP8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





3-11-0	7-10-0
3-11-0	3-11-0

Scale	1 – د	.337

		-											
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-MR	0.37 0.18 0.05	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.02 0.00	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 33 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 shea 6-0-0 oc purlins, exc Rigid ceiling directly bracing. (size) 5=0-7-5, 7 Max Horiz 7=91 (LC Max Uplift 5=-24 (LC Max Grav 5=387 (LC	athing directly applie cept end verticals. applied or 10-0-0 or /=0-3-0 11) 15), 7=-44 (LC 14) 2 22), 7=442 (LC 21)	5) 6) ed or 7) c 8)	This truss ha load of 12.0 overhangs n This truss ha chord live loa * This truss ha chord live loa * This truss f on the bottor 3-06-00 tall t chord and ar One H2.5A S recommende UPLIFT at jt(does not cor One RT8A M	is been designed f psf or 1.00 times fit on-concurrent with is been designed f ad nonconcurrent v has been designed in chord in all area: y 2-00-00 wide wi y other members. Simpson Strong-Ti- d to connect truss (s) 7. This connect sisider lateral forces tiTek connectors r	or great at roof k other liv or a 10. with any l for a liv s where ll fit betv e conne- to bear to bear s. ecomme	er of min roof pad of 20.0 p: re loads.) psf bottom other live loa e load of 20.0 a rectangle reen the botto ctors ng walls due uplift only ar nded to conr	live sf on ds. Dpsf com to nd					
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=100 Cat. II; E>	(lb) - Maximum Com Tension 1-2=0/34, 2-3=-352/3 2-7=-399/309, 4-5=-3 6-7=-167/205, 5-6=- 3-6=-217/144 ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; BC op B; Enclosed; MWFRS	pression/Maximum 323, 3-4=-359/318, 341/243 167/205 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio	10) LO	truss to bear connection is forces.) This truss is International R802.10.2 ar AD CASE(S)	ing walls due to UI s for uplift only and designed in accord Residential Code nd referenced star Standard	PLIFT at does no dance w sections dard AN	jt(s) 5. This ot consider la ith the 2018 R502.11.1 a ISI/TPI 1.	teral Ind			111	NITH CA	ROY

zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 4-8-4, Exterior(2E) 4-8-4 to 7-8-4 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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)



GI 11111111 August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	GGE	Common Supported Gable	1	1	Job Reference (optional)	160054072

Scale = 1:30.6 Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL

BCDL

Run: 8,63 S Jul 28 2023 Print: 8,630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:26 ID:eRc1th_b1mifwHRa5QEZzzyzBQ0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

GRIP

244/190

FT = 20%



LUMBER								
TOP CHORD	2x4 SP N	0.2						
BOT CHORD	2x4 SP N	0.2						
WEBS	2x4 SP N	0.3						
OTHERS	2x4 SP N	0.3						
BRACING								
TOP CHORD	Structural wood sheathing directly applied of 6-0-0 oc purlins, except end verticals.							
BOT CHORD	Rigid ceili bracing.	ing directly applied or 6-0-0 oc						
REACTIONS	(size)	8=7-10-0, 9=7-10-0, 10=7-10-0,						
		11=7-10-0, 12=7-10-0						
	Max Horiz	12=96 (LC 13)						
	Max Uplift	8=-26 (LC 14), 9=-69 (LC 15),						
		11=-70 (LC 14), 12=-29 (LC 15)						
	Max Grav	8=211 (LC 22), 9=230 (LC 22),						
		10=174 (LC 22), 11=230 (LC 21) 12=211 (LC 21)						
FORCES	(lb) - Max	imum Compression/Maximum						
	Tension	-						
TOP CHORD	2-12=-193	3/164, 1-2=0/57, 2-3=-52/62,						
	3-4=-76/1	55, 4-5=-76/156, 5-6=-45/60,						
	6-7=0/57,	6-8=-193/160						
BOT CHORD	11-12=-44	4/85, 10-11=-44/85, 9-10=-44/85,						
	8-9=-44/8	5						
WEBS	4-10=-134	4/0, 3-11=-193/143, 5-9=-193/148						
NOTES								

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 1-11-0, Corner(3R) 1-11-0 to 5-11-0, Corner(3E) 5-11-0 to 8-8-8 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

- braced against lateral movement (i.e. diagonal web). 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 29 lb uplift at joint 12, 26 lb uplift at joint 8, 70 lb uplift at joint 11 and 69 lb uplift at joint 9.
- 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

21),



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

818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB				
23070130-01	GGR	Common Girder	1	2	Job Reference (optional)	160054073			

0-10-8

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

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:26 ID:mIX4RCA3yu3lhLxPq??YxdyzBOU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





3-11-0	7-6-0
3-11-0	3-7-0

Scale = 1:36				•	3-11-0		•	3-7-0						
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	/TPI2014	CSI TC BC WB Matrix-MP	0.33 1.00 0.03	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.16 -0.26 0.05	(loc) 7-10 7-10 2	l/defl >549 >337 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 80 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x6 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 1 Structural wood shea 6-0-0 oc purlins, exc Rigid ceiling directly i (size) 2=0-3-0, 6 Max Horiz 2=85 (LC 1	-6-0 athing directly applie ept end verticals. applied. =0-5-8 11)	4) _{d or} 5) 6)	Wind: ASCE Vasd=103mj Cat. II; Exp B zone; cantile and right exp DOL=1.60 pj TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design.	7-16; Vult=130mp bh; TCDL=6.0psf; 3; Enclosed; MWF ver left and right e posed; porch left and late grip DOL=1.60; 7-16; Pr=20.0 psf .15); Pf=20.0 psf (Is=1.0; Rough Cat =1.10 snow loads have t	h (3-sec BCDL=6 RS (enve xposed nd right o f (roof LL Lum DC B; Fully peen cor	orond gust) .0psf; h=25ft elope) exterior end vertical exposed; Lur .: Lum DOL= DL=1.15 Plate Exp.; Ce=0.1	;; or left nber 1.15 e 9; his	Cc	oncentra Vert: 7=	ted Lo: -335 (I	ads (lb) 3), 12=-335 (B),	13=-335 (B)	
Max Holiz 2=05 (EC 17) Max Uplift 2=-193 (LC 12), 6=-195 (LC 13) Max Grav 2=894 (LC 19), 6=907 (LC 20) 'ORCES (lb) - Maximum Compression/Maximum Tension 'OP CHORD 1-2=0/29, 2-4=-580/196, 4-5=-77/77, 5-6=-173/67 OT CHORD 2-7=-51/59, 6-7=-10/7 VEBS 4-7=-292/34			 (a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c					of min roof live ad of 20.0 psf on b loads. psf bottom ther live loads. load of 20.0psf rectangle sen the bottom						
NOTES 1) 2-ply trus: (0.131"x3 Top chore oc. Bottom cf staggerec Web com: 2) All loads a except if f CASE(S) provided unless off 3) Unbalanc this desin	s to be connected togeti ") nails as follows: Is connected as follows: nords connected as follow d at 0-9-0 oc. nected as follows: 2x4 - are considered equally a noted as front (F) or bac section. Ply to ply conn to distribute only loads r nerwise indicated. ed roof live loads have I n	her with 10d : 2x4 - 1 row at 0-9-0 ws: 2x6 - 2 rows 1 row at 0-9-0 oc. applied to all plies, k (B) face in the LO, ections have been noted as (F) or (B), been considered for	10) 11) 12) AD 13) LO	chord and ar One H2.5A S recommende UPLIFT at jtl and does no This truss is International R802.10.2 a Use Simpsou 11-10dX 1/2 spaced at 2- end to 5-11 chord. Fill all nail hot AD CASE(S)	ny other members. Simpson Strong-Ti ed to connect truss (s) 2 and 6. This co t consider lateral fr designed in accord Residential Code nd referenced star n Strong-Tie HTU2 2 Truss, Single Ply 0-0 oc max. startin 4 to connect truss(ples where hanger Standard	e connection proces. dance w sections idard AN 26 (20-10 Girder) g at 1-1 es) to ba is in cor	ctors ing walls due n is for uplift ith the 2018 R502.11.1 a ISI/TPI 1. Jd Girder, or equivalen 1-4 from the ack face of bo	e to only and t left ottom uber.		A summer		ORTH CA ORTHESS SEA 0363		

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

Vert: 1-4=-60, 4-5=-60, 6-8=-20

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

Increase=1.15 Uniform Loads (lb/ft)

1)

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August 10,2023

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	н	Monopitch	5	1	Job Reference (optional)	160054074

-0-10-8

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

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:26 ID:KTXq?QfDiHz7LXcdC1n?2_yzBRj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





7-0-8

Scale = 1:31.6

Plate Offsets (X, Y): [2:0-4-6,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/TPI2014	CSI TC BC WB Matrix-MP	0.93 0.59 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.32 -0.26 -0.05	(loc) 7-10 7-10 2	l/defl >256 >314 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 28 lb	GRIP 244/190 FT = 20%	_
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD NOTES 1) Wind: AS(Vasd=103 Cat. II; Ex zone and 2-1-8 to 4 cantilever right expo members Lumber D 2) TCLL: AS Plate DOL DOL=1.16 Cs=1.00; 3) Unbalance design.	2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 Left 2x4 SP No.3 Structural wood she 2-2-0 oc purlins, ex Rigid ceiling directly bracing. (size) 2=0-3-0,7 Max Horiz 2=80 (LC Max Uplift 2=-130 (L Max Grav 2=424 (LC (lb) - Maximum Com Tension 1-2=0/16, 2-4=-290/ 4-7=-268/207 2-7=-304/400, 6-7=(CE 7-16; Vult=130mph Brp B; Enclosed; MWFR GC- Exterior(2E) 0-10 -0-8, Exterior(2E) 4-0-8 left and right exposed (sed; porch left and right and forces & MWFRS POL=1.60 plate grip DC CE 7-16; PT=20.0 psf (L =1.15); Is=1.0; Rough Cat E Ct=1.10 ed snow loads have be	1-6-0 athing directly applie cept end verticals. applied or 10-0-0 oc 7= Mechanical 13) C 10), 7=-108 (LC 10 C 21), 7=381 (LC 21) pression/Maximum 447, 4-5=-6/0, 0/0 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior 0-8 to 2-1-8, Interior (3 to 7-0-8 zone; ; end vertical left and the exposed; C-C for for reactions shown; DL=1.60 roof LL: Lum DDL=1 um DDL=1.15 Plate 3; Fully Exp.; Ce=0.9; een considered for thi	 4) This trus load of overhan 5) This trus chord lix 6) * This trus on the basing joint 7. 9) One H2 recomm UPLIFT does no 10) This trus Internati R802.10 LOAD CASI 11) 15 	s has been designed 2.0 psf or 1.00 times gs non-concurrent wit s has been designed e load nonconcurrent uss has been designed ottom chord in all area tall by 2-00-00 wide w d any other members girder(s) for truss to t mechanical connectio plate capable of withs 5A Simpson Strong-T ended to connect trus at jt(s) 2. This connect consider lateral force s is designed in acco onal Residential Code .2 and referenced sta E(S) Standard	for great flat roof I th other li for a 10. with any df or a li with as where vill fit betw. s. rruss connon on (by oth standing 1 Fie conne is to bear ordance w e sections andard AN	er of min roof bad of 20.0 p ve loads. 0 psf bottom other live load e load of 20. a rectangle veen the bott nections. ers) of truss i 108 lb uplift ar ctors ing walls due r uplift only ar ith the 2018 s R502.11.1 a vSI/TPI 1.	f live isf on ads. Opsf om to t e to nd and		An IIIIII		SEA 0363	EEP. AL	2

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

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	H1	Monopitch	1	1	Job Reference (optional)	160054075

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:26 ID:9RTNzvL_Ho91hITa2VJNs?yzBQq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:29

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

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 YES IRC2018/TPI20	CSI TC BC WB 14 Matrix-MP	0.95 0.63 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.34 0.27 -0.06	(loc) 5-8 5-8 1	l/defl >240 >302 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 26 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No BOT CHORD 2x4 SP No BOT CHORD 2x4 SP No SLIDER Left 2x4 S BRACING TOP CHORD Structural except ene BOT CHORD Rigid ceilin bracing. REACTIONS (size) Max Horiz Max Uplift Max Grav FORCES (lb) - Maxi Tension TOP CHORD 1-3=-315/5 BOT CHORD 1-5=-319/4 NOTES 1) Wind: ASCE 7-16; Vul Vasd=103mph; TCDL= Cat. II; Exp B; Enclose zone and C-C Exterior 3-0-0 to 3-9-4, Exteriol cantilever left and right right exposed; porch le members and forces & Lumber DOL=1.60 pl 2) TCLL: ASCE 7-16; Pr= Plate DOL=1.15); Ff=2 DOL=1.15); Is=1.0; Rc Cs=1.00; Ct=1.10 3) Unbalanced snow loacd design. 4) This truss has been de	2.2 0.1 0.3 P No.3 wood she d verticals ng directly 1=0-3-0, (1=75 (LC 1=75 (LC 1=97 (LC 1=356 (LC 1=97 (LC	1-6-0 athing directly applied applied or 10-0-0 oc 3= Mechanical 13) (10), 3=-104 (LC 10) (20), 3=361 (LC 20) (20), 3=361 (LC 20) (20), 3=361 (LC 20) (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior to 3-0-0, Interior (1) 4 to 6-9-4 zone; ; end vertical left and the exposed; C-C for for reactions shown; DL=1.60 roof LL: Lum DOL=1. um DOL=1.15 Plate 3; Fully Exp.; Ce=0.9; even considered for this r a 10.0 psf bottom	 5) * This on the 3-06-C chord 6) Refer 7) Provid bearin joint 3 9) One H recom UPLIF does r 10) This tr Interna R802. 11) Gap b diagor LOAD CA 	truss has been design bottom chord in all are 10 tall by 2-00-00 wide and any other member to girder(s) for truss to g plate at joint(s) 1. The mechanical connecting g plate at joint(s) 1. The mechanical connecting g plate capable of with the mechanical connect tru T at jt(s) 1. This conner to consider lateral forc uss is designed in accu- ational Residential Coo 10.2 and referenced st etween inside of top ch al or vertical web shal SE(S) Standard	ed for a liv ass where will fit betw rs. truss conri ion (by oth ion (by oth standing 1 Tie conne iss to bear ction is for yes. ordance w le sections andard AN nord bear in l not excert	e load of 20.1 a rectangle veen the bott lections. ers) of truss 1 ers) of truss 1 04 lb uplift at ctors ing walls due uplift only ar ith the 2018 i R502.11.1 <i>a</i> ISI/TPI 1. Ig and first ad 0.500in.	Opsf om to to t nd and				SEA 0363	L BEF. BEF. III

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 2) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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)



GI

11111111 August 10,2023

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	H2	Monopitch	3	1	Job Reference (optional)	160054076

7-0-8

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

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:27 ID:9RTNzvL_Ho91hITa2VJNs?yzBQq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:25.4

Plate Offsets (X, Y): [1:0-3-8,Edge]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/	TPI2014	CSI TC BC WB Matrix-MP	0.95 0.62 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.33 -0.27 -0.06	(loc) 6-9 6-9 1	l/defl >243 >305 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 26 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 2x4 S BOT CHORD 2x4 S BOT CHORD 2x4 S SUDER Left 2 BRACING TOP CHORD Struc 2-2-0 BOT CHORD Rigid braci REACTIONS (size) Max H Max U Max G FORCES (lb) - Tens TOP CHORD 1-6=- NOTES 1) Wind: ASCE 7-16 Vasd=103mph; T Cat. II; Exp B; En zone and C-C Ex 3-0-0 to 4-0-8, Ex cantilever left and right exposed; po members and for Lumber DOL=1.6 2) TCLL: ASCE 7-16 Plate DOL=1.15); DOL=1.15); IS=1. Cs=1.00; Ct=1.10; J Unbalanced snow design. 4) This truss has be chord live load no	P No.2 P No.3 X4 SP No.3 tural wood she oc purlins, ex ceiling directly ng. 1= Mecha oriz 1=76 (LC plift 1=-96 (LC rav 1=355 (LC Maximum Corr on 315/524, 3-4=- 318/425, 5-6=(; Vult=130mph CDL=6.0psf; B closed; MWFR bclosed; MWFR bclosed; MWFRS 0 plate grip DC 5; Pr=20.0 psf (L 0; Rough Cat E v loads have be en designed fo inconcurrent w	1-6-0 athing directly applied cept end verticals. applied or 10-0-0 oc 13) 2 10), 6=-110 (LC 10) 2 20), 6=385 (LC 20) pression/Maximum 6/0, 3-6=-270/213 //0 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior to 3-0-0, Interior (1) 8 to 7-0-8 zone; ; end vertical left and it exposed;C-C for for reactions shown; L=1.60 roof LL: Lum DOL=1. um DOL=1.15 Plate b; Fully Exp.; Ce=0.9; then considered for thi r a 10.0 psf bottom th any other live load	5) 6) 7) dor 8) LOA 15 s s.	* This truss h on the bottom 3-06-00 tall b chord and an Refer to girdé Provide mect bearing plate 1 and 110 lb This truss is o International R802.10.2 ar AD CASE(S)	as been designed in chord in all areas y 2-00-00 wide will y other members. er(s) for truss to tru nanical connection capable of withsta uplift at joint 6. designed in accord Residential Code s d referenced stand Standard	for a liv where fit betw ss conr (by oth nding 9 ance w ections dard AN	e load of 20.0 a rectangle veen the botto nections. ers) of truss to 6 lb uplift at jo ith the 2018 R502.11.1 a ISI/TPI 1.)psf om opint nd		1 Contraction of the second se		SEA OBCERSS SEA O3633	ROUL 22 EREAL	

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	HGE	Monopitch Supported Gable	1	1	Job Reference (optional)	160054077

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:27 ID:1aYKOOAVMhpxxEzIlwYOtKyzBSM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:31.5

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

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	0.16 0.12 0.07	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 2	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 31 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Left 2x4 S Structura 6-0-0 oc Rigid ceil bracing. (size) Max Horiz Max Uplift Max Grav	0.2 0.2 0.3 0.3 SP No.3 1 I wood sheat purlins, exc ing directly 2=7-0-8, 7 9=7-0-8, 1 2=80 (LC 2=-41 (LC (LC 14), 9 14), 11=-4 2=226 (LC (LC 21), 9 (LC 21), 1	I-6-0 athing directly applie cept end verticals. applied or 10-0-0 oc ?=7-0-8, 8=7-0-8, 10=7-0-8, 11=7-0-8 13), 11=80 (LC 13) : 10), 7=-3 (LC 13), 8 I=-14 (LC 10), 10=-6 I1 (LC 10) C 21), 7=1 (LC 21), 8 I=120 (LC 21), 10=3 1-226 (LC 21)	ed or c 8=-14 11 (LC 3=85 68	 Truss desig only. For sti see Standar or consult qr TCLL: ASCE Plate DOL= DOL=1.15); Cs=1.00; Ct Unbalanced design. This truss ha load of 12.0 overhangs r Gable requii Gable studs This truss ha chord live 0:0 * This truss on the botto 3-06-00 tall 	ned for wind load uds exposed to w d Industry Gable Jalified building de 7-16; Pr=20.0 psf Is=1.0; Rough Ca =1.10; Rough Ca snow loads have as been designed psf or 1.00 times ion-concurrent wit res continuous bo spaced at 2-0-0 d as been designed has been designed m chord in all are: by 2-00-00 wide v	is in the p ind (norm End Deta esigner as sf (roof LL f (Lum DC at B; Fully been cor l for great flat roof ld th other li ht totm chor oc. f or a 10.4 t with any sd for a liv as where vill fit betv	lane of the tri al to the face ils as applica s per ANSI/T :: Lum DOL= DL=1.15 Plate Exp.; Ce=0. asidered for t er of min rooi oad of 20.0 p <i>re</i> loads. d bearing. D psf bottom other live loa e load of 20. a rectangle veen the bott	uss s), ble, PI 1. 1.15 9; his f live sf on ads. Opsf om					
FORCES	(lb) - Max Tension	timum Com	pression/Maximum		cnord and a 10) Provide med bearing plat	ny other members chanical connections canable of withs	s. on (by oth standing /	ers) of truss	to ioint				minin	unin,
TOP CHORD	1-2=0/16 5-6=-32/4	, 2-4=-89/8 16, 6-7=-5/0	1, 4-5=-43/52,), 6-8=-69/54		2, 3 lb uplift joint 10, 14 l	at joint 7, 14 lb up b uplift at joint 9 a	olift at join and 41 lb	t 8, 61 lb upli uplift at joint	ift at 2.			AN	OR HESS	ROLIN
BOT CHORD	2-10=-26	/48, 9-10=-: z/224 5 0	26/48, 8-9=-26/48		11) This truss is	designed in acco	ordance w	ith the 2018			1	22	OFE	PN: SIN
NOTES	4-10=-26	1/234, 5-9=	-112/100		Internationa	Residential Code	e sections	5 K502.11.1 a	and		-	V	:2	12/1
 Wind: ASI Vasd=103 Cat. II; Ex zone and 2-1-8 to 7 end vertic forces & N DOL=1.60 	CE 7-16; Vu 3mph; TCDL cp B; Enclos C-C Corner -0-8 zone; c cal left and ri MWFRS for 0 plate grip I	It=130mph =6.0psf; B0 ed; MWFR3 (3E) -0-10-10- ght expose reactions sl DOL=1.60	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio 8 to 2-1-8, Exterior(2 ft and right exposed d;C-C for members hown; Lumber	or 2N) I ; and	OAD CASE(S)	Standard					THE DAY	A MARTINE AND	SEA 0363	EER.R.

- 2-1-8 to 7-0-8 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
 - WARNING Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BC2E Building Component Schut beformation, available from the Structure Building Component Advanciation (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

GI minim August 10,2023

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	1	Jack-Open	9	1	Job Reference (optional)	160054078

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:27 ID:crXu80texbJNcE7reHwwFyyzBEX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:29.7

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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-MR	0.43 0.29 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.02 -0.03	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 17 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No. 2x4 SP No. 2x4 SP No. 2x4 SP No. Structural V 4-0-0 oc pu Rigid ceilin bracing. (size) { Max Horiz { Max Horiz { Max Uplift { Max Grav {	2 2 3 vood she: g directly 3= Mecha 5=0-5-8 5=133 (LC 3=-92 (LC 3=176 (LC	athing directly applie cept end verticals. applied or 10-0-0 oc nical, 4= Mechanica 2 14) 14), 4=-3 (LC 14) 2 21), 4=72 (LC 7), 5	6) 7) d or 8) ; 9) I, 10 =307 LC	* This truss h on the botton 3-06-00 tall b chord and an All bearings a capacity of 4. Refer to girdd Provide mecl bearing plate 3 and 3 lb up 0) This truss is International R802.10.2 ar	as been designed in chord in all areas y 2-00-00 wide will y other members. are assumed to be 25 psi. er(s) for truss to tru nanical connection capable of withsta lift at joint 4. designed in accord Residential Code s d referenced stand Standard	for a liv where fit betv User D ss conr (by oth nding 9 ance w sections dard AN	e load of 20. a rectangle veen the bot efined crush nections. ers) of truss 2 lb uplift at kt the 2018 R502.11.1 ISI/TPI 1.	.0psf tom to joint and					
FORCES TOP CHORD BOT CHORD	(lb) - Maxin Tension 2-5=-284/8 4-5=0/0	num Com 5, 1-2=0/3	pression/Maximum 39, 2-3=-143/87											
NOTES 1) Wind: ASG Vasd=103 Cat. II; Ex zone and exposed ; members Lumber D 2) TCLL: AS Plate DOL DOL=1.15 Cs=1.00; 3) Unbalance design. 4) This truss load of 12 overhange 5) This truss chord live	CE 7-16; Vult Bmph; TCDL= p B; Enclosec C-C Exterior(end vertical I and forces & IOL=1.60 plat CE 7-16; Pr=2i D; Is=1.0; Rot C=1.10 ed snow load: has been de: .0 psf or 1.00 s non-concurr has been de: load nonconc	=130mph 6.0psf; B0 1; MWFR 2E) zone; eft and rig MWFRS e grip DO 20.0 psf (L 0.0 psf (L 1.0gh Cat B s have be signed for times flat ent with c signed for zurrent wi	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and right ht exposed;C-C for for reactions shown; L=1.60 roof LL: Lum DOL=1 um DOL=1.15 Plate ; Fully Exp.; Ce=0.9 en considered for th greater of min roof I roof load of 20.0 ps ther live loads. a 10.0 psf bottom th any other live loads	ight .15 ; is live f on							A contraction of the		SEA 0363	L L L L B H H H H H H H H H H H H H H H

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	11	Half Hip	1	1	Job Reference (optional)	160054079

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:27 ID:oyh2Rm0XL_ipQxTyo5dVCHyzBEM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:35.5

Plate Offsets ((X, Y): [3:0-4-4,0-2-0]												
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.15 0.05 0.04	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: 32 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 shea 4-0-0 oc purlins, exu 2-0-0 oc purlins: 3-4 Rigid ceiling directly bracing. (size) 5= Mecha Max Horiz 7=121 (LC Max Uplift 5=-54 (LC	athing directly applie cept end verticals, ar applied or 10-0-0 oc inical, 7=0-5-8 C 11) C 11), 7=-24 (LC 14)	4) 5) nd 7) c 8) 9) 10	Unbalanced design. This truss ha load of 12.0 g overhangs no Provide adec This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Refer to girdd One H2 5A S	snow loads have b s been designed for psf or 1.00 times fla on-concurrent with uate drainage to p s been designed for ad nonconcurrent w has been designed n chord in all areas by 2-00-00 wide will by other members. er(s) for truss to trus impson Strong-Tie	een cor or great at roof k other liv revent or a 10.0 /ith any for a liv s where I fit betw uss con	er of min roof pad of 20.0 ps ve loads. water ponding 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto nections.	nis live g. ds. Opsf					
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this desig 2) Wind: ASG Vasd=103	Max Grav 5=150 (LC (lb) - Maximum Com Tension 1-2=0/63, 2-3=-153/; 4-5=-51/25, 2-7=-29 6-7=-118/136, 5-6= 3-6=-4/87, 3-5=-166, ed roof live loads have n. CE 7-16; Vult=130mph Smph; TCDL=6.0psf; B(C 35), 7=319 (LC 36) pression/Maximum 36, 3-4=-39/57, 7/126 41/95 /68, 2-6=-40/120 been considered for (3-second gust) CDL=6.0psf; h=25ft;) 11 12 r LC	recommende UPLIFT at jt(and does not) This truss is International R802.10.2 ar) Graphical pu or the orienta bottom chorc DAD CASE(S)	ed to connect truss s) 7 and 5. This co t consider lateral fo designed in accorc Residential Code s and referenced stan rlin representation ation of the purlin a standard	to bear nnectio rces. lance w sections dard AN does no long the	ing walls due in is for uplift of R502.11.1 a ISI/TPI 1. of depict the s top and/or	to only ind size			A A A A A A A A A A A A A A A A A A A	OR JEESS	ROUT

- Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 2-9-10, Exterior(2E) 2-9-10 to 3-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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

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GILB

11111111 August 10,2023

SEAL 036322

Vanananan



Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	J	Jack-Open	2	1	Job Reference (optional)	160054080

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:28 ID:wY4gRT_LHtvJeN9W1caV_MyzBD5-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1





3x5 🛛

3-4-0

Scale = 1:27.8

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

											_
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 0.21 BC 0.11 WB 0.00 Matrix-MP	DEFL Vert(LL) Vert(CT) Horz(CT)	in (I -0.01 -0.01 0.01	oc) / 5-8 > 5-8 > 2	defl L/d 999 240 999 180 n/a n/a	PLATES MT20 Weight: 14 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 3OT CHORD 3LIDER BRACING TOP CHORD 3OT CHORD 3OT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD NOTES 1) Wind: ASC Vasd=103i Cat. II; Exp zone and C exposed ; i members a Lumber DC 2) TCLL: ASC Plate DOL DOL=1.15; Cs=1.00; C 3) Unbalance design. 4) This truss load of 12. overhangs	2x4 SP No.2 2x4 SP No.2 Left 2x4 SP No.3 1 Structural wood sheat 3-4-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8,4 Mechanica Max Horiz 2=74 (LC Max Uplift 2=-18 (LC Max Uplift 2=-18 (LC (Ib) - Maximum Com Tension 1-2=0/36, 2-4=-96/42 2-5=-110/78 EF 7-16; Vult=130mph mph; TCDL=6.0psf; BG D=1.60 plate grip DO CE 7-16; Pr=20.0 psf (LI =1.15); Pf=20.0 psf (LI =1.10) d snow loads have be has been designed for 0 psf or 1.00 times flat non-concurrent with o	I-6-0 athing directly applied applied or 10-0-0 oc I= Mechanical, 5= al 14) 14), 4=-44 (LC 14) 21), 4=124 (LC 21), 7) pression/Maximum 4 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and right exposed; C-C for for reactions shown; L=1.60 roof LL: Lum DOL=1. Im DOL=1.15 Plate ; Fully Exp.; Ce=0.9; en considered for thi greater of min roof II roof load of 20.0 psf ther live loads.	 5) This truss has chord live lo 6) * This truss on the botton 3-06-00 tall the chord and at 7) All bearings capacity of 4 8) Refer to gird 9) Provide mechanism bearing platt 4. 10) One H2.5A 3 recommend UPLIFT at it does not cor 11) This truss is International R802.10.2 a LOAD CASE(S) 	as been designed for a 1 ad nonconcurrent with an has been designed for a n chord in all areas when by 2-00-00 wide will fit by y other members. are assumed to be User (25 psi. er(s) for truss to truss co hanical connection (by o e capable of withstanding Simpson Strong-Tie com (s) 2. This connection is insider lateral forces. designed in accordance Residential Code sectio nd referenced standard / Standard	0.0 psf bottom y other live load ive load of 20.0 e a rectangle tween the botto Defined crushin mections. hers) of truss to 44 lb uplift at jo ectors tring walls due t or uplift only and with the 2018 as R502.11.1 ar INSI/TPI 1.	ds. psf m g bint d		A COMPANY AND A COMPANY AN	SEA 0363	EER. K	

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V1	Valley	1	1	Job Reference (optional)	160054081

TCDL

BCLL

BCDL

1)

2)

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:28 ID:DTBTk2iEBbrKjDFXxKE1mCyzBJw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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August 10,2023



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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V2	Valley	1	1	Job Reference (optional)	160054082

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:28 ID:XFryJlebWm?dvpUHJx6YFyyzBHQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

GRIP

244/190

FT = 20%



TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	Structural	wood sheathing directly applied
	6-0-0 oc p	purlins.
BOT CHORD	Rigid ceili	ng directly applied or 6-0-0 oc
	bracing.	
REACTIONS	(size)	1=13-9-0, 5=13-9-0, 6=13-9-0,
		7=13-9-0, 8=13-9-0
	Max Horiz	1=-131 (LC 12)
	Max Uplift	1=-26 (LC 10), 6=-148 (LC 15),
		8=-151 (LC 14)
	Max Grav	1=115 (LC 24), 5=91 (LC 23),
		6=444 (LC 21), 7=288 (LC 21),

Scale = 1:42.2 Loading

TCLL (roof)

Snow (Pf)

LUMBER

FORCES

TOP CHORD

TCDL

BCLL

BCDL

- 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 d or DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
 - Unbalanced snow loads have been considered for this 5) desian.

see Standard Industry Gable End Details as applicable,

- 6) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc. 7)
- This truss has been designed for a 10.0 psf bottom 8)
- 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 26 lb uplift at joint 1, 151 lb uplift at joint 8 and 148 lb uplift at joint 6.
- 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



mmm August 10,2023

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Edenton, NC 27932

VIVILLE IN THE

818 Soundside Road

4-5=-113/83 BOT CHORD 1-8=-50/113, 7-8=-50/91, 6-7=-50/91, 5-6=-50/91 WEBS 3-7=-206/0. 2-8=-374/193. 4-6=-374/191 NOTES Unbalanced roof live loads have been considered for 1) this design. Wind: ASCE 7-16; Vult=130mph (3-second gust) 2)

Tension

8=444 (LC 20)

(Ib) - Maximum Compression/Maximum

1-2=-143/120, 2-3=-191/116, 3-4=-191/114,

Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 2-10-13, Interior (1) 2-10-13 to 3-10-13, Exterior(2R) 3-10-13 to 9-10-13, Interior (1) 9-10-13 to 10-9-5, Exterior(2E) 10-9-5 to 13-9-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V3	Valley	1	1	Job Reference (optional)	160054083

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:29 ID:XFryJlebWm?dvpUHJx6YFyyzBHQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



11-4-3

Scale = 1:40.6

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 IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.32 0.12 0.09	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 46 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=11-4-3, 7=11-4-3, Max Horiz 1=-107 (LI Max Uplift 1=-39 (LC 6=-134 (LI Max Grav 1=75 (LC (LC 21), 7 20)	athing directly applied applied or 10-0-0 oc 5=11-4-3, 6=11-4-3, 8=11-4-3 C 10) 10), 5=-12 (LC 11), C 15), 8=-138 (LC 14) 24), 5=56 (LC 26), 6=4 =252 (LC 21), 8=442 (3) or 5) 6) 7) 8) 9) LC	Truss desig only. For stu- see Standarn or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct- Unbalanced design. Gable requir Gable studs This truss ha chord live loc * This truss h on the bottor 3-06-00 tall th	ned for wind load uds exposed to w d Industry Gable ualified building d 57-16; Pr=20.0 ps I.15); Pf=20.0 ps Is=1.0; Rough Ca =1.10 snow loads have es continuous bo spaced at 4-0-0 as been designe n chord in all are by 2-00-00 wieb w other member	s in the p ind (norm End Deta esigner as for cof LL (Lum DC at B; Fully been cor ttom chor oc. for a 10.0 for a 10.0 with any d for a liv as where vill ft betw	lane of the tru al to the face ils as applica s per ANSI/TI : L'um DOL= DL=1.15 Plate Exp.; Ce=0.9 nsidered for the d bearing. 0 psf bottom other live loa re load of 20.0 a rectangle veen the bottom	uss), ble, PI 1. 1.15 e; his ds. Dpsf					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	10) Provide mec	hanical connection	on (by oth standing 3	ers) of truss t	o oint					
TOP CHORD	1-2=-123/101, 2-3=-2 4-5=-100/66	224/112, 3-4=-224/112	,	1, 12 lb uplift	t at joint 5, 138 lb	uplift at jo	pint 8 and 13	4 lb					
BOT CHORD	1-8=-33/74, 7-8=-25/ 5-6=-34/74	74, 6-7=-25/74,	11) This truss is International	designed in acco Residential Code	rdance w	ith the 2018 s R502.11.1 a	ind				mm	un.
WEBS	3-7=-163/0, 2-8=-434	4/243, 4-6=-434/243		R802.10.2 a	nd referenced sta	indard AN	NSI/TPI 1.	-				WTH CA	Roil
NOTES			LC	DAD CASE(S)	Standard							A	1

- 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 8-4-8, Exterior(2E) 8-4-8 to 11-4-8 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
 - 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)

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V4	Valley	1	1	Job Reference (optional)	160054084

1)

2)

3)

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:29 ID:XFryJlebWm?dvpUHJx6YFyyzBHQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V5	Valley	1	1	Job Reference (optional)	160054085

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:29 ID:XFryJlebWm?dvpUHJx6YFyyzBHQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



6-6-10



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	0.20 0.21 0.07	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 24 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No 2x4 SP No 2x4 SP No Structural 6-6-10 oc Rigid ceili bracing. (size) Max Horiz Max Uplift Max Grav	0.2 0.2 0.3 wood she: purlins. ng directly 1=6-6-10, 1=50 (LC 1=-5 (LC : (LC 14) 1=102 (LC 4=457 (LC	athing directly applie applied or 6-0-0 oc 3=6-6-10, 4=6-6-10 11) 21), 3=-5 (LC 20), 4 2 20), 3=102 (LC 21 2 20)	ed or 0 1),	 5) Unbalanced design. 6) Gable requir 7) Gable studs 8) This truss ha chord live loa 8) This truss ha on the bottor 3-06-00 tall b chord and ar 10) Provide mec bearing plate 1, 5 lb uplift a 11) This truss is International 880210 2 ar 	snow loads have b es continuous both spaced at 4-0-0 oc is been designed fr ad nonconcurrent v has been designed in chord in all areas by 2-00-00 wide wil y other members. hanical connection e capable of withsta at joint 3 and 60 lb designed in accord Residential Code ad referenced stan	been cor om chor or a 10.0 vith any for a liv s where I fit betw (by oth anding 5 uplift at dance w sections dard Ab	asidered for t d bearing. D psf bottom other live loa e load of 20. a rectangle veen the bott ers) of truss : I b uplift at jc joint 4. ith the 2018 R 502.11.1 a	his Dpsf om int					
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Maxi Tension 1-2=-88/18 1-4=-136/ 2-4=-316/	mum Com 88, 2-3=-8 134, 3-4=- 168	pression/Maximum 8/188 136/134		-OAD CASE(S)	Standard		101/1F11.						

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) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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



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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V6	Valley	1	1	Job Reference (optional)	160054086

2-0-14

2-0-14

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

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:29 ID:?RPKW5fDG37UXz3Ttedno9yzBHP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

3-9-11

1-8-12

Page: 1





4-1-13

4x5 =

Scale - 1.24 0

Scale = 1:24.9													
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 IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.06 0.08 0.03	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 14 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 4-1-13 oc purlins. Rigid ceiling directly bracing. (size) 1=4-1-13, Max Horiz 1=37 (LC Max Uplift 1=-1 (LC (LC 14) Max Grav 1=79 (LC (LC 20)	athing directly applie applied or 6-0-0 oc 3=4-1-13, 4=4-1-13 11) 14), 3=-8 (LC 15), 4= 20), 3=79 (LC 21), 4	5) 6) 7) 8) ed or 9) 25 25 23 23 23	Unbalanced design. Gable requir Gable studs This truss ha chord live loi: * This truss l on the bottor 3-06-00 tall l chord and ar) Provide mec bearing plate 1, 8 lb uplift.) This truss is International	snow loads have es continuous bot spaced at 4-0-0 c as been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide w hy other members hanical connectio e capable of withs at joint 3 and 25 ll designed in accon Residential Code	been cor tom chor c. for a 10. with any d for a liv as where rill fit betv i. n (by oth tanding 1 o uplift at rdance w s sections	hsidered for the d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t lb uplift at joi joint 4. ith the 2018 R502.11.1 a	ds. Dpsf om o int					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	LC	R802.10.2 a AD CASE(S)	nd referenced sta Standard	ndard Ar	ISI/TPI 1.						
TOP CHORD BOT CHORD WEBS	1-2=-72/76, 2-3=-72 1-4=-60/69, 3-4=-60 2-4=-136/67	/76 /69											
NOTES													
1) Unbalance	ed roof live loads have	been considered for	r										11.
 this design Wind: ASC Vasd=103 Cat. II; Ex zone and exposed ; members Lumber D Truss des only. For see Stand or consult TCLL: AS Plate DOL DOL=1.15 Cs=1.00; 	n. CE 7-16; Vult=130mph smph; 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 DC signed for wind loads in studs exposed to wind 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	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio ; cantilever left and r ght exposed;C-C for for reactions shown; DL=1.60 n the plane of the tru I (normal to the face) d Details as applicat gner as per ANSI/TF roof LL: Lum DOL=1 a; Fully Exp.; Ce=0.9	r ight ss , ole, Pl 1. I.15 ;							M. M. MILLINN.	The second secon	SEA 0363	EER. KINN

August 10,2023



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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V11	Valley	1	1	Job Reference (optional)	160054087

9-6-0

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

7-11-4

0-0-4

2-0-0

12 10 F 2

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2x4 🖌

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:30 ID:MUJwr2X04VK7oB8VeTRuFYyzBGG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

> 3x5 II 4

Page: 1

2x4 II 12 3 11 7-11-4 10 2x4 5 6 3x5 II 2x4 u 2x4 II 9-6-0 CSI DEFL L/d PLATES in (loc) l/defl GRIP 244/190 FT = 20%



TCLL (roof)	20.0	Plate Grip DOL	1.15	5	TC	0.65	Vert(LL)	n/a	-	n/a	999	MT20
TCDI	20.0	Rep Stress Incr			WB	0.17	Horiz(TL)	n/a	- 5	n/a	999 n/a	
BCU	10.0	Code	IRC	2018/TPI2014	Matrix-MSH	0.15		0.00	5	II/a	n/a	
BCDL	10.0	out		2010/11/2014								Weight: 50 lb
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood sh 6-0-0 cc purlins, e Rigid ceiling direct bracing	eathing directly appli xcept end verticals. y applied or 10-0-0 o	ed or c	 TCLL: AS(Plate DOL DOL=1.15 Cs=1.00; (Unbalance design. Gable required Gable stud This truss chord live 	CE 7-16; Pr=20.0 p =1.15); Pf=20.0 psi ; Is=1.0; Rough Ca Ct=1.10 d snow loads have uires continuous bo ls spaced at 4-0-0 has been designed load nonconcurrent	sf (roof Ll f (Lum DC at B; Fully been co bttom cho oc. I for a 10. t with any	L: Lum DOL= DL=1.15 Plate (Exp.; Ce=0. nsidered for t rd bearing. 0 psf bottom (other live loa	:1.15 e 9; his ads.				
REACTIONS	(size) 1=9-6-0, Max Horiz 1=271 (L Max Uplift 1=-91 (L 6=-136 (Max Grav 1=159 (L 6=508 (L	5=9-6-0, 6=9-6-0, 7= .C 11) C 12), 5=-65 (LC 11) LC 14), 7=-100 (LC 2 .C 11), 5=218 (LC 5) .C 5), 7=307 (LC 23)	=9-6-0 , 14)	 8) * This trus on the bot 3-06-00 ta chord and 9) Provide m bearing pla 5, 91 lb ur 	s has been designed om chord in all are Il by 2-00-00 wide v any other members echanical connection ate capable of withs	ed for a liv as where will fit betw s, with BC on (by oth standing 6	ve load of 20. a rectangle ween the bott CDL = 10.0ps hers) of truss 65 lb uplift at	Opsf com f. to joint				
FORCES	(lb) - Maximum Co Tension 1-2=-272/327, 2-3=	mpression/Maximum -224/278, 3-4=-174/	157,	uplift at joi 10) This truss	nt 7. is designed in acco al Residential Code	ordance w	vith the 2018	and				
BOT CHORD WEBS	4-5=-171/72 1-7=-118/134, 6-7= 3-6=-393/257, 2-7=	96/134, 5-6=-96/13 223/202	4	R802.10.2	and referenced sta S) Standard	andard Al	NSI/TPI 1.					
NOTES 1) Wind: AS0 Vasd=103 Cat. II; Ex	CE 7-16; Vult=130mp mph; TCDL=6.0psf; I p B; Enclosed; MWFI	h (3-second gust) 3CDL=6.0psf; h=25ft RS (envelope) exterio	; pr							6	A. I. I.	OR EESSI

one and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-1-10, Exterior(2R) 5-1-10 to 9-4-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

(psf)

Spacing

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.

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August 10,2023



Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V12	Valley	1	1	Job Reference (optional)	160054088

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:30 ID:BehB56cngL4GW6cf?kYJVpyzBGA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:42.3

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	0.74	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.20	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.11	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018	3/TPI2014	Matrix-MP								
BCDL	10.0											Weight: 42 lb	FT = 20%
LUMBER			3)	TCLL: ASCE	7-16; Pr=20.0 psf	(roof Ll	.: Lum DOL=1	.15					
TOP CHORD	2x4 SP No.2			Plate DOL=1	.15); Pf=20.0 psf (I	Lum DC	DL=1.15 Plate						
BOT CHORD	2x4 SP No.2			DOL=1.15);	s=1.0; Rough Cat	B; Fully	Exp.; Ce=0.9	;					
WEBS	2x4 SP No.3			Cs=1.00; Ct=	■1.10								
OTHERS	2x4 SP No.3		4)	Unbalanced	snow loads have b	een cor	nsidered for th	is					
BRACING				design.									
TOP CHORD	Structural wood shea	athing directly applie	dor ⁵⁾	Gable require	es continuous botto	om choi	d bearing.						
	6-0-0 oc purlins, exc	cept end verticals.	6)	Gable studs	spaced at 4-0-0 oc	-							
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	7)	This truss ha	s been designed fo	or a 10.	0 psf bottom						
	bracing.		•	chord live loa	id nonconcurrent w	vith any	other live load	ds.					
REACTIONS	(size) 1=8-3-10,	4=8-3-10, 5=8-3-10	8)	^ This truss r	las been designed	for a liv	e load of 20.0	pst					
	Max Horiz 1=235 (LC	C 11)		on the botton	n chord in all areas	s wnere	a rectangle	-					
	Max Uplift 1=-19 (LC	10), 4=-58 (LC 11),		s-00-00 tail t	y 2-00-00 wide wil	with PC		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
	5=-165 (L	C 14)	a)	Provide med	hanical connection	(by oth	DL = 10.0psi.	Դ					
	Max Grav 1=199 (LC	C 24), 4=201 (LC 5),	5)	bearing plate	canable of withsta	andina f	8 lb unlift at in	oint					
	5=552 (LC	5)		4. 19 lb uplift	at joint 1 and 165	lb uplift	at joint 5.	Jiin					
FORCES	(lb) - Maximum Com	pression/Maximum	10) This truss is	designed in accord	lance w	ith the 2018						
	Tension		-	International	Residential Code s	sections	R502.11.1 a	nd					
TOP CHORD	1-2=-259/278, 2-3=-	171/157, 3-4=-163/76	6	R802.10.2 a	nd referenced stan	dard AN	ISI/TPI 1.						
BOT CHORD	1-5=-83/208, 4-5=-83	3/119	LC	AD CASE(S)	Standard								
WEBS	2-5=-419/319			()									
NOTES													111
1) Wind: AS	CE 7-16; Vult=130mph	(3-second gust)										1111 01	E III
Vasd=103	3mph; TCDL=6.0psf; B0	CDL=6.0psf; h=25ft;										TH UA	ROUL
Cat. II; Ex	(p B; Enclosed; MWFRS)	S (envelope) exterior									2	A STER	Del Alte
zone and	C-C Exterior(2E) 0-0-5	to 3-0-5, Interior (1)								/	52		PN: Sin
3-0-5 to 3	-11-4, Exterior(2R) 3-1	1-4 to 8-2-2 zone;								4	12		A. A.
cantilever	left and right exposed	; end vertical left and									14	.4	
right expo	sed;C-C for members a	and forces & MWFRS	5							=		SEA	n <u>a s</u>
for reaction	ons snown; Lumber DO	L=1.60 plate grip								- 8		000	
2) Truce de	U algood for wind loads in	the plane of the true										0363	22 : 3
	signed for wind loads in	(normal to the face)	55								3		1 5
See Stop	and Industry Gable End	(normal to the race),									2	· ~	A 1. 3
or consult	t qualified building desig	ner as per ANSI/TP	10,								2.0	NGINI	EENIAS
01 0011001	a dearnou bunanig abole		• ••								1	2/2·19/11	The CAN
											1	i'C'A O	IL BY IN

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GI 11111111 August 10,2023

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V13	Valley	1	1	Job Reference (optional)	160054089

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:30 ID:0o2TM9gXFBrQE13pL?fjk4yzBG4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:38

				_										
Loading		(psf)	Spacing	2-0-0		CSI	0.50	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.15			0.52	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Show (Pf)		20.0	Lumber DOL	1.15		BC	0.12	Vert(IL)	n/a	-	n/a	999		
TCDL		10.0	Rep Stress Incr	TES		VVB	0.09	Horiz(IL)	0.00	4	n/a	n/a		
BCLL		10.0	Code	IRC2018	3/TPI2014	Matrix-MP							Waint OF th	FT 200/
BCDL		10.0		-									Weight. 35 lb	F1 = 20%
LUMBER TOP CHORD BOT CHORD	2x4 SP No 2x4 SP No 2x4 SP No).2).2		4) 5)	Unbalanced a design. Gable require	snow loads have be as continuous botto	een cor om chor	nsidered for th d bearing.	nis					
OTHERS	2x4 SF No	.3		7)	This truss ha	s been designed fo	ora 10 i) nsf bottom						
BRACINC	274 01 100			• • • •	chord live loa	d nonconcurrent w	ith anv	other live loa	ds.					
TOP CHORD	Structural 6-0-0 oc p Rigid ceili	wood shea urlins, exa ng directly	athing directly applied cept end verticals. applied or 10-0-0 oc	dor 8)	* This truss h on the botton 3-06-00 tall b	as been designed n chord in all areas y 2-00-00 wide will	for a liv where fit betv	e load of 20.0 a rectangle veen the botto	Opsf om					
	bracing.			0)	chord and an	y other members.	(h., ath							
REACTIONS	(size)	1=7-1-3, 4	1 =7-1-3, 5=7-1-3	9)	bearing plate	canable of withsta	(by oth Inding 5	ers) or truss t 3 lb unlift at i	.0 oint					
	Max Horiz	1=199 (LC	C 11)		4 26 lb unlift	at joint 1 and 148	lh unlift	at joint 5	oint					
	Max Uplift	1=-26 (LC	: 10), 4=-53 (LC 11),	10) This truss is	designed in accord	ance w	ith the 2018						
		5=-148 (L	C 14)		International	Residential Code s	sections	R502.11.1 a	ind					
	Max Grav	1=137 (LC	24), 4=198 (LC 20),		R802.10.2 ar	nd referenced stand	dard AN	ISI/TPI 1.						
FORCES	(lb) Movi	5=400 (LC	proposion/Movimum	LC	AD CASE(S)	Standard								
FURCES	(ID) - Maxi		pression/maximum											
TOP CHORD	1-2=-183/	256 2-3=-	155/148 3-4=-167/71											
BOT CHORD	1-5=-70/1	51. 4-5=-7	0/102											
WEBS	2-5=-383/2	290												
NOTES														
 Wind: AS(Vasd=103 Cat. II; Ex zone and exposed; ; members Lumber D Truss des only. For see Stand or consult TCLL: AS Plate DOL DOL=1.15 Cs=1.00; (CE 7-16; Vul imph; TCDL: p B; Enclose C-C Exterior end vertical and forces & OL=1.60 pla signed for wi studs expos lard Industry qualified bu CE 7-16; Pr= =1.15; Pf= 5); Is=1.0; Rc Ct=1.10	t=130mph 66.0psf; B(d; MWFR3 (2E) zone; left and rig MWFRS te grip DO nd loads ir ed to wind Gable Enc Iding desig :20.0 psf (L ough Cat B	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and rig ht exposed;C-C for for reactions shown; L=1.60 h the plane of the trus (normal to the face), d Details as applicabl gner as per ANSI/TPI coof LL: Lum DOL=1. to DDL=1.15 Plate ; Fully Exp.; Ce=0.9;	ght s e, 1. 15							Withinton		SEA 0363	

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V14	Valley	1	1	Job Reference (optional)	160054090

5-10-13

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

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:30 ID:MmrMPskg4jTiKoxm8YEuR8yzBG?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

2x4 II



5-10-13

Scale = 1:33.7

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	3/TPI2014	CSI TC BC WB Matrix-MP	0.35 0.12 0.10	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 27 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS DTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood sheat 5-10-13 oc purlins, of Rigid ceiling directly bracing. (size) 1=5-10-13 Max Horiz 1=163 (LC 5=-133 (L' Max Grav 1=98 (LC 5=-133 (L' Max Grav 1=98 (LC 5=-416 (LC (lb) - Maximum Com Tension 1-2=-222/247, 2-3=- 1-5=-69/84, 4-5=-57, 2-5=-416/334 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 studs exposed to wind lard Industry Gable Enc qualified building desig CE 7-16; Pr=20.0 psf (Li =1.15); Pf=20.0 psf (Li 5); Is=1.0; Rough Cat B CI=1.10	athing directly applied except end verticals. applied or 10-0-0 oc 3, 4=5-10-13, 5=5-10- C 11) (12), 4=-46 (LC 11), C 14) (11), 4=199 (LC 20), C 20) pression/Maximum 155/134, 3-4=-165/64/ 84 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and right exposed;C-C for for reactions shown; U=1.60 the plane of the trus (normal to the face), d Details as applicabl gner as per ANSI/TPI roof LL: Lum DOL=1. um DOL=1.15 Plate b; Fully Exp.; Ce=0.9;	4) 5) 6) 7) d or 8) 10 LC 4 ght is is ie, 1. 15	Unbalanced design. Gable require Gable studs This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Provide mecl bearing plate 4, 49 lb uplift) This truss is International R802.10.2 ar	snow loads have l es continuous bott spaced at 4-0-0 o s been designed i d nonconcurrent as been designed n chord in all area y 2-00-00 wide w y other members nanical connection capable of withst at joint 1 and 133 designed in accor Residential Code d referenced star Standard	been cor tom chor c. for a 10.0 with any d for a liv is where ill fit betw n (by oth tanding 4 b uplift rdance w sections ndard AN	Isidered for the d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss t 6 lb uplift at j at joint 5. ith the 2018 R502.11.1 a ISI/TPI 1.	his Ids. Opsf om oont and				SEA 0363	L 22 EEERER	in annunder
Cs=1.00;	UT=1.10											A. G	ILL.	

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V15	Valley	1	1	Job Reference (optional)	160054091

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Wed Aug 09 12:00:31 ID:f6m?tGq3QtLjgt_72WsXDcyzBFu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

3-6-12 4-8-6 3-6-12



Scale = 1:31.4

DOL=1.60

3)

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

zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 3-7-1, Exterior(2E) 3-7-1 to 4-6-15 zone;

cantilever left and right exposed ; end vertical left and

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

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.

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-MR	0.51 0.34 0.00	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: 18 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 4-8-6 oc purlins; ex 2-0-0 oc purlins: 2-3 Rigid ceiling directly	athing directly applie cept end verticals, a applied or 10-0-0 or	4) 5) ed or nd 6) 7) 5 8)	TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design. Provide adea Gable requir Gable studs	7-16; Pr=20.0 ps 1.15); Pf=20.0 ps Is=1.0; Rough Ca =1.10 snow loads have quate drainage to es continuous bo spaced at 4-0-0 0	sf (roof LL f (Lum DC at B; Fully been cor prevent v ttom chor oc.	L: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 Insidered for the water ponding d bearing.	1.15 9; his g.					
	bracing. (size) 1=4-8-6, 4 Max Horiz 1=100 (LC Max Uplift 1=-12 (LC Max Grav 1=259 (LC (lb) - Maximum Com	4=4-8-6 C 11) C 14), 4=-39 (LC 11) C 35), 4=208 (LC 35	9) 10)) * This truss has chord live loa) * This truss h on the bottor 3-06-00 tall h chord and ar	as been designed ad nonconcurrent has been designe m chord in all are by 2-00-00 wide v hy other members	t with any ed for a liv as where will fit betv s.	other live loa e load of 20.0 a rectangle veen the botto	ads. Opsf om					
TOP CHORD BOT CHORD NOTES 1) Unbalanco this design 2) Wind: ASG Vasd=103 Cat. II; Ex	Tension 1-2=-320/51, 2-3=-7 1-4=-98/251 ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Bi ps; Enclosed; MWFR	6/90, 3-4=-113/90 been considered fo (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio	11 12 13 r LC	 provide mecolection bearing plate 4 and 12 lb u This truss is International R802.10.2 a Graphical puor or the orienta bottom chord DAD CASE(S) 	e capable of withs a capable of withs uplift at joint 1. designed in acco Residential Code nd referenced sta trilin representatio attion of the purlin J. Standard	or (by oth standing 3 ordance w e sections andard AN on does no along the	ers) or truss t 19 lb uplift at j 18 R502.11.1 a ISI/TPI 1. 10 depict the s 10 and/or	io joint and size				NITH CA	ROLIN



Page: 1

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V21	Valley	1	1	Job Reference (optional)	160054092

3-7-1

3-7-1

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

4

5

-0-0

2-4-15

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:31 ID:wFUqCSffOUJUB8tO0FFENGyzBQR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

6-8-15

3-1-14



4x5 = 2 12 8 Г 0 3 4 2x4 🍫 2x4 u 2x4 💊 7-2-2

Scale = 1:26.6

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-MP	0.23 0.24 0.08	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 25 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood si 7-2-2 oc purlins. Rigid ceiling direct bracing. (size) 1=7-2-2 Max Horiz 1=53 (L Max Uplift 1=-10 (4=-52 (Max Grav 1=104 (4=505 ((lb) - Maximum Co Tension	neathing directly applie tly applied or 6-0-0 oc 2, 3=7-2-2, 4=7-2-2 C 11) LC 21), 3=-10 (LC 20), LC 14) LC 20), 3=104 (LC 21) LC 20) ompression/Maximum	4) 5) ed or 6) 7) 8) 9)), 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 chord live loa * This truss ha chord and ar)) Provide mec bearing plate 1, 10 lb upliff)) This truss is	7-16; Pr=20.0 ps 1.15); Pf=20.0 ps Is=1.0; Rough Ca =1.10 snow loads have es continuous bo spaced at 4-0-0 of the speen designed ad nonconcurrent nas been designed ad nonconcurrent n chord in all area by 2-00-00 wide v hy other members hanical connection e capable of withs t at joint 3 and 52 designed in acco	sf (roof LL (Lum DC at B; Fully been cor ttom chor oc. for a 10.0 with any d for a liv as where will fit betw s. on (by oth tanding 1 lb uplift a rdance w	: 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 botton ers) of truss to 0 buplift at ji t joint 4. tit hthe 2018	1.15 e); nis ds. Dpsf om o					
TOP CHORD BOT CHORD WEBS NOTES	1-2=-98/230, 2-3= 1-4=-163/129, 3-4 2-4=-355/166	-98/230 =-163/129	L	International R802.10.2 a DAD CASE(S)	Residential Code nd referenced sta Standard	e sections Indard AN	s R502.11.1 a NSI/TPI 1.	Ind					
1) Unbalance	ed roof live loads ha	ve been considered for	r									200111	11.

- 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) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-2-8, Exterior(2E) 4-2-8 to 7-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss 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.

VIIIIII WITTER PARTY SEAL 036322 G mmm August 10,2023

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Job	Truss	Truss Type	Qty	Ply	89 Serenity-Roof-B328 A LH CP TMB	
23070130-01	V22	Valley	1	1	Job Reference (optional)	160054093

2-10-1

2-10-1

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

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Wed Aug 09 12:00:31 ID:wFUqCSffOUJUB8tO0FFENGyzBQR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

5-2-15

2-4-14

5-8-2

Page: 1





5-8-2

Scale = 1:24.6														
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 IRC2018/	TPI2014	CSI TC BC WB Matrix-MP	0.12 0.14 0.05	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 19 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 5-8-2 oc purlins. Rigid ceiling directly bracing. (size) 1=5-8-2, Max Horiz 1=41 (LC Max Uplift 1=-4 (LC (LC 14) Max Grav 1=94 (LC (LC 20)	eathing directly applie / applied or 6-0-0 oc 3=5-8-2, 4=5-8-2 11) 14), 3=-11 (LC 15), / 20), 3=94 (LC 21), 4	5) 6) 7) 8) ed or 9) 4=-33 4=358 11)	Unbalanced design. Gable requir Gable studs This truss ha chord live loz * This truss ha chord live loz * This truss hottor 3-06-00 tall b chord and ar Provide mec bearing plate to his truss is International	snow loads have es continuous bot spaced at 4-0-0 o s been designed d nonconcurrent has been designed n chord in all area y 2-00-00 wide w y other members hanical connectio capable of withs at joint 3 and 33 designed in accor Residential Code	been cor tom chor cc. for a 10.0 with any d for a liv as where ill fit betv n (by oth tanding 4 lb uplift a rdance w e sections	nsidered for the d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t l b uplift at joi t 4. ith the 2018 s R502.11.1 a	ds. Dpsf om o nt						
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Maximum Con Tension 1-2=-93/144, 2-3=-9 1-4=-108/95, 3-4=-1 2-4=-232/118	npression/Maximum 93/144 108/95	LOA	R802.10.2 ar AD CASE(S)	nd referenced star Standard	ndard AN	ISI/TPI 1.							
NOTES	2-4=-232/116													
 Unbalance this design Wind: AS0 Vasd=103 Cat. II; Ex 	ed roof live loads have n. CE 7-16; Vult=130mpl 3mph; TCDL=6.0psf; B p B; Enclosed; MWFR	e been considered fo n (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio	r								and a	OR FESS	ROUN	6
zone and exposed ; members Lumber D 3) Truss des only. For see Stand	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 wind lard Industry Gable Er	e; cantilever left and r ight exposed;C-C for for reactions shown DL=1.60 n the plane of the tru d (normal to the face) ind Details as applicat	right ; uss), ble,							Gentline		SEA 0363	L 22	Mannun
4) TCLL: AS Plate DOL DOL=1.15 Cs=1.00;	cualified building desi CE 7-16; Pr=20.0 psf (L=1.15); Pf=20.0 psf (L 5); Is=1.0; Rough Cat I Ct=1.10	Igner as per ANSI/1F (roof LL: Lum DOL=1 um DOL=1.15 Plate B; Fully Exp.; Ce=0.9	9 1. 1.15 9;									A. C	EER. A	2



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

