

**Trenco** 818 Soundside Rd Edenton, NC 27932

Re: 23080083-01 108 Serenity-Roof-B329 A LH CP

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

Pages or sheets covered by this seal: I60552850 thru I60552912

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

North Carolina COA: C-0844



September 5,2023

# Gilbert, Eric

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

Job	Truss		Truss Type		Qty	Ply	108 Sereni	ity-Roof-B329	A LH CP		
23080083-0	1 A01		Flat		1	1	Job Refere	ence (optional)		160552850	
Carter Compone	nts (Sanford), Sanford, N	C - 27332,		Run: 8.63 S Jul 28 20 ID:C?sBVu?G6imTJZC					•	Page	ə: 1
0-3-8 ⊣ 0-3-8	6-8-1 6-4-9	<u>12-10-14</u> 6-2-13	<u>19-1-11</u> 6-2-13	<u>25-6-4</u> 6-4-9		<u>32-4-9</u> 6-10-5	NAILED	<u>39-1-3</u> 6-8-9		40-11-0	46-3-0 ──H 0-3-8
2x4 12 0 8 4 12 221 6x8		$\frac{1}{10000000000000000000000000000000000$	LED NAILED 4x6= 4x5=	4x5= 1 6 32 33 33 34 1 6 32 7 33 34 1 7 10 10 10 10 10 10 10 10 10 10 10 10 10	2x4 II 7 35	36 36 57	4x6= 37 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	38 39	4x5= 40,10 4,1 40,10 4,10 4,10 40,10 4,10 4,10 4,10 4,10 4,10 4,10 4,10	Anailed Nailed	2x4 II 112 113 113 143 5x6=
0-3-8   <del> </del>	<u>8-9-0</u> 8-5-8		NAILED NAIL 7-0-12 -3-12	ED 25-6-4 8-5-8	25-9-0	3	<u>5-8-14</u> -11-14		<u>45-1</u> 10-2	1-0	46-3-0
Loading	X, Y): [14:0-3-0,0-3-8 (psf)	Spacing	2-0-0	CSI	DEFI		in (loc)	l/defl L/d	PLATES	GRIP	
TCLL (roof) Snow (Pf) TCDL BCLL	20.0 20.0 10.0 0.0*	Plate Grip DOL Lumber DOL Rep Stress Incr Code	1.15 1.15 YES IRC2018/TPI2014	TC 0.8 BC 0.6 WB 0.9 Matrix-MSH	66 Vert(	CT) -0.	12 14-15 26 14-15 06 14	>999 240 >926 180 n/a n/a	MT20	244/190	
BCDL	10.0								Weight: 322 I	FT = 20%	
	bracing, Except: 8-5-2 oc bracing: 20 7-11-11 oc bracing: 1 1 Row at midpt 2 Rows at 1/3 pts (size) 14= Mech 21=0-5-8 Max Uplift 14=-432 (	applied or 10-0-0 oc 1-21 18-20. 3-21, 9-17, 10-14 6-17 nanical, 17=0-5-8, (LC 11), 17=-1635 (LC 584 (LC 11) (LC 1), 17=4241 (LC	Vasd=103m Cat. II; Exp I zone and C- 5-0-0 to 41-3 for members Lumber DOI 2) TCLL: ASCE Plate DOL=: DOL=1.15); Cs=1.00; Ct 3) Unbalanced design. 4) Provide ade 5) All plates arc 6) This truss ha chord live lo	<ul> <li>7-16; Vult=130mph (3-ph; TCDL=6.0psf; BCDI 3; Enclosed; MWFRS (c C Corner (3) 0-0-0 to 5-0.0 corner (3) 41-3-0 tc s and forces &amp; MWFRS =1.60 plate grip DOL=<sup>-1</sup></li> <li>7-16; Pr=20.0 psf (roo 1.15); Pf=20.0 psf (Lum Is=1.0; Rough Cat B; Fi=1.10 snow loads have been quate drainage to preve a 4x5 MT20 unless other as been designed for a and nonconcurrent with a fan sheen designed for a m chord in all areas whether a sheen designed for a s</li></ul>	L=6.0psf; envelope) 0-0, Exter 0 46-3-0 zer for reactic 1.60 f LL: Lum DOL=1.1: Jully Exp.; considere nt water p rwise indi 10.0 psf b iny other 1 t live load	h=25ft; exterior ior (2) one;C-C ons shown; DOL=1.15 5 Plate Ce=0.9; d for this oonding. cated. ottom ive loads. of 20.0psf	of th LOAD ( 1) De Inc Ur Cc	truss are no CASE(S) Star ad + Snow (ba crease=1.15 liform Loads (II Vert: 1-12=-60 oncentrated Lo. Vert: 9=-118 (I (F), 26=-118 (I (F), 30=-118 (I (F), 34=-118 (I (F), 42=-118 (I (F), 42=-118 (I (F), 42=-22 (F), 51 54=-32 (F), 55 58=-32 (F), 59	ted as front (F) hdard alanced): Lumb b/ft) , 13-22=-20 ads (lb) F), 23=-118 (F) F), 27=-118 (F) F), 35=-118 (F) F), 39=-118 (F) F), 43=-118 (F) F), 43=-118 (F) F), 43=-118 (F) F), 43=-12 (F), 56=-3 =-32 (F), 56=-3 =-32 (F), 60=-3 F), 60=-3 F)	er Increase=1.15 24=-118 (F), 25 28=-118 (F), 33 36=-118 (F), 33 36=-118 (F), 37 40=-118 (F), 41 44=-32 (F), 45=- 3=-32 (F), 49=-32 2 (F), 53=-32 (F) 2 (F), 57=-32 (F) 2 (F), 61=-32 (F)	;, Plate =-118 =-118 =-118 =-118 -32 2 (F), i, i,
FORCES	(lb) - Maximum Com Tension	pression/Maximum	3-06-00 tall	by 2-00-00 wide will fit b ny other members.		0		62=-32 (F), 63	=-32 (F), 64=-3	2 (F), 65=-32 (F)	
TOP CHORD	1-2=0/0, 2-3=0/0, 3- 4-6=-1323/528, 6-7= 7-9=-715/1691, 9-10 11-12=0/0 21-22=0/0, 20-21=-7 18-20=-864/2018, 1	=-715/1691, )=-997/366, 10-11=0/0 778/1814, 7-18=-372/846,	8) Refer to gird 9) Provide mec bearing plate joint 17 and 10) H10A Simps connect trus	er(s) for truss to truss c chanical connection (by e capable of withstandir 432 lb uplift at joint 14. con Strong-Tie connecto s to bearing walls due to	others) of lg 1635 lb ors recomr o UPLIFT	truss to uplift at mended to at jt(s) 21.		(a)	OR THES	AROUN	
WEBS	15-17=-238/514, 14- 13-14=0/0 7-17=-858/472, 11-1 2-21=-269/137, 3-21 3-20=-50/481, 4-20= 6-18=-353/1079, 6-1 9-17=-2587/1118, 9- 10-15=-261/247, 10-	14=-308/159, 1=-2173/932, =-35/147, 4-18=-988/4 17=-3038/1303, -15=-206/773,	lateral forces 11) This truss is International R802.10.2 a 12) Graphical pu or the orient bottom chorr 13) "NAILED" in	designed in accordance Residential Code secti nd referenced standard urlin representation does ation of the purlin along d. dicates 3-10d (0.148"x3	e with the ons R502 ANSI/TPI s not depir the top ar ") or 3-12	2018 .11.1 and 1. ct the size nd/or		TIMAN WALKER	SE 036		WILLING CONTRACT
			(0.148"x3.25	5") toe-nails per NDS gu	idlines.				Think.		

September 5,2023



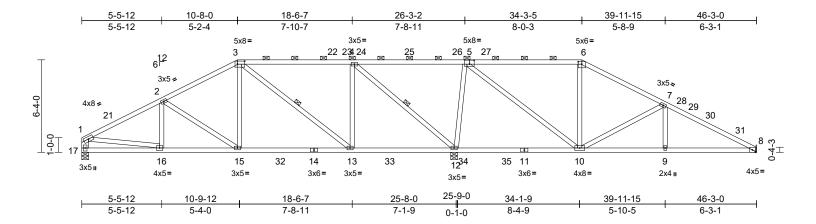
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	A02	Нір	1	1	I60 Job Reference (optional)	0552851

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:49 ID:G7I4v5m?S53dyvwRJiljnNyi372-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



### Scale = 1:79

	(X, Y): [3:0-6-0,0-2-8]	, [0.0-0-12,0-0-4], [0.		~1									
oading	(psf)	Spacing	2-0-0		CSI	0.00	DEFL	in		l/defl	L/d	PLATES	GRIP
CLL (roof) Snow (Pf)	20.0 20.0	Plate Grip DOL Lumber DOL	1.15 1.15		TC BC	0.86 0.65	Vert(LL) Vert(CT)	-0.14	10-12 10-12	>999 >995	240 180	MT20	244/190
CDL	10.0	Rep Stress Incr	YES		WB	0.85	Horz(CT)	-0.25	8	-995 n/a	n/a		
	0.0*	Code		8/TPI2014	Matrix-MSH	0.90	11012(01)	0.05	0	11/d	n/a		
	10.0	Code	11(0201	0/1112014	Matrix-MOT							Weight: 254 lb	FT = 20%
UMBER			2)	Wind: ASCE	7-16; Vult=130m	ph (3-seo	cond gust)		LOAD	CASE(S	) Sta	ndard	
OP CHORD	2x4 SP No.2 *Excep	ot* 3-5,5-6:2x4 SP N	o.1		ph; TCDL=6.0psf;								
OT CHORD	2x4 SP No.2				B; Enclosed; MWF								
/EBS	2x4 SP No.3 *Excep	ot* 17-1:2x6 SP No.2	2		C Exterior(2E) 0-2			r					
RACING					to 17-2-8, Interior			4.0					
OP CHORD					27-8-13 to 40-9-1 rior(2E) 41-7-8 to								
	4-4-1 oc purlins, ex		nd		exposed ; end ve			~1					
	2-0-0 oc purlins (4-2		-		C for members and			r					
OT CHORD	Rigid ceiling directly bracing, Except:	applied of 10-0-0 o	C		own; Lumber DOL								
	6-0-0 oc bracing: 10	)-12		DOL=1.60		-							
EBS	1 Row at midpt	3-13, 4-12	3)		E 7-16; Pr=20.0 ps								
EACTIONS		anical, 12=0-5-8, 17=	-0-5-8		1.15); Pf=20.0 psf								
	Max Horiz 17=-97 (L				ls=1.0; Rough Ca	t B; Fully	Exp.; Ce=0.9	);					
	Max Uplift 8=-119 (L	,	10), 4	Cs=1.00; Ct	snow loads have	boon co	cidorod for t	aic					
	. 17=-135 (	(LC 14)	··· -,	design.	Show loads have	Deen coi		115					
	Max Grav 8=819 (L0		43), 5)		quate drainage to	prevent	water ponding	<b>a</b> .					
	17=1069	· /	6		as been designed			<u>.</u>					
ORCES	(lb) - Maximum Com	pression/Maximum		chord live lo	ad nonconcurrent	with any	other live loa	ds.					
	Tension	1070/010	7)		nas been designe			Opsf					
OP CHORD	,	,	77		m chord in all area							minin	1111.
	3-4=-535/180, 4-6=- 7-8=-1333/225, 1-17		177,		oy 2-00-00 wide w						2	I'L'H CA	ROUL
OT CHORD	16-17=-94/241, 15-2		0		ny other members			i.			N	A	OL M
	13-15=-103/919, 12	,	8) 9)		er(s) for truss to to hanical connectio			~			x.	O'. FESS	100 Vin
	10-12=-643/160, 9-1		9,		e capable of withs					/	55	in	MAN
	8-9=-129/1129	,		8.		anding	10 ib upint at	Joint		-	V	21 /	<b>T</b> :
/EBS	2-16=-64/101, 2-15=	=-517/119, 3-15=0/5	35, 1(		Simpson Strong-T	ie conne	ctors			-		CEA	
	3-13=-642/64, 4-13=	,	228,	recommende	ed to connect trus	s to bear	ing walls due	to		=	:	SEA	- :
	5-12=-1242/267, 5-1	,	0	,	(s) 17 and 12. Thi			ift		=		0363	22 :
	6-10=-277/92, 7-10=	ၓo <i>3</i> /1//, /-9=0/24			es not consider lat					-	1 8		(d)
	1-16=-110/1059		11		designed in acco						-	1	
OTES	a di wa a <b>fi</b> liwa dia a da d	have consider 14	_		Residential Code			ind			20	A.SNOW	ERIX
	ed roof live loads have	been considered to			nd referenced sta						1	AL. GIN	The CAN
this desigr			14		Irlin representation ation of the purlin						1	SEA 0363	ILBUIN
				bottom chore		along the						11111	in in its
												Sentemb	

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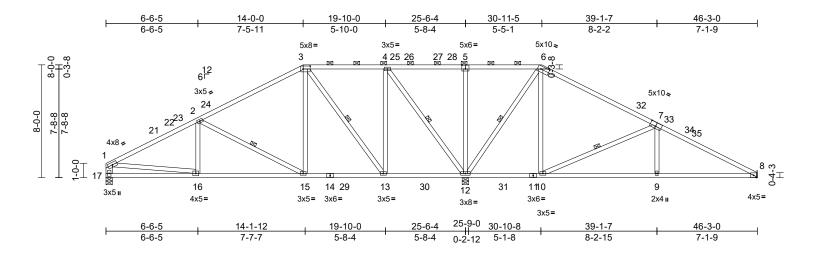


September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	A03	Нір	1	1	Job Reference (optional)	160552852

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:50 ID:d2\_gHEcziVw5P8LG6eS\_rEyi3?V-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



### Scale = 1:81.8

Plate Offsets (	X, Y): [3:0-6-0,0-2-8],	, [5:0-3-0,0-3-4], [6:0-7-	4,0-2-8],	[7:0-5-0,0-3-4	1]								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES IRC2018/	/TPI2014	CSI TC BC WB Matrix-MSH	0.88 0.67 0.69	<b>DEFL</b> Vert(LL) Vert(CT) Horz(CT)	in -0.10 -0.20 0.04	(loc) 15-16 9-10 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 274 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.3 *Excep Structural wood she 2-2-0 oc purlins, ex 2-0-0 oc purlins (6-0 Rigid ceiling directly bracing, Except: 6-0-0 oc bracing: 12 1 Row at midpt (size) 8= Mecha Max Horiz 17=-136 ( Max Uplift 8=-99 (LC 17=-94 (L	applied or 10-0-0 oc 2-13,10-12. 2-15, 3-13, 4-12, 6-12, 7-10 anical, 12=0-5-8, 17=0- (LC 15) 2 15), 12=-104 (LC 10), C 14) C 42), 12=2631 (LC 43)	or 3) 5-8 4) 5) 5)	Vasd=103mj Cat. II; Exp B zone and C-1 4-10-4 to 7-5 20-6-8 to 24. (1) 37-8-3 to zone;C-C for reactions sho DOL=1.60 TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct Unbalanced design. Provide aded This truss ha chord live log	snow loads have b quate drainage to p is been designed fo ad nonconcurrent w	CDL=6 S (env. 12 to 4- 5-8 to 2 4-7-4 tc 2) 41-7- es & M 1.60 pl (roof LL Lum DC B; Fully een cor revent v revent v or a 10.0	.0psf, h=25ft; elope) exteric 10-4, Interior 0-6-8, Interior 0-6-8, Interior 0-6-8, Interior 0-7-8-3, Interior 8 to 46-3-0 WFRS for ate grip .: Lum DOL=: .: Lum DOL=: Lum DOL=: .: Lum DOL=: Lum	or (1) (1) rior 1.15 e 2; ds.					
FORCES	(lb) - Maximum Com Tension 1-2=-1464/151_2-3-	npression/Maximum =-793/149, 3-4=-185/16	,	on the bottor 3-06-00 tall b	nas been designed m chord in all areas by 2-00-00 wide wil	where fit betv	a rectangle veen the botto	om				mun	un,
BOT CHORD		13/125, 6-8=-1148/261 -16=-164/1259,	8)	Refer to gird Provide mec	ny other members, er(s) for truss to tru hanical connection e capable of withsta	ss conr (by oth	nections. ers) of truss t	0			- AL	OR TH CA	ROLL
WEBS NOTES 1) Unbalance this design	2-16=0/225, 2-15=-7 7-9=0/341, 5-12=-53 4-13=-8/930, 4-12=- 1-16=-44/1087, 6-10 6-12=-1302/131, 7-1 ed roof live loads have	0=-6/697, 10=-1077/235	10) 11)	8. One H2.5A S recommende UPLIFT at jt( only and doe This truss is International R802.10.2 at	simpson Strong-Tie ed to connect truss (s) 17 and 12. This is not consider late designed in accord Residential Code s nd referenced stam rlin representation	connect to bear connect ral force ance w sections dard AN	ctors ing walls due tion is for upli es. ith the 2018 i R502.11.1 a ISI/TPI 1.	to ift ind				SEA 0363	• -
<b></b>			,		ation of the purlin a 1.			-			11	C A. G	ILBERTIT

September 5,2023

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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	A04	Piggyback Base	1	1	Job Reference (optional)	160552853

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:50 ID:nVtzValjZPhBKcQfHQvk1ryi2vS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

19-0-0 25-11-528-5-11 16-5-11 22-5-11 18-5-1120-5-11 24-5-11 26-5-11 30-3-8 <u>32-6-6</u> 5-10 2-0-0 1-9-13 2-2-14 30-3-8 <u>32-6-6</u> 4-7-13 6-6-5 12-9-3 39-1-7 46-3-0 6-6-5 6-2-13 1-10-11 2-0-0 2-0-0 2-0-01-5-10 6-7-1 7-1-9 0-6-5 1-9-14 0-6-6 5x6 \$ 6×8=11 5 6 47 42 5x6 🕏 5x6 -Δ 6<sup>12</sup> 3 8 Ø 20 40<sup>41</sup> 4849 348= 10-6-0 4x5 🕫 3x6= 3x5. 2 9 39 7-8-8 50 3x5 II 10 m ¢\_ 18 4⊥ 4⊥ × 17 43 446 15 45 46 13 12 11 14 4x6= 4x5= 3x5= 3x6 =3x5= 3x5= 3x6= 3x8= 25-9-9 9-7-12 19-1-12 25-9-0 32-6-6 39-1-7 46-3-0 9-7-12 9-6-0 6-7-4 0-0-9 6-8-13 6-7-1 7-1-9 Scale = 1:79.3 Plate Offsets (X, Y): [3:0-3-0,0-3-0], [5:0-6-0,0-2-8], [6:0-3-0,0-2-7], [8:0-3-0,0-3-4] 2-0-0 Loading Spacing CSI DEFL in l/defl L/d PLATES GRIP (psf) (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 тс 0.85 Vert(LL) -0.26 15-17 >999 240 MT20 244/190 Snow (Pf) 20.0 Lumber DOL 1.15 BC 0.99 Vert(CT) -0.41 15-17 >748 180 TCDL 10.0 Rep Stress Incr WB 0.99 Horz(CT) 0.03 YES 10 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-MSH Weight: 315 lb FT = 20% BCDL 10.0 NOTES LUMBER 13) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to 2x4 SP No.2 \*Except\* 5-6:2x4 SP No.1 TOP CHORD Unbalanced roof live loads have been considered for 1) 2x4 SP No.2 UPLIFT at it(s) 14 and 18. This connection is for uplift BOT CHORD this design only and does not consider lateral forces. WEBS 2x4 SP No.3 \*Except\* 14-5:2x4 SP No.2, 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) 14) This truss is designed in accordance with the 2018 18-1:2x6 SP No.2 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; International Residential Code sections R502.11.1 and Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior BRACING R802.10.2 and referenced standard ANSI/TPI 1. zone and C-C Exterior(2E) 0-2-12 to 4-10-4, Interior (1) TOP CHORD Structural wood sheathing directly applied or 15) Graphical purlin representation does not depict the size 4-10-4 to 14-3-15, Exterior(2R) 14-3-15 to 30-7-7, 5-1-6 oc purlins, except end verticals, and Interior (1) 30-7-7 to 41-7-8, Exterior(2E) 41-7-8 to or the orientation of the purlin along the top and/or 2-0-0 oc purlins (10-0-0 max.): 5-6. 46-3-0 zone;C-C for members and forces & MWFRS for bottom chord. actions shown; Lumber DOL=1.60 plate grip LOAD CASE(S) Standard

BOT CHORD	Rigid ceili bracing.	ing directly applied or 2-2-0 oc	46 rea
WEBS JOINTS	1 Row at	midpt 3-15, 14-20, 14-21, 8-14 t Jt(s): 19,	DC 3) Tr on
REACTIONS	Max Horiz	10= Mechanical, 14=0-5-8, 18=0-5-8 18=-177 (LC 15) 10=-112 (LC 15), 14=-87 (LC 15), 18=-109 (LC 14) 10=580 (LC 42), 14=2900 (LC 44), 18=930 (LC 34)	se or 4) TC Pla DC Cs 5) Un
FORCES	(lb) - Max Tension	imum Compression/Maximum	de 6) Pro
TOP CHORD	5-6=-17/1	92, 2-4=-1134/190, 4-5=-128/436, 069, 1-18=-293/101, 6-7=-75/1235, /764, 9-10=-830/201	7) All 8) Ga 9) Th
BOT CHORD	17-18=-23 14-15=-49	39/1083, 15-17=-101/706, 9/262, 12-14=-218/113, 8/694, 10-11=-98/694	ch 10) * T on 3-(
WEBS	3-15=-76 5-19=-38/ 14-20=-14 6-21=-838 9-12=-72	5/197, 3-17=-30/628, 1/183, 15-19=-38/918, 1920, 5-20=-1538/153, 485/148, 14-21=-836/198, 3/198, 8-14=-908/178, 8-12=-7/606, 7/191, 9-11=0/299, 2-18=-963/108, 3/188, 19-20=-390/189,	ch 11) Re 12) Pro be 10

20-21=-473/198, 7-21=-422/186

OL=1.60

russ designed for wind loads in the plane of the truss ly. For studs exposed to wind (normal to the face), e Standard Industry Gable End Details as applicable, consult qualified building designer as per ANSI/TPI 1.

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

nbalanced snow loads have been considered for this esign.

rovide adequate drainage to prevent water ponding.

- I plates are 2x4 MT20 unless otherwise indicated.
- able studs spaced at 2-0-0 oc.
- his truss has been designed for a 10.0 psf bottom nord live load nonconcurrent with any other live loads
- This truss has been designed for a live load of 20.0psf n the bottom chord in all areas where a rectangle 06-00 tall by 2-00-00 wide will fit between the bottom nord and any other members, with BCDL = 10.0psf.
- efer to girder(s) for truss to truss connections.
- rovide mechanical connection (by others) of truss to
- earing plate capable of withstanding 112 lb uplift at joint



Page: 1

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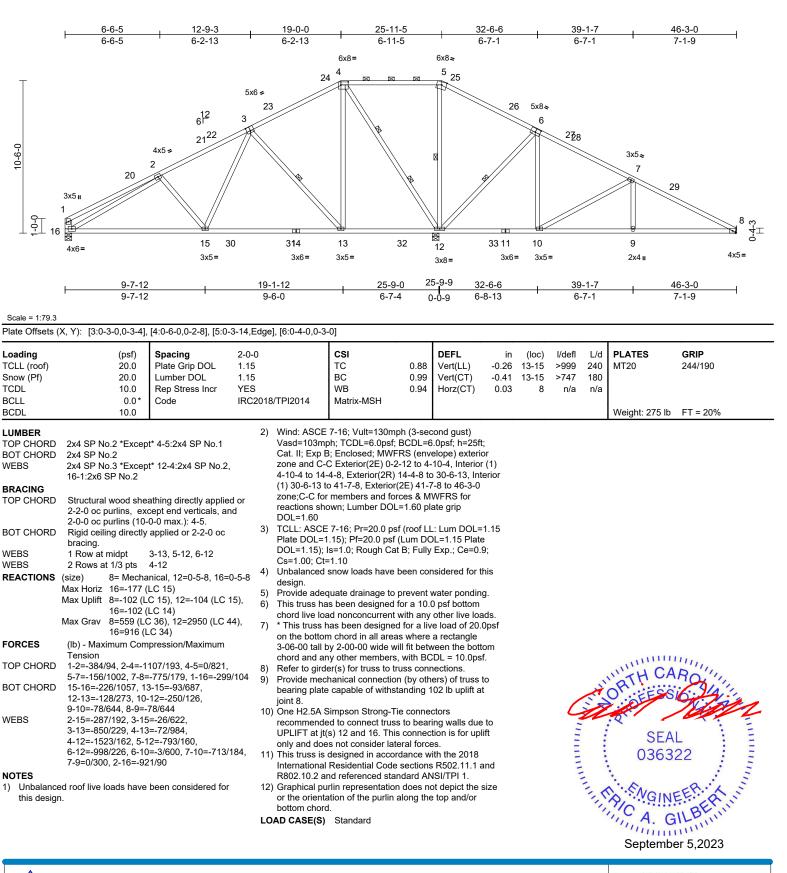
Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	A05	Piggyback Base	3	1	Job Reference (optional)	160552854

Run: 8.63 S. Jul 28 2023 Print: 8.630 S. Jul 28 2023 MiTek Industries. Inc. Fri Sep 01 14:12:51 ID:JB5bLQFGF3C9vTBFkpkf65yi2p3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Page: 1

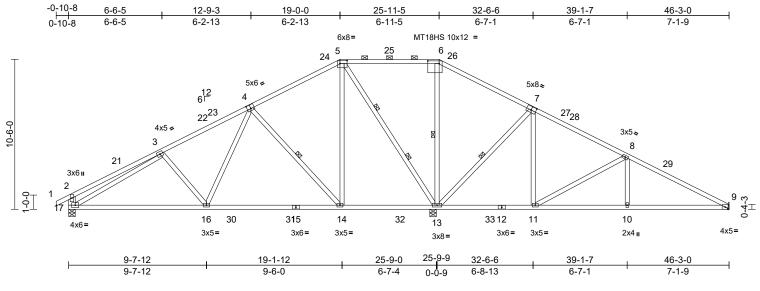


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **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	108 Serenity-Roof-B329 A LH CP	
23080083-01	A06	Piggyback Base	2	1	Job Reference (optional)	160552855

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:52 ID:86vrdMjsFRcFbhb4agr6Ivyi2gi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:80.7

# Plate Offsets (X, Y): [4:0-3-0,0-3-4], [5:0-6-0,0-2-8], [6:0-9-8,0-2-4], [7:0-4-0,0-3-0]

		1										i	
Loading	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.88	Vert(LL)	-0.26	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.99	Vert(CT)	-0.41	14-16	>745	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES		WB	0.86	Horz(CT)	0.03	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2	014	Matrix-MSH		( )						
BCDL	10.0	••••										Weight: 276 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS WEBS REACTIONS	2x4 SP No.2 *Excep 2x4 SP No.2 2x4 SP No.3 *Excep Structural wood she 2-2-0 oc purlins, exi 2-0-0 oc purlins (10- Rigid ceiling directly bracing. 1 Row at midpt 2 Rows at 1/3 pts (size) 9= Mecha Max Horiz 17=-155 ( Max Uplift 9=-104 (L 17=-135 ( Max Grav 9=566 (LC 17=978 (L	t* 17-2:2x6 SP No.2 athing directly applied cept end verticals, an 0-0 max.): 5-6. applied or 2-2-0 oc 6-13, 4-14, 7-13 5-13 nical, 13=0-5-8, 17=( LC 19) C 15), 13=-153 (LC 1 LC 14) C 37), 13=2936 (LC 4 .C 35)	d or (1) 3 d cat. zone (1) 3 d cant for r DOL 3) TCL Plate DOL 25-8 DOL 5), desig desig 5), This load	d=103mp II; Exp E and C-to to 12-5 2-5-7 to lever lef expose actions =1.60 L: ASCE DOL=1 =1.15); 1.00; Ct= alanced gn. truss ha of 12.0	7-16; Vult=130mpt bh; TCDL=6.0psf; B 3; Enclosed; MWFR C Exterior(2E) -0-1( i-8, Exterior(2R) 12: 41-7-8, Exterior(2R) 12: 41-7-8, Exterior(2R) 12: 41-7-8, Exterior(2R) 12: 41-7-8, Exterior(2R) 12: 41-7-8, Exterior(2R) 12: 41-7-8, Exterior(2R) 12: -1.7-8, Exterior(2R) 12: -1.10; Rough Cat I =1.10 snow loads have but as been designed for psf or 1.00 times fla on-concurrent with	CDL=6 S (env )-8 to 3 -5-8 to ) 41-7- ) ; end v and foi DL=1.6( (roof LL Lum DC B; Fully een cor or great at roof le	.0psf; h=25ft; elope) exterio -9-0, Interior ( 32-5-7, Interior 8 to 46-3-0 zc vertical left an- rces & MWFR ) plate grip .: Lum DOL=1 JL=1.15 Plate Exp.; Ce=0.9 asidered for th er of min roof pad of 20.0 ps	or (1) or one; d S 1.15 ); ); live	or t		ation o d.	presentation doe of the purlin along	s not depict the size
FORCES	(lb) - Maximum Com Tension	pression/Maximum			quate drainage to p								
TOP CHORD	1-2=0/30, 2-3=-458/ 5-6=0/806, 6-8=-170 2-17=-416/165		8) This chor	truss ha d live loa	MT20 plates unles is been designed fo ad nonconcurrent w nas been designed	or a 10. vith any	) psf bottom other live load	ds.				TH CA	RO
BOT CHORD	16-17=-239/1055, 14 13-14=-125/267, 11- 10-11=-81/658, 9-10	13=-235/125,	on th 3-06	ne bottor -00 tall b	n chord in all areas by 2-00-00 wide will by other members, v	where fit betw	a rectangle veen the botto	, pm		4	in,	OR	N'N'
WEBS NOTES 1) Unbalance this design	6-13=-788/119, 7-11 8-11=-713/184, 3-17 4-14=-849/226, 7-13 5-13=-1514/185 ed roof live loads have	=-1006/223,	11) Prov bear joint 12) One reco UPL	ide mec ing plate 9. H2.5A S mmende IFT at jt(	er(s) for truss to tru hanical connection capable of withsta Simpson Strong-Tie do to connect truss s) 13 and 17. This is not consider later	(by oth nding 1 conne to bear connec	ers) of truss to 04 lb uplift at ctors ing walls due tion is for upli	to				SEA 0363	• -
uns desigi			13) This Inter	truss is national	designed in accord Residential Code s nd referenced stand	ance w	ith the 2018 R502.11.1 a	nd			in a	September	ILBE er 5,2023

818 Soundside Road Edenton, NC 27932

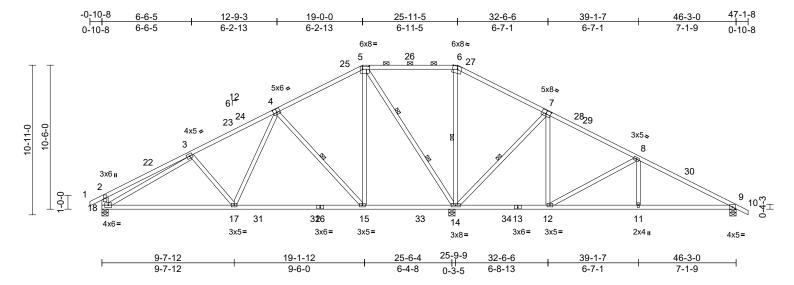
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent oclapse 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 Stability and the prevention applicable from the Structure Building Component Advance interpreted the property damage. and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



only and does not consider lateral forces. 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	A07	Piggyback Base	1	1	Job Reference (optional)	160552856

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:53 ID:mnZqp49xwCxjCaSirOxFxIyi2dZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:84

Plate Offsets (2	X, Y): [4:0-3-0,0-3-4],	[5:0-6-0,0-2-8], [6:0	-4-9,Edge], [7:0-4-0,0-3	-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	0.88	Vert(LL)	-0.26	15-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.41	15-17	>745	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.03	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 278 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS												

WEBS	2x4 SP No.3 "Except" 18-2:2x6 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or
	2-2-0 oc purlins, except end verticals, and
	2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc
	bracing.
WEBS	1 Row at midpt 6-14, 4-15, 7-14
WEBS	2 Rows at 1/3 pts 5-14
REACTIONS	(size) 9=0-5-8, 14=0-5-8, 18=0-5-8
	Max Horiz 18=-168 (LC 19)
	Max Uplift 9=-124 (LC 15), 14=-147 (LC 15),
	18=-136 (LC 14)
	Max Grav 9=618 (LC 43), 14=2934 (LC 45),
	18=982 (LC 35)
FORCES	(lb) - Maximum Compression/Maximum
	Tension
TOP CHORD	1-2=0/30, 2-3=-458/149, 3-5=-1118/195,
	5-6=0/807 6-8=-170/984 8-9=-787/187

2 Rows at	1/3 pts 5-14			DOL=1.
size)	9=0-5-8, 14=0-5-8	, 18=0-5-8	4)	Cs=1.00 Unbalan
/lax Horiz	18=-168 (LC 19)		4)	desian.
∕lax Uplift	9=-124 (LC 15), 14	4=-147 (LC 15),	5)	This trus
	18=-136 (LC 14)		- /	load of 1
/lax Grav	9=618 (LC 43), 14	=2934 (LC 45),		overhan
	18=982 (LC 35)		6)	Provide
(lb) - Max	mum Compression	ı/Maximum	7)	This trus
Tension			,	chord liv
1-2=0/30,	2-3=-458/149, 3-5	=-1118/195,	8)	* This tr
	, 6-8=-170/984, 8-9	9=-787/187,		on the b
	, 2-18=-415/165			3-06-00
17-18=-23	5/1062, 15-17=-10	8/702,		chord ar

14-15=-125/274, 12-14=-238/129, 11-12=-71/653, 9-11=-71/653 WEBS 5-15=-69/987, 6-14=-788/113, 3-17=-274/186, 4-17=-21/614, 7-12=-2/598, 8-11=0/299, 8-12=-708/182, 3-18=-850/55, 4-15=-856/226, 7-14=-1005/223, 5-14=-1514/184

### NOTES

BOT CHORD

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

- zone and C-C Exterior(2E) -0-10-8 to 3-9-0. Interior (1) 3-9-0 to 12-5-8, Exterior(2R) 12-5-8 to 32-5-7, Interior (1) 32-5-7 to 42-6-0, Exterior(2E) 42-6-0 to 47-1-8 zone; 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
- 3) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate .15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 0; Ct=1.10
- nced snow loads have been considered for this
- iss has been designed for greater of min roof live 12.0 psf or 1.00 times flat roof load of 20.0 psf on ngs non-concurrent with other live loads. adequate drainage to prevent water ponding.
- iss has been designed for a 10.0 psf bottom ve load nonconcurrent with any other live loads.
- russ has been designed for a live load of 20.0psf bottom chord in all areas where a rectangle tall by 2-00-00 wide will fit between the bottom nd any other members, with BCDL = 10.0psf.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 9, and 18. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or
- bottom chord.
- LOAD CASE(S) Standard



Page: 1

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	A08	Attic	2	1	Job Reference (optional)	160552857
Carter Components (Sanford), S	Run: 8.63 S Jul 28 2	Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:54				

ID:nZLG3VUHdq?4Tuf s0oesByiIZ6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

				ID:nZLG3VUHdq?4Tuf	_s0oesByilZ6-RfC?Ps	B70Hq3NS	gPqnL8w3ulT	XbGKWr	CDoi7J4zJC?	f	
	-0-10-8 5-8-6 0-10-8 5-8-6	<u>11-2-2</u> 5-5-12	16-3-15 5-1-13		<u>11-5   28-7-7  </u> -10 2-8-2	<u>34-2-5</u> 5-6-14		<u>40-1-6</u> 5-11-1		46-3-0 6-1-10	47-1-8 
				5x6=	5x6=						
ТТ		12 6		3x8 ≠ 6 7 3x8 ≠ 7	<u>≈</u> 8 46						
			5 10 <b>ء</b> 10	0-11-8	9						
		0,	52	37 35	36 38		47 6x10≈				
		4 51	3	3x8= 5x8=	5x8= 5x10=		1.008				
10-11-0		4x8 =		7-0-12					2x4 🍫		
10	50	3		2-0				,	11		
	10x12=		<u> </u>			1	\	$\langle \rangle$		49	
0_ -						_ %_T					12 13 m
$\uparrow$ $\uparrow$ $\downarrow$ $\downarrow$	34	33 42	43 32	<u>370 278 276 24 255</u> 31 29 27 25 22	2 <u>1<sup>™</sup>18 ⊠ <b>1</b>0</u> 16	<del></del> 15 <sup>0</sup> 4	4 45	<del></del> 14			134⊥
		55 42		<pre>x8= 2x4 II</pre>	<b>29</b> 16 2x4 u 3x6=	10 4	4 40	14			4x5=
			ŧ	5x8 II 2x4 II	3x8= 5x10=	-					
				3x8:	420=	4x6=					
			16-	-5-11 21-10-3 24-3	4x6= 30-4 11 27-0-1428-7-7						
		3-14 3-14	<u>15-11-0</u> 16-3 7-7-2 0-4-		25-6-4 28-5-11 1-2-8 1-4-14		<u>37-3-6</u> 6-11-6			<u>-3-0</u> 1-11	———————————————————————————————————————
Scale = 1:85.4		-	0-1	1-12 1-10-11 1-2- 1-8-15		-9			-		
Plate Offsets ()	K, Y): [2:Edge,0-2-4],	[4:0-4-12,0-3-0], [6:0-3-	-0,0-2-0], [8:0-3-0,0	0-2-0], [10:0-2-0,Edge], [22	:0-3-8,0-1-8], [30:E	dge,0-2-4	], [32:0-1-12	2,0-3-0],	[35:0-2-8,0	-2-0], [38:0	-5-0,0-1-12]
Loading	(psf)	Spacing 2	-0-0	csi	DEFL	in (lo	oc) l/defl	L/d	PLATES	GRIF	ı
TCLL (roof) Snow (Pf)	20.0 20.0		.15 .15	TC 0.6 BC 0.9		0.51 31- 0.82 31-		240 180	MT20	244/1	90
TCDL	10.0	Rep Stress Incr Y	ΈS	WB 0.9	0 Horz(CT)	0.12	12 n/a	n/a			
BCLL BCDL	0.0* 10.0	Code II	RC2018/TPI2014	Matrix-MSH	Attic -	0.31 17-	30 >473	360	Weight: 33	5lb FT=	20%
			BOT CHORD	33-34=-213/2778, 31-33	=-111/2775	2)	Wind: ASCI				
TOP CHORD	2x4 SP No.1		Ber energ	29-31=-5/2674, 27-29=0	/3059,	,	Vasd=103m	nph; TCE	DL=6.0psf; l	BCDL=6.0p	sf; h=25ft;
BOT CHORD	2x4 SP 2400F 2.0E No.1	*Except* 30-17:2x4 SP		25-27=0/3092, 22-25=-{ 19-22=-1559/850, 16-19			Cat. II; Exp zone and C				pe) exterior 0, Interior (1)
WEBS	2x4 SP No.3 *Excep	t* 5-31,9-16:2x4 SP No.2, 34-2:2x6 SP No.2		14-16=0/2441, 12-14=0 28-30=-832/266, 26-28=			3-9-0 to 12- (1) 32-5-13				5-13, Interior to 47-1-8
BRACING	No. 1, 37-30.224 Of	10.2, 34-2.220 31 10.2		24-26=-490/1687, 23-24	=-490/1687,		zone; cantil	ever left	and right e	xposed ; er	nd vertical left
TOP CHORD		athing directly applied o xcept end verticals, and		21-23=-490/1687, 20-21 18-20=-215/3562, 17-18			and right ex MWFRS for				L=1.60 plate
	2-0-0 oc purlins (5-5	-0 max.): 6-8.	WEBS	30-31=-45/671, 30-37=0 16-17=-376/53, 17-38=-			grip DOL=1		Pr=20.0 nsf	(roof LL · L	um DOL=1.15
BOT CHORD	bracing, Except:	applied or 10-0-0 oc		9-38=-902/107, 35-37=-	96/1469,	,	Plate DOL=	1.15); P	f=20.0 psf (	Lum DOL=	1.15 Plate
	6-0-0 oc bracing: 22 6-0-0 oc bracing: 21	-25,19-22,16-19. -30 17-18		35-36=-1428/39, 36-38= 10-14=-34/624, 11-14=-	,		DOL=1.15); Cs=1.00; C		Rough Cat	B; Fully Ex	p.; Ce=0.9;
	10-0-0 oc bracing: 1	8-21	6	4-31=-680/196, 4-33=-2 3-34=-2789/49, 19-20=-		, ,	Unbalanced design.	d snow lo	oads have b	een consic	lered for this
WEBS		35-36, 4-31, 3-34, 10-1 10-38	0,	24-25=-17/227, 22-23=-	651/0,	5)	This truss h				of min roof live
JOINTS	1 Brace at Jt(s): 35, 36, 21, 18			7-35=-185/420, 6-35=-5 7-36=-773/122, 5-35=-2	619/151,		overhangs i	non-con	current with	other live l	
REACTIONS	(size) 12=0-5-8,	19=0-5-8, 34=0-5-8		9-36=-63/1227, 10-16=- 4-37=-211/949, 10-38=-	,		Provide ade All plates ar	e 3x5 M	T20 unless	otherwise	
	Max Horiz 34=-168( Max Uplift 12=-1 (LC	LC 19) : 15), 34=-119 (LC 14)		29-30=-416/565, 28-29= 27-28=-480/201, 26-27=	-295/184,	,	,		111111 H (		
I		(LC 46), 19=2183 (LC		25-26=-1321/25, 21-22=	0/1870,			( N	TH	CARO	111 million
FORCES	(lb) - Maximum Com	098 (LC 36) pression/Maximum		19-21=-1409/0, 18-19=- 16-18=-224/1921	1968/188,		/	S'al	11ªC	Stor:	Nin
TOP CHORD	Tension 6-7=-1295/139, 7-8=	-656/149.	NOTES				4		2-	100	0.1.
	2-34=-458/145, 8-9=	-791/152,	<ol> <li>Unbalance this designed</li> </ol>	ced roof live loads have bee jn.	n considered for				S	EAL	
	9-11=-3061/558, 11- 12-13=0/23, 1-2=0/3	0, 2-3=-570/121,	0						030	6322	1 E -
	3-5=-3691/189, 5-6=	-1422/144									1 1
									· ENIE	-ER	023
								11	PIO G	INEC	Pin
									In A.	GILD	111
									Septer	mber 5 2	023
									Copio		



Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and RCSI Building Component Safety (Information, available from the Structural Building Component Association (www shearcomponent Safety Information, available from the Structural Building Component Association (www shearcomponent Safety Information, available from the Structural Building Component Association (www shearcomponent Association) (wow shearc 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	108 Serenity-Roof-B329 A LH CP	
23080083-01	A08	Attic	2	1	Job Reference (optional)	160552857

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Ceiling dead load (5.0 psf) on member(s). 35-37, 35-36, 36-38; Wall dead load (5.0psf) on member(s).30-37, 17-38
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 28-30, 26-28, 24-26, 23-24, 21-23, 20-21, 18-20, 17-18
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 34 and 12. This connection is for uplift only and does not consider lateral forces.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

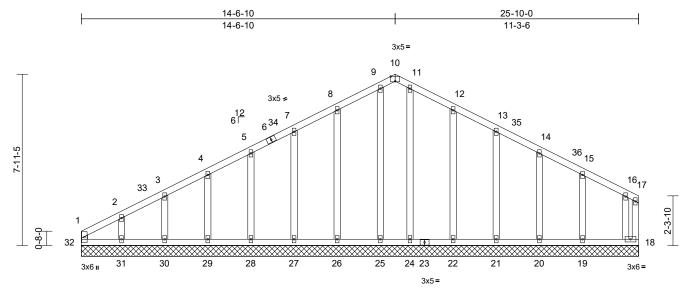
Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:54 ID:nZLG3VUHdq?4Tuf\_s0oesByilZ6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

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



Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	B01	Common Supported Gable	1	1	Job Reference (optional)	160552858

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:55 ID:FNWJPV9PY63BhDnj6k2w3GyiMH5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



25-10-0	
---------	--

Scale = 1:53.4

Plate Offsets (X, Y): [10:0-2-8,Edge]

	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	1-11-4 1.15 1.15 YES IRC2018/TPI2014	CSI           TC         0.12           BC         0.05           WB         0.15           Matrix-MR	DEFLinVert(LL)n/aVert(TL)n/aHoriz(TL)0.00	-	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 168 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she	athing directly applied		1-32=-84/37, 1-2=-154/79, 3-4=-89/106, 4-5=-70/128, 7-8=-76/197, 8-9=-98/249, 10-11=-87/219, 11-12=-98 12-13=-76/198, 13-14=-59 14-15=-48/114, 15-16=-44 17-18=-14/41 31-32=-4/21, 30-31=-4/21,	5-7=-61/155, 9-10=-87/219, /249, /154, /43, 16-17=-6/15,	de: 6) All 7) Ga 8) Tru bra 9) Ga	sign. plates an able requir uss to be aced agai able studs	re 2x4 res cor fully sl inst late s space	MT20 unless oth ntinuous bottom neathed from one eral movement (i ed at 2-0-0 oc.	e face or securely .e. diagonal web).
BOT CHORD	bracing.	cept end verticals. applied or 10-0-0 oc	BUTCHORD	31-32=-4/21, 30-31=-4/21, 28-29=-4/21, 27-28=-4/21, 25-26=-4/21, 24-25=-4/21, 21-22=-4/21, 20-21=-4/21,	26-27=-4/21, 22-24=-4/21,	Ćcho 11) * T	ord live lo his truss	ad nor has be		any other live loads. a live load of 20.0psf
REACTIONS	20=25-10 22=25-10 25=25-10 27=25-10 31=25-10 31=25-10 Max Horiz 32=144 (L Max Uplift 18=-9 (LC			18-19=-4/21 9-25=-138/1, 11-24=-134/ 7-27=-169/72, 5-28=-117/7 3-30=-117/80, 2-31=-117/ 12-22=-197/94, 13-21=-17 14-20=-115/67, 15-19=-12 16-18=-85/33 ed roof live loads have been	I, 8-26=-196/94, 75, 4-29=-116/74, 129, 0/74, 7/134,	3-0 cho 12) Pro be: 32 upl 29 upl	06-00 tall ord and a ovide med aring plat , 9 lb uplit lift at joint , 31 lb up lift at joint	by 2-0 iny oth chanica te capa ft at joi t 27, 42 lift at jo t 22, 42	0-00 wide will fit er members. al connection (by ble of withstandi nt 18, 52 lb uplift 2 lb uplift at joint joint 30, 96 lb upli	v others) of truss to ng 36 lb uplift at joint at joint 26, 41 lb 28, 45 lb uplift at joint ft at joint 31, 57 lb 21, 35 lb uplift at joint
	22=-57 (L 27=-41 (L 29=-45 (L 31=-96 (L 20=150 (L 22=237 (L 25=170 (L 25=170 (L 25=207 (L 25=175 (L	C 15), 26=-52 (LC 14 C 14), 28=-42 (LC 14 C 14), 30=-31 (LC 14 C 14), 32=-36 (LC 15	,         this design           ,         2)         Wind: ASC           ,         2)         Wind: ASC           ,         2)         Cat. II; Ex           ,         2 cone and         1,           ,         3-1-12 to         1,           1,         Exterior(2I)         25-8-4 zor           0,         reactions :         0,           0,         DOL=1.60         0,           0,         Truss des	n. CE 7-16; Vult=130mph (3-sec imph; TCDL=6.0psf; BCDL=6 p B; Enclosed; MWFRS (env C-C Corner(3E) 0-1-12 to 3- 11-6-10, Corner(3R) 11-6-10 N) 17-6-10 to 22-8-4, Corner ne;C-C for members and forc shown; Lumber DOL=1.60 pl ) signed for wind loads in the p	cond gust) 6.0psf; h=25ft; elope) exterior 1-12, Exterior(2N) to 17-6-10, (3E) 22-8-4 to ses & MWFRS for ate grip lane of the truss		4		OR FESS	ROLINIII L 22
FORCES	(lb) - Maximum Com Tension	pression/Maximum	see Stand or consult 4) TCLL: AS Plate DOL	studs exposed to wind (norm and Industry Gable End Deta qualified building designer a CE 7-16; Pr=20.0 psf (roof LI =1.15); Pf=20.0 psf (Lum DC ;); Is=1.0; Rough Cat B; Fully Ct=1.10	ills as applicable, s per ANSI/TPI 1. _: Lum DOL=1.15 DL=1.15 Plate		Contraction (Contraction)	ALL	AIC A. C	EER. K

# Continued on page 2 Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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September 5,2023

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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	160552858
23080083-01	B01	Common Supported Gable	1	1	Job Reference (optional)	100552858
Carter Components (Sanford), S	anford, NC - 27332,	Run: 8.63 S Jul 28 20	Page: 2			

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:55 ID:FNWJPV9PY63BhDnj6k2w3GyiMH5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

LOAD CASE(S) Standard

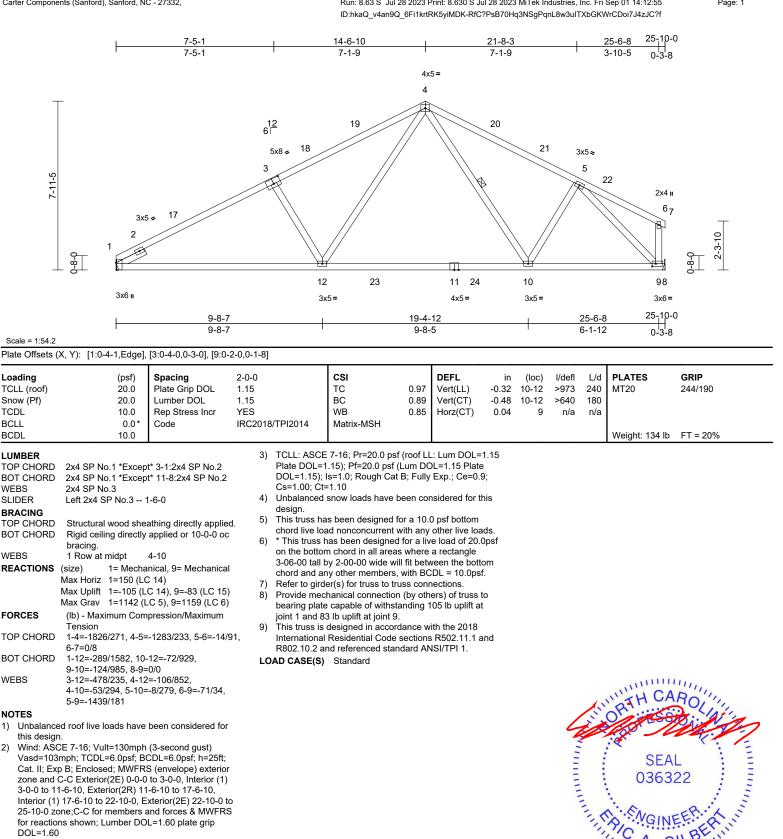
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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 Scherulter and properting 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 Campage to the properting and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	B02	Common	8	1	Job Reference (optional)	160552859

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:55

Page: 1



Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 11-6-10, Exterior(2R) 11-6-10 to 17-6-10, Interior (1) 17-6-10 to 22-10-0, Exterior(2E) 22-10-0 to 25-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

1)

2)

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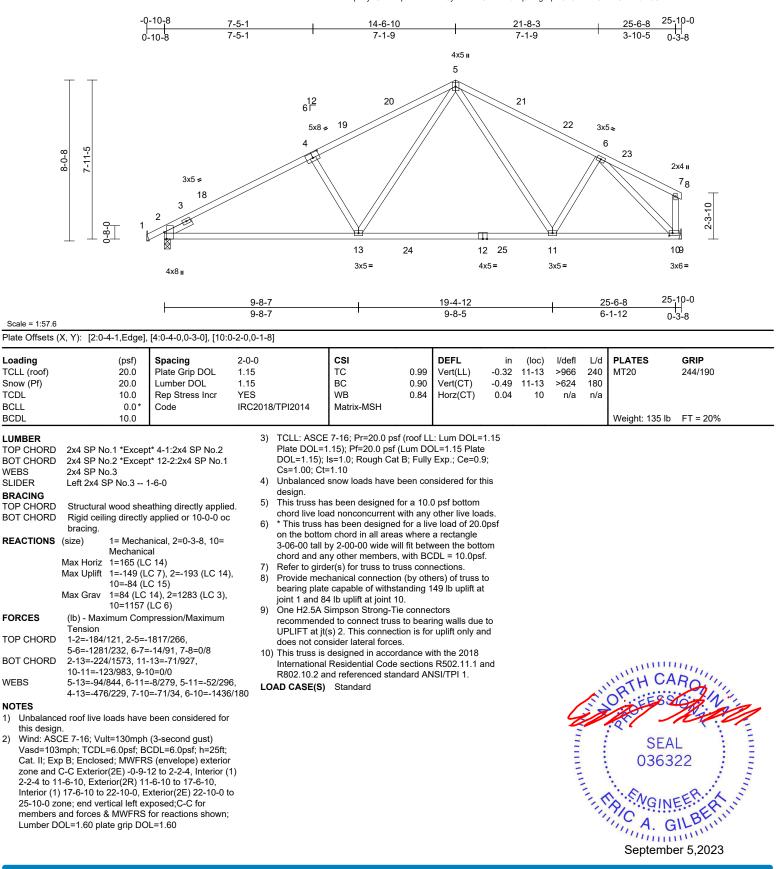
GI mann September 5,2023

Job	Truss	Truss Type	Type Qty Ply 108 Serenity-Roof-B329 A LH CP		108 Serenity-Roof-B329 A LH CP	
23080083-01	B03	Common	1	1	Job Reference (optional)	160552860

1)

2)

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:56 ID:qTIoy7GVe?cqcW?KuvHXv5yiMxZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



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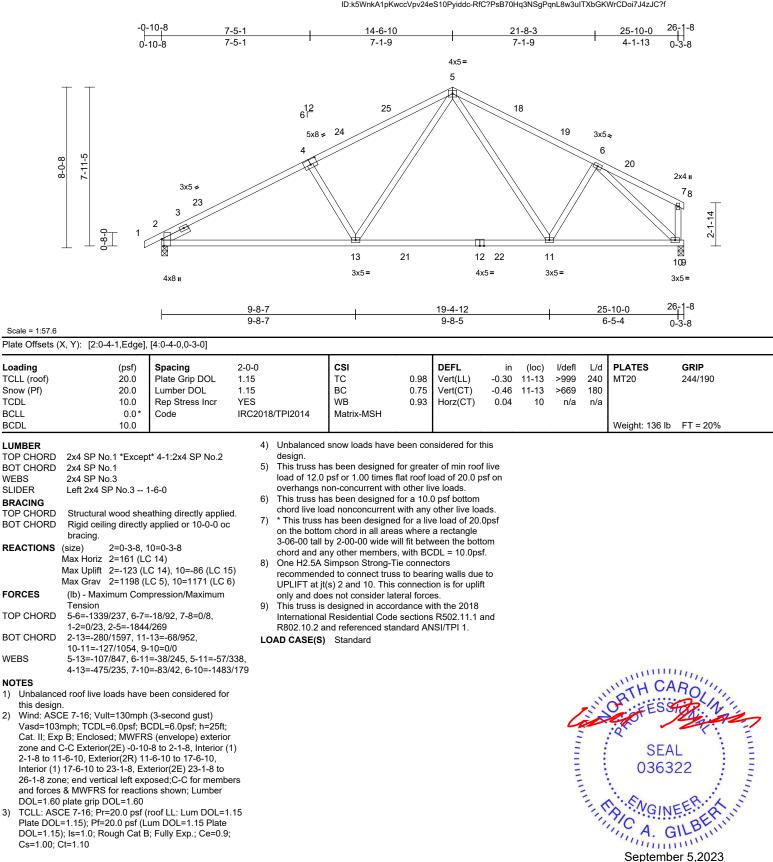
Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	B04	Common	2	1	Job Reference (optional)	160552861

1)

2)

3)

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:56 ID:k5WnkA1pKwccVpv24eS10Pyiddc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



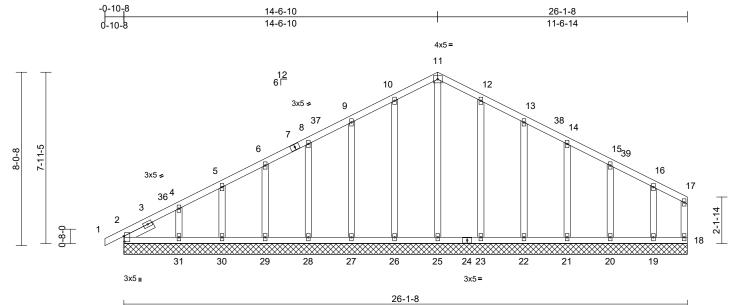


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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	B05	Common Supported Gable	1	1	Job Reference (optional)	160552862

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:56 ID:M4IN5iqbNbjp2?MHQ1tHxmyiM4c-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



		2

Scale = 1:53.4 Plate Offsets (X, Y): [2:0-3-1,0-0-5]

	(X, 1). [2.0-5-1,0-0-5]	1										
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.07 0.04 0.18	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: 167 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Left 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 2=26-1-8 20=26-1- 23=26-1- 30=26-1- 30=26-1- 23=26-1- 23=26-1- 23=26-1- 23=26-1- 23=26-1- 23=26-1- 23=26-1- 23=26-1- (22=-48) (122-48) (122-48) (122-48) 22=-43) (122-48) (122-48) 22=-43) (122-48) 22=-43) (122-48) 22=-37) (122-48)	eathing directly applied xcept end verticals. y applied or 10-0-0 oc 3, 18=26-1-8, 19=26-1- 8, 21=26-1-8, 22=26-1- 8, 25=26-1-8, 26=26-1- 8, 28=26-1-8, 29=26-1- 8, 28=26-1-8, 29=26-1- 0, 21-20-1- 8, 21=26-1-8, 22=26-1- 0, 21-26-1- 8, 21=26-1-8, 22=26-1- 0, 21-26-1- 8, 21=26-1- 8, 22=26-1- 8, 2	<ul> <li>WEBS</li> <li>-8,</li> <li>-9,</li> <li>-9,</li></ul>	1-2=0/23, 2-4=-147/ 5-6=-75/123, 6-8=-5 9-10=-81/217, 10-11 11-12=-99/259, 12-1 13-14=-62/169, 14-1 15-16=-30/74, 16-17 2-31=-2/11, 20-31=- 28-29=-2/11, 27-28= 25-26=-2/11, 23-25= 21-22=-2/11, 20-21= 18-19=-2/11 11-25=-164/28, 10-2 9-27=-188/81, 8-28= 5-30=-115/69, 4-31= 13-22=-188/82, 14-2 15-20=-123/92, 16-1 ed roof live loads have b B; Enclosed; MWFR C-C Corner(3E)-0-10- 16-10, Corner(3R) 11: 1) T-6-10 to 22-11-12 2 zone; end vertical le and forces & MWFRS	8/146, 1=-99/2 13=-81/ 15=-44/ 7=-20/2 -2/11, 2 -2/11, 2 -2/11, 2 -2/11, 2 -2/11, 2 -2/11, 2 -135/7 =-140/1 21=-135 19=-11( 	8-9=-62/170, 59, 217, 126, 0, 17-18=-37/ 9-30=-2/11, 26-27=-2/11, 22-23=-2/11, 19-20=-2/11, 19-20=-2/11, 5/71, 6, 6-29=-121/ 11, 12-23=-20 5/74, 0/123 considered for ond gust) .0psf, h=25ft; elope) exterior 1-8, Exterior(2 0, 17-6-10, er(3E) 22-11-' sed;C-C for	79, 05/71, 2N) 12	load ove 7) All   8) Gal 9) Gal 10) Thi: cho 11) * Th 0 cho 12) Pro bea 26, upli 31, upli 31, upli 19, 13) Thi: Inte	d of 12.0 rhangs i plates ar plates ar plates ar plates ar plates ar plates ar plates ar plates ar truss h rd live k his truss the botto 6-00 tall rd and a vide me irring plat 45 lb up ft at join 40 lb up ft at join 37 lb up s truss is rnationa 02.10.2 a	b) psf or non-co re 2x4 l irres coince as beee aad non- has bee m cho by 2-0 nny oth chanic. t 29, 30,000 lift at ji t 21, 4 t 22, 30,000 lift at ji t 21, 4 s desig and ref	1.00 times flat rc ncurrent with oth MT20 unless oth minuous bottom of ed at 2-0-0 oc. en designed for a nconcurrent with een designed for rd in all areas wh 0-00 wide will fit er members. al connection (by able of withstandi oint 27, 43 lb upli 0 lb uplift at joint 3 oint 23, 46 lb upli 1 lb uplift at joint 3 oint 23, 46 lb upli 1 lb uplift at joint 3 oint 23, 46 lb upli 0 nd a coordance dential Code sect ierenced standard	erwise indicated. chord bearing. 10.0 psf bottom any other live loads. a live load of 20.0psf ere a rectangle between the bottom others) of truss to ng 43 lb uplift at joint ft at joint 28, 47 lb 30, 89 lb uplift at joint ft at joint 22, 44 lb 20, 61 lb uplift at joint plift at joint 2. we with the 2018 ions R502.11.1 and ANSI/TPI 1.
FORCES	23=245 ( 26=245 ( 28=174 ( 30=149 ( 32=150 (	LC 22), 25=197 (LC 27 (LC 21), 27=228 (LC 21 (LC 21), 29=163 (LC 34 (LC 21), 31=199 (LC 34	<ul> <li>Description</li> <li>Descript</li></ul>	DL=1.60 plate grip DC igned for wind loads in studs exposed to wind ard Industry Gable En qualified building desi CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L ); Is=1.0; Rough Cat E Ct=1.10 ed snow loads have be	n the pl d (norma d Detai gner as (roof LL um DO 3; Fully	ane of the trus al to the face) Is as applicab per ANSI/TP : Lum DOL=1 IL=1.15 Plate Exp.; Ce=0.9	, Ile, Il 1. .15 ;			A A A A A A A A A A A A A A A A A A A	SEA 0363	L 22 L BER L BER L I L BER L I I I I I I I I I I I I I I I I I I

September 5,2023

Page: 1



Continued on page 2 Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. WARNING - 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/TPH Quality Crieria and DSB-22** available from Truss Plate Institute (www.tpinst.org) with the SCH trust information, available from the Structure Building Company depresent depresent on properts and presents on the properts on the properties of the structure Building Company. 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	108 Serenity-Roof-B329 A LH CP	
23080083-01	B05	Common Supported Gable	1	1	Job Reference (optional)	160552862
Carter Components (Sanford), S	anford, NC - 27332,	Run: 8.63 S Jul 28 20	023 Print: 8.6	30 S Jul 28 2	2023 MiTek Industries, Inc. Fri Sep 01 14:12:56	Page: 2

ID:M4IN5iqbNbjp2?MHQ1tHxmyiM4c-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	C01	Common Supported Gable	1	1	Job Reference (optional)	160552863

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:57 ID:HgQOZJQ?\_97iryHX?XwsQlyidVM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-p-10-8 20-9-8 19-11-0 9-11-8 0-10-8 9-11-8 9-11-8 0-10-8 4x5 = 8 7 9 1<u>2</u> 6Γ 6 10 33 34 5-8-15 5-7-12 5 11 3x5 ≉ 3x5 ≈ 4 12 3 13 2 14 te 0-8-0 15 P. 24 23 22 21 20 19 18 17 16 3x5 II 5x6 = 3x5 II 19-11-0

Scale = 1:43.3

Plate Offsets (X, Y):	[2:0-2-8,0-0-5], [14:0-3-1,0-0-5], [20:0-3-0,0-3-0]

		1											
Loading	(psf)	Spacing	1-11-4		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.08	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TI	PI2014	Matrix-MSH								
BCDL	10.0											Weight: 109 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS SLIDER	2x4 SP No.2 2x4 SP No.3	1-6-0, Right 2x4 SP N	WEB		2-24=-13/87, 23-2 21-22=-13/87, 19- 17-18=-13/87, 16- 8-20=-104/0, 7-21 5-23=-132/77, 4-2 10-18=-182/81, 11	21=-13/8 17=-13/8 =-199/78 4=-110/9	37, 18-19=-13 37, 14-16=-13 3, 6-22=-182/8 99, 9-19=-199	/87, /87 31,	on t 3-00 cho 12) Pro	the botto 6-00 tall rd and a vide me	om cho by 2-0 any oth chanic	ord in all areas wh 00-00 wide will fit ler members. al connection (by	a live load of 20.0psf ere a rectangle between the bottom others) of truss to ng 15 lb uplift at joint
DDACING	1-0-0				12-16=-110/99	11 10	2/11,					int 21, 44 lb uplift	
BRACING TOP CHORD	Structural wood she	athing directly applie	tor NOTE	s	· ···-								24, 43 lb uplift at joint
	6-0-0 oc purlins.	aumy uneous applie			d roof live loads hav	/e been	considered fo	r					ft at joint 17, 59 lb
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	, th	iis design.								nd 15 lb uplift at jo	
	bracing.		2) W		E 7-16; Vult=130mp nph; TCDL=6.0psf;							chord at joint(s)	rovide full bearing
	16=19-11 18=19-11 20=19-11 22=19-11 24=19-11 29=19-11 Max Horiz 2=83 (LC Max Uplift 2=83 (LC 17=-39 (I 19=-43 (I 22=-44 (I 24=-67 (I 16=153 ( 18=221 ( 20=143 ( 22=221 ( 22=146 ( 22=15 (LC)) 18=221 ( 22=15 (LC)) 22=15 (LC))	14), 25=83 (LC 14) C 15), 16=-59 (LC 15) .C 15), 18=-44 (LC 15) .C 15), 21=-44 (LC 16) .C 14), 23=-37 (LC 14) .C 14), 25=-15 (LC 16) C 21), 14=136 (LC 22) LC 25), 17=170 (LC 2) LC 22), 19=238 (LC 2) LC 21), 23=170 (LC 2) LC 21), 23=170 (LC 2) LC 24), 25=136 (LC 2)	C zz 1. (2 z z m M M m M m y j, 3) T j), oi j), 3) T j), s z j), 0 z j), 0 z j), 0 z j), 0 z j, 0 z j, 0 z j, 0 z z z z z z z z z z z z z z z z z z z	at. II; Exp one and C -11-8 to 6- :N) 12-11- one; cantil and right ex WVFRS for rip DOL=1 russ design nly. For s ee Standa r consult of CLL: ASC late DOL= OL=1.15) s=1.00; C nbalance esign.	B; Enclosed; MWF -C Corner(3E) -0-1 -11-8, Corner(3E) -0-1 -11-8, Corner(3R) 6 8 to 17-9-8, Corner ever left and right e cover left and right e	RS (env 0-8 to 1- i-11-8 to (3E) 17- exposed nbers ar Lumber I in the p nd (norm ind Deta signer a f (roof LI (Lum DC B; Fully been con for great	elope) exterior 11-8, Exterior 12-11-8, Exterior 12-11-8, Exterior 12-11-8, Exterior 12-11-8, Exterior 12-10-9 8, per 40-9-8 per 4	or r(2N) erior left its iss ), bble, PI 1. 1.15 ; ; ; his	Inte R80 LOAD (	rnationa 02.10.2 a CASE(S	al Resid and ref ) Sta	ferenced standard ndard	ANSI/TPI 1.
FORCES	Tension 1-2=0/23, 2-4=-88/4 5-6=-50/77, 6-7=-57 8-9=-63/162, 9-10=		o" 7) A 8) G 9) G 10) T	verhangs Il plates al able requi able studs his truss h	) psr or 1.00 times r non-concurrent with re 2x4 MT20 unless ires continuous bott s spaced at 2-0-0 on has been designed to bad nonconcurrent	n other li s otherwi tom choi c. for a 10.	ve loads. se indicated. d bearing. 0 psf bottom				A A A A A A A A A A A A A A A A A A A	SEA 0363	EER. KININ

September 5,2023

Page: 1

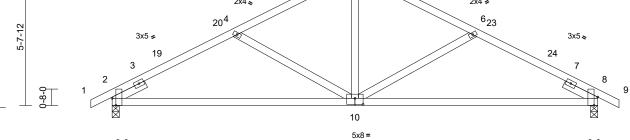
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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

A MiTek Affili 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP		
23080083-01	C02	Common	9	1	Job Reference (optional)	160552864	

5-8-15

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:57 Page: 1 ID:s0dYfRZTiKBmq2LtL68C2nyidWT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -0-10-8 20-9-8 5-1-8 9-11-8 14-9-8 19-11-0 5-1-8 4-10-0 4-10-0 5-1-8 0-10-8 0-10-8 4x5 = 5 1<u>2</u> 6 21 22 2x4 🔊 2x4 🕫 <sup>6</sup>23 20<sup>4</sup>



3x8 II

9-11-8	19-11-0
9-11-8	9-11-8

### Scale = 1:47.3 Plate Offsets (X, Y); [2:0-3-8.Edge], [8:0-4-1.Edge], [10:0-4-0.0-3-0]

Plate Offsets	(X, Y): [2:0-3-8,Edge],	, [8:0-4-1,Edge], [10:	0-4-0,0-3-0	ון								-	
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.53 0.83 0.27	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.13 -0.26 0.03	(loc) 10-13 10-13 8	l/defl >999 >911 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 94 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD	<ul> <li>2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3  1-6-0</li> <li>Structural wood she 4-10-10 oc purlins.</li> <li>Rigid ceiling directly bracing.</li> <li>(size) 2=0-3-8, 8 Max Horiz 2=86 (LC Max Grav 2=900 (LC Max Grav 2=900 (LC (lb) - Maximum Com Tension</li> </ul>	athing directly applie applied or 10-0-0 oc 8=0-3-8 14) C 14), 8=-93 (LC 15) C 21), 8=900 (LC 22) apression/Maximum 2/271, 4-5=-985/211,	6) ed or 7) c 8) ) 9)	design. This truss ha load of 12.0 overhangs n This truss ha chord live lo * This truss ha chord all ve lo * This truss is -06-00 tall chord and ai One H2.5A recommend UPLIFT at jt and does no This truss is International	snow loads have I as been designed f psf or 1.00 times f on-concurrent with as been designed f ad nonconcurrent has been designed m chord in all area by 2-00-00 wide winy other members. Simpson Strong-Ti ed to connect truss (s) 2 and 8. This co t consider lateral fi designed in accor Residential Code nd referenced star Standard	for great lat roof I n other li for a 10. with any d for a lin s where ill fit betw e conne s to bear onnectio orces. dance w sections	er of min roo bad of 20.0 p ve loads. 0 psf bottom other live loa re load of 20. a rectangle veen the bott ctors ing walls due n is for uplift ith the 2018 \$ R502.11.1 a	f live ssf on ads. Opsf tom e to only				<u> </u>	
BOT CHORD WEBS		,	9/172									min	1111
this desig 2) Wind: AS Vasd=10 Cat. II; E: zone and 2-1-8 to 6 (1) 12-11 zone; end members Lumber D 3) TCLL: AS Plate DO	ced roof live loads have gn. CCE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Br xp B; Enclosed; MWFR I C-C Exterior(2E) -0-10 3-11-8, Exterior(2R) 6-1 4 to 17-9-8, Exterior(2I d vertical left and right e s and forces & MWFRS OCL=1.60 plate grip DC SCE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L 5); Is=1.0; Rough Cat E	r (1) ior ; 1.15							<b>W</b> . 11111	2	SEA 0363	L 22 EER-ER-	

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



September 5,2023

3x8 II

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818 Soundside Road Edenton, NC 27932

A. GIL

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP		
23080083-01	C03	Common	2	1	Job Reference (optional)	160552865	

Loading

Snow (Pf)

LUMBER

TCDL

BCLL

BCDL

WEBS

SLIDER

FORCES

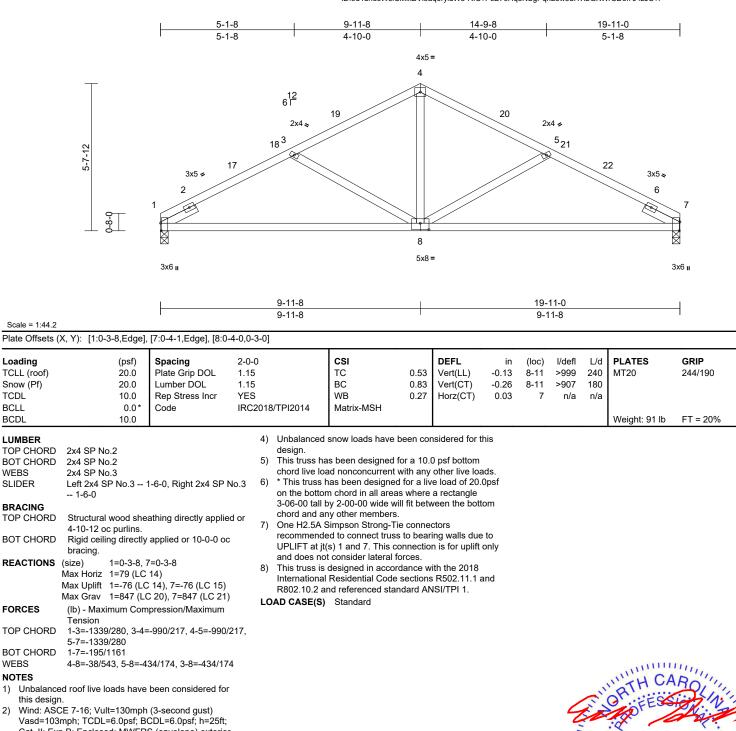
WEBS

NOTES

1)

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Page: 1



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) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 6-11-8. Exterior(2R) 6-11-8 to 12-11-8. Interior (1) 12-11-8 to 16-11-0, Exterior(2E) 16-11-0 to 19-11-0 zone; 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) 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

Straman Martin 1111111111 SEAL 036322 GI Thin the start September 5,2023

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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	C04	Common Girder	1	2	Job Reference (optional)	160552866

Loading

Snow (Pf)

LUMBER

TCDL

BCLL

BCDL

WEBS

BRACING

FORCES

WEBS

NOTES

1)

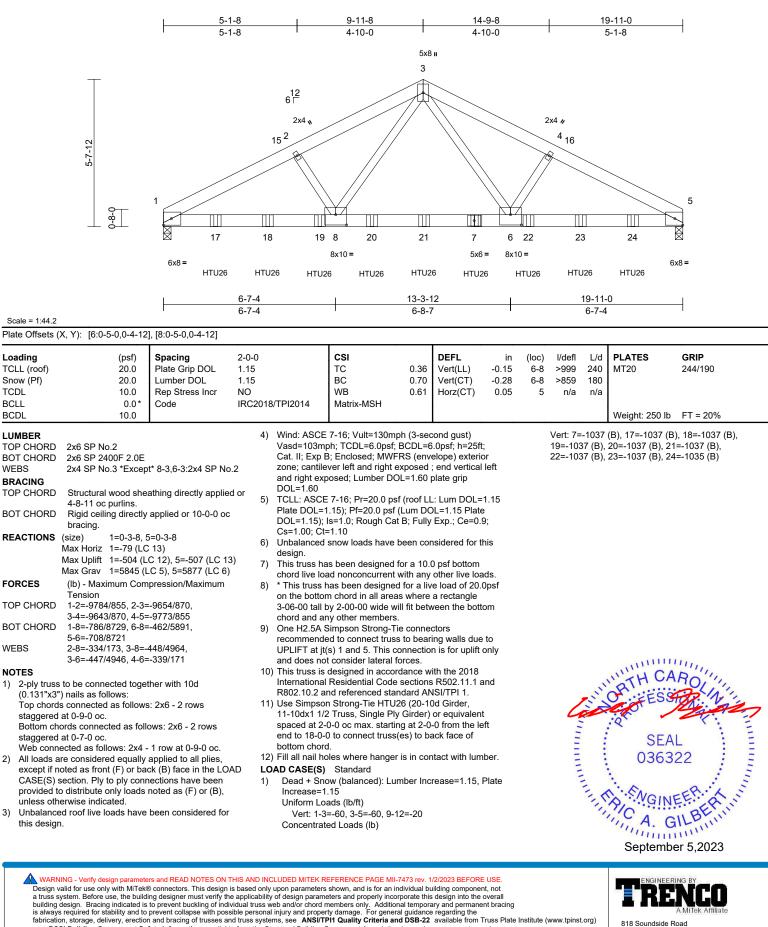
2)

3)

Run: 8.63 S. Jul 28 2023 Print: 8.630 S. Jul 28 2023 MiTek Industries. Inc. Fri Sen 01 14:12:58 ID:pZm2gFLO1 c4sbz J6gZukyi2?I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

Edenton, NC 27932



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

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	CJ2	Jack-Open	2	1	Job Reference (optional)	160552867

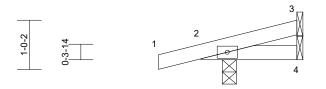
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0-9-12

Page: 1







3x5 =



Scale = 1:23.7

Loading TCLL (roof) Snow (Pf)	(psf) 20.0 20.0	<b>Spacing</b> Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI TC BC	0.08 0.08	DEFL Vert(LL) Vert(CT)	in 0.00 0.00	(loc) 5 5	l/defl >999 >999	L/d 240 180	PLATES MT20	<b>GRIP</b> 244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP		(- )						
BCDL	10.0										Weight: 7 lb	FT = 20%
	2x4 SP No.2 Structural wood she 1-11-11 oc purlins. Rigid ceiling directly bracing.	applied or 10-0-0 o 3= Mechanical, 4= al 10) 2 10), 3=-8 (LC 14),	ed or 7) Bearings crushing of c 8) Refer to g 9) Provide m 6 8) Refer to g 9) Provide m 4.8 lb up 10) This truss Internation R802.10.2	is has been designe tom chord in all are all by 2-00-00 wide v any other members are assumed to be: apacity of 425 psi. irder(s) for truss to bechanical connection ate capable of withs iff at joint 3 and 86 l is designed in accor- nal Residential Codo 2 and referenced sta S) Standard	as where will fit betw s. , Joint 2 truss con on (by oth standing 4 b uplift at ordance w e sections	a rectangle veen the botto Jser Defined nections. ers) of truss t l b uplift at joi joint 2. ith the 2018 \$ R502.11.1 a	o int					
	(LC 7)	5 2 1), 5 26 (20 2 1);										
FORCES	(Ib) - Maximum Com	pression/Maximum										
TOP CHORD	Tension 1-2=0/17, 2-3=-121/	125										
BOT CHORD	2-4=-121/144											
NOTES												
Vasd=103 Cat. II; Ex zone and exposed;C	CE 7-16; Vult=130mph mph; TCDL=6.0psf; B p B; Enclosed; MWFR C-C Exterior(2E) zone C-C for members and f shown; Lumber DOL= )	CDL=6.0psf, h=25ft; S (envelope) exteric ; porch left and right orces & MWFRS for	r						6	in the	ORTH C	AD JUNIN
Plate DOL	CE 7-16; Pr=20.0 psf ( _=1.15); Pf=20.0 psf (L 5); Is=1.0; Rough Cat E Ct=1.10	um DOL=1.15 Plate	l.								SE/ 0363	
	ed snow loads have be	en considered for th	nis								030	
load of 12	has been designed fo .0 psf or 1.00 times fla s non-concurrent with o	t roof load of 20.0 p							5		AIC A	EER AL
5) This truss	has been designed fo load nonconcurrent w	r a 10.0 psf bottom	ds.								innin .	GILBE

September 5,2023

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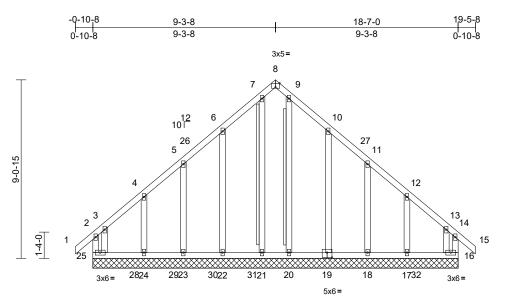
818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	D01	Common Girder	1	1	Job Reference (optional)	160552868

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4

Page: 1



18-7-0

# Scale = 1:58.6 Plate Offsets (X, Y): [8:0-2-8,Edge], [19:0-3-0,0-3-0]

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	1-11-4 1.15	CSI TC	0.17	<b>DEFL</b> Vert(LL)	in n/a	(loc) -	l/defl n/a	L/d 999	PLATES MT20	<b>GRIP</b> 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.00	16	n/a	n/a		
BCLL BCDL	0.0* 10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 139 lb	FT = 20%
LUMBER		•	TOP CHOR	D 2-25=-179/146, 1	-2=0/38,	2-3=-69/68,		9) Tru	ss to be	fully s	heathed from one	e face or securely
TOP CHORD	2x4 SP No.2			3-4=-160/143, 4-		,	77,					.e. diagonal web).
BOT CHORD	2x4 SP No.2			6-7=-92/235, 7-8							ed at 2-0-0 oc.	
WEBS	2x4 SP No.3		_	9-10=-92/226, 10		,					en designed for a	
OTHERS		pt* 0-0,0-0:2x4 SPF N	5.2	11-12=-89/128, 1 13-14=-66/66, 14			141					any other live loads. a live load of 20.0ps
	(flat)		BOT CHOR				1 - 1				ord in all areas wh	
BRACING TOP CHORD	Structural wood sh	eathing directly applied		22-23=-105/123,		,						between the bottom
	6-0-0 oc purlins, ex			20-21=-105/123,	18-20=-1	05/123,					er members.	
BOT CHORD		y applied or 6-0-0 oc		17-18=-104/123,								others) of truss to
	bracing.		WEBS	7-21=-146/16, 9-		,	27,					ing 144 lb uplift at
WEBS	T-Brace:	2x4 SPF No.2 - 7-21		5-23=-135/73, 4- 3-25=-253/212, 1								Ib uplift at joint 21, 2 pint 22, 93 lb uplift at
	Feater (OV) T	9-20	-	11-18=-135/74, 1								2 lb uplift at joint 19,
	of web with 10d (0.	I braces to narrow edg	le	13-16=-224/180							18 and 264 lb up	
	o.c.,with 3in minim		NOTES					14) Thi	s truss is	s desig	ned in accordance	ce with the 2018
	,	90% of web length.		ced roof live loads ha	ve been	considered for						tions R502.11.1 and
REACTIONS		-0, 17=18-7-0, 18=18-7	r <sub>-0,</sub> this desi	gn.				R80	02.10.2	and ref	ferenced standar	d ANSI/TPI 1.
		-0, 20=18-7-0, 21=18-7	7_0. 2) Wind: A	SCE 7-16; Vult=130m								
		-0, 23=18-7-0, 24=18-7		)3mph; TCDL=6.0psf			-					
	25=18-7-			xp B; Enclosed; MW			I					111
	Max Horiz 25=-230			60 plate grip DOL=1.6		a, Lumber					IN'IL CA	Dille
		(LC 9), 17=-264 (LC 1 LC 13), 19=-162 (LC 1	<i>3),</i> , , , , , , , , , , , , , , , , , ,	esigned for wind load		lane of the tru	SS				"aTH UF	no in
		LC 30), 21=-23 (LC 31	), only. Fo	r studs exposed to w	ind (norm	al to the face)	,			À	OTTESS	6:14:
		(LC 12), 23=-93 (LC 1	2). see Star	dard Industry Gable						30	1	Tilan
	24=-225	(LC 12), 25=-144 (LC	8) or consu	It qualified building d					<u> </u>	U		
		LC 22), 17=413 (LC 2	<sup>0</sup> , <sup>1</sup> Dista D(	SCE 7-16; Pr=20.0 p )L=1.15); Pf=20.0 ps			.15		-		054	· · · · · · · · · · · · · · · · · · ·
		(LC 20), 19=371 (LC 2		15); Is=1.0; Rough Ca					=		SEA	L : E
		(LC 20), 21=270 (LC 1 (LC 19), 23=271 (LC 1	<sup>()</sup> , 0- 100	; Ct=1.10	at D, i uny	LAP., 00-0.3	,		=		0363	22 : =
		(LC 22), 25=328 (LC 2	<sup>5</sup> ), <u>-</u> \	ced snow loads have	been co	nsidered for th	is		-			: E
FORCES		mpression/Maximum	ć design.							1	·	A. E. E.
	Tension			s has been designed						20	SEA 0363	FETTAS
				2.0 psf or 1.00 times gs non-concurrent wi			it on			11	7/0	Et N
				s are 2x4 MT20 unles							11. A. G	ILDUN
				quires continuous bo							minu	111111
			-,	,							Sontomb	or E 2022

September 5,2023

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



Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	D01	Common Girder	1	1	If Job Reference (optional)	60552868

15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 113 lb down and 46 lb up at 0-1-12, 108 lb down and 53 lb up at 2-1-8, 108 lb down and 53 lb up at 4-1-8, 108 lb down and 53 lb up at 6-1-8, 108 lb down and 53 lb up at 8-1-8, 108 lb down and 53 lb up at 10-1-8, 108 lb down and 53 lb up at 14-1-8, 108 lb down and 53 lb up at 14-1-8, 108 lb down and 53 lb up at 14-1-8, 108 lb down and 53 lb up at 14-1-8, 108 lb down and 53 lb up at 16-5-8, and 108 lb down and 46 lb up at 18-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

16) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

# LOAD CASE(S) Standard

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

Uniform Loads (lb/ft)

Vert: 1-2=-58, 2-8=-58, 8-14=-58, 14-15=-58,

16-25=-19

Concentrated Loads (lb)

Vert: 25=-113, 16=-113, 20=-108, 19=-108, 18=-108, 17=-108, 28=-108, 29=-108, 30=-108, 31=-108,

32=-108

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:12:59 ID:FxfwZql0vU\_XFGKn2XT8rqyiMvf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



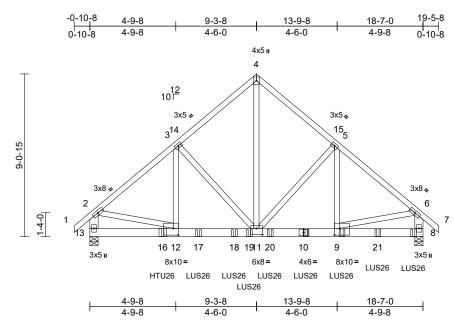
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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



Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	D02	Common Girder	1	2	Job Reference (optional)	160552869

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:00 ID:MxFwBELagtZwqajGkCZLsqyi1sF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



### Scale = 1:64.3

Plate Offsets (X, Y): [9:0-3-8,0-4-8], [11:0-4-0,0-4-4], [12:0-3-8,0-4-8]

		E		•									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	3/TPI2014	CSI TC BC WB Matrix-MSH	0.36 0.67 0.72	DEFL Vert(LL) Vert(CT) Horz(CT)		(loc) 11-12 11-12 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 290 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x6 SP No.2 2x4 SP No.3 *Excep Structural wood she 6-0-0 oc purlins, exi Rigid ceiling directly bracing.	athing directly applie cept end verticals. applied or 10-0-0 oc	ed or	this design. Wind: ASCE Vasd=103mp Cat. II; Exp E zone; end ve DOL=1.60 pl TCLL: ASCE Plate DOL=1 DOL=1.15); I	7-16; Vult=130mp bh; TCDL=6.0psf; E 3; Enclosed; MWFF rtical left and right ate grip DOL=1.60 ; 7-16; Pr=20.0 psf .15); Pf=20.0 psf (15); Rf=20.0 psf (15); Rough Cat	h (3-seo 3CDL=6 RS (env expose (roof LI Lum DC	cond gust) 6.0psf; h=25ft; elope) exteric d; Lumber .: Lum DOL= DL=1.15 Plate	or 1.15	the 16) Har pro lb d des res <b>LOAD (</b> 1) De	truss. nger(s) o vided su own and ign/sele consibilit	or other fficient d 111 ll ction o ty of ot ) Stat	r connection devic to support conce o up at 18-4-4 on f such connectior hers. ndard	ntrated load(s) 569 bottom chord. The
REACTIONS	Max Horiz 13=-237 ( Max Uplift 8=-746 (L Max Grav 8=3976 (L	LC 10) C 13), 13=-772 (LC	10	design.	snow loads have b					niform Lo Vert: 1-2 oncentra	2=-60,	2-4=-60, 4-6=-60	, 6-7=-60, 8-13=-20
FORCES	(lb) - Maximum Com Tension		, 19) 7)	load of 12.0	is been designed for psf or 1.00 times fla on-concurrent with	at roof l	oad of 20.0 p			(B), 17=	-799 (	B), 18=-687 (B), 1	=-551 (B), 16=-1145 9=-560 (B), 20=-537
TOP CHORD		-3689/722, 6-7=0/42	2,	This truss ha	ad nonconcurrent with ad nonconcurrent with as been designed	or a 10. vith any	0 psf bottom other live loa			(B), 21=	-544 (	В)	
BOT CHORD	12-13=-275/440, 11- 9-11=-466/2767, 8-9	-12=-678/3086, )=-96/351	5)	on the bottor 3-06-00 tall b	n chord in all areas by 2-00-00 wide wil	where	a rectangle	•					
WEBS	4-11=-777/3482, 5-1 5-9=-127/713, 3-11= 3-12=-381/1243, 2-1 6-9=-416/2507	-1210/459,	10	) LGT2 Simps connect truss and 8. This c	ny other members. on Strong-Tie conr s to bearing walls o connection is for up	lue to U	PLIFT at jt(s)	13			an'	ORTH CA	ROLIN
(0.131"x3 Top chord oc, 2x6 - 2 Bottom ch staggered Web conr	s to be connected togel ") nails as follows: is connected as follows 2 rows staggered at 0-5 nords connected as follo 1 at 0-9-0 oc. nected as follows: 2x4 - are considered equally	s: 2x4 - 1 row at 0-9- 9-0 oc. ows: 2x6 - 2 rows • 1 row at 0-9-0 oc.	0 12	International R802.10.2 ar Use Simpsor 11-10dx1 1/2 4-0-12 from t face of botton	designed in accord Residential Code s nd referenced stan n Strong-Tie HTU2 2 Truss, Single Ply the left end to conn	sections dard AN 6 (20-1) Girder) nect trus	R502.11.1 a ISI/TPI 1. Od Girder, or equivalent s(es) to back	at		With the second		SEA 0363	• -

All lo except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

- Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 6-0-12 from the left end to 18-0-12 to connect truss(es) to back face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.

A. GILB A. GILD

September 5,2023

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PIC

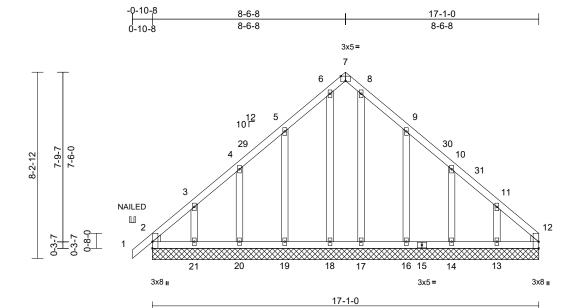
Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	E01	Common Supported Gable	1	1	Job Reference (optional)	160552870

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:01 ID:msPYNollActYsq9j0KJ?\_WyiMxX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

September 5,2023

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### Scale = 1:50.9

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

	, , , , , [ <u>2</u> .2ugo,o o .],			.1									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.23 0.13 0.14	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc) - - 12	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 111 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood she 6-0-0 oc purlins.	athing directly applied applied or 10-0-0 oc	W 1 or <b>N</b> (	YEBS OTES	2-21=-162/202, 20 19-20=-72/182, 18 17-18=-72/182, 16 14-16=-72/182, 13 12-13=-72/182 6-18=-151/31, 8-17 4-20=-142/117, 3-2 9-16=-225/139, 10 11-13=-139/157 roof live loads hav	-19=-72 -17=-72 -14=-72 7=-151/4 21=-154 -14=-14	/182, /182, /182, /182, /182, /182, /182, /182, /182, /182, /1714,		cho 11) * Th on t 3-0 cho 12) Pro bea join upli join	rd live lo nis truss the botto 6-00 tall ord and a vide me tring pla t 2, 31 ll ft at join t 21, 96	bad noi has be om cho by 2-0 any oth chanic te capa b uplift t 19, 79 Ib uplif	een designed for rd in all areas wh 0-00 wide will fit er members. al connection (by able of withstandi at joint 12, 11 lb 9 lb uplift at joint ft at joint 16, 63 lb	any other live loads. a live load of 20.0psf lere a rectangle between the bottom others) of truss to ng 204 lb uplift at uplift at joint 18, 97 lb 20, 181 lb uplift at o uplift at joint 14, 126
REACTIONS	(size) 2=17-1-0, 14=17-1-0 14=17-1-0 21=17-1-0 21=17-1-0 21=17-1-0 21=17-1-0 21=17-1-0 13=-128 (L 13=-128 (L 13=-96 (L 13=-97 (L 13=201 (L 16=267 (L 18=184 (L 20=179 (L	C 10), 12=-31 (LC 13 LC 15), 14=-63 (LC 5 C 55), 18=-11 (LC 11 C 54), 20=-79 (LC 14 LC 54), 22=-204 (LC C 13)	1-0, 2) 1-0, 1-0 ), 5), ), 10), 10), 3) 5), 2), 4), 4), 4), 4), 4), 4), 4), 4	Vasd=103m Cat. II; Exp I zone and C (2N) 1-10-4 Exterior(2N) 17-1-0 zone vertical left a forces & MW DOL=1.60 p Truss desig only. For stu see Standar or consult qu TCLL: ASCE	F-16; Vult=130mp ph; TCDL=6.0psf; I B; Enclosed; MWFI C Corner(3E) -0-11 to 5-6-8, Corner(3F 11-6-8 to 14-1-0, ( ; cantilever left and and right exposed; C VFRS for reactions late grip DOL=1.6C ned for wind loads uds exposed to wind d Industry Gable E ualified building des E 7-16; Pr=20.0 psf 1.15); Pf=20.0 psf	BCDL=6 RS (env )-8 to 1- R) 5-6-8 Corner(3 right ex C-C for r shown; ) in the p d (norm nd Deta signer a: f (roof Ll	.0psř, h=25ft; elope) exterio 10-4, Exterior to 11-6-8, E) 14-1-0 to posed ; end nembers and Lumber lane of the tru al to the face ils as applicat s per ANS/TF .: Lum DOL=	r iss ), ble, PI 1. 1.15	at jo 13) This Inte R8 14) "NA (0.1 15) In ti of ti LOAD (	int 12. s truss is ernationa 02.10.2 i NLED" in 148"x3.2 he LOAI he truss CASE(S	s desig al Resid and ref ndicate 5") toe D CASI are no ) Star	ned in accordance dential Code secto rerenced standarr s 3-10d (0.148"x -nails per NDS g E(S) section, load ted as front (F) o ndard	ions R502.11.1 and d ANSI/TPI 1. 3") or 3-12d uidlines. Is applied to the face r back (B).
FORCES TOP CHORD	(Ib) - Maximum Com Tension 1-2=-92/70, 2-3=-21 4-5=-96/78, 5-6=-10	pression/Maximum 3/131, 3-4=-138/102, 4/135, 6-7=-62/114, 04/134, 9-10=-79/48,	5)	DOL=1.15); Cs=1.00; Ct Unbalanced design. This truss ha load of 12.0 overhangs n All plates are Gable requir	Is=1.0; Rough Cat	B; Fully been cor or great at roof le other li otherwi om chor	Exp.; Ce=0.9 nsidered for the er of min roof bad of 20.0 ps ve loads. se indicated.	); iis live				SEA 0363	EER. Kunner

- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.



Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	E01	Common Supported Gable	1	1	Job Reference (optional)	160552870
Carter Components (Sanford), S	anford, NC - 27332,	Run: 8.63 S Jul 28 20	023 Print: 8.6	30 S Jul 28 2	2023 MiTek Industries, Inc. Fri Sep 01 14:13:01	Page: 2

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Dead + Snow (balanced): Lumber Increase=1.15, Plate 1) Increase=1.15 Uniform Loads (lb/ft) Vert: 1-7=-60, 7-12=-60, 22-26=-20

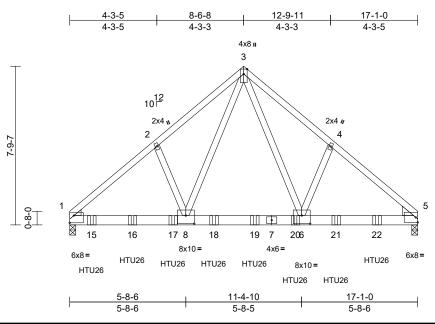
Concentrated Loads (lb) Vert: 1=23 (B)

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



Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	E02	Common Girder	1	2	Job Reference (optional)	160552871

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:01 ID:b7\_VE9M3qjmyqXpPx6mIdSyiMBg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



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

Scale = 1:56.5

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	0.52	Vert(LL)	-0.09	6-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.47	Vert(CT)	-0.16	6-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO		WB	0.82	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018	/TPI2014	Matrix-MSH								
BCDL	10.0											Weight: 218 lb	FT = 20%
LUMBER			3)		roof live loads hav	e been o	considered fo	r		CASE(S)			
TOP CHORD			•	this design.	7 40 14 400							alanced): Lumber	Increase=1.15, Plate
BOT CHORD	2x6 SP 2400F 2.0E		4)		7-16; Vult=130mp		0,			crease=			
WEBS	2x4 SP No.3				h; TCDL=6.0psf;					niform Lo			
WEDGE	Left: 2x4 SP No.3				; Enclosed; MWF ver left and right e							3-5=-60, 9-12=-2	0
	Right: 2x6 SP No.2				osed; Lumber DO			ien		oncentra			
BRACING				DOL=1.60	used, Lumber DO	L=1.00	slate grip						B), 17=-1037 (B),
TOP CHORD	Structural wood she	athing directly applie	d or 5)		7-16; Pr=20.0 pst	(roof LL	: Lum DOL=	1.15				19=-1037 (B), 20 22=-1037 (B)	I—-1037 (В),
BOT CHORD	4-8-7 oc purlins. Rigid ceiling directly	applied or 10.0.0 or	,		.15); Pf=20.0 psf (					21100	л (D),	221037 (D)	
BOT CHURD	bracing.	applied of 10-0-0 of	,	DOL=1.15);	s=1.0; Rough Cat	B; Fully	Exp.; Ce=0.9	);					
REACTIONS	0	-0.2.0		Cs=1.00; Ct=	:1.10		•						
REACTIONS	(size) 1=0-3-8, 5 Max Horiz 1=167 (L0		6)	Unbalanced	snow loads have l	been cor	nsidered for th	nis					
	Max Uplift 1=-542 (L		3)	design.									
	Max Opint 1=-542 (L Max Grav 1=5452 (L				s been designed f								
FORCES	(lb) - Maximum Com				d nonconcurrent								
FURCES	Tension	pression/waximum	8)		as been designed			pst					
TOP CHORD	1-2=-5985/622, 2-3=	-5962/706			n chord in all area y 2-00-00 wide wi								
	3-4=-5914/701, 4-5=	,			y other members,								
BOT CHORD	1-8=-510/4586, 6-8=		9)		impson Strong-Ti			•					
	5-6=-425/4542	,	0)		d to connect truss			to					11.5
WEBS	3-8=-491/3950, 2-8=	-324/185,			s) 5 and 1. This co							11111 00	Ellin,
	3-6=-480/3855, 4-6=	-298/197		and does not	consider lateral fo	orces.		,				"TH UA	ROUT
NOTES			10	This truss is	designed in accore	dance w	ith the 2018				1	ON SECC	in Inde
1) 2-ply truss	to be connected toge	ther with 10d			Residential Code			nd			K 2	OFEUU	Marin
(0.131"x3"	) nails as follows:				nd referenced star					4	12		
Top chord	s connected as follows	s: 2x4 - 1 row at 0-9-	0 11	Use Simpsor	Strong-Tie HTU2	6 (20-10	d Girder,				1 1		
OC.					Truss, Single Ply					-		SEA	L 18 E
	ords connected as foll	ows: 2x6 - 2 rows			0-0 oc max. startin					=	:	0202	· · ·
	at 0-8-0 oc.	1		chord.	to connect truss(e	s) to bac	K TACE OF DOL	UIII		1		0363	~~ : :
	ected as follows: 2x4 -		12		Strong-Tie HTU2	6 (20-1)	d Girder			-	e e		1 1
	re considered equally oted as front (F) or ba				Truss, Single Ply						-	i.A.	airs
	section. Ply to ply conr				)-0 oc max. startir						25	VGIN	EELAN
	o distribute only loads				) to connect truss(						11	710	allin
	erwise indicated.			bottom chord		,						0363	ILDIN
041			13	Fill all nail ho	les where hanger	is in cor	tact with lum	ber.				CA. G	11111
					Ū							Septembe	er 5 2023
												ocpicitio	0,2020

818 Soundside Road Edenton, NC 27932

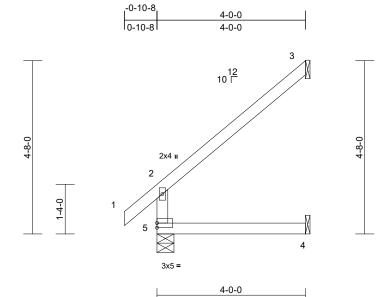
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCEL Building Component Schut before the Structure Building former the Advection (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	108 Serenity-Roof-B329 A LH CP	100550070	
23080083-01	EJ4	Jack-Open	22	1	I60 Job Reference (optional)	552872	

### Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:02 ID:d3hD92STipIWgxctoeVD3ZyiMtS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:31.1

Loading         (psf)           TCLL (roof)         20.0           Snow (Pf)         20.0           TCDL         10.0           BCLL         0.0*           BCDL         10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	<b>CSI</b> TC BC WB Matrix-MR	0.52 0.36 0.00	<b>DEFL</b> Vert(LL) Vert(CT) Horz(CT)	in 0.03 -0.03 -0.06	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 17 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING TOP CHORD Structural wood she 4-0-0 oc purlins, ex BOT CHORD Rigid ceiling directly bracing.	applied or 10-0-0 oc inical, 4= Mechanical, C 14) C 14) C 14), 4=-8 (LC 14) C 21), 4=73 (LC 7), 5=	on the botto 3-06-00 tall chord and a 7) Bearings are crushing car 8) Refer to girc 9) Provide mec bearing plat 3 and 8 lb u 10) This truss is Internationa R802 210.2 a CASE (S)	has been designed m chord in all area by 2-00-00 wide w ny other members a assumed to be: , bacity of 425 psi. ler(s) for truss to t chanical connection e capable of withst plift at joint 4. designed in accor I Residential Code nd referenced star Standard	s where ill fit betw Joint 5 L russ con n (by oth anding 9 dance w sections	a rectangle veen the bott Jser Defined nections. ers) of truss 9 lb uplift at ith the 2018 i R502.11.1 a	om to joint				Weight: 17 lb	FT = 20%
Tension TOP CHORD 2-5=-283/75, 1-2=0/: BOT CHORD 4-5=0/0 NOTES 1) Wind: ASCE 7-16; Vult=130mph Vasd=103mph; TCDL=6.0psf; Br Cat. II; Exp B; Enclosed; MWFR: zone and C-C Exterior(2E) zone; exposed;C-C for members and fr reactions shown; Lumber DOL= DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (L DOL=1.15); Is=1.0; Rough Cat E Cs=1.00; Ct=1.10 3) Unbalanced snow loads have be design. 4) This truss has been designed for load of 12.0 psf or 1.00 times flat overhangs non-concurrent with c 5) This truss has been designed for chord live load nonconcurrent with	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; end vertical left orces & MWFRS for 1.60 plate grip roof LL: Lum DOL=1. um DOL=1.15 Plate s; Fully Exp.; Ce=0.9; een considered for this r greater of min roof li t roof load of 20.0 psf other live loads. r a 10.0 psf bottom	s ve on								SEA 0363	EER. AUT

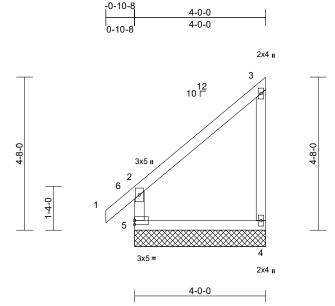


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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	EJ4A	Jack-Open	1	1	I60552 Job Reference (optional)	873

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:02 ID:ClcXAL8ntWAFloQVACTkwtyiMoh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:35 1

Scale = 1:35.1											
Loading         (psf)           TCLL (roof)         20.0           Snow (Pf)         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	Plate Grip DOL       1         Lumber DOL       1         Rep Stress Incr       Y	-0-0 .15 .15 ES RC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.41 0.28 0.07	<b>DEFL</b> Vert(LL) Vert(CT) Horz(CT)	in n/a n/a n/a	(loc) - -	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 23 lb	<b>GRIP</b> 244/190 FT = 20%
4-0-0 oc purlins,           BOT CHORD         Rigid ceiling direct bracing.           REACTIONS         (size)         4=4-0-0           Max Horiz         5=126           Max Uplift         4=-105           Max Grav         4=223           FORCES         (lb) - Maximum Contention	(LC 14) (LC 21), 5=317 (LC 21) pmpression/Maximum :0/49, 2-3=-140/88 ve been considered for ph (3-second gust) BCDL=6.0psf; h=25ft; :RS (envelope) exterior ne; end vertical left d forces & MWFRS for .= 1.60 plate grip of (roof LL: Lum DOL=1.15 (Lum DOL=1.15 Plate t B; Fully Exp.; Ce=0.9; been considered for this for greater of min roof live flat roof load of 20.0 psf on h other live loads.	<ul> <li>chord live loa</li> <li>8) * This truss I on the bottor 3-06-00 tall It chord and ar</li> <li>9) All bearings capacity of 5</li> <li>10) N/A</li> <li>11) This truss is International R802.10.2 a</li> <li>LOAD CASE(S)</li> </ul>	designed in accord Residential Code s nd referenced stan	vith any for a liv s where I fit betv SP No. SP No. lance w sections	other live load e load of 20.0 a rectangle veen the bottor 2 crushing tht the 2018 R502.11.1 ar	psf m		4		SEA 0363	L 22



September 5,2023

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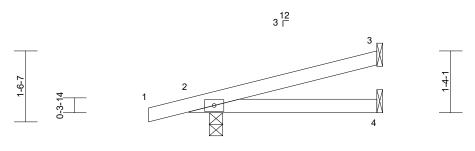
818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	EJ4B	Jack-Open	2	1	I60552 Job Reference (optional)	874

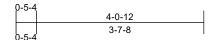
### Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:02 ID:gULXnTbdkc2aFYwQ74WH4Ryi1Mx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f











### Scale = 1:24.9

Loading	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.03	4-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	0.02	4-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 14 lb	FT = 20%
	4 SP No.2 4 SP No.2		on the botto 3-06-00 tall	has been design om chord in all are by 2-00-00 wide any other member	eas where will fit betv	a rectangle						

BIUGOINO			
TOP CHORD	Structura	wood sheathing directly applied or	7)
	4-0-12 oc	purlins.	•
BOT CHORD		ing directly applied or 10-0-0 oc	8) 9)
	bracing.		9)
REACTIONS	(size)	2=0-3-8, 3= Mechanical, 4=	
		Mechanical	10
	Max Horiz	2=47 (LC 10)	10
	Max Uplift	2=-103 (LC 10), 3=-37 (LC 10),	
		4=-13 (LC 10)	
	Max Grav	2=328 (LC 21), 3=119 (LC 21),	LC
		4=62 (LC 7)	
FORCES	(lb) - Max	imum Compression/Maximum	
	Tension		
TOP CHORD	1-2=0/18,	2-3=-119/133	
BOT CHORD	2-4=-128/	143	

### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; porch 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 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.
- This truss has been designed for greater of min roof live 4) load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- Bearings are assumed to be: , Joint 2 User Defined crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 3, 13 lb uplift at joint 4 and 103 lb uplift at joint 2.

0) 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.

# OAD CASE(S) Standard



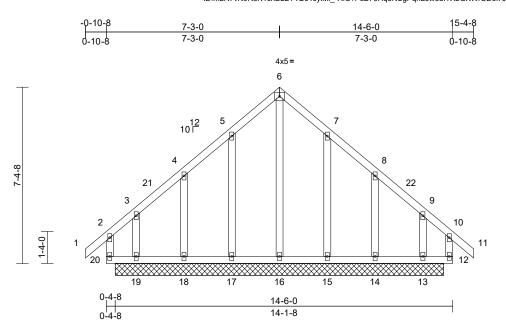
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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	G01	Common Supported Gable	1	1	Job Reference (optional)	160552875

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Page: 1



### Scale = 1:48.2

Plate Offsets (X, Y): [10:0-0-0,Edge]

PLATES         GRIP           MT20         244/190           Weight: 98 lb         FT = 20%
cal connection (by others) of truss to iable of withstanding 58 lb uplift at joint t joint 18, 105 lb uplift at joint 19, 58 lb I33 lb uplift at joint 14 and 103 lb uplift aring condition. Review required. gned in accordance with the 2018 idential Code sections R502.11.1 and offerenced standard ANSI/TPI 1. andard
H CARO
OPERATION
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# NOTES

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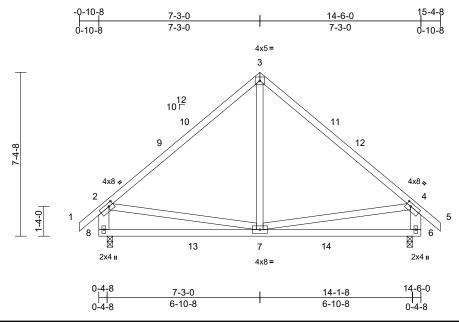


September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	G02	Common	4	1	Job Reference (optional)	160552876

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Scale = 1:51.9

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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-MSH	0.97 0.43 0.34	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.09 -0.10 0.01	(loc) 6-7 7-8 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 89 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES	2x4 SP No.2 2x4 SP No.3 *Excep Structural wood shee except end verticals. Rigid ceiling directly bracing. (size) 6=0-3-0,8 Max Horiz 8=200 (LC Max Uplift 6=-57 (LC Max Grav 6=703 (LC (Ib) - Maximum Com Tension 1-2=0/42, 2-3=-624/4 4-5=0/42, 2-8=-640/3	athing directly applied applied or 10-0-0 oc 3=0-3-0 C 13) C 15), 8=-57 (LC 14) C 22), 8=702 (LC 21) pression/Maximum 435, 3-4=-624/435, 385, 4-6=-641/379 196/368	<sub>d,</sub> 6) 7) 8) 9)	design. This truss ha load of 12.0 overhangs n This truss ha chord live lo * This truss lo on the bottoo 3-06-00 tall 1 chord and at One RT8A M truss to beat This connec lateral forces This truss is International	designed in accord Residential Code nd referenced star	for great lat roof I n other li for a 10. with any d for a liv s where ill fit betv ecomme PLIFT a y and do dance w sections	er of min roo oad of 20.0 p ve loads. 0 psf bottom other live loa re load of 20. a rectangle ween the bott ended to com t jt(s) 8 and 6 bes not consi- vith the 2018 s R502.11.1 a	f live osf on ads. Opsf tom nect 3. der					
	and we affly a landa la sure												1.1.4

- 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) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 4-3-0, Exterior(2R) 4-3-0 to 10-3-0, Interior (1) 10-3-0 to 12-4-8, Exterior(2E) 12-4-8 to 15-4-8 zone; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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

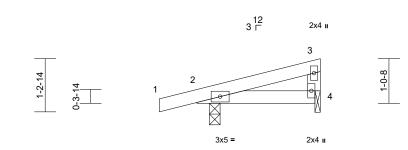


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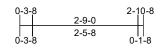
Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	H01	Jack-Closed	2	1	Job Reference (optional)	60552877

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:03 ID:JZY989jmNtkp0yAOw6RgmPyiMvh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



-0-10-8

0-10-8



2-10-8

2-10-8

### Scale = 1:26.8

Loading         (psf)           TCLL (roof)         20.0           Snow (Pf)         20.0           TCDL         10.0           BCLL         0.0*           BCDL         10.0	Plate Grip DOL 1 Lumber DOL 1 Rep Stress Incr Y	-11-4 .15 .15 ES RC2018/TPI2014	<b>CSI</b> TC BC WB Matrix-MP	0.10 0.10 0.00	<b>DEFL</b> Vert(LL) Vert(CT) Horz(CT)	in 0.01 0.01 0.00	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	<b>PLATES</b> MT20 Weight: 11 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER           TOP CHORD         2x4 SP No.2           BOT CHORD         2x4 SP No.2           WEBS         2x4 SP No.3           BRACING         2x4 SP No.3	applied or 10-0-0 oc 4=0-1-8 10) 10), 4=-38 (LC 10) 2 21), 4=123 (LC 21) pression/Maximum 4, 3-4=-80/94 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior porch left and right orces & MWFRS for 1.60 plate grip n the plane of the truss (normal to the face), d Details as applicable, gner as per ANSI/TPI 1. roof LL: Lum DOL=1.15 um DOL=1.15 Plate ; Fully Exp.; Ce=0.9; en considered for this greater of min roof live toof load of 20.0 psf on	<ul> <li>7) This truss ha chord live loa</li> <li>8) * This truss h on the bottor</li> <li>3-06-00 tall b chord and ar</li> <li>9) Bearings are crushing cap capacity of 5</li> <li>10) Bearing at jo using ANSI/1 designer sho</li> <li>11) Provide mec bearing plate</li> <li>12) One H2.5A S recommende UPLIFT at jt( and does noi</li> <li>13) This truss is International R802.10.2 ar</li> <li>LOAD CASE(S)</li> </ul>	int(s) 4 considers   IPI 1 angle to grain uld verify capacity hanical connections at joint(s) 4. Simpson Strong-Ti- d to connect trusses s) 4 and 2. This con- t consider lateral for designed in accord Residential Code nd referenced star	or a 10. with any I for a liv s where II fit betw oint 2 Us oint 2 Us oint 4 SF parallel fin formula of bear in (by oth e connection proces. dance w sections	other live load e load of 20.0 a rectangle veen the botto ser Defined <sup>b</sup> No.3 crushir o grain value a. Building ng surface. ers) of truss to ctors ing walls due n is for uplift c ith the 2018 i R502.11.1 a	opsf om o to only		North Harris		SEA 0363	

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818 Soundside Road Edenton, NC 27932

September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	H02	Jack-Closed	9	1	Job Reference (optional)	160552878

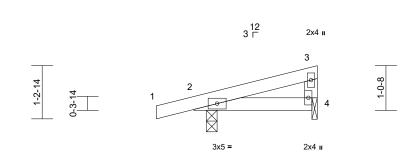
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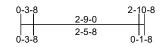
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Carter Components (Sanford), Sanford, NC - 27332,

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Page: 1





2-10-8

2-10-8

### Scale = 1:26.8

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.10	<b>DEFL</b> Vert(LL)	in 0.01	(loc) 4-7	l/defl >999	L/d 240	PLATES MT20	<b>GRIP</b> 244/190
Snow (Pf) TCDL	20.0	Lumber DOL	1.15 YES	BC WB	0.11	Vert(CT)	0.01	4-7	>999	180		
BCLL	10.0 0.0*	Rep Stress Incr Code	YES IRC2018/TPI2014	Matrix-MP	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	11(02010/1112014	Watth-Wi							Weight: 11 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD DOL = 1.60 2) TCLL: AS( Plate DOL DOL = 1.16 2) (1) Uhbalance design. 4) This truss load of 12 overhange 5) This truss	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 2-10-8 oc purlins, e Rigid ceiling directly bracing. (size) 2=0-3-0, - Max Horiz 2=36 (LC Max Uplift 2=-76 (LC Max Grav 2=221 (LC (Ib) - Maximum Con Tension 1-2=0/17, 2-3=-68/8 2-4=-100/52 CE 7-16; Vult=130mph mph; TCDL=6.0psf; B p B; Enclosed; MWFR C-C Exterior(2E) zone C-C for members and f shown; Lumber DOL= CE 7-16; Pr=20.0 psf (L CE 7-16; Pr=20.0 psf (L Show); Is=1.0; Rough Cat E	applied or 10-0-0 oc 4=0-1-8 10) 2 (10), 4=-39 (LC 10) C 21), 4=127 (LC 21) pression/Maximum 7, 3-4=-83/97 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior; porch left and right orces & MWFRS for 1.60 plate grip roof LL: Lum DOL=1 um DOL=1.15 Plate B; Fully Exp.; Ce=0.9; een considered for thi r greater of min roof I t roof load of 20.0 ps ther live loads. r a 10.0 psf bottom	on the botto 3-06-00 tall chord and a 7) Bearings at crushing cc capacity of 8) Bearing at using ANSI designer sh 9) Provide me bearing pla 10) One H2.5A recommend UPLIFT at and does n 11) This truss i Internationa R802.10.2 LOAD CASE(S) .15 is	oint(s) 4 considers /TPI 1 angle to grai lould verify capacity chanical connection te at joint(s) 4. Simpson Strong-Ti led to connect truss t(s) 4 and 2. This co ot consider lateral f s designed in accor al Residential Code and referenced star	s where ill fit betw loint 2 U oint 4 SF parallel n formul y of bear n (by oth ie conne s to bear onnectio onces. dance w sections	a rectangle ween the botto ser Defined P No.3 crushir to grain value a. Building ing surface. ers) of truss t ctors ing walls due n is for uplift o vith the 2018 \$ R502.11.1 a	o ng o to only				SEA 0363	ROUL
											Sentemb	er 5 2023

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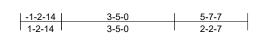
September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	HJ57	Diagonal Hip Girder	1	1	I605528 Job Reference (optional)	79

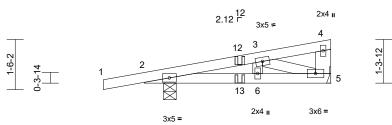
Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:03 ID:nMTt61WohGqC4tdJQuQQzgyi1OK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1

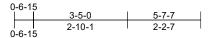






NAILED

NAILED



Scale = 1:34.7

00010 1.04.1													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC20	18/TPI2014	CSI TC BC WB Matrix-MP	0.19 0.15 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.01 0.00	(loc) 6 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 23 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	<ul> <li>2x4 SP No.2</li> <li>2x4 SP No.3 *Excep</li> <li>Structural wood she 5-7-7 oc purlins, ex</li> <li>Rigid ceiling directly bracing.</li> </ul>	athing directly applied cept end verticals. applied or 10-0-0 oc 5= Mechanical 33) C 8), 5=-65 (LC 8)	8 9 1	<ul> <li>on the bottor 3-06-00 tall I chord and an</li> <li>All bearings capacity of 4</li> <li>Refer to gird</li> <li>Provide mec bearing plate 5.</li> <li>On one H2.5A S recommende UPLIFT at jtr</li> </ul>	er(s) for truss to tu chanical connection e capable of withs Simpson Strong-T ed to connect trus (s) 2. This connect	as where vill fit betw e User D russ coni n (by oth tanding 6 ie conne s to bear tion is fo	a rectangle veen the bott efined crushi nections. ers) of truss : 55 lb uplift at j ctors ing walls due	om ing to joint e to					
FORCES	(lb) - Maximum Com			1) This truss is	nsider lateral force designed in accor	rdance w							
TOP CHORD	Tension 1-2=0/17, 2-3=-366/ 4-5=-75/24	1	International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 12) "NAILED" indicates 3-10d (0.148"x3") or 2-12d										
WEBS	BOT CHORD 2-6=-240/346, 5-6=-100/346				<ul> <li>(0.148"x3.25") toe-nails per NDS guidlines.</li> <li>13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).</li> </ul>								
NOTES		(0,		OAD CASE(S)		(F) or ba	ск (Б).						
Vasd=103 Cat. II; Ex zone; por plate grip 2) TCLL: AS	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Br xp B; Enclosed; MWFR rch left and right expose DOL=1.60 SCE 7-16; Pr=20.0 psf ( -1.45; Pf=20.0 psf (	CDL=6.0psf; h=25ft; S (envelope) exterior ed; Lumber DOL=1.6( roof LL: Lum DOL=1	1	) Dead + Sno Increase=1 Uniform Lo Vert: 1-4 Concentrat	ow (balanced): Lu .15 ads (lb/ft) =-60, 5-7=-20 ed Loads (lb)	mber Inc	rease=1.15,	Plate			AND	ORTH CA	ROUT
DOL=1.15 Cs=1.00; 3) Unbalanc	L=1.15); Pf=20.0 psf (L 5); Is=1.0; Rough Cat E Ct=1.10 ced snow loads have be	3; Fully Exp.; Ce=0.9;		Vert: 13=	=2 (F=1, B=1)					4	Ų	SEA	• -
load of 12	s has been designed for 2.0 psf or 1.00 times fla js non-concurrent with o	t roof load of 20.0 pst										0363	22

iya 5) This truss has been designed for a 10.0 psf bottom

chord live load nonconcurrent with any other live loads.

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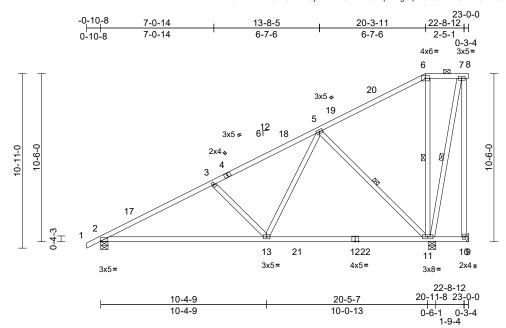
818 Soundside Road Edenton, NC 27932

A. GILB A. GILDIN September 5,2023

C

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	K01	Piggyback Base	1	1	lob Reference (optional)	160552880

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:04 ID:xa10s7ns4F4A5BZ91BVIt8yi2Be-RfC?PsB70Hq3NSgPqnL&w3uITXbGKWrCDoi7J4zJC?f Page: 1



#### Scale = 1:72.1

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

			-		i							i	
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)	-0.28	11-13	>878	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.87	Vert(CT)	-0.42	13-16	>579	180		
TCDL	10.0	Rep Stress Incr	YES		WB	0.46	Horz(CT)	0.03	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018	3/TPI2014	Matrix-MSH								
BCDL	10.0											Weight: 150 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD	2x4 SP No.1 *Excep 2x4 SP No.3 *Excep Structural wood she 3-8-0 oc purlins, exc 2-0-0 oc purlins (10-	t* 11-7:2x4 SP No.2 athing directly applied pept 0-0 max.): 6-8.	4)	Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0	7-16; Pr=20.0 psf 1.15); Pf=20.0 psf ( Is=1.0; Rough Cat =1.10 snow loads have b as been designed f psf or 1.00 times fit on-concurrent with	Lum DC B; Fully been col or great at roof l	DL=1.15 Plate Exp.; Ce=0.9 Insidered for the er of min roof Dad of 20.0 p	e 9; his f live					
BOT CHORD	Rigid ceiling directly bracing, Except: 6-0-0 oc bracing: 10	applied or 10-0-0 oc -11.	6) 7)	Provide ade This truss ha	quate drainage to p as been designed f	orevent or a 10.	water ponding 0 psf bottom	•					
WEBS		6-11, 7-11, 5-11			ad nonconcurrent v								
REACTIONS	(size) 2=0-5-8, 1	I0= Mechanical, 11=0	.5-8 8)		nas been designed			0psf					
ILE/ICTIONO	Max Horiz 2=387 (LC		00		n chord in all area								
	Max Uplift 2=-52 (LC	,			oy 2-00-00 wide wi								
	11=-230 (				ny other members,			t.					
	Max Grav 2=919 (LC		9)		er(s) for truss to tru			•					
	11=1647		10		hanical connection e capable of withst								
FORCES	(lb) - Maximum Com	pression/Maximum		joint 10.	e capable of withst	anung s	94 ib upilit a	L					
	Tension		11		Simpson Strong-Ti	e conne	ctors						
TOP CHORD	1-2=0/23, 2-3=-1351 5-6=-90/183, 6-7=-6	/67, 7-8=0/0		recommende	ed to connect truss (s) 2 and 11. This of	to bear	ing walls due						11111
BOT CHORD	2-13=-332/1177, 11- 9-10=0/0	·13=-171/592, 10-11=-	,	only and doe	es not consider late designed in accord	eral force	es.				AN	RTHUA	ROLIN
WEBS	,	-391/157, 7-11=-307/2 =-33/779, 5-11=-934/2	29,	International	Residential Code nd referenced star	sections	s R502.11.1 a	and		4	in	20 SS	No star
NOTES			13		Irlin representation			size		1		.9	
1) Unbalance	ed roof live loads have	been considered for			ation of the purlin a					-		SEA	
this design	۱.			bottom chore	d.	-				=	:	SLA	• -
Vasd=103 Cat. II; Exp zone and 0 2-1-8 to 17 Exterior(21 and forces	<ul> <li>this design.</li> <li>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 17-3-11, Exterior(2R) 17-3-11 to 20-3-11, Exterior(2E) 20-3-11 to 23-0-0 zone;C-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60</li> </ul>				Standard					111111	A A A A A A A A A A A A A A A A A A A	0363	EER. Kunn

September 5,2023

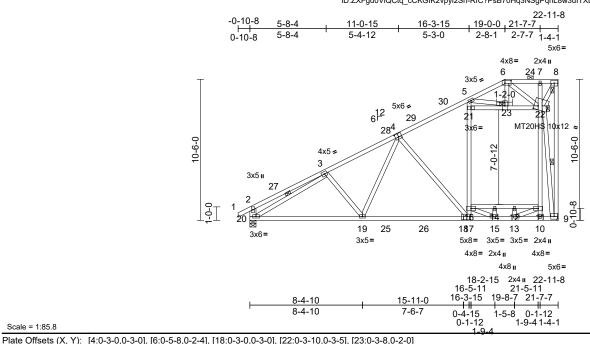
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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



Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	K02	Attic	3	1	Job Reference (optional)	160552881

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Page: 1



Scale = 1	1:85.8
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Plate Offsets (	X, Y): [4:0-3-0,0-3-0],	, [6:0-5-8,0-2-4], [18:0	J-3-0,0-3-I	0], [22:0-3-10,	0-3-5], [23:0-3-8,0-	2-0]								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	<b>CSI</b> TC BC WB Matrix-MSH	0.78 0.74 0.91	DEFL Vert(LL) Vert(CT) Horz(CT) Attic	-0.59 0.04	(loc) 17-19 17-19 9 11-16	l/defl >809 >463 n/a >533	L/d 240 180 n/a 360	PLATES MT20 MT20HS Weight: 201	<b>GRIP</b> 244/190 187/143 b FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.1 *Excep 18-9:2x4 SP No.2 2x4 SP No.3 *Excep No.2, 5-17,7-10:2x4 No.2, 9-22:2x4 SP 2	ot* 8-9,21-22:2x4 SP SP No.1, 20-2:2x6 S	3,	EBS	3-19=-148/178, 4- 4-17=-660/201, 16 16-21=-4/833, 5-2 11-22=0/834, 7-22 22-23=-1396/87, 3 5-23=-2047/135, 9 8-22=-3070/278, 6	-17=-66 1=0/775 =-240/6 -20=-13 -22=-44	/710, , 10-11=0/359 3, 21-23=-49/ 37/0, 6-23=0/ 16/232,	626,	Wa 11) Bot cho 12- 12) Ref	ll dead lo tom cho rd dead 14, 11-1 er to gire	oad (5. rd live load (4 2 der(s) t	.0psf) on meml load (40.0 psf) 5.0 psf) applied	ember(s). 21-23, 22 per(s).16-21, 11-22 and additional bott I only to room. 14-1 s connections.	2 ttom
BRACING TOP CHORD	Structural wood she 4-2-14 oc purlins, e	athing directly applie xcept end verticals, a	and N	OTES Unbalanced	14-15=-116/102, 1 12-13=-340/0, 11-	13=0/84	3	r	rec UP doe 14) This	ommend LIFT at j s not co s truss is	led to o t(s) 20 nsider s desig	connect truss to . This connecti lateral forces. ned in accorda	o bearing walls due on is for uplift only ince with the 2018	and
2-0-0 oc purlins (10-0-0 max.): 6-8. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 1 Row at midpt 3-20, 9-22 JOINTS 1 Brace at Jt(s): 22, 23, 8 <b>REACTIONS</b> (size) 9= Mechanical, 20=0-5-8 Max Horiz 20=352 (LC 14) Max Uplift 20=-33 (LC 14) Max Grav 9=1608 (LC 39), 20=1210 (LC 39)				this design. Wind: ASCI Vasd=103m Cat. II; Exp zone and C 2-1-8 to 14- (2E) 19-9-1: exposed;C-	E 7-16; Vult=130mp ph; TCDL=6.0psf; B; Enclosed; MWF -C Exterior(2E) -0- 9-1, Exterior(2R) 1- 2 to 22-9-12 zone; - C for members and own; Lumber DOL	h (3-sec BCDL=6 RS (env 10-8 to 2 1-9-1 to end vert forces a	cond gust) 3.0psf; h=25ft; elope) exterior 2-1-8, Interior 19-9-12, Exte ical left & MWFRS for	or (1) erior	Inte R80 15) Gra or t bott	rnationa 02.10.2 a phical p he orien com choi c room c CASE(S	I Resid and ref urlin re tation o d. hecke ) Sta	dential Code se ferenced stand epresentation d of the purlin alo d for L/360 def ndard	ections R502.11.1 a ard ANSI/TPI 1. loes not depict the ong the top and/or lection.	and
FORCES	(lb) - Maximum Com			DOL=1.60 TCLL: ASC	E 7-16; Pr=20.0 ps	f (roof Ll	L: Lum DOL=	1.15				min	um.	
TOP CHORD	2-3=-413/104, 3-5=-	)=-379/130, 1-2=0/30 1603/7, 5-6=-82/870	,	DOL=1.15); Cs=1.00; C	1.15); Pf=20.0 psf ( ls=1.0; Rough Cat t=1.10 I snow loads have I	B; Fully	Exp.; Ce=0.9	);			1 2	ORTH C		7
BOT CHORD	19-20=-303/1423, 1 15-17=-74/1167, 13 10-13=-8/244, 9-10= 12-14=-401/0, 11-12	-15=0/1011, =-32/614, 14-16=-401	1/0, 6) 7) 8)	load of 12.0 overhangs i Provide ade All plates ar This truss h chord live lo * This truss on the botto 3-06-00 tall	as been designed f psf or 1.00 times finon-concurrent with equate drainage to p e MT20 plates unleas been designed boad nonconcurrent has been designed m chord in all area by 2-00-00 wide with	at roof lo other lip prevent or a 10.1 with any l for a liv s where ll fit betw	oad of 20.0 ps ve loads. water ponding rwise indicate 0 psf bottom other live loa ve load of 20.0 a rectangle ween the botto	sfon g. d. ds. )psf om				SE 036	AL 322 GILBER	Manning

- All plates are MT20 plates unless otherwise indicated. 7)
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

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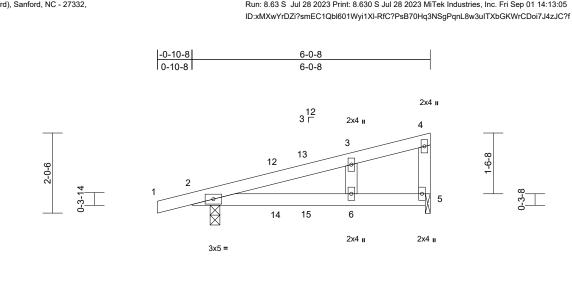
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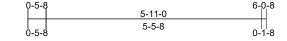
September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	L01	Monopitch	1	1	Job Reference (optional)	160552882

# Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Fri Sep 01 14:13:05

Page: 1





Scale = 1:29.2

Scale = 1.29.2												
Loading TCLL (roof) Snow (Pf) TCDL	(psf) 20.0 20.0 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr	1-11-4 1.15 1.15 YES	CSI TC BC WB	0.42 0.46 0.02	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.14 -0.12 0.00	(loc) 6-11 6-11 2	l/defl >507 >601 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP	0.02		0.00	2	n/a	n/a		
BCDL	10.0				-						Weight: 23 lb	FT = 20%
BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS (s M M FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Wind: ASCE Vasd=103m Cat. II; Exp E zone and C- 2-1-8 to 2-10 porch left an forces & MU DOL=1.60 p 2) Truss desig only. For stu see Standar (3) TCLL: ASCE Plate DOL=	2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, exi Rigid ceiling directly bracing. size) 2=0-3-0, £ fax Horiz 2=63 (LC fax Uplift 2=-123 (L fax Grav 2=409 (LC (Ib) - Maximum Com Tension 1-2=0/17, 2-3=-117/ 4-5=-149/183 2-6=-128/140, 5-6=0 3-6=-87/51 57-16; Vult=130mph ph; TCDL=6.0psf; BB B; Enclosed; MWFR: C Exterior(2E) 2-10 of right exposed; C-C VFRS for reactions s late grip DOL=1.60 ined for wind loads in uds exposed to wind d Industry Gable Eni- ualified building desig 57-16; Pr=20.0 psf (L Is=1.0; Rough Cat E =1.10	cept end verticals. applied or 10-0-0 oc 5=0-1-8 10) C 10), 5=-81 (LC 10 C 21), 5=263 (LC 21) pression/Maximum 133, 3-4=-50/32, 0/0 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior. 8 to 2-1-8, Interior ( 10-12 to 5-10-12 zor for members and hown; Lumber n the plane of the tru (normal to the face) d Details as applicat gner as per ANSI/TP roof LL: Lum DOL=1. un DOL=1.15 Plate	design. 5) This trus load of 1 overhang 6) Gable st ed or 7) This trus chord liv 8) * This trus chord liv 8) * This trus on the bb 3-06-00 chord an 9) Bearings (capacity) 10) Bearings (capacity) 10) Bearings (capacity) 10) Bearings (capacity) 10) Bearings (capacity) 10) Bearings (capacity) 10) Bearings (capacity) 11) Provide I bearing (capacity) 12) One H2. recomme UPLIFT: and does 13) This trus Internatic 13) This trus Internatic	sed snow loads have a has been designed 2.0 psf or 1.00 times is non-concurrent wi uds spaced at 2-0-0 s has been designed load nonconcurren ss has been designed thom chord in all are all by 2-00-00 wide v d any other member are assumed to be: of 565 psi. at joint(s) 5 considers SI/TPI 1 angle to gra should verify capaci nechanical connection late at joint(s) 5. 55 Simpson Strong- ingto to consider lateral is designed in acco- nal Residential Code 2 and referenced sta ( <b>S</b> ) Standard	I for great flat roof I tho ther Ii oc. I for a 10. t with any ed for a 10. t with any ed for a liv as where will fit betv s. Joint 5 S s parallel ain formul ty of bear on (by oth Tie conne ss to bear connectio forces. rodance we e sections	er of min roo oad of 20.0 p ve loads. 0 psf bottom other live loa re load of 20. a rectangle veel oad of 20. a rectangle ween the bott P No.3 crush to grain value a. Building ing surface. ers) of truss ctors ing walls due n is for uplift ith the 2018 s R502.11.1 a	f live sf on dds. Opsf om ing to to			22	SEA 0363	• -



GILB

China Gilling September 5,2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent oclapse 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 Stability and the prevention applicable from the Structure Building Component Advance interpreted the property damage. and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	L02	Monopitch	8	1	Job Reference (optional)	160552883

Scale = 1:29.2 Loading

TCLL (roof)

Snow (Pf)

LUMBER

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

NOTES

1)

2)

3)

4)

TOP CHORD

BOT CHORD

Cs=1.00; Ct=1.10

desian.

**REACTIONS** (size)

2x4 SP No.2

2x4 SP No.2

2x4 SP No.3

bracing.

Tension

2-4=-132/144

TCDL

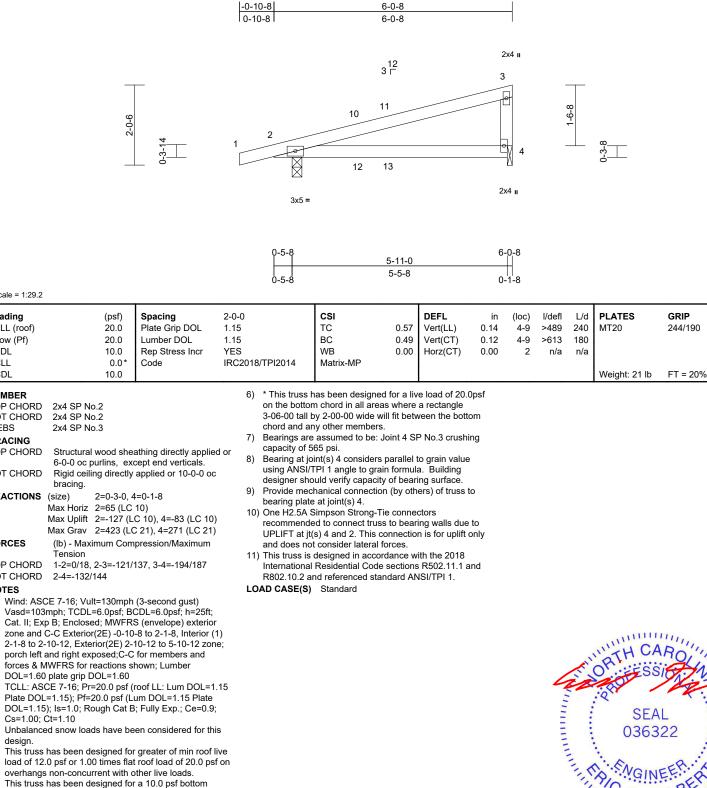
BCLL

BCDL

WFBS

#### Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:05 ID:pE4RPXqQnfN4xXkKM5Y2sGyi1ZY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



- load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 5) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.

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



818 Soundside Road

Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	MH01	Half Hip Girder	1	1	Job Reference (optional)	160552884

4-0-12

4-0-12

-0-10-8

0-10-8

Carter Components (Sanford), Sanford, NC - 27332

Scale = 1:31.9

Loading

TCLL (roof)

Snow (Pf)

LUMBER

WEBS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

WEBS

1)

2)

3)

4)

5)

6)

design.

NOTES

TOP CHORD

BOT CHORD

TCDL

BCLL

BCDL

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:06 ID:ISsvCrchB6VoiJmNU0VIxxyi1Le-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

6-9-0

2-8-4

NAILED

NAILED

ATTEND IT

Page: 1

3 ⊓ 4x8 = 2x4 II 3 13 4 5 Ţ ΠΓ 0 Lo ПП 8 14 76 2x4 I 3x6 =3x5 = NAILED Special 7-0-8 4-2-8 6-9-0 3-9-0 2-6-8 0-3-8 Plate Offsets (X, Y): [3:0-5-4,0-2-0] 2-0-0 CSI DEFL in l/defl L/d PLATES GRIP (psf) Spacing (loc) 20.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) -0.01 8-12 >999 240 MT20 244/190 20.0 Lumber DOL 1.15 BC 0.24 Vert(CT) -0.02 8-12 >999 180 10.0 Rep Stress Incr WB NO 0.19 Horz(CT) 0.00 7 n/a n/a 0.0 IRC2018/TPI2014 Matrix-MP Code 10.0 Weight: 34 lb FT = 20% 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 2x4 SP No.2 \* This truss has been designed for a live load of 20.0psf 2x6 SP No.2 8) on the bottom chord in all areas where a rectangle 2x4 SP No.3 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. Structural wood sheathing directly applied or 9) Refer to girder(s) for truss to truss connections. 6-0-0 oc purlins, except 10) Provide mechanical connection (by others) of truss to 2-0-0 oc purlins: 3-5. bearing plate capable of withstanding 156 lb uplift at Rigid ceiling directly applied or 10-0-0 oc joint 7. bracing. 11) One H2.5A Simpson Strong-Tie connectors **REACTIONS** (size) 2=0-3-0, 7= Mechanical recommended to connect truss to bearing walls due to Max Horiz 2=49 (LC 8) UPLIFT at jt(s) 2. This connection is for uplift only and Max Uplift 2=-182 (LC 8), 7=-156 (LC 8) does not consider lateral forces. Max Grav 2=550 (LC 34), 7=508 (LC 33) 12) This truss is designed in accordance with the 2018 (Ib) - Maximum Compression/Maximum International Residential Code sections R502.11.1 and Tension R802.10.2 and referenced standard ANSI/TPI 1. 1-2=0/17, 2-3=-780/241, 3-4=0/0, 4-5=0/0 13) Graphical purlin representation does not depict the size 2-8=-241/732, 7-8=-252/770, 6-7=0/0 or the orientation of the purlin along the top and/or 3-8=-72/251, 4-7=-164/51, 3-7=-818/268 bottom chord. 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines. Unbalanced roof live loads have been considered for 15) Hanger(s) or other connection device(s) shall be this design. provided sufficient to support concentrated load(s) 213 Wind: ASCE 7-16: Vult=130mph (3-second gust) Ib down and 107 lb up at 4-0-12 on bottom chord. The Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; design/selection of such connection device(s) is the Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior responsibility of others. zone; porch left and right exposed; Lumber DOL=1.60 16) In the LOAD CASE(S) section, loads applied to the face plate grip DOL=1.60 of the truss are noted as front (F) or back (B). TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 SEAL LOAD CASE(S) Standard Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate 036322 Dead + Snow (balanced): Lumber Increase=1.15, Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 1) Increase=1.15 Cs=1.00; Ct=1.10 Uniform Loads (lb/ft) Unbalanced snow loads have been considered for this Vert: 1-3=-60, 3-5=-60, 2-6=-20 This truss has been designed for greater of min roof live Concentrated Loads (lb) load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on Vert: 8=-213 (B), 3=-59 (B), 13=-61 (B), 14=-28 (B) GI overhangs non-concurrent with other live loads mmm Provide adequate drainage to prevent water ponding. September 5,2023 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) 818 Soundside Road and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com) Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	MH02	Half Hip	1	1	Job Reference (optional)	160552885

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:06 ID:KCvvUO7fLjVtydn3rsiDZbyi1Fp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

7-0-8 -0-10-8 6-9-0 6-0-12 6-0-12 0-10-8 0-8-4 0-3-8 0-3-0 Н 2x4 II 4x5 = 3<sup>12</sup> 3 45 ₽⊓₽ 2-0-7 14 ÷۱ Ø 15 8 76 2x4 u 3x5 = 2x4 II 7-0-8 6-9-0 0-5-8 6-2-8 5-9-0 0-5-8 0-6-8 0-3-8 Spacing 2-0-0 CSI DEFL in l/defl L/d PLATES (psf) (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.64 Vert(LL) 0.27 8-13 >302 240 MT20 20.0 1 15 BC 0.69 180 Lumber DOL Vert(CT) 0.21 8-13 >382 10.0 Rep Stress Incr YES WB 0.06 Horz(CT) 0.00 2 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MP 10.0 Weight: 26 lb 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on 2x4 SP No.2 2x4 SP No.2 overhangs non-concurrent with other live loads. 2x4 SP No.3 Provide adequate drainage to prevent water ponding. 6) This truss has been designed for a 10.0 psf bottom 7) chord live load nonconcurrent with any other live loads Structural wood sheathing directly applied or \* This truss has been designed for a live load of 20.0psf 8) 6-0-0 oc purlins, except on the bottom chord in all areas where a rectangle 2-0-0 oc purlins: 3-5. Rigid ceiling directly applied or 10-0-0 oc 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. bracing 9) Refer to girder(s) for truss to truss connections.

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - LOAD CASE(S) Standard



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818 Soundside Road Edenton, NC 27932

Scale = 1:41.1

Loading

Snow (Pf)

TCDL

BCLL

BCDL

- LUMBER TOP CHORD BOT CHORD WFBS BRACING TOP CHORD BOT CHORD **REACTIONS** (size) 2=0-3-0, 7= Mechanical Max Horiz 2=66 (LC 10) Max Uplift 2=-139 (LC 10), 7=-94 (LC 10) Max Grav 2=440 (LC 36), 7=287 (LC 36) FORCES (Ib) - Maximum Compression/Maximum Tension 1-2=0/17, 2-3=-117/129, 3-4=0/0, 4-5=0/0 TOP CHORD BOT CHORD 2-8=-124/139, 7-8=0/0, 6-7=0/0 WEBS 3-8=-204/207, 4-7=-56/18
  - NOTES
  - Unbalanced roof live loads have been considered for 1) this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 6-0-12, Exterior(2E) 6-0-12 to 7-0-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.



GRIP

244/190

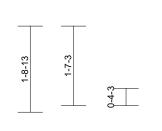
FT = 20%

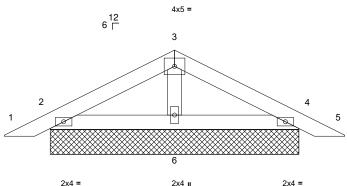
Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	РВА	Piggyback	1	1	Job Reference (optional)	160552886

### Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:06 ID:XgDf3INHPQvtHRF\_HNdUzYyiJhY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1







5-0-3

Scale = 1.23.2

Scale = 1:23.2	2												
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD BOT CHORD OTHERS BRACING	(psf) 20.0 20.0 10.0 0.0* 10.0 2x4 SP No.2	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018 4)	Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced	CSI TC BC WB Matrix-MP :7-16; Pr=20.0 psf I.15; Pf=20.0 psf Is=1.0; Rough Ca =1.10 snow loads have	(Lum DC t B; Fully	DL=1.15 Plate Exp.; Ce=0.9	);	(loc) - - 4	l/defl n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 20 lb	<b>GRIP</b> 244/190 FT = 20%
TOP CHORD	OP CHORD       Structural wood sheathing directly applied or 6-0-0 oc purlins.       of this truss has been designed for greater of min roof live         IOT CHORD       Rigid ceiling directly applied or 10-0-0 oc bracing       of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.												
REACTIONS	(size) 2=5-0-3, 4 7=5-0-3, 1 Max Horiz 2=25 (LC Max Uplift 2=-31 (LC (LC 14), 7 15) Max Grav 2=196 (LC	14), 7=25 (LC 14) 14), 4=-35 (LC 15), '=-31 (LC 14), 11=-3 C 21), 4=196 (LC 22) C 21), 7=196 (LC 21)	5 (LC	<ul> <li>7) Gable requires continuous bottom chord bearing.</li> <li>8) Gable studs spaced at 4-0-0 oc.</li> <li>9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>10) * This truss has been designed for a live load of 20 0psf</li> </ul>									
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Maximum Com Tension 1-2=0/24, 2-3=-57/5	pression/Maximum	/24 12	<ul> <li>bearing plate capable of withstanding 31 lb uplift at joint 2, 35 lb uplift at joint 4, 3 lb uplift at joint 6, 31 lb uplift at joint 2 and 35 lb uplift at joint 4.</li> <li>12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.</li> </ul>									uun,
NOTES 1) Unbalance this design 2) Wind: AS Vasd=100 Cat. II; Ex- zone and exposed members Lumber D 3) Truss de only. For see Stand	ced roof live loads have	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio; cantilever left and r ght exposed;C-C for for reactions shown; $L=1.60in the plane of the tru(normal to the face)d Details as applicable$	r ight ss , ole,	) See Standar Detail for Co	d Industry Piggyb nnection to base f fied building desig	ack Trus truss as a	s Connection					SEA 0363	EER.K.

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 frusses and truss systems, see **ANS/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **PCB Building** Component **5**, the form the structure. Building component divergence of the prevent collapse with possible form the Structure. Building 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)

A. GI A. GIL September 5,2023



Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	PBA1	Piggyback	8	1	Job Reference (optional)	160552887

2-6-1

2-6-1

-0-11-1

0-11-1

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

## Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:07 ID:?8ITrSbZAyBKSCdSL9yiiLyiJhG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

5-0-3

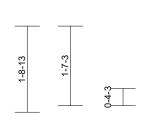
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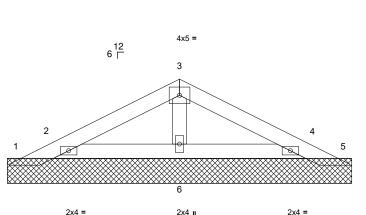
5-11-4

0-11-1



Page: 1





5-0-3

Scale = 1:23.2

30ale - 1.23.2											
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI           TC         0.12           BC         0.07           WB         0.02           Matrix-MP         0.02	Vert(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: 20 lb	<b>GRIP</b> 244/190 FT = 20%
	6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=6-11-5, 5=6-11-5, 10=6-11-5 Max Horiz 1=-25 (LC Max Uplift 1=-53 (LC 4=-48 (LC 7=-47 (LC Max Grav 1=25 (LC 4=277 (LC	2 15) 2 21), 2=-47 (LC 14), 2 15), 5=-50 (LC 22), 2 14), 10=-48 (LC 15) 14), 2=290 (LC 21), 2 22), 5=14 (LC 15), 2 21), 7=290 (LC 21),	<ul> <li>only. For stissee Standarn or consult quot or consult quot quot quot quot quot quot quot quo</li></ul>	ned for wind loads in the Jds exposed to wind (nor d Industry Gable End Dei Jalified building designer E 7-16; Pr=20.0 psf (roof 1 Is=1.0; Rough Cat B; Ful =1.10 snow loads have been co res continuous bottom ch spaced at 4-0-0 oc. as been designed for a 10 ad nonconcurrent with an m chord in all areas wher by 2-00-00 wide will fit be ny other members. thanical connection (by oi e capable of withstanding t at joint 4, 53 lb uplift at j	nal to the face alls as applica as per ANSI/TI L: Lum DOL= OL=1.15 Plate y Exp.; Ce=0.9 onsidered for the ord bearing. .0 psf bottom y other live load ve load of 20.0 e a rectangle ween the botto hers) of truss to 47 lb uplift at j	.), ble, PI 1. 1.15 e 9; his dds. 0psf om to					
FORCES TOP CHORD	(Ib) - Maximum Com Tension 1-2=-32/54, 2-3=-65		at joint 5, 47 11) This truss is	Ib uplift at joint 2 and 48 designed in accordance Residential Code section	b uplift at joint vith the 2018	4.					unin.
BOT CHORD WEBS <b>NOTES</b>	4-5=-12/53 2-6=-11/28, 4-6=-12 3-6=-87/42	/28	12) See Standar Detail for Co	nd referenced standard <i>A</i> rd Industry Piggyback Tru nnection to base truss as ified building designer.	ss Connection			4	11 m	ORTHCA	ROLIN
this design 2) Wind: ASC Vasd=103i Cat. II; Exp zone and 0	ed roof live loads have a. DE 7-16; Vult=130mph mph; TCDL=6.0psf; Br o B; Enclosed; MWFR C-C Exterior(2E) zone ond vortice loft ond right	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and rig		D CASE(S) Standard						SEA 0363	• -

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	108 Serenity-Roof-B329 A LH CP	
23080083-01	PBA2	Piggyback	1	1	Job Reference (optional)	160552888

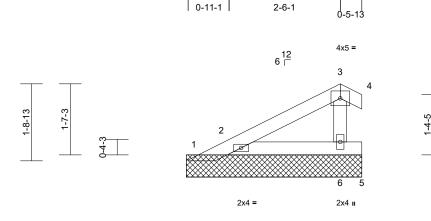
Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:07 ID:7\_DWPyn153XQCG6H4kihg?yiJfk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2-6-1

2-11-15

Page: 1





-0-11-1



Scale = 1:26

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 0.05 0.03	,	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: 13 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	3-11-8 oc purlins. Rigid ceiling directly bracing. (size) 1=3-11-8 6=3-11-8 Max Horiz 1=54 (LC Max Uplift 1=-57 (LC 6=-16 (LC Max Grav 1=36 (LC	,	d or d or d or d or d or d or d or d or	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 has been designed 0 psf or 1.00 times non-concurrent wit itres continuous bo is spaced at 4-0-0 of has been designed oad nonconcurrent is has been designed oad noncon	f (Lum DC at B; Fully been cor for great flat roof li th other li ttom chor bc. for a 10.1 c with any ed for a liv as where vill fit betw s.	DL=1.15 Plate Exp.; Ce=0.9 Insidered for the er of min roof pad of 20.0 ps ve loads. d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the botto	; live ıf on ds. psf					
FORCES TOP CHORD BOT CHORD WEBS NOTES	(lb) - Maximum Con Tension 1-2=-102/83, 2-3=-3 2-6=-20/3, 5-6=0/0 3-6=-90/85	npression/Maximum 87/30, 3-4=0/19	value usin designer s 12) Provide m bearing pl	ANSI/TPL 1 angle hould verify capacit echanical connection ate capable of withe lift at joint 1, 16 lb u	to grain f ty of bear on (by oth standing 4	ormula. Build ing surface. ers) of truss to 6 lb uplift at jo	o pint					11111

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone;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.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



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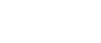
Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	PBA3	Piggyback	2	1	Job Reference (optional)	160552889

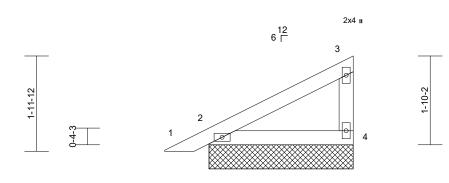
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Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Fri Sep 01 14:13:07 ID:7\_DWPyn153XQCG6H4kihg?yiJfk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





2x4 =

2-11-15

2x4 II

2-11-15

2-11-15

Scale = 1.23.9

Scale = 1:23.9													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MP	0.14 0.13 0.00	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: 13 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.3 Structural wood she 3-11-8 oc purlins, e Rigid ceiling directly bracing. (size) 2=2-11-1{ Max Horiz 2=62 (LC Max Uplift 2=-18 (LC 5=-18 (LC Max Grav 2=218 (LC 5=218 (LC (lb) - Maximum Com Tension 1-2=0/25, 2-3=-48/3 2-4=-25/41	xcept end verticals. applied or 10-0-0 oc 5, 4=2-11-15, 5=2-17 14), 5=62 (LC 14) 2 14), 4=-28 (LC 14), 2 14), 4=-28 (LC 14), 2 14), 4=153 (LC 21 2 21), 4=153 (LC 21 2 21) apression/Maximum 7, 3-4=-104/73	c 9) 1-15 , 1( ), 1 <sup>,</sup> 12	<ul> <li>load of 12.0 overhangs n</li> <li>Gable requir</li> <li>Gable studs</li> <li>This truss ha chord live loa</li> <li>* This truss for 3-06-00 tall th chord and ar</li> <li>Provide mec bearing plate 4, 18 lb uplift</li> <li>This truss is International R802.10.2 a</li> <li>See Standar Detail for Co</li> </ul>	is been designed psf or 1.00 times on-concurrent wite es continuous bo spaced at 4-0-0 of is been designed ad nonconcurrent nas been designed na chord in all area by 2-00-00 wide w y 2-00-00 wide w y 2-00-00 wide w y other members hanical connectio e capable of withs tat joint 2 and 18 designed in acco Residential Code nd referenced stat d Industry Piggyt nnection to base fied building design Standard	flat roof li th other li ttom choro- bo. for a 10.1 with any d for a liv as where vill fit betv s. no (by oth standing 2 lb uplift a rdance w e sections indard AN sack Truss as a	bad of 20.0 p ve loads. d bearing. D psf bottom other live loa e load of 20. a rectangle veen the bott ers) of truss 28 lb uplift at it joint 2. ith the 2018 s R502.11.1 a s K502.11.1 a s Connection	ads. Opsf tom to joint and					
Vasd=103	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B (p B; Enclosed; MWFR	CDL=6.0psf; h=25ft;											

zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 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. TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate

- DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this 4)
- design.

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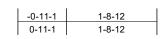
Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	PBA4	Piggyback	1	1	Job Reference (optional)	160552890

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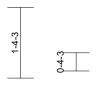
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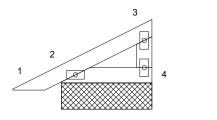
Page: 1

1 49









2x4 = 2x4 u

1-8-12

Scale = 1:22

Loading TCLL (roof)(psf) 20.0Spacing Plate Grip DOL2-0-0 1.15CSI TCDEFLin(loc)l/deflSnow (Pf)20.0Lumber DOL1.15TC0.04Vert(LL)n/a-n/aTCDL10.0Rep Stress IncrYESWB0.00Watrix-MPVert(CT)n/a-n/aBCLL0.0*CodeIRC2018/TPI2014WB0.00Matrix-MPVert(CT)0.002n/aLUMBER10.0CodeIRC2018/TPI2014Matrix-MPSolutionn/aLUMBER10.02x4 SP No.2SolutionBOT CHORD2x4 SP No.2Structural wood sheathing directly applied or 2-8-5 oc purins, except end verticals.5)This truss has been designed for a 10.0 psf bottom chord live load onconcurrent with other live loads </th <th>999 999</th> <th>n/a 999 n/a 999</th> <th>9 MT20</th> <th><b>GRIP</b> 244/190</th>	999 999	n/a 999 n/a 999	9 MT20	<b>GRIP</b> 244/190
TOP CHORD       2x4 SP No.2       load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.         WEBS       2x4 SP No.2       Gable requires continuous bottom chord bearing.         BRACING       Structural wood sheathing directly applied or 2-8-5 oc purlins, except end verticals.       6)       Gable requires continuous bottom chord bearing.         BOT CHORD       Structural wood sheathing directly applied or 10-0-0 oc bracing.       7)       Gable studs spaced at 4-0-0 oc.         REACTIONS       (size)       2=1-8-12, 4=1-8-12, 5=1-8-12 Max Horiz       2=39 (LC 14), 5=39 (LC 14), 5=-717 (LC 14), 4=-13 (LC 14), 5=-171 (LC 14), 5=-	.,,u		Weight: 8 lb	FT = 20%
5=144 (LC 21)       Init tables is designed in accounce with the 2018         FORCES       (lb) - Maximum Compression/Maximum Tension       International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANS//TPI 1.         TOP CHORD       1-2=0/23, 2-3=-23/18, 3-4=-48/34       Detail for Connection to base truss as applicable, or consult qualified building designer.         NOTES       1) Wind: ASCE 7-16; Vult=130mph (3-second gust)       LOAD CASE(S)       Standard				

- Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.



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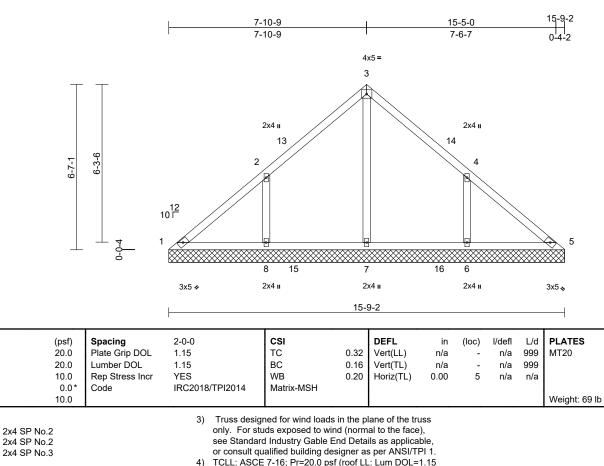
Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLB1	Valley	1	1	Job Reference (optional)	160552891

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GRIP

244/190

FT = 20%



OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD		wood sheathing directly applied or
	6-0-0 oc p	purlins.
BOT CHORD	Rigid ceili	ng directly applied or 6-0-0 oc
	bracing.	
REACTIONS	(size)	1=15-9-2, 5=15-9-2, 6=15-9-2,
		7=15-9-2, 8=15-9-2
	Max Horiz	1=150 (LC 13)
	Max Uplift	1=-22 (LC 10), 6=-169 (LC 15),
		8=-172 (LC 14)

- Max Grav
   1=127 (LC 28), 5=104 (LC 21), 6=483 (LC 6), 7=452 (LC 23), 8=483 (LC 5)

   FORCES
   (Ib) - Maximum Compression/Maximum
- Tension TOP CHORD 1-2=-152/196, 2-3=-143/154, 3-4=-143/133, 4-5=-124/156
- BOT CHORD 1-8=-89/134, 7-8=-89/119, 6-7=-89/119, 5-6=-89/119 WEBS 3-7=-264/0, 2-8=-383/207, 4-6=-383/206
- NOTES

Scale = 1:45.9

TCLL (roof)

Snow (Pf)

LUMBER

TOP CHORD

BOT CHORD

TCDL

BCLL

BCDL

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: AŠCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 4-10-14, Exterior(2R) 4-10-14 to 10-10-14, Interior (1) 10-10-14 to 12-9-6, Exterior(2E) 12-9-6 to 15-9-6 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- ICLL: ASCE 7-16; Pr=20.0 psf (root LL: Lum DOL=1. Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.9) \* This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle
   3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
   10) Provide mechanical connection (by others) of truss to
- bearing plate capable of withstanding 22 lb uplift at joint 1, 172 lb uplift at joint 8 and 169 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



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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLB2	Valley	1	1	Job Reference (optional)	160552892

Scale = 1:41.5 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

WEBS

NOTES

1)

2)

TOP CHORD

BOT CHORD

this design.

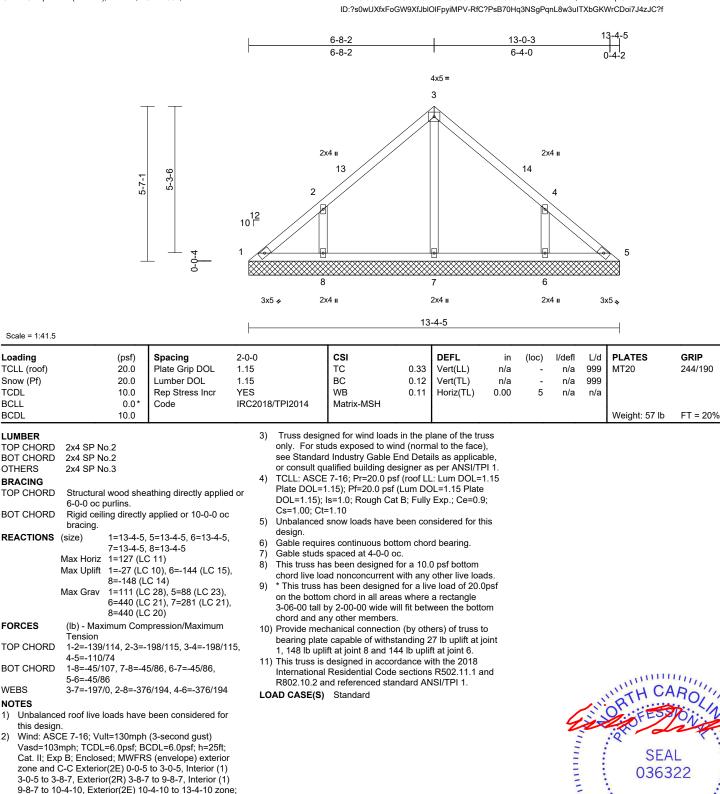
TCDL

BCLL

BCDL

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:08

Page: 1



3-0-5 to 3-8-7, Exterior(2R) 3-8-7 to 9-8-7, Interior (1) 9-8-7 to 10-4-10, Exterior(2E) 10-4-10 to 13-4-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLB3	Valley	1	1	Job Reference (optional)	160552893

5-5-12

5-5-12

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

4-7-1

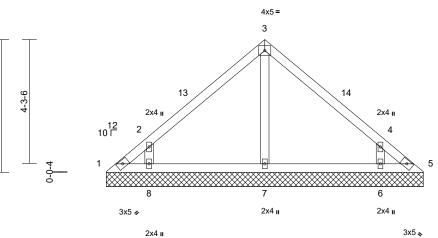
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10-7-6

5-1-10



10-11-8 0-4-2



10-11-8

#### Scale = 1:39.8

Loading		(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.15		тс	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL		10.0	Rep Stress Incr	YES		WB	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCLL		0.0*	Code	IRC201	8/TPI2014	Matrix-MSH								
BCDL		10.0											Weight: 44 lb	FT = 20%
LUMBER				3)	Truss desig	ned for wind loads	in the p	lane of the tr	uss					
TOP CHORD	2x4 SP N	o.2		,	only. For stu	ids exposed to wir	nd (norm	al to the face	e),					
BOT CHORD	2x4 SP N				see Standar	d Industry Gable E	nd Deta	ils as applica	ble,					
OTHERS	2x4 SP N	0.3			or consult qu	alified building de	signer a	s per ANSI/T	PI 1.					
BRACING				4)		7-16; Pr=20.0 ps								
TOP CHORD	Structura	l wood shea	athing directly applie	d or		1.15); Pf=20.0 psf								
	6-0-0 oc j		5 7 11			Is=1.0; Rough Cat	B; Fully	Exp.; Ce=0.	9;					
BOT CHORD	Rigid ceil	ing directly	applied or 10-0-0 oc	-	Cs=1.00; Ct=									
	bracing.			5)		snow loads have	been cor	nsidered for t	his					
REACTIONS	(size)	1=10-11-8	s, 5=10-11-8, 6=10-1	1-8,	design.	aa aantinuusua hati		al heaving						
		7=10-11-8	s, 8=10-11-8	7)		es continuous bot spaced at 4-0-0 o		u bearing.						
	Max Horiz	1=-103 (L	C 10)	8)		is been designed		0 nsf bottom						
	Max Uplift		12), 5=-22 (LC 13),	- /		ad nonconcurrent			ade					
		· · ·	C 15), 8=-139 (LC 14	, yı		has been designed								
	Max Grav		11), 5=50 (LC 15), 6	=452 ′		n chord in all area			ope.					
			=248 (LC 21), 8=452	2 (LC		oy 2-00-00 wide w			om					
		20)			chord and ar	y other members								
FORCES		imum Com	pression/Maximum	10	)) Provide mec	hanical connection	n (by oth	ers) of truss	to					
	Tension	405 0 0 1	07/440 0 4- 007/4	10	bearing plate	e capable of withst	anding 4	l8 lb uplift at j	joint					
TOP CHORD		,	227/110, 3-4=-227/1	10,		t at joint 5, 139 lb i	uplift at jo	oint 8 and 13	5 lb					
BOT CHORD	4-5=-112		73, 6-7=-23/73,		uplift at joint									
BUT CHURD	5-6=-46/7	,	13, 0-123/13,	11		designed in accor								111.
WEBS			3/266, 4-6=-468/266			Residential Code			and				TH CA	D'''
	5-1100	0, 2-040	, 200, <del>4</del> -0 <del>4</del> 00/200			nd referenced star	ndard AN	NSI/TPL1.					THUR	no //
NOTES			heen considered for	L	DAD CASE(S)	Standard						5	n'iico	2. 1/A!

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 7-11-13, Exterior(2E) 7-11-13 to 10-11-13 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 BCB Building Component Science Institute (available from the Structure Building Component Advance Institute (www.tpinst.org)

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



September 5,2023

SEAL

036322

Mannannan .

818 Soundside Road Edenton, NC 27932

Phillippine and the

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLB4	Valley	1	1	Job Reference (optional)	160552894

4-3-6 4-3-6

Carter Components (Sanford), Sanford, NC - 27332

3-7-1

## Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:09 ID:fRGuaS?7PjwP7\_NuoKPZxxyiMP2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4x5 = 2

8-2-9

3-11-4



GRIP

244/190

FT = 20%

10 11 3-3-6 12 10 Г g 12 3 0-0-4 4 2x4 II 3x5 🖌 3x5 💊 8-6-11 Spacing 2-0-0 CSI DEFL l/defl L/d PLATES in (loc) Plate Grip DOL 1.15 TC 0.40 Vert(LL) n/a n/a 999 MT20 BC 1 15 0.38 999 Lumber DOL Vert(TL) n/a n/a Rep Stress Incr YES WB 0.14 Horiz(TL) 0.00 4 n/a n/a IRC2018/TPI2014 Matrix-MP Weight: 32 lb TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 5) Unbalanced snow loads have been considered for this desian. blied or Gable requires continuous bottom chord bearing. 6) Gable studs spaced at 4-0-0 oc. 7) С This truss has been designed for a 10.0 psf bottom 8) 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 0). 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. , 4=689 10) Provide mechanical connection (by others) of truss to

- bearing plate capable of withstanding 47 lb uplift at joint 1, 47 lb uplift at joint 3 and 104 lb uplift at joint 4. 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

# COLOR WARNER MALLAND IN IN SEAL 036322 G mmm September 5,2023

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

#### Loading TCLL (roof) Snow (Pf) TCDL

BCLL

BCDL

LUMBER

Scale = 1:31.4

TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	Structural 8-6-11 oc	l wood sheathing directly applie purlins.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 6-0-0 oc
REACTIONS	(size)	1=8-6-11, 3=8-6-11, 4=8-6-11
	Max Horiz	1=80 (LC 11)
	Max Uplift	1=-47 (LC 21), 3=-47 (LC 20)
		4=-104 (LC 14)
	Max Grav	1=87 (LC 20), 3=87 (LC 21), 4
		(LC 21)
FORCES	(lb) - Max Tension	imum Compression/Maximum
TOP CHORD		/318, 2-3=-126/318
BOT CHORD		186, 3-4=-214/186
	2-4=-513/	,
WEBS	2-4=-013/	200

(psf)

20.0

20.0

10.0

10.0

0.0

Code

#### NOTES

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

818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLB5	Valley	1	1	Job Reference (optional)	160552895

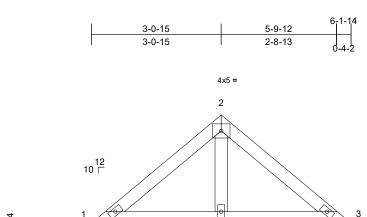
2-3-6

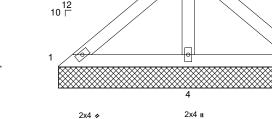
0-0-4

2-7-1

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Fri Sep 01 14:13:09 ID:E86BWEAv60hQp8RadHfrVuyiMOq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2x4 💊





6-1-14



Scale = 1:27.3 -

BOT CHORD

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC201	18/TPI2014	Matrix-MP								
BCDL	10.0											Weight: 23 lb	FT = 20%
	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shee 6-1-14 oc purlins. Rigid ceiling directly bracing. (size) 1=6-1-14, Max Horiz 1=56 (LC Max Uplift 3=-3 (LC Max Grav 1=100 (LC 4=417 (LC (lb) - Maximum Com Tension 1-2=-88/166, 2-3=-8i	applied or 6-0-0 oc 3=6-1-14, 4=6-1-14 11) 15), 4=-53 (LC 14) 2 20), 3=100 (LC 21) 2 21) pression/Maximum	9) 1( ), 1	<ul> <li>design.</li> <li>Gable requir</li> <li>Gable studs</li> <li>This truss ha chord live loa</li> <li>* This truss f on the bottor</li> <li>3-06-00 tall t</li> <li>chord and ar</li> <li>Provide mec</li> <li>bearing plate</li> <li>and 53 lb up</li> <li>This truss is International</li> </ul>	designed in acc Residential Coo nd referenced st	ottom chor oc. d for a 10.1 tt with any ed for a liv eas where will fit betv 's. on (by oth standing 3 ordance w le sections	d bearing. ) psf bottom other live loa e load of 20. a rectangle ween the bott ers) of truss i lb uplift at jc ith the 2018 s R502.11.1 a	ads. Opsf tom to pint 3					

WEBS 2-4=-282/153 NOTES 1) Unbalanced roof live loads have been considered for

1-4=-122/125, 3-4=-122/125

- this design. 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right
- exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 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.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

IN DTH CAS ORTH Contraction of the AND DUDIN SEAL 036322 GI in annin September 5,2023

Page: 1

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **PCB\_Building** Component **5**, the form Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLB6	Valley	1	1	I60552896 Job Reference (optional)	

1-10-9

1-10-9

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

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:09 ID:I1WsfNLJadal6S5S?wRMc2yiMOb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

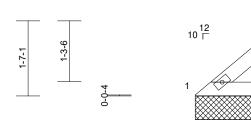
3-5-0

1-6-7



3x5 =

3





2

3-9-2

Scale = 1:24.3

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

Loading         (psf)           TCLL (roof)         20.0           Snow (Pf)         20.0           TCDL         10.0           BCLL         0.0*           BCDL         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	0.11 0.09 0.00	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 12 lb	<b>GRIP</b> 244/190 FT = 20%
3-9-2 oc purlins.	C 10) C 14), 3=-12 (LC 15) C 20), 3=177 (LC 21) pression/Maximum 30/86 been considered for a (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and ri ght exposed;C-C for for reactions shown; JL=1.60 n the plane of the trust (normal to the face) d Details as applicab gner as per ANS/ITP (roof LL: Lum DOL=1 .um DOL=1.15 Plate 3; Fully Exp.; Ce=0.9; seen considered for thi	8) This truss hi chord live lo 9) * This truss on the botto 3-06-00 tall chord and a 10) Provide mec bearing plat 1 and 12 lb 11) This truss is Internationa R802.10.2 a LOAD CASE(S)	spaced at 4-0-0 oc as been designed fo ad nonconcurrent w has been designed m chord in all areas by 2-00-00 wide will ny other members. chanical connection e capable of withsta uplift at joint 3. designed in accord I Residential Code s and referenced stand Standard	or a 10. /ith any for a liv where I fit betw (by oth unding 1 lance w sections	other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 2 lb uplift at ju ith the 2018 i R502.11.1 a	0psf om o oint				SEA 0363	EER A LUN



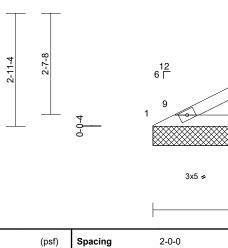
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLC1	Valley	1	1	Job Reference (optional)	160552897

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:09 ID:tY8k3ftoJ8CbTim0rIFIfKyiMQV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

11-8-0 5-10-0 11-1-1 5-10-0 5-3-1 0-6-15 4x5 = 2 10 11 12 6 ┌ 9 12 3 ŀ 4 2x4 II 3x5 ≠ 3x5 👟 11-8-0



Scale = 1:30												
Loading TCLL (roof) Snow (Pf) TCDL	(psf) 20.0 20.0 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI TC BC WB	0.60 0.55 0.16	<b>DEFL</b> 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	<b>PLATES</b> MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0* 10.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 38 lb	FT = 20%
BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS ( M FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalanced this design. 2) Wind: ASCE Vasd=103m Cat. II; Exp zone and C 3-0-8 to 84 cantilever le right expose for reactions DOL=1.60 3) Truss desig only. For st see Standar	10-0-0 oc purlins. Rigid ceiling directly bracing. size) 1=11-8-0 Max Horiz 1=-44 (LC Max Uplift 1=-61 (LC 4=-79 (LC Max Grav 1=107 (L 4=913 (L (lb) - Maximum Com Tension 1-2=-180/533, 2-3=: 1-4=-382/231, 3-4=: 2-4=-711/360 d roof live loads have E 7-16; Vult=130mpt mph; TCDL=6.0psf; B B; Enclosed; MWFR -C Exterior(2E) 8-8- aft and right exposed ed;C-C for members s shown; Lumber DC gned for wind loads i tuds exposed to winc rd Industry Gable Er	C 21), 3=-61 (LC 20), C 14) C 20), 3=108 (LC 21) C 20) npression/Maximum -180/533 -382/231 e been considered for n (3-second gust) 3CDL=6.0psf; h=25ft; S (envelope) exterior 8 to 3-0-8, Exterior(2F 8 to 11-8-8 zone; 1; end vertical left and and forces & MWFR3	Plate DOL=1 DOL=1.15); Cs=1.00; Ct= 5) Unbalanced design. 6) Gable requir 7) Gable studs 8) This truss h chord live loa 9) * This truss h on the bottor 3-06-00 tall t chord and ar 9) Provide mec bearing plate 1, 61 lb upliff 11) This truss is International R802.10.2 ai LOAD CASE(S)	snow loads have be es continuous bottor spaced at 4-0-0 oc. Is been designed for ad nonconcurrent wi has been designed for n chord in all areas by 2-00-00 wide will by 0-00 wide wide wide wide wide wide by 0-00 wide wide wide wide wide wide wide wide	um DC s; Fully een cor m chor r a 10.0 th any or a liv where fit betw (by oth- nding 6 uplift a ance wi ections	L=1.15 Plate Exp.; Ce=0.9 sidered for th d bearing. ) psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss to 1 lb uplift at jo t joint 4. th the 2018 R502.11.1 a	; ds. psf om o			1	SEA O363	22 EER H

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

September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLC2	Valley	1	1	Job Reference (optional)	160552898

3-10-0

3-10-0

Carter Components (Sanford), Sanford, NC - 27332

#### Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:10 ID:TF?1?R2a0Rzc9rqigFV1EHyiMQH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

7-1-1

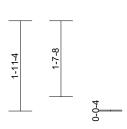
3-3-1

7-8-0

0-6-15



4x5 = 2 9 10 12 6 ∟ 3 4 2x4 ı 2x4 💋 2x4 👟 7-8-0 2-0-0 CSI DEFL l/defl L/d PLATES GRIP in (loc) Plate Grip DOL 1.15 TC 0.25 Vert(LL) n/a n/a 999 MT20 244/190 1 15 BC 0.26 Lumber DOL Vert(TL) n/a n/a 999 Rep Stress Incr YES WB 0.07 Horiz(TL) 0.00 4 n/a n/a IRC2018/TPI2014 Matrix-MP Weight: 24 lb FT = 20% TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this 5) desian. polied or Gable requires continuous bottom chord bearing. 6) 7) Gable studs spaced at 4-0-0 oc. oc 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. \* This truss has been designed for a live load of 20.0psf 9) on the bottom chord in all areas where a rectangle C 15), 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 10 lb uplift at joint 1, 16 lb uplift at joint 3 and 41 lb uplift at joint 4. 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 ATH CAL 0 Provinsion and the state SEAL 036322



Spacing

Code



GI minin September 5,2023 WITTER PARTY

BCDL		10.0	
LUMBER			
TOP CHORD	2x4 SP N	o.2	
BOT CHORD	2x4 SP N	o.2	
OTHERS	2x4 SP N	o.3	
BRACING			
TOP CHORD	Structural 7-8-0 oc p		athing directly ap
BOT CHORD	Rigid ceili bracing.	ng directly	applied or 6-0-0
REACTIONS	(size)	1=7-8-0, 3	=7-8-0, 4=7-8-0
	Max Horiz	1=28 (LC	14)
	Max Unlift		14) 3=-16 (I C 1

(psf)

20.0

20.0

10.0

0.0

#### Max Grav 1=113 (LC 20), 3=113 (LC 21), 4=514 (LC 20) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-127/260, 2-3=-127/260 BOT CHORD 1-4=-193/150, 3-4=-193/150 WEBS 2-4=-354/206 NOTES

4=-41 (LC 14)

Scale = 1:24.7 Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Exterior(2R) 3-0-8 to 4-8-8, Exterior(2E) 4-8-8 to 7-8-8 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
- 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.

818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLC3	Valley	1	1	I60552 Job Reference (optional)	2899

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:10 ID:6YjZWYB5B7Uvbhl0NmirjpyiMQ5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

3-1-1

1-3-1

1-10-0

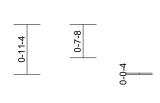
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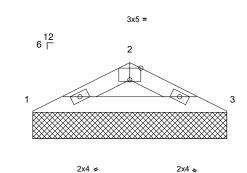
3-8-0

0-6-15

Page: 1

818 Soundside Road Edenton, NC 27932





2x4 👟

3-8-0

# Scale = 1:21.8

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

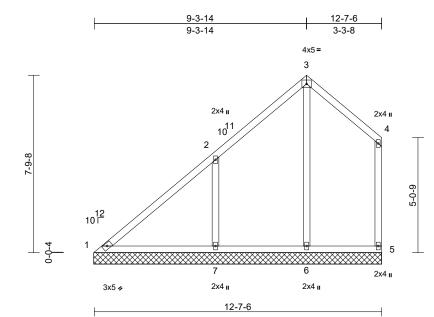
Loading         (psf)           TCLL (roof)         20.0           Snow (Pf)         20.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI TC BC	0.10 0.11	DEFL Vert(LL) Vert(TL)	in n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	<b>GRIP</b> 244/190
TCDL         10.0           BCLL         0.0*           BCDL         10.0	Rep Stress Incr Code	YES IRC2018/TPI2014	WB Matrix-MP	0.00	Horiz(TL)	0.00	3	n/a	n/a	Weight: 10 lb	FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING TOP CHORD Structural wood she 3-8-0 oc purlins. BOT CHORD Rigid ceiling directly bracing. REACTIONS (size) 1=3-8-0, : Max Horiz 1=12 (LC Max Uplift 1=-15 (LC Max Grav 1=164 (LC FORCES (Ib) - Maximum Com Tension TOP CHORD 1-2=-267/123, 2-3=- BOT CHORD 1-3=-96/230 NOTES 1) Unbalanced roof live loads have this design. 2) Wind: ASCE 7-16; Vult=130mph	applied or 10-0-0 or 3=3-8-0 18) 14), 3=-15 (LC 15) 2 20), 3=164 (LC 21) pression/Maximum 267/123 been considered for (3-second gust)	<ul> <li>7) Gable stuce</li> <li>8) This truss chord live</li> <li>9) * This truss on the bott</li> <li>3-06-00 ta chord and</li> <li>10) Provide m bearing pla 1 and 15 ll</li> <li>11) This truss Internation R802.10.2</li> <li>LOAD CASE(5)</li> </ul>	is spaced at 4-0-0 has been designed oad nonconcurren s has been designed om chord in all are l by 2-00-00 wide v any other member schanical connecti the capable of withs o uplift at joint 3. Is designed in acco al Residential Cod and referenced sta 5) Standard	I for a 10.0 t with any ed for a liv as where will fit betw s. on (by oth standing 1 ordance w e sections	other live load e load of 20.0 a rectangle veen the botto 5 lb uplift at jo ith the 2018 \$ R502.11.1 at	ipsf om o pint				Weight: 10 lb	FT = 20%
<ul> <li>Vasd=103mph; TCDL=6.0psf; B Cat. II; Exp B; Enclosed; MWFR zone and C-C Exterior(2E) zone exposed; end vertical left and ri- members and forces &amp; MWFRS Lumber DOL=1.60 plate grip DC</li> <li>Truss designed for wind loads ii only. For studs exposed to wind see Standard Industry Gable En or consult qualified building desi</li> <li>TCU: ASCE 7.40, Dre200 and</li> </ul>	S (envelope) exterior ; cantilever left and r ght exposed; C-C for for reactions shown; iL=1.60 n the plane of the tru (normal to the face) d Details as applicat gner as per ANSI/TF	r ight ss i, ole, 21 1.						Contraction of the second seco		SEA 0363	
<ol> <li>TCLL: ASCE 7-16; Pr=20.0 psf ( Plate DOL=1.15); Pf=20.0 psf (L DOL=1.15); Is=1.0; Rough Cat E Cs=1.00; Ct=1.10</li> <li>Unbalanced snow loads have be design.</li> </ol>	um DOL=1.15 Plate 3; Fully Exp.; Ce=0.9	;									EER KING

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

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLD1	Valley	1	1	Job Reference (optional)	160552900

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:10 ID:vAVBsNisdZRLs81UW9iY4Kyi377-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:50.6

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	0.38 0.29 0.23	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 66 lb	<b>GRIP</b> 244/190 FT = 20%
	6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 1=12-7-1 7=12-7-1 Max Horiz 1=238 (LC Max Uplift 1=-37 (LC 6=-38 (LC Max Grav 1=253 (LC	applied or 10-0-0 oc 1, 5=12-7-11, 6=12-7- 1 C 11) 2 10), 5=-58 (LC 10), 2 11), 7=-211 (LC 14)	5) .11, 6) 7) 8) 9)	only. For stu see Standaru 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 loo * This truss ha on the botton 3-06-00 tall th	ned for wind load: dids exposed to wi d Industry Gable I lalified building de 7-16; Pr=20.0 psf Is=1.0; Rough Ca =1.10 snow loads have es continuous bol spaced at 4-0-0 d sbeen designed ad nonconcurrent tas been designed ad nonconcurrent tas been designed y 2-00-00 wide w y other members	nd (norm End Deta signer as f (roof LL (Lum DC t B; Fully been cor tom chor c. for a 10.1 with any d for a liv is where ill fit betv	al to the face ils as applica is per ANSI/T :: Lum DOL= :L=1.15 Plate Exp.; Ce=0.1 asidered for t d bearing. 0 psf bottom other live loa re load of 20.1 a rectangle veen the bott	), ble, Pl 1. 1.15 e 9; his dds. 0psf om					
FORCES	(lb) - Maximum Com Tension 1-2=-340/207, 2-3=- 4-5=-170/157	pression/Maximum 192/180, 3-4=-134/19		) Provide mec bearing plate 5, 37 lb uplift	hanical connection capable of withs t at joint 1, 38 lb u	n (by oth tanding 5	ers) of truss 58 lb uplift at j	to joint					
, this design	1-7=-63/236, 6-7=-6 3-6=-220/100, 2-7=- d roof live loads have	379/258 been considered for		surface with This truss is International	7. e or shim required truss chord at joir designed in acco Residential Code nd referenced sta	it(s) 1. dance w sections	ith the 2018 8 R502.11.1 a	0			ALL	OR FESS	ROLIN
<ol><li>Wind: ASC</li></ol>	E 7-16; Vult=130mph	(3-second gust)	LC	DAD CASE(S)	Standard						2)	11	

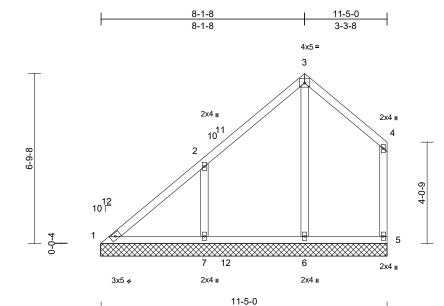
:130mph (3 vvina: . ASCE 7-16; Vult Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 6-4-3, Exterior(2R) 6-4-3 to 9-4-3, Exterior(2E) 9-4-3 to 12-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP
23080083-01	VLD2	Valley	1	1	I60552901 Job Reference (optional)

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Fri Sep 01 14:13:11 ID:vAVBsNisdZRLs81UW9iY4Kyi377-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scal	le =	1.46	

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MSH	0.30 0.17 0.18	<b>DEFL</b> 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: 58 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	6-0-0 oc purlins, e Rigid ceiling direct bracing. (size) 1=11-5- 7=11-5- Max Horiz 1=202 ( Max Uplift 1=-42 (L 6=-29 (L Max Grav 1=201 (	-	; 5) , 6) , 7) 8) 9)	only. For stu see Standard 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 loo * This truss ha on the botton 3-06-00 tall th	ned for wind loads ids exposed to wird d Industry Gable E ialified building des 7-16; Pr=20.0 psf 1.15); Pf=20.0 psf 1.15); Pf=20.0 psf 1.10; Rough Cat =1.10 snow loads have I es continuous bott spaced at 4-0-0 o is been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide win y other members.	d (norm nd Deta signer as f (roof LL Lum DC B; Fully been cor om chor c. or a 10.0 with any for a liv s where Il fit betv	al to the face ils as applical s per ANSI/TF JL=1.15 Plate Exp.; Ce=0.9 asidered for th d bearing. 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto	), ble, Pl 1. 1.15 ); ds. )psf om					
FORCES TOP CHORD	Tension 1-2=-269/176, 2-3	mpression/Maximum =-177/156, 3-4=-123/1		) Provide mec bearing plate	hanical connection capable of withst t at joint 1, 29 lb up	ı (by oth anding 5	ers) of truss t i3 lb uplift at j	o oint					
BOT CHORD WEBS	4-5=-173/143 1-7=-50/181, 6-7=- 3-6=-228/80, 2-7=-	,		surface with	7. e or shim required truss chord at join designed in accor	(s) 1.	·	9				NILL CA	Della

#### NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-1-13, Exterior(2R) 5-1-13 to 8-1-13, Exterior (2E) 8-1-13 to 11-3-9 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
- 12) This truss is designed in accordance with the 2018
- International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLD3	Valley	1	1	Job Reference (optional)	160552902

6-11-2

6-11-2

2x4 II

2

7

2x4 II

12 10 Г

2x4 🥠

1

10<sup>11</sup>

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

5-9-8

0-0-4

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10-2-10

3-3-8

4x5 =3

6

10-2-10

2x4 II

2x4 II

Page: 1

2x4 II 4 3-0-9 5



Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	<b>CSI</b> TC BC WB Matrix-MSH	0.30 0.10 0.13	<b>DEFL</b> 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: 49 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, exi Rigid ceiling directly bracing. (size) 1=10-2-14 7=10-2-14 Max Horiz 1=166 (LC Max Uplift 1=-48 (LC 6=-20 (LC Max Grav 1=141 (LC	cept end verticals. applied or 10-0-0 oc 4, 5=10-2-14, 6=10-2 5 11) 5 11), 5=-52 (LC 15), 5 11), 7=-150 (LC 14) 5 24), 5=206 (LC 21), 5 20), 7=395 (LC 20)	d or consult of the study of th	d snow loads have ires continuous bo s spaced at 4-0-0 as been designed ad nonconcurren has been designed om chord in all are by 2-00-00 wide v by 2-00-00 wide v	ind (norm End Deta esigner a: sf (roof LL f (Lum DC t (Lum DC been cor been cor been cor oc. I for a 10. t with any d for a liv as where will fit betv s.	al to the face ils as applica s per ANSI/T .: Lum DOL= U=1.15 Plate Exp.; Ce=0. asidered for t d bearing. D psf bottom other live loa e load of 20. a rectangle yeen the bott	), ble, PI 1. 1.15 9; his ds. 0psf om					
TOP CHORD BOT CHORD WEBS <b>NOTES</b> 1) Unbalanc this desig 2) Wind: AS Vasd=103 Cat. II; Ex zone and 2-11-6 to (2E) 6-11 exposed ; members	Tension 1-2=-185/155, 2-3=- 4-5=-179/134 1-7=-35/118, 6-7=-3 3-6=-229/70, 2-7=-3 red roof live loads have	164/137, 3-4=-127/15 5/49, 5-6=-35/49 20/244 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior to 2-11-6, Interior (1 11-6 to 6-11-6, Exteri lever left and right pht exposed;C-C for for reactions shown;	54, 5, 48 lb upli upliff at join 11) Beveled pla surface with 12) This truss is Internationa R802.10.2 : LOAD CASE(S	te or shim require n truss chord at joi s designed in acco al Residential Cod and referenced sta	standing 5 uplift at joi ed to provi nt(s) 1. ordance w e sections	i2 lb uplift at nt 6 and 150 de full bearin ith the 2018 i R502.11.1 a	joint Ib g		A straight s		ORTH CA OFESS SEA 0363	•

- Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 2-11-6, Interior (1) 2-11-6 to 3-11-6, Exterior(2R) 3-11-6 to 6-11-6, Exterior (2E) 6-11-6 to 10-1-2 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 oclapse 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 Stability and the prevention applicable from the Structure Building Component Advance interpreted the property damage. and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



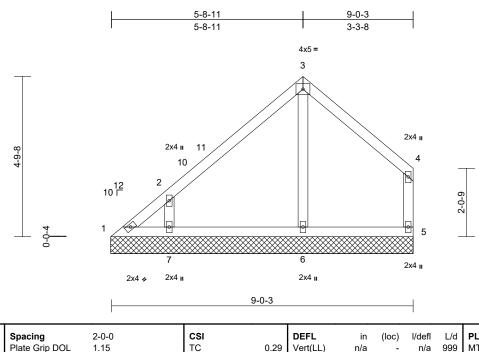
818 Soundside Road Edenton, NC 27932

GI The Gilling September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLD4	Valley	1	1	Job Reference (optional)	160552903

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:11 ID:vAVBsNisdZRLs81UW9iY4Kyi377-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.29 0.11 0.09	<b>DEFL</b> 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: 40 lb	<b>GRIP</b> 244/190 FT = 20%	
	Max Horiz 1=130 (LC Max Uplift 1=-60 (LC 6=-11 (LC Max Grav 1=93 (LC	cept end verticals. applied or 10-0-0 oc 5=9-0-8, 6=9-0-8, 7= C 11) C 10), 5=-59 (LC 15), C 11), 7=-135 (LC 14)	<ul> <li>Plate DOL=: DOL=1.15); Cs=1.00; Ct</li> <li>Unbalanced design.</li> <li>Gable requir</li> <li>Gable studs</li> <li>This truss has chord live lo</li> <li>* This truss on the botto 3-06-00 tall chord and a</li> <li>Provide mec bearing plate</li> </ul>	snow loads have to spaced at 4-0-0 or as been designed for ad nonconcurrent w has been designed m chord in all areas by 2-00-00 wide win hy other members. chanical connection e capable of withsta	(Lum DC B; Fully been cor om chor c. for a 10.0 with any I for a liv s where Il fit betw h (by oth anding 5	DL=1.15 Plate Exp.; Ce=0.9 Insidered for th d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss to 9 lb uplift at jo	; ds. lpsf om oint						
FORCES	(lb) - Maximum Com Tension 1-2=-160/148, 2-3=-	pression/Maximum	uplift at joint 11) Beveled plat 41, surface with	e or shim required truss chord at joint	to provi t(s) 1.	de full bearing							
BOT CHORD	4-5=-192/130 1-7=-31/42, 6-7=-24		Ínternationa	designed in accord Residential Code	sections	R502.11.1 a	nd						
WEBS NOTES	3-6=-218/59, 2-7=-3	59/287	R802.10.2 a LOAD CASE(S)	nd referenced stan	ndard AN	ISI/TPI 1.					MITT	11111	
1) Unbalance	ed roof live loads have	been considered for		Standard							TH CA	ROUL	
Vasd=103 Cat. II; Exp zone and 0 3-0-0 to 5- cantilever right expos	CE 7-16; Vult=130mph mph; TCDL=6.0psf; B o B; Enclosed; MWFR C-C Exterior(2E) 0-0-0 9-0, Exterior(2E) 5-9-0 left and right exposed sed;C-C for members ns shown; Lumber DC	CDL=6.0psf; h=25ft; S (envelope) exterior to 3-0-0, Exterior(2F to 8-10-12 zone; ; end vertical left and and forces & MWFR	R) I						A Contraction of the second se		SEA 0363	L 222	. Annunters
3) Truss des only. For s	igned for wind loads in studs exposed to wind ard Industry Gable En	(normal to the face)	,							inter and	A C A	EEP. AL	

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.

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 Institute (average component description description (unwe theoremonent) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

818 Soundside Road Edenton, NC 27932

GI A. GIL

September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLD5	Valley	1	1	Job Reference (optional)	160552904

4-6-5

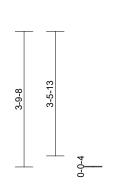
4-6-5

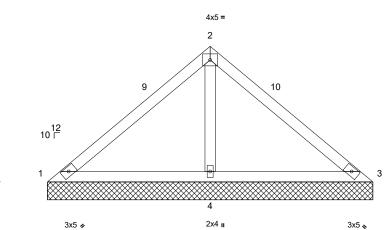
Carter Components (Sanford), Sanford, NC - 27332,

# Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:12 ID:NM3Z3jjUOsZCUIcg4sDncXyi376-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

 $\frac{8-8-8}{4-2-3} \xrightarrow{9-0-10}{0-4-2}$ 





9-0-10

Scale = 1:32.2

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(pst 20.0 20.0 10.0 0.0 10.0	0 Plate Grip DOL 0 Lumber DOL 0 Rep Stress Incr 0* Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.38 0.37 0.16	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 34 lb	<b>GRIP</b> 244/190 FT = 20%
	9-0-10 oc purlins Rigid ceiling dire bracing. (size) 1=9-1 Max Horiz 1=85 Max Uplift 1=-40 4=-98	ectly applied or 6-0-0 oc -3, 3=9-1-3, 4=9-1-3 (LC 11) (LC 21), 3=-40 (LC 20) (LC 14) (LC 20), 3=91 (LC 21), 4	5 ed or 6 7 8 9	Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. Gable requiri Gable studs This truss ha chord live loa * This truss f on the bottor 3-06-00 tall t chord and ar 0) Provide mec	7-16; Pr=20.0 ps .15); Pf=20.0 psf is=1.0; Rough Cai -1.10 snow loads have es continuous bot spaced at 4-0-0 o s been designed ad nonconcurrent nas been designed n chord in all area by 2-00-00 wide w yo other members hanical connection c capable of withsl	(Lum DC t B; Fully been cor tom chor c. for a 10. with any d for a liv d for a liv s where ill fit betv n (by oth	DL=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 bottwers) of truss the	e ); ds. Dpsf om o					
FORCES TOP CHORD BOT CHORD WEBS NOTES	(lb) - Maximum ( Tension 1-2=-107/343, 2- 1-4=-200/165, 3- 2-4=-548/258			1, 40 lb uplift 1) Beveled plat surface with 2) This truss is International	at joint 3 and 98 e or shim required truss chord at join designed in accor Residential Code nd referenced star	lb uplift a l to provi it(s) 1, 3. dance w sections	t joint 4. de full bearing ith the 2018 5 R502.11.1 a	g					
this design		ave been considered fo	Ľ	OAD CASE(S)	Standard							WHY CA	Della

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

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

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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLD6	Valley	1	1	Job Reference (optional)	160552905

3-3-14

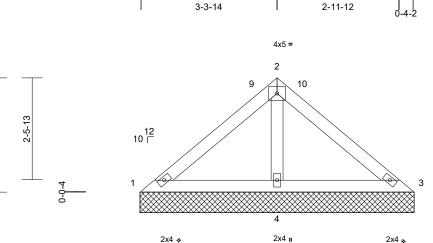
Carter Components (Sanford), Sanford, NC - 27332,

2-9-8

#### Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Fri Sep 01 14:13:12 ID:NM3Z3jjUOsZCUIcg4sDncXyi376-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

6-3-11





6-7-13

Scale = 1:28.2

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MP	0.21 0.22 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: 25 lb	<b>GRIP</b> 244/190 FT = 20%
FORCES TOP CHORD BOT CHORD WEBS NOTES	Max Horiz 1=61 (LC Max Uplift 1=-10 (LC 4=-63 (LC Max Grav 1=101 (LI 4=478 (LI (lb) - Maximum Con Tension 1-2=-86/201, 2-3=-8 1-4=-145/140, 3-4=- 2-4=-335/180	y applied or 6-0-0 oc 3=6-8-7, 4=6-8-7 11) C 21), 3=-10 (LC 20) C 14) C 20), 3=101 (LC 21 C 20) npression/Maximum 36/201 -145/140	6) 7) 8) 9) , 11 12	Plate DOL= DOL=1.15); Cs=1.00; Ct Unbalanced design. Gable requin Gable studs This truss ha chord live lo * This truss on the botto 3-06-00 tall chord and a 0) Provide meet bearing platt 1, 10 lb uplif Beveled plat surface with 2) This truss is International R802.10.2 a	snow loads have res continuous bo spaced at 4-0-0 as been designed ad nonconcurren has been designed m chord in all are by 2-00-00 wide 'v by 2-00-00 wide 'v hanical connectif e capable of with t at joint 3 and 63 te or shim require truss chord at joi designed in acco I Residential Cod and referenced sta	f (Lum DC at B; Fully be been con- bottom choi oc. d for a 10. t with any ed for a 11 beas where will fit betw 's. on (by oth standing ' 3 lb uplift a d to provi int(s) 1, 3. ordance w le sections	DL=1.15 Plate Exp.; Ce=0.9 Insidered for the d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss t 0 lb uplift at j tt joint 4. de full bearing ith the 2018 s R502.11.1 a	e e); his Dpsf com coint					
fhis desigr	ed roof live loads have n. CE 7-16: Vult=130mpt		r <b>L</b> (	OAD CASE(S)	Standard							WITH CA	ROUL

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 3-8-7, Exterior(2E) 3-8-7 to 6-8-7 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.

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818 Soundside Road Edenton, NC 27932

SEAL

036322

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLD7	Valley	1	1	I60552906 Job Reference (optional)	

2-1-8

2-1-8

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

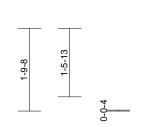
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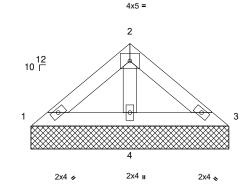
3-10-14

1-9-6



Page: 1





4-3-0

Scale = 1:25

		1			1							r	
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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.08	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.03	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC20	18/TPI2014	Matrix-MP								
BCDL	10.0											Weight: 15 lb	FT = 20%
LUMBER			4	5) Unbalanced	snow loads have	e been cor	sidered for t	this					
TOP CHORD	2x4 SP No.2			design.									
BOT CHORD	2x4 SP No.2		(	<ol> <li>Gable requi</li> </ol>	res continuous bo	ottom chor	d bearing.						
OTHERS	2x4 SP No.3			7) Gable studs	spaced at 4-0-0	OC.	-						
BRACING			;		as been designed								
TOP CHORD	Structural wood she	athing directly applie	ed or		ad nonconcurren								
	4-3-0 oc purlins.		9		has been design			.0psf					
BOT CHORD	Rigid ceiling directly bracing.	applied or 6-0-0 oc		3-06-00 tall	m chord in all are by 2-00-00 wide	will fit betv		tom					
REACTIONS	(size) 1=4-3-10,	3=4-3-10, 4=4-3-10	)		ny other member								
	Max Horiz 1=-38 (LC	2 10)			chanical connecti								
	Max Uplift 1=-1 (LC		=-26		e capable of with at joint 3 and 26			SINT					
	(LC 14)				te or shim require			a d					
	Max Grav 1=81 (LC	20), 3=81 (LC 21), 4	4=251		truss chord at jo			iy					
	(LC 20)				designed in acco		ith the 2018						
FORCES	(lb) - Maximum Corr	pression/Maximum			Residential Cod								
	Tension			R802.10.2 a	and referenced st	andard AN	ISI/TPI 1.						
TOP CHORD	1-2=-74/83, 2-3=-74			LOAD CASE(S)									
BOT CHORD	1-4=-65/73, 3-4=-65	/73											

### NOTES 1)

WEBS

Unbalanced roof live loads have been considered for this design.

2-4=-147/73

- 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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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLG1	Valley	1	1	Job Reference (optional)	160552907

7-4-10

7-4-10

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

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:13 ID:Y15h7GgdScsbER4SWOvSfXyiMOB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

8-7-10

1-3-0 4x5 = 3

> 2x4 🛛 4

Page: 1

11 2x4 II 10 6-2-2 2 5-1-10 e 12 10 □ 0-0-4 5 12 6 2x4 II 2x4 🖌 8-7-10 Spacing 2-0-0 CSI DEFL in l/defl L/d PLATES GRIP (loc) Plate Grip DOL 1.15 тс 0.25 Vert(LL) n/a n/a 999 MT20 244/190 Lumber DOL 1.15 BC 0 13 Vert(TL) 999 n/a n/a . riz(TL) 0.00 5 n/a n/a FT = 20% Weight: 48 lb m DOL=1.15 15 Plate .; Ce=0.9; red for this aring. bottom r live loads ad of 20.0psf ctangle the bottom 10.0psf. of truss to uplift at joint int 7. Ill bearing ne 2018 02.11.1 and ΡI 1. Non the transferrer VALUE IN INT SEAL 036322 GI mmm September 5,2023 818 Soundside Road Edenton, NC 27932

Scale = 1:43.1

Loading

TCLL (roof)

		20.0	I late onp DOL	1.10			10	0.20	V CIU
Snow (Pf)		20.0	Lumber DOL	1.15			BC	0.13	Vert
TCDL		10.0	Rep Stress Incr	YES			WB	0.09	Horiz
BCLL		0.0*	Code	IRC2	2018	/TPI2014	Matrix-MP		
BCDL		10.0							
LUMBER					4)	TCLL: ASCE	7-16; Pr=20.0	psf (roof LL	_: Lum
TOP CHORD	2x4 SP N	lo.2				Plate DOL=1	.15); Pf=20.0 p	sf (Lum DC	)L=1.1
BOT CHORD	2x4 SP N	o.2					s=1.0; Rough C	Cat B; Fully	Exp.;
WEBS	2x4 SP N	o.3				Cs=1.00; Ct=			
OTHERS	2x4 SP N	lo.3			5)		snow loads hav	e been cor	nsidere
BRACING					•	design.			
TOP CHORD	Structura	l wood shea	athing directly applie	ed or	6)		es continuous b		d bear
			cept end verticals.		7)		spaced at 4-0-0		0 maf h
BOT CHORD	0	ing directly	applied or 10-0-0 o	с	8)		s been designe ad nonconcurre		
	bracing.				9)		as been desigr		
REACTIONS	(size)		5=8-7-15, 6=8-7-15	5,	5)		n chord in all ar		
		7=8-7-15					y 2-00-00 wide		
		1=200 (LC					y other membe		
	Max Uplift		15), 6=-20 (LC 14)	,	10)		hanical connect		
	May Cray	7=-167 (L				bearing plate	capable of with	nstanding 3	33 lb u
	Max Grav		2 25), 5=51 (LC 21), 2 23), 7=462 (LC 23			5, 20 lb uplift	at joint 6 and 1	67 lb uplift	at join
FORCES				)	11)		e or shim requir		de full
FURCES	Tension		pression/Maximum				truss chord at jo		
TOP CHORD		/169 2-3=-	103/64, 3-4=-30/31,		12)		designed in acc		
	4-5=-58/3		100/04, 0-400/01,				Residential Co		
BOT CHORD		, 101, 6-7=0/0	0. 5-6=0/0				nd referenced s	tanuaru AN	N31/1P
WEBS		/89, 2-7=-2	,		LO	AD CASE(S)	Standard		
		•							

NOTES

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

(psf)

20.0

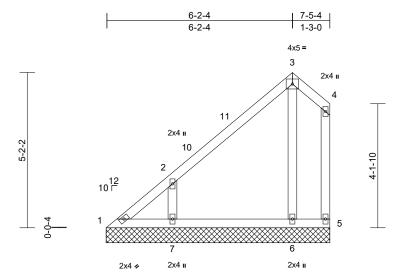
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 4-4-15, Exterior(2R) 4-4-15 to 7-4-15, Exterior (2E) 7-4-15 to 8-6-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss 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.

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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLG2	Valley	1	1	I60 Job Reference (optional)	0552908

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Fri Sep 01 14:13:14 ID:f3RS\_KE6O2nxMgAUnIFT3RyiMNS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



7-5-4



Scale = 1:38.4

30ale - 1.30.4					-							-	
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	<b>CSI</b> TC BC WB Matrix-MP	0.25 0.09 0.10	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: 39 lb	<b>GRIP</b> 244/190 FT = 20%
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 Cat. II; Ex zone and 3-0-0 to 6- members Lumber D 3) Truss des only. For see Stand	Max Horiz 1=164 (LC Max Uplift 1=-27 (LC 6=-23 (LC Max Grav 1=111 (LC (lb) - Maximum Com Tension 1-2=-279/172, 2-3=- 4-5=-58/40 1-7=-22/28, 6-7=0/0 3-6=-143/97, 2-7=-2 ed roof live loads have	cept end verticals. applied or 10-0-0 or 5=7-5-8, 6=7-5-8, 7= C 14) C 12), 5=-33 (LC 15), C 14), 7=-146 (LC 21), C 20), 7=343 (LC 23), pression/Maximum 102/66, 3-4=-30/33, , 5-6=0/0 91/331 been considered for (G-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior 10 (G-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior 10 (3-second gust) CDL=0.0psf; h=25ft; S (envelope) exterior 10 (3-second gust) CDL=0.0psf; h=25ft; S (envelope) exterior 10 (3-30-0, Exterior(2) 10 (3-12 cone;C-C) for reactions shown DL=1.60 n the plane of the true ( normal to the face); d Details as applicat	7 8 c 8 -7-5-8 9 -7-5-8 9 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7	<ul> <li>Plate DOL=1 DOL=1.15); Cs=1.00; Ct:</li> <li>Unbalanced design.</li> <li>Gable requir</li> <li>Gable studs</li> <li>This truss ha chord live loa</li> <li>* This truss 1</li> <li>on the bottor 3-06-00 tall t chord and ar</li> <li>Provide mec bearing plate 5, 27 lb uplift uplift at joint</li> <li>Beveled plat surface with</li> <li>This truss is International</li> </ul>	snow loads have es continuous bo spaced at 4-0-0 is been designed ad nonconcurren nas been designed n chord in all are y 2-00-00 wide v hy other member hanical connecti e capable of withs a tjoint 1, 23 lb i 7. e or shim require truss chord at joi designed in acco Residential Cod nd referenced sta	f (Lum DC at B; Fully been con- bittom chor oc. I for a 10.1 t with any ad for a liv as where will fit betw s. on (by oth standing 3 uplift at joi ed to provi int(s) 1. ordance w e sections	DL=1.15 Plate Exp.; Ce=0.9 Insidered for the d bearing. D psf bottom other live load e load of 20.0 a rectangle ween the botto ers) of truss t i3 lb uplift at j nt 6 and 146 de full bearing ith the 2018 : R502.11.1 a	); ds. lpsf om oint lb				SEA 0363	• •

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 Institute (average component description description (unwe theoremonent) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

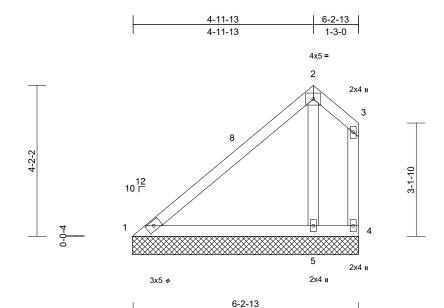


818 Soundside Road Edenton, NC 27932

GILB A. GILIN September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP
23080083-01	VLG3	Valley	1	1	I60552909 Job Reference (optional)

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:14 ID:8XWFmUSO9a2NXRYyqXZioEyiMNA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:31.9

Scale - 1.51.9													
<b>Loading</b> TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MP	0.37 0.41 0.05	<b>DEFL</b> 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: 30 lb	<b>GRIP</b> 244/190 FT = 20%
	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 1=6-3-2, 4 Max Upift 4=-78 (LC Max Upift 4=-78 (LC Max Upift 4=-78 (LC (lb) - Maximum Com Tension 1-2=-221/81, 2-3=-3 1-5=-153/193, 4-5=0 2-5=-169/123	cept end verticals. • applied or 10-0-0 o 4=6-3-2, 5=6-3-2 C 14) C 20), 5=-93 (LC 14) C 20), 4=17 (LC 14), C 20) npression/Maximum 0/36, 3-4=-58/45	c 1 , 1	<ul> <li>design.</li> <li>Gable requir</li> <li>Gable studs</li> <li>This truss hat chord live lo</li> <li>* This truss on the botto</li> <li>3-06-00 tall</li> <li>chord and a</li> <li>Provide mee bearing plate</li> <li>4 and 93 lb</li> <li>Beveled plats</li> <li>surface with</li> <li>2) This truss is International</li> </ul>	snow loads have res continuous bo spaced at 4-0-0 i as been designed ad nonconcurrent has been designed m chord in all are by 2-00-00 wide w ny other members inhanical connection e capable of withs uplift at joint 5. te or shim require truss chord at joi designed in acco I Residential Code nd referenced sta Standard	ottom chor oc. I for a 10.t with any d for a liv as where will fit betv s. on (by oth standing 7 d to provi nt(s) 1. ordance w e sections	d bearing. ) psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 8 lb uplift at j de full bearing ith the 2018 i R502.11.1 a	ids. Opsf om to joint g					
this design 2) Wind: ASC Vasd=103 Cat. II; Exp	ed roof live loads have 1. CE 7-16; Vult=130mph imph; TCDL=6.0psf; B p B; Enclosed; MWFR C-C Exterior(2E) 0-0-0	i (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio	; or								A A A	ORTH CA	ROUN

- Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 5-0-2, Exterior(2E) 5-0-2 to 6-1-6 zone;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
- 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

September 5,2023

SEAL 036322

Vinneeneer

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



annun nun

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLG4	Valley	1	1	li Job Reference (optional)	60552910

#### Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries. Inc. Fri Sep 01 14:13:14 ID:n6mDrPobKViGVuGX17aVTMyiMMj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

3-9-7 5-0-7 3-9-7 1-3-0 4x5 = 2 2x4 🛛 9 3 9 3-2-2 8 12 10 ∟ 2-1-10 0 0-0-4 4 5 2x4 II 2x4 II 2x4 🍫

5-0-7



Scale = 1:27.8

Scale = 1:27.8													
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 IRC201	8/TPI2014	CSI TC BC WB Matrix-MP	0.20 0.25 0.03	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 23 lb	<b>GRIP</b> 244/190 FT = 20%
	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 5-0-7 oc purlins, ex Rigid ceiling directly bracing. (size) 1=5-0-12, Max Horiz 1=90 (LC Max Uplift 4=-35 (LC Max Grav 1=145 (LC (lb) - Maximum Com Tension 1-2=-172/63, 2-3=-2 1-5=-120/145, 4-5=( 2-5=-133/82	cept end verticals. applied or 10-0-0 o 4=5-0-12, 5=5-0-12 14) 33), 5=-60 (LC 14) 2 20), 4=27 (LC 21), 2 20) apression/Maximum 8/38, 3-4=-55/48	c 10 2 10 11	design. Gable requii Gable studss This truss ha chord live lo * This truss on the botto 3-06-00 tall chord and a Provide mee bearing plate 4 and 60 lb 1) Beveled plath surface with Strate truss is International	snow loads have res continuous bo spaced at 4-0-0 o as been designed ad nonconcurrent has been designe m chord in all area by 2-00-00 wide w ny other members chanical connectic e capable of withs uplift at joint 5. te or shim require- truss chord at joi designed in accoo I Residential Code not referenced sta Standard	ttom chor oc. for a 10.1 with any d for a liv as where vill fit betwork on (by oth tanding 3 d to provint(s) 1. rdance we	d bearing. 0 psf bottom other live loa re load of 20.1 a rectangle veen the bott ers) of truss i 35 lb uplift at j de full bearin ith the 2018 s R502.11.1 a	ads. Opsf om to joint g					
<ol> <li>Unbalance this design</li> <li>Wind: ASC</li> </ol>	ed roof live loads have n. CE 7-16; Vult=130mph mph; TCDL=6.0psf; B	(3-second gust)										WITH CA	ROLIN

- 2 Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 3-9-12, Exterior(2E) 3-9-12 to 4-11-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), 3) see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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818 Soundside Road Edenton, NC 27932

A. GIL

September 5,2023

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Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLG5	Valley	1	1	Job Reference (optional)	160552911

2-7-1

2-7-1

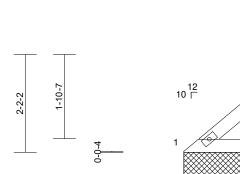
Carter Components (Sanford), Sanford, NC - 27332,

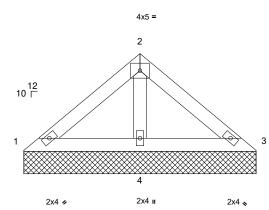
Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:15 ID: NocWnBzN1oTHB2KDr3rn1JyiMMV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-9-15

2-2-15

Page: 1





5-2-1

Scale = 1:25.7

Scale = 1:25.7											
Loading         (psf)           TCLL (roof)         20.0           Snow (Pf)         20.0           TCDL         10.0           BCLL         0.0*           BCDL         10.0	Spacing2-0Plate Grip DOL1.1Lumber DOL1.1Rep Stress IncrYECodeIR	15 15	CSI TC BC WB Matrix-MP	0.10 0.13 0.04	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 19 lb	<b>GRIP</b> 244/190 FT = 20%
BOT CHORD         5-2-1 oc purlins.           Rigid ceiling directly bracing. <b>REACTIONS</b> (size)           Max Horiz         1=47 (LC Max Uplift 3=-6 (LC Max Uplift 1)	3=5-2-1, 4=5-2-1 13) 15), 4=-38 (LC 14) 20), 3=92 (LC 21), 4=323 pression/Maximum 4/117 /97 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and right ght exposed;C-C for for reactions shown; L=1.60 the plane of the truss (normal to the face), d Details as applicable, gner as per ANSI/TPI 1. toof LL: Lum DOL=1.15 um DOL=1.15 Plate	<ul> <li>design.</li> <li>6) Gable requir</li> <li>7) Gable studs</li> <li>8) This truss ha chord live loc</li> <li>9) * This truss f on the bottor 3-06-00 tall t chord and ar</li> <li>10) Provide mec bearing plate and 38 lb up</li> <li>11) This truss is International</li> </ul>	designed in accorda Residential Code so nd referenced stand	m chor r a 10.0 ith any for a liv where fit betw (by oth nding 6 ance w ections	d bearing. ) psf bottom other live loac e load of 20.0 a rectangle veen the botto ers) of truss to lb uplift at join th the 2018 R502.11.1 ar	ds. psf m o nt 3				SEA 0363	22 EERER III

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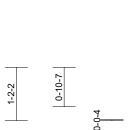


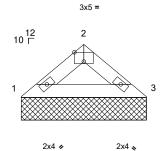
818 Soundside Road Edenton, NC 27932

A. GIL September 5,2023

Job	Truss	Truss Type	Qty	Ply	108 Serenity-Roof-B329 A LH CP	
23080083-01	VLG6	Valley	1	1	I605529 Job Reference (optional)	12

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Fri Sep 01 14:13:15 ID:\_TGVzwPShYnlowCr7nxwhhyiMJM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





2-9-4

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

Scale = 1:25.5

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

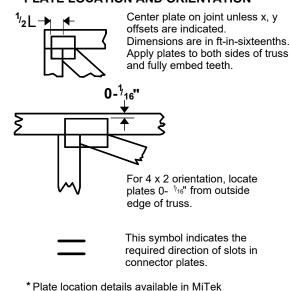
Loading         (psf)           TCLL (roof)         20.0           Snow (Pf)         20.0           TCDL         10.0           BCLL         0.0*           BCDL         10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.06 0.06 0.00	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 8 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING TOP CHORD Structural wood shea 2-9-4 oc purlins. BOT CHORD Rigid ceiling directly bracing. REACTIONS (size) 1=2-9-4, 3 Max Horiz 1=-23 (LC Max Uplift 1=-9 (LC 1 Max Grav 1=127 (LC FORCES (lb) - Maximum Comp Tension TOP CHORD 1-2=-156/67, 2-3=-15 BOT CHORD 1-2=-156/67, 2-3=-15 BOT CHORD 1-3=-38/113 NOTES 1) Unbalanced roof live loads have I this design. 2) Wind: ASCE 7-16; Vult=130mph Vasd=103mph; TCDL=6.0psf; BC Cat. II; Exp B; Enclosed; MWFRS zone and C-C Exterior(2E) zone; exposed ; end vertical left and rig members and forces & MWFRS Lumber DOL=1.60 plate grip DOI 3) Truss designed for wind loads in only. For studs exposed to wind see Standard Industry Gable Enc or consult qualified building desig 4) TCLL: ASCE 7-16; Pr=20.0 psf (L DOL=1.15); Is=1.0; Rough Cat B; Cs=1.00; Ct=1.10	applied or 10-0-0 oc 12-2-9-4 10) 14), 3=-9 (LC 15) 2 20), 3=127 (LC 21) pression/Maximum 56/67 been considered for (3-second gust) DL=6.0psf; h=25ft; 5 (envelope) exterior cantilever left and rig ht exposed;C-C for for reactions shown; L=1.60 the plane of the trus (normal to the face), d Details as applicable gre as per ANSI/TPI cof LL: Lum DOL=1.15 Plate ; Fully Exp.; Ce=0.9;	8) This truss ha chord live lo: 9) * This truss 1 on the botton 3-06-00 tall i chord and at 10) Provide mec bearing plate and 9 lb upli 11) This truss is International R802.10.2 a LOAD CASE(S)	designed in accord Residential Code s nd referenced stan	or a 10. vith any for a liv where I fit betw (by oth anding S lance w sections	other live load e load of 20.0p a rectangle veen the botton ers) of truss to 0 lb uplift at joir ith the 2018 : R502.11.1 an	psf m o nt 1				Weight: 8 Ib OFTH CA OFTEE 85 SEA 0363	
<ol> <li>Unbalanced snow loads have bee design.</li> <li>Gable requires continuous botton</li> </ol>		3									Der 5,2023



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# Symbols

# PLATE LOCATION AND ORIENTATION



# PLATE SIZE

software or upon request.



The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

# LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated

# BEARING

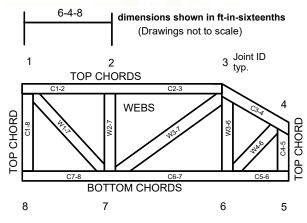


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

### Industry Standards:



# Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

# Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282 ESR-4722. ESL-1388

# Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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### MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

# General Safety Notes

# Failure to Follow Could Cause Property Damage or Personal Injury

- 1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- 2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- 3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- 4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- 5. Cut members to bear tightly against each other.
- 6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- 7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- 8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- 9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified
- 13. Top chords must be sheathed or purlins provided at spacing indicated on design.
- 14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others.
- 16. Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- 18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- 19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.