Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	A	Common	4	1	Job Reference (optional)	158430769

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:12 ID:E0Cyw8nKi_264uwBrSZujjzFZiB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

	-0-10-8	6-10-3	13-4-13	19-11-8		26-6-3	33-0-13		39-11-0	40-9-8
	0-10-8	6-10-3	6-6-11	6-6-11	I	6-6-11	6-6-11	I	6-10-3	0-10-8
					5x6= 6	1				
ТТ										
				^{5x8} ≠ 27 26		28	5x8 ≈			
			12 6	5			7			
12										
10-8-15		4	2x4,					2x4 <i>4</i>		
	3x5 -		€ //			\$		7	<	
	3	25							30	^{3x5} ≈ 9
	- 1 2									10 11
⊥ ⊥ 6⊥			16 15	31	⊠ 14	3213	33 12			₩ \
	3x6 II		3x5= 3x6	•	3x8=	4x6=	3x5=			3x6 ш
	I	9-11-3	l	19-2-4		29-11-13	I	39	-11-0	1
Scale = 1:73		9-11-3	1	9-3-1	1	10-9-9	I		11-3	
ate Offsets (X,	, Y): [2:0-3-9,0-0	-1], [5:0-4-0,0-3-0],	[7:0-4-0,0-3-0], [10:0-3	-13,0-0-1]						
oading	(psf		2-0-0	CSI	0.00	DEFL in	()	L/d PLATES	GRIP	0
CLL (roof) now (Pf)	20.0 20.0) Lumber DOL	1.15	TC BC	0.86 0.85	Vert(LL) -0.35 Vert(CT) -0.54	12-14 >461	240 MT20 180	244/19	0
CDL CLL	10.0 0.0	·	cr YES IRC2018/TPI201	4 Matrix-MSH	0.48	Horz(CT) 0.03	2 n/a	n/a		
CDL	10.0)						Weight: 2	13 lb FT = 2	0%
EBS LIDER RACING DP CHORD DT CHORD EBS EACTIONS (6 M M DRCES DP CHORD DT CHORD	2x4 SP No.3 *Ex Left 2x4 SP No.3 1-6-0 Structural wood 3 5-2-0 oc purlins. Rigid ceiling dire bracing, Except 6-0-0 oc bracing; 1 Row at midpt size) 2=0-5: 4ax Horiz 2=-16! 4ax Uplift 2=-88 14=-1! 4ax Grav 2=732 14=21 (lb) - Maximum C Tension 1-2=0/23, 2-4=-8 6-8=-870/389, 8-	14-16. 5-14, 6-14, 7-14 8, 10=0-5-8, 14=0- 5 (LC 15) (LC 14), 10=-120 (I 58 (LC 14) (LC 5), 10=819 (LC 49 (LC 3) Compression/Maxim 73/126, 4-6=-674/4 10=-1065/186, 10- 4-16=-36/280, 12-	No.2 zone a SP No.3 3-1-6 t SP No.3 3-1-6 t Interior 40-9-8 pplied or forces -0 oc 3) TCLL: Plate I Plate I 4 CS=1.0 5-8 4) Unbala design LC 15), 5) This tri C 6), overha 6) This tri num chord I 7) * This on the 11=0/23 3-06-0 14=0/420, chord 4 8) One H	Exp B; Enclosed; M nd C-C Exterior(2E) o 15-11-10, Exterior((1) 23-11-6 to 36-9- zone; cantilever left left and right expos & MWFRS for reacti. 60 plate grip DOL= ASCE 7-16; Pr=20.0 (DL=1.15); Pf=20.0 (1.15); Is=1.0; Rough 10; Ct=1.10 inced snow loads ha discrete the second second second show loads ha discrete the second second second show loads ha discrete the second second transform the second second second transform the second second transform the second second second transform the second second second second transform the second second second second transform the second second second second second second to the second second second second second second second to the second second second second second second to the second second to the second second second second second to the second s	-0-10-8 to 3 2R) 15-11-1 10, Exterior and right exe ed;C-C for n ons shown; 1.60 0 psf (roof LL osf (Lum DC Cat B; Fully ve been cor ed for great es flat roof l with other lin ed for a 10.0 ant with any ned for a liv reas where e will fit betw g-Tie conner	-1-6, Interior (1) 0 to 23-11-6, (2E) 36-9-10 to possed ; end nembers and Lumber .: Lum DOL=1.15 JL=1.15 Plate Exp.; Ce=0.9; isidered for this er of min roof live bad of 20.0 psf on ve loads. 0 psf bottom other live loads. e load of 20.0psf a rectangle veen the bottom DL = 10.0psf. ctors	L.	I U ATH	CAROL	
DTES		5-14=-662/83, 7-12=-28/734, 8-12= ave been considere	e-362/195 only ar 9) This tr d for Interna R802.2	T at jt(s) 2, 14, and 1 Id does not consider uss is designed in ac tional Residential Co 0.2 and referenced SE(S) Standard	lateral force cordance w	es. ith the 2018 R502.11.1 and	THE REAL PROPERTY OF		SEAL 36322	The second second
								CHIC A	May 19,20	23

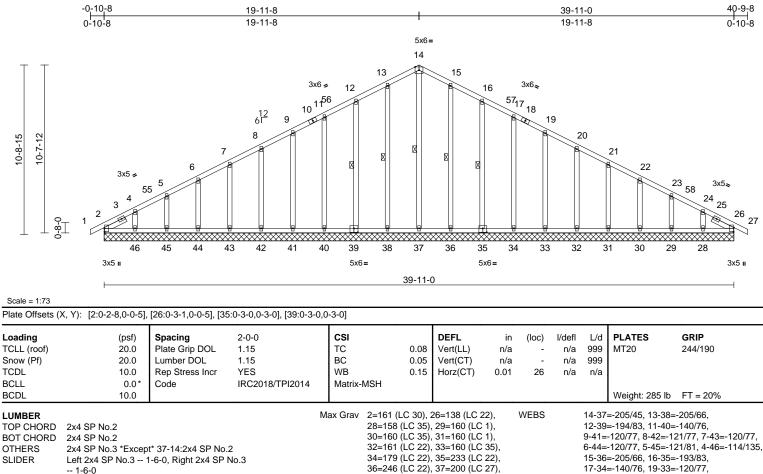


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	AGE	Common Supported Gable	1	1	Job Reference (optional)	158430770

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:14 ID:G6Ee6u5RDTylpdNKH63bBhzFZlg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



OTHERS SLIDER BRACING TOP CHORD BOT CHORD	Left 2x4 SP No.3 1-6-0 Structural wood s 6-0-0 oc purlins. Rigid ceiling direct bracing.	 cept* 37-14:2x4 SP No.2 1-6-0, Right 2x4 SP No.3 cheathing directly applied or ctly applied or 10-0-0 oc ctly applied or 10-0-0 oc 		32=161 (LC 22), 33=160 (LC 35), 34=179 (LC 22), 35=233 (LC 22), 36=246 (LC 22), 37=200 (LC 27), 38=247 (LC 21), 39=234 (LC 21), 40=178 (LC 21), 41=160 (LC 1), 42=160 (LC 21), 43=160 (LC 1), 44=160 (LC 34), 45=160 (LC 1), 46=159 (LC 34), 47=161 (LC 30), 51=138 (LC 22)	6-44=-120/77, 5-45=-121/81, 4-46=-114/135, 15-36=-205/66, 16-35=-193/83, 17-34=-140/76, 19-33=-120/77, 20-32=-121/77, 21-31=-120/77, 22-30=-120/77, 23-29=-121/81, 24-28=-114/135 NOTES 1) Unbalanced roof live loads have been considered for this design.
WEBS	1 Row at midpt	14-37, 13-38, 12-39, 15-36, 16-35	FORCES	(lb) - Maximum Compression/Maximum	
REACTIONS	28=39 30=39 32=39 34=39 36=39 40=39 40=39 42=39 44=39 46=39 51=39 Max Horiz 2=-165 Max Uplift 2=-21 29=-37 31=-43 33=-44 38=-38 40=-45 42=-44 44=-46	1-0, 26=39-11-0, 11-0, 29=39-11-0, 11-0, 31=39-11-0, 11-0, 33=39-11-0, 11-0, 33=39-11-0, 11-0, 35=39-11-0, 11-0, 39=39-11-0, 11-0, 41=39-11-0, 11-0, 43=39-11-0, 11-0, 43=39-11-0, 11-0, 43=39-11-0, 11-0, 47=39-11-0, 11-0, 47=40, 12-0, 12-0, 47=40,	TOP CHORD	Tension 1-2= $0/23$, 2-4=-217/79, 4-5=-168/82, 5-6=-130/94, 6-7=-97/107, 7-8=-73/130, 8-9=-61/153, 9-11=-65/177, 11-12=-84/220, 12-13=-104/269, 13-14=-121/310, 14-15=-121/310, 15-16=-104/269, 16-17=-84/221, 17-19=-66/176, 19-20=-49/131, 20-21=-41/86, 21-22=-45/40, 22-23=-67/27, 23-24=-100/35, 24-26=-144/59, 26-27= $0/23$ 2-46=-45/167, 45-46=-45/167, 44-45=-45/167, 45-46=-45/167, 42-43=-45/167, 41-42=-45/167, 42-43=-45/167, 38-40=-45/167, 37-38=-44/166, 36-37=-44/166, 32-33=-44/166, 31-32=-44/166, 30-31=-44/166, 29-30=-44/166, 28-29=-44/166, 26-28=-44/166	SEAL 036322

Continued on page 2





Edenton, NC 27932

May 19,2023

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	AGE	Common Supported Gable	1	1	Job Reference (optional)	158430770
Carter Components (Sanford)	Sanford NC - 27332	Bun: 8 53 S Mar 9 2	Page: 2			

- Wind: ASCE 7-16: Vult=130mph (3-second aust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 3-1-6, Exterior(2N) 3-1-6 to 15-11-8, Corner(3R) 15-11-8 to 23-11-8, Exterior(2N) 23-11-8 to 36-9-10, Corner(3E) 36-9-10 to 40-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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 design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing. 8)
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 11) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. 12) Provide mechanical connection (by others) of truss to
- bearing plate capable of withstanding 21 lb uplift at joint 2, 38 lb uplift at joint 38, 47 lb uplift at joint 39, 45 lb uplift at joint 40, 43 lb uplift at joint 41, 44 lb uplift at joint 42, 43 lb uplift at joint 43, 46 lb uplift at joint 44, 34 lb uplift at joint 45, 96 lb uplift at joint 46, 36 lb uplift at joint 36, 48 lb uplift at joint 35, 43 lb uplift at joint 34, 44 lb uplift at joint 33, 44 lb uplift at joint 32, 43 lb uplift at joint 31, 46 lb uplift at joint 30, 37 lb uplift at joint 29, 80 lb uplift at joint 28 and 21 lb uplift at joint 2.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

ID:G6Ee6u5RDTylpdNKH63bBhzFZlg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to preven tbuckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses sand truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss		Truss Type		Qty	Ply	12 Se	erenity-Roof-B33)-E	
23050027-01	в		Attic		3	1	loh F	Reference (option	al)	158430771
Carter Components	s (Sanford), Sanford, NC	- 27332,				XAzFbbu-RfC	r 9 2023 M	liTek Industries, Inc.	Thu May 18 10:08:15 bGKWrCDoi7J4zJC?f	Page: 1
	-(0-10-8 <u>5-5-4</u> 	10-4-4	-0-0 16-5-13 7-12 4-5-13 5x8=	<u>20-11-11</u> 4-5-13	22-11-0 1-11-5 2		<u>29-10-0</u> 4-7-4	<u>35-3-0</u> 5-5-0 36-1-8 	
	11-8-12 7-10-14 - 7-10-14 - 7-2-2 -2-2	4 39 4x6 * 34	4xi 9 ^{]2} 4 5x6 * 35 41 33 33 32	5 42 6 36 3	8 8 1 1 1 1 1 1 1 1 1 1 1 1 1	5x8= 7 5x1 37 2x4 II	0= 8 4x8* 9 9 18 17 16	44 4546 10 10 15 14	47 11 12 10x12	8-0-0 8-
Scale = 1:84.5 Plate Offsets (X,	Y): [2:0-2-14,0-2-0],	<u>5-5-4</u> 5-5-4 [3:0-3-0,0-3-0], [5:0	<u> </u>	13-1-0 15-11- 10-0 15-7-0 -0 14-4-0 16-1 2 1-3-0 1-3-0 3-0 1-3-0 0-4-0	1-12 20-0-0 1-7-8 1 1-7-8 1	-3-0 1-3- 2 1-3-0	25-0-0 + -0 0-2-12 1-3-0 2	2 -10-0 29-11-12 	<u>35-3-0</u> 5-3-4	
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.50 V 0.91 V 0.82 H	E FL ert(LL) ert(CT) orz(CT) tic	-0.25 19	(loc) I/defl L 9-21 >999 24 9-21 >919 18 13 n/a n 8-31 >999 36	0 MT20 30 ⁄a	GRIP 244/190 FT = 20%
BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 *Except* 2.0E, 8-9:2x6 SP No.2 2x4 SP No.2 *Except* 2x4 SP No.3 *Except* SP No.2, 35-8,31-33:2 Structural wood sheat 3-2-7 oc purlins, exce 2-0-0 oc purlins (4-9-7 Rigid ceiling directly a bracing, Except: 5-1-14 oc bracing: 32 4-2-9 oc bracing: 30-3 6-0-0 oc bracing: 21-2 4-0-0 oc bracing: 19-2	2 26-15:2x4 SP No.1 4-32,9-16,13-11:2x 2x4 SP No.2 thing directly applied ept end verticals, an 13 max.): 5-7. applied or 10-0-0 oc -33 32 30. 27	6 d or webs	33-34=-255/313, 3 30-32=-1679/613, 25-28=0/3198, 22 17-20=0/3333, 16 13-14=-56/289, 25 27-29=-680/1020, 23-24=-2112/0, 21 3-33=-1035/0, 31- 4-35=0/1185, 16- 10-16=-344/216, 3 53-38=-2171/0, 8 11-14=0/1985, 17 17-19=-1090/0, 25 19-20=-13/524, 26 20-21=-361/165, 2 21-22=-422/190, 3	28-30=-264 -25=0/3889, -17=0/1971, 24-27=-211 1-23=-2112// 3-19=-742/1: 32=0/292, 3 18=0/344, 9- 10-14=-187// 36-38=-1617 37=-2179/0, -3=0-1611// 3-29=0/1018 27-28=-1007	/1882, 20-22=0/33 14-16=0/22 880, 2/0, 0, 22 1-35=0/119 18=0/1009, 66, /55, 2-33=0/17; 30-31=0/15 0, ,	965, 251, 4) 5) 92, 6) 7) 8) 39, 8) 39, 587, 9)	Plate DOL=1.13 DOL=1.15); Is= Cs=1.00; Ct=1. Unbalanced sn design. This truss has I load of 12.0 psl overhangs non- Provide adequa All plates are 3. This truss has I chord live load * This truss has on the bottom of 3-06-00 tall by chord and any	5); Pf=20.0 psf (Lurr 1.0; Rough Cat B; F 10 ow loads have been over designed for gr or 1.00 times flat rc concurrent with oth the drainage to prevv x5 MT20 unless oth been designed for a nonconcurrent with been designed for hord in all areas wh 2-00-00 wide will fit	ully Exp.; Ce=0.9; considered for this reater of min roof live of load of 20.0 psf or er live loads. ent water ponding. erwise indicated. 10.0 psf bottom any other live loads. a live load of 20.0psf ere a rectangle between the bottom

24-25=-349/6, 22-23=-59/141, 5-36=0/513,

7-37=0/99, 6-38=-475/125, 4-36=-1417/0,

5-38=-323/481, 7-38=-109/816,

31-33=-64/2602, 3-31=-28/670

1) Unbalanced roof live loads have been considered for

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

2-7-13 to 7-0-3, Exterior(2R) 7-0-3 to 25-11-8, Interior

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

(1) 25-11-8 to 32-7-3, Exterior(2E) 32-7-3 to 36-1-8

zone and C-C Exterior(2E) -0-10-8 to 2-7-13, Interior (1)

 Ceiling dead load (5.0 psf) on member(s). 8-9, 35-36, 36-38, 37-38, 8-37; Wall dead load (5.0psf) on member (s).31-35, 9-18



TRENCO

818 Soundside Road Edenton, NC 27932

Continued on page 2 WARNING - Verify of

JOINTS

FORCES

TOP CHORD

REACTIONS (size)

13=0-5-8, 34=0-5-8

(lb) - Maximum Compression/Maximum

1-2=0/37, 2-4=-2641/0, 4-5=-1021/113,

7-8=-812/209, 8-9=-2092/0, 9-11=-2883/0,

11-12=0/40, 2-34=-2108/0, 11-13=-2115/0

5-6=-1253/236, 6-7=-1253/236,

Max Grav 13=2179 (LC 46), 34=2164 (LC 46)

9-9-0 oc bracing: 29-31

Max Horiz 34=-309 (LC 12)

1 Brace at Jt(s): 19,

29, 21, 27, 36, 37,

38

Tension

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NOTES

2)

this design.

grip DOL=1.60

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	В	Attic	3	1	Job Reference (optional)	158430771

- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 29-31, 27-29, 24-27, 23-24, 21-23, 19-21, 18-19
- 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.

14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:15 ID:oX3OApWZ1pjG7uzC27KLXAzFbbu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



Job	Truss		Truss Type		Qty	Ply	12 Serenity	-Roof-B330-E	E	
23050027-01	B1		Attic		6	1	Job Refere	nce (optional)		158430772
arter Components (Sanf		-0-10-8 <u>5-5-4</u> 0-10-8 <u>5-5-4</u> 0-10-8 <u>5-5-4</u>	10-4-4 12-	5 45 6 45 6 35 37	2023 Prir ofNt1Wd9 <u>20-11-</u> 4-5-1: 4 II <u>4</u> 6 1-4-0	1: 8.530 S Ma 9RzFaMp-RfC 11 22-11-0 3 1-11-5 5x8= 7	9 2023 MiTek Ir ?PsB70Hq3NSgF 25-2-12 2-3-12 4-	qnL8w3ulTXbG	•	Page: 1
		33	32 31 6x10= 2x4 6x10 11-	= 5xi 43-1-0 15-11-0 10-0 15-7-0	2x4 i 3= 244 ¹¹ 7-4	21-3-0 23	5x8= 4x6= 25-2-12 9-0 27-10-		11 12.00 5x8 II	-
Scale = $1:84.5$	2.0.2.44.0.2.0	5-5-4 5-5-4	<u> </u>	0 14-4-0 16-11 2 1-3-0 1-3-0 3-0 1-3-0 0-4-0	1-7-8 1-4-	1-3-0 1-	 	29-11-12 2-1-12	35-3-0 5-3-4	
	2.0-2-14,0-2-0									
oading CLL (roof) now (Pf) CDL CLL	(psf) 20.0 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.95 \ 0.92 \ 0.79 H	/ert(CT) lorz(CT)	in (loc) -0.28 17-18 -0.50 18-20 0.10 12 -0.18 17-30	l/defl L/d >999 240 >845 180 n/a n/a >959 360	PLATES MT20	GRIP 244/190
CDL	10.0	-			[`				Weight: 315 lb	FT - 20%

	2x4 SP No.2 *Except* 10-12:2x4 SP No.1, 10-7:2x6 SP 2400F 2.0E, 8-9:2x6 SP No.2 2x4 SP No.2 *Except* 14-12:2x4 SP 2400F 2.0E, 14-25:2x4 SP No.1 2x4 SP No.3 *Except* 4-31,9-15:2x6 SP No.2, 34-8,30-32:2x4 SP No.2 Right 2x4 SP No.3 1-6-0 Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-10-1 max.): 5-7. Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 3-9-0 oc bracing: 20-26 4-0-0 oc bracing: 26-28, 17-18 9-11-0 oc bracing: 28-30 1 Brace at Jt(s): 35, 36, 37, 18, 28, 20, 26 (size) 12= Mechanical, 33=0-5-8 Max Horiz 33=-293 (LC 12) Max Grav 12=2125 (LC 46), 33=2178 (LC 46) (lb) - Maximum Compression/Maximum Tension 1-2=0/37, 2-4=-2677/0, 4-5=-1005/116, 5-6=-1241/239, 6-7=-1241/239, 7-8=-803/211, 8-9=-2123/0, 9-12=-2965/0, 2-33=-2122/0	this design 2) Wind: ASC Vasd=103r Cat. II; Exp zone and C 2-7-13 to 7 (1) 25-11-8 zone; canti	E 7-16; Vult=130mph (3-second gust) mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; b B; Enclosed; MWFRS (envelope) exterior C-C Exterior(2E) -0-10-8 to 2-7-13, Interior (1) -0-3, Exterior(2E) 7-0-3 to 25-11-8, Interior to 31-8-11, Exterior(2E) 31-8-11 to 35-3-0 lever left and right exposed ; end vertical left	4) 5) 6) 7) 8) 9)	 design. This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. Provide adequate drainage to prevent water ponding. All plates are 3x5 MT20 unless otherwise indicated. 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. Ceiling dead load (5.0 psf) on member(s). 8-9, 34-35, 35-37, 36-37, 8-36; Wall dead load (5.0psf) on member (s).30-34, 9-17
		(1) 25-11-8 zone; canti and right e	3 to 31-8-11, Exterior(2E) 31-8-11 to 35-3-0 lever left and right exposed ; end vertical left xposed;C-C for members and forces & or reactions shown; Lumber DOL=1.60 plate		

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property incorporate this design into the applicability of design parameters and NUSTPH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

May 19,2023



Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	B1	Attic	6	1	Job Reference (optional)	158430772

- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 28-30, 26-28, 23-26, 22-23, 20-22, 18-20, 17-18
- 12) Refer to girder(s) for truss to truss connections.
- 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.
- 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: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:17 ID:6BNfNLm89oLAofNt1Wd99RzFaMp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job		Truss		Truss Type		Qty	Ply	12 Soronit	v-Roof-B33	0-E		
23050027-0	1	B1GE		Attic Supported G	ahle	1	1 Piy					158430773
Carter Compone			C - 27332,	Auto Supported G	Run: 8.53 S Mar				ence (optior ndustries, Inc		y 18 10:08:19	Page: 1
			-0-10-8 <u>5-5-</u> 	1044	ID:_30I99mK45tCl <u>2-0-0 16-5-13</u> -7-12 4-5-13 6x8=		7zFa8c-RfC?F 25	sB70Hq3NSgF -2-12 29-^			Doi7J4zJC?f	
Scole 197 1	11-6-0 7 40 44 9-3-14	$\frac{1-10-14}{7-10-14}$ $\frac{1}{1-5-0}$ 2-2-2 $\frac{1}{2-6-0}$	5x8 = 3 3 48 48 $3x5 = 47$ $3x6 = 47$ $3x6 = 5-5-4$	9^{2} $5x6 \neq 7$ 6 6 3x6 = 5 3x8 = 5 6346 62 60 4 4x8 = 5x 10-4-4 10 4-11-0 0.22	x6= 3x6 II 4x5 II 4x5 II x5 x5 x5 x5 x5 x5 x5 x5 x5 x5 x5 x5 x5	1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.5 38 36 38 36 38 36 38 36 38 36 38 36 38 36 38 36 38 36 38 36 37 38 36 38 36 38 36 38 36 38 36 38 36 38 38 39 39 30 30 30 31 32 33 35 36 36 37 38 38 39 39 30 30 30 30 30 30 </td <td>552 552 552 552 552 552 552 552 552 552</td> <td>3 4x8 142 15 7 9 26 27 25 27 27 27 27 27 27 27 27 27 27 27 27 27</td> <td>55 3x8 II 2625 2423 3x6=</td> <td>18 75 19</td> <td>20 21æ 21æ 24æ 3x5 =</td> <td>ſ</td>	552 552 552 552 552 552 552 552 552 552	3 4x8 142 15 7 9 26 27 25 27 27 27 27 27 27 27 27 27 27 27 27 27	55 3x8 II 2625 2423 3x6=	18 75 19	20 21æ 21æ 24æ 3x5 =	ſ
$\frac{\text{Scale} = 1:85.4}{\text{Plate Offsets ()}}$	X, Y): [5:0-3-	0,0-3-0],	[9:0-6-0,0-2-0], [12	2:0-6-0,0-2-0], [30:0-4-0,	<u>1-3-0 1-3-0 0-4-0</u> 0-2-4], [32:0-2-8,0-1-8		<u>2 1-3-00-5</u> 4,0-3-0]	-0 2-7-4 1-3-0				
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.32 Ve 0.18 Ve	E FL ert(LL) ert(CT) orz(CT)	in (loc) n/a - n/a - 0.01 21	n/a 9 n/a 9	99 MT 99 1/a	ATES 20 eight: 383 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD WEBS JOINTS	No.2 2x4 SP No.2 2x4 SP No.3 No.2, 49-13: 2x4 SP No.3 Right 2x4 SI Structural w 6-0-0 oc pur Rigid ceiling bracing. 1 Row at mi 1 Brace at J 51, 52, 31, 4 40, 55, 56, 5	2 3 *Except 22x4 SP 1 3 P No.3 ood shee rlins, exc rlins (4-10 9 directly dpt tt(s): 50, 42, 34, 59, 60,	1-6-0 athing directly appl cept end verticals, a 0-14 max.): 9-12. applied or 10-0-0 o 44-49	SP ied or and TOP CHORD DC BOT CHORD	25=150 (28=564 () 33=231 () 37=165 () 43=106 () 46=675 ()	LC 23), 24: LC 20), 27: LC 44), 29: LC 7), 35= LC 7), 41=; LC 42), 45: LC 42), 45: LC 40), 47: LC 22), 66: npression/N 0/37, 2-3=- 533/180, 6 -739/174, -11=-1213, 2-13=-925, -15=-377/1 -18=-492/8 21=-308/27	=285 (LC 23) =45 (LC 13), =168 (LC 7), 233 (LC 7), =418 (LC 42) =202 (LC 25) =304 (LC 23) Maximum 309/142, -7=-514/207 239, 168, 25, 6,	, ,				
	22 23 33 44 47 Max Horiz 44 Max Uplift 22 24 44	4=35-3-0 8=35-3-0 5=35-3-0 3=35-3-0 7=35-3-0 8=-293 (l 2=-123 (l 5=-51 (L 8=-105 (l	_C 15), 24=-23 (LC C 15), 27=-132 (LC _C 15), 43=-16 (LC _C 14), 47=-78 (LC	5-3-0, 5-3-0, 5-3-0, 5-3-0, 5-3-0 \$ 11), \$ 39), \$ 14),	36-38=-21/205, 34-3 31-34=-16/216, 30-3 47-48=-244/260, 46 45-46=-82/274, 43 41-43=-22/241, 37 35-37=-33/202, 33-3 29-33=-20/275, 28-3 27-28=-15/231, 25-3 24-25=-15/231, 23-3 22-23=-14/222, 21-3	36=-21/205 31=-1/135, -47=-244/2 45=-96/314 41=-19/218 35=-20/220 29=-50/387 27=-15/231 24=-14/222	, 60, , , ,		Mannannen	LIN CONTRACTOR	- COLUM	22

May 19,2023



Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property incorporate this design into the applicability of design parameters and NUSTPH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job		Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
2305002	-01 B1GE		Attic Supported Gable	1	1	Job Reference (optional)	158430773
Carter Comp	ponents (Sanford), S	anford, NC - 27332,				2023 MiTek Industries, Inc. Thu May 18 10:08:19 sB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f	Page: 2
WEBS	63-64=-125/ 5-46=-600/1	46, 64-65=-126/261, 264, 46-63=-129/263, 01, 17-24=-274/34, 48, 44-49=-474/120,	 16) Graphical purlin representation d or the orientation of the purlin alc bottom chord. 17) Attic room checked for L/360 def 	ng the top a			

LOAD CASE(S) Standard

-45=-328/48, 44-49=-474/120, 8-49=-383/125, 28-30=-667/42, 14-30=-709/99, 49-51=-133/32, 51-58=-71/246, 57-58=-65/258, 50-57=-65/258, 50-53=-44/406, 52-53=-46/399, 13-52=-45/395, 11-50=-368/98, 9-51=-224/46, 12-52=-46/10, 29-30=-135/0, 43-44=-149/75, 8-51=-61/363, 9-56=-115/640, 50-56=-112/620, 12-50=-114/458, 29-31=-83/0, 42-43=-87/0, 31-33=-133/0, 41-42=-117/0, 33-34=-77/0, 40-41=-80/0, 34-35=-52/0, 37-40=-54/0, 37-38=-58/0, 35-36=-59/0, 28-54=-51/239, 54-55=-53/246, 17-55=-60/281, 46-62=-127/124, 60-62=-114/119, 44-60=-110/119, 5-61=-43/262, 59-61=-48/258, 44-59=-47/214, 12-53=-3/80, 15-54=-20/158, 27-54=-23/168, 16-55=-148/53, 25-55=-112/75, 18-23=-155/10, 19-22=-154/130, 10-56=-111/40, 56-57=-63/31, 9-58=-39/189, 7-59=-88/32, 59-60=-32/23, 6-61=-56/24, 61-62=-50/23, 4-63=-26/21, 3-64=-149/102, 47-64=-158/103. 48-65=-62/32

NOTES

- 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) -0-10-8 to 2-5-13, Interior (1) 2-5-13 to 7-3-15, Exterior(2R) 7-3-15 to 25-7-11, Interior (1) 25-7-11 to 31-8-11, Exterior(2E) 31-8-11 to 35-3-0 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Ceiling dead load (5.0 psf) on member(s). 13-14, 49-51, 51-58, 57-58, 50-57, 50-53, 52-53, 13-52; Wall dead load (5.0psf) on member(s).44-49, 14-30
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 48, 162 lb uplift at joint 46, 23 lb uplift at joint 24, 105 lb uplift at joint 28, 16 lb uplift at joint 43, 132 lb uplift at joint 27, 51 lb uplift at joint 25, 123 lb uplift at joint 22 and 78 lb uplift at joint 47.
- 15) 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.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to preven tbuckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses sand truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss		Truss Type		Qty	Ply	12 Serenity-Roof-	B330-E	
23050027-0	1 B2		Attic		3	1	Job Reference (or	ational)	158430774
Carter Componer	nts (Sanford), Sanford, N	C - 27332, -0-10-8 5-5-4 1-1 5-5-4 0-10-8 5-5-4		ID:V7rMa8UunQYeg 12-0-0 16-5-13 1-7-12 4-5-13		Fa3p-RfC?P	2023 MiTek Industries sB70Hq3NSgPqnL8w3 5-2-12 29-10-0	, Inc. Thu May 18	÷
Scale = 1:84.5	$\begin{array}{c cccc} & 11-6-0 & 11-6-0 \\ \hline & 7-10-14 & 9-3-14 \\ \hline & 7-10-14 & 1-5-0 & 2-2-2 \\ 2-6-0 & & & \\ \end{array}$	4x6 = 38 2 33 33 5-5-4 5-5-4	39 ³ 32 5x8=	5 41 20 34 35 3 34 35 3 310= 4x5 II 50 12 28 12 261 31 29 27 25 2x4 II 4x6	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	36 2x4 II 1-3-0 23- 0 22-6-0 -3-0 1-3	25-0-0 29-1	10 46	
	K, Y): [2:0-2-14,0-2-0], [3:0-3-0,0-3-0], [5:0	-6-0,0-2-0], [7:0-6-0,0-	2-0], [12:Edge,0-1-8],[8,0-3-0], [32:0-2	2-0,0-1-12]
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	BC	0.49 Vert(1 0.98 Vert(1 0.86 Horz(Attic	LL) -0. CT) -0. (CT) 0.	in (loc) l/defl 22 22-24 >999 41 22-24 >997 07 12 n/a 16 17-30 >999	L/d PLATE 240 MT20 180 n/a 360 Weight	S GRIP 244/190 : 316 lb FT = 20%
	2.0E, 8-9:2x6 SP No 2x4 SP No.2 *Excep 2x4 SP No.3 *Excep No.2, 34-8:2x4 SP N Structural wood she 3-5-4 oc purlins, ex 2-0-0 oc purlins (4-9	ot* 14-25:2x4 SP No.1 t* 4-31,9-15:2x6 SP lo.2 athing directly applied cept end verticals, an 0-6 max.): 5-7. applied or 10-0-0 oc -32 19-31 -27. -26 -20 -28 -18	for WEBS	28-30=-418/1733, 26-24-26=-2314/0, 12-24-26=-2314/0, 18-20-22=-2314/0, 18-20-27-29-732, 29-5-27-29=-188/2220, 23-27-29=-188/2220, 23-21-23=0/3960, 19-21:15-16=-7/1618, 13-15-332=-921/0, 10-13=-30-31=0/245, 30-34=0/1503, 16-18-28-29=-1521/0, 18-19-20=-455/71, 26-27-20-21=-282/210, 23-24=-292/10, 21-22-23-24=-292/10, 21-22-23-24=-292/10, 21-22-23-24=-292/10, 21-22-3-30=-45/590, 15-17=34-35=-544/390, 35-53=36-37=-2008/0, 8-36=10-15=-90/359, 5-35=	L=-2314/0, =-1901/0, 33=-270/297 11=-1097/78 -27=0/3390, =0/3920, 16- 628/0, 2-32= 0/1119, 4-34 =-1182/0, ==0/608, 27- "z=892/0, 66=-19/810, 2=-82/95, 11 =-113/2090, -1/201, 9-17 7Z=-1409/65 2016/0,	, , , , , , , , , , , , , ,	 Plate DOL- DOL=1.15) Cs=1.00; C Unbalance design. 5) This truss I load of 12. overhangs 6) Provide ad 7) All plates a 8) This truss I chord live I 9) * This truss on the bott 3-06-00 tal chord ad 10) Ceiling dea 	EE 7-16; Pr=20.0 =1.15); Pf=20.0 ; Is=1.0; Rough t=1.10 d snow loads hat has been design 0 psf or 1.00 tim non-concurrent equate drainage re 3x5 MT20 un has been design oad nonconcurrent is has been design om chord in all at l by 2-00-00 wid d load (5.0 psf) 37, 8-36; Wall d	D psf (roof LL: Lum DOL=1.15 psf (Lum DOL=1.15 Plate Cat B; Fully Exp.; Ce=0.9; we been considered for this ed for greater of min roof live es flat roof load of 20.0 psf on with other live loads. to prevent water ponding. less otherwise indicated. led for a 10.0 psf bottom ent with any other live loads. gned for a live load of 20.0psf areas where a rectangle e will fit between the bottom

9-2-0 oc bracing: 28-30 JOINTS 1 Brace at Jt(s): 18, 28, 20, 26, 35, 36, NOTES 37 1) REACTIONS (size) 12= Mechanical, 33=0-5-8 Max Horiz 33=-295 (LC 12) 2) Max Grav 12=2114 (LC 46), 33=2092 (LC 46) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/37, 2-4=-2485/0, 4-5=-1060/105, 5-6=-1275/234, 6-7=-1275/234, 7-8=-819/206, 8-9=-1965/9, 9-11=-2538/0, 2-33=-2038/0, 11-12=-2063/0

Unbalanced roof live loads have been considered for

this design.

6-37=-474/125, 4-35=-1490/0,

5-37=-330/466, 7-37=-105/837

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 2-6-5, Interior (1) 2-6-5 to 7-2-5, Exterior(2R) 7-2-5 to 25-9-6, Interior (1) 25-9-6 to 30-5-7, Exterior(2E) 30-5-7 to 33-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



818 Soundside Road Edenton, NC 27932

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

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	B2	Attic	3	1	Job Reference (optional)	158430774

- 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, 22-24, 20-22, 18-20, 17-18
- 12) Refer to girder(s) for truss to truss connections.
- 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.
- 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: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:22 ID:V7rMa8UunQYegXKaGvRJRtzFa3p-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



			1		-	1	
Job	Truss		Truss Type		Qty	Ply	12 Serenity-Roof-B330-E I58430775
23050027-01	1 B2GR	R	Attic Girder		1	2	Job Reference (optional)
Carter Componen	nts (Sanford), Sanford, NC	C - 27332, -0-10-8 5-5-4 0-10-8 5-5-4	<u> </u>	ID:yxWyV23d1UH 12-0-0 16-5-13 1-7-12 4-5-13 4x8= 3x8 ¢ 5 39	75oKqiGUi	r6GzFLKZ-RfC? <u>11-11 22-11</u> 5-13 1-11 5x8=	9 2023 MiTek Industries, Inc. Thu May 18 10:08:23 Page: 1 PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 25-2-12 1-0 -5 2-3-12 4-7-4 4-2-0 3×10 _♦
	11-6-0 7-10-14 7-10-14 1-5-0 2-2-2	3x6 = 2 1 33 2x4 II	6x8=	34 35 3x8= 4x5 II 4x5 II 10 30 10 28 10 31 29 27 2 3x6 II 5x6=		x4 II	$ \begin{array}{c} 8 \\ 3x10_{x} \\ 9 \\ 44_{12} \\ 8x10_{x} \\ 10 \\ 11 \\ 12 \\ 12 \\ 12 \\ 12 \\ 12 \\ 12 \\ 12$
Scale = 1:80.7 Plate Offsets (X	X. Y): [3:0-3-0.0-3-0].	5-5-4 5-5-4 [5:0-6-0.0-2-0], [7:0-1	10-4-4 10	5x10= 15-1 11-10-0 14-4-0 16 0-7-013-1-0 15-7-0 11-1 - 1 -2-12 1-3-0 1-3-0 1-3-0 1-3-0 0-4 -3-4] 15-1	18-7-4	4 21-3-0 2 1-3-	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Loading	(psf)	Spacing	2-0-0	csi		DEFL	in (loc) l/defl L/d PLATES GRIP
TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(DSI) 20.0 20.0 10.0 0.0* 10.0	Plate Grip DOL Lumber DOL Rep Stress Incr Code	1.15 1.15 NO IRC2018/TPI2014	TC BC WB Matrix-MSH	0.50 \ 0.96 \ 0.69 H	/ert(LL) - /ert(CT) - Horz(CT)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
BOT CHORD WEBS BRACING TOP CHORD BOT CHORD JOINTS REACTIONS	6-0-0 oc purlins, exc 2-0-0 oc purlins (6-0- Rigid ceiling directly bracing, Except: 6-0-0 oc bracing: 31- 1 Brace at Jt(s): 18, 28, 20, 26, 35, 36, 37 (size) 12= Mech Max Grav 12=3464 ((lb) - Maximum Com Tension 1-2=0/37, 2-4=-3921 5-6=-1238/220, 6-7=	 b.2 t* 30-17:2x4 SP No.3 t* 4-31,9-15:2x6 SP lo.2 athing directly applied cept end verticals, an lo max.): 5-7. applied or 10-0-0 oc -32,29-31. annical, 33=0-5-8 LC 10) (LC 46), 33=3107 (LC hpression/Maximum l/5, 4-5=-1194/118, 	NOTES 1) 2-ply truss (0.131"x3" Top chords oc, 2x6 - 2 Bottom cho 0-9-0 oc. Web conne 2 rows stag	3-32=-1521/45, 10- 30-31=-84/1287, 30 4-34=0/2058, 15-17 9-17=0/1984, 34-35 35-37=-2587/172, 3 8-36=-3615/0, 29-3 28-29=-1793/0, 18- 27-28=0/1188, 19-2 26-27=-1230/0, 20- 24-26=-66/1349, 22- 21-22=-78/189, 10- 11-13=0/3169, 16-1 7-36=0/135, 6-37=- 5-37=-527/361, 7-3 30-32=-216/3437, 3 to be connected togel) nails as follows: s connected as follows: s connected as follows: 2x4 ggered at 0-9-0 oc.	-34=0/20 =-122/14 =-1071/4 6-37=-36 D=0/7783 19=-104/3 0=-238/2 21=-666/2 -24=-473 15=-90/44 7=0/954, 476/125, 7=-120/95 -30=-87/' ther with s: 2x4 - 1 9-0 oc. lows: 2x4 - 1 row at	72, 28, 58, 04/0, , 16-18=-889/ 339, 63, 245, /27, 36, 5-35=0/732, 4-35=-2060/2 38, 1110 10d row at 0-9-0 - 1 row at : 0-9-0 oc, 2x6	 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 O Unbalanced snow loads have been considered for this design. 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 8) Provide adequate drainage to prevent water ponding. 9) All plates are 3x5 MT20 unless otherwise indicated. 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 8. 11) * This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent will fit between the bottom chord and any other members. 12) Ceiling dead load (5.0 psf) on member(s). 8-9, 34-35, 35-37, 36-37, 8-36; Wall dead load (5.0 psf) on member (s).30-34, 9-17
BOT CHORD	2-33=-3049/8, 11-12 32-33=-271/302, 31- 29-31=-2176/774, 27 24-27=0/3325, 21-24 16-19=0/4436, 15-16 13-15=0/3025, 12-13 28-30=-588/3813, 26 23-26=-1541/165, 22 20-22=-1541/165, 18 17-18=-915/173	2=-3417/12 -32=-1221/582, 7-29=-149/1672, 4=0/4289, 19-21=0/40 6=-184/3366, 3=-15/38, 6-28=-837/1535, 2-23=-1541/165,	 except if no CASE(S) s provided tc unless other this design Unbalance this design Wind: ASC Vasd=1031 Cat. II; Exp zone; canti 	oted as front (F) or basection. Ply to ply con o distribute only loads erwise indicated. di roof live loads have E 7-16; Vult=130mpl mph; TCDL=6.0psf; E o B; Enclosed; MWFF liever left and right e xposed; Lumber DOI	noted as noted as been con (3-secor CDL=6.0 (S (envelo posed ; e	ce in the LOAI have been (F) or (B), nsidered for nd gust) psf; h=25ft; ope) exterior nd vertical lef	SEAL 036322

May 19,2023



Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property incorporate this design into the applicability of design parameters and NUSTPH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	B2GR	Attic Girder	1	2	Job Reference (optional)	158430775
Carter Components (Sanford), S	anford. NC - 27332.	Run: 8.53 S Mar 9	2023 Print: 8.	530 S Mar 9	2023 MiTek Industries. Inc. Thu May 18 10:08:23	Page: 2

ID:yxWyV23d1UH75oKqiGUr6GzFLKZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

- 13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 28-30, 26-28, 23-26, 22-23, 20-22, 18-20, 17-18
- 14) Refer to girder(s) for truss to truss connections.
- 15) 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.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 932 lb down and 79 lb up at 10-7-0, and 1585 lb down and 135 lb up at 25-2-12 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.

18) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft)

- Vert: 1-2=-60, 2-5=-60, 5-7=-60, 7-8=-60, 8-9=-70, 9-11=-60, 12-33=-20, 17-30=-30, 34-35=-10, 35-37=-10, 36-37=-10, 8-36=-10
- Drag: 30-34=-10, 9-17=-10
- Concentrated Loads (lb)
- Vert: 31=-500 (F), 15=-850 (F)

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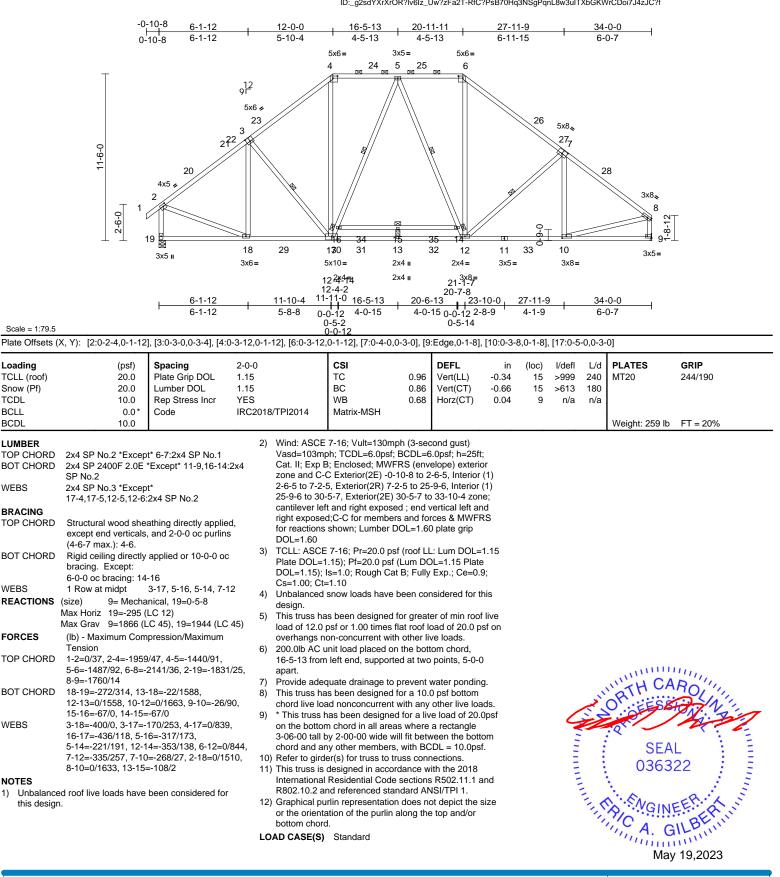


Page: 2

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	B3	Piggyback Base	5	1	Job Reference (optional)	158430776

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:25 ID:_g2sdYXrXrOR?lv6lz_Uw?zFa2T-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE
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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	B3GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)	158430777

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:26 ID:mNIIsnGAd4X?GtvokCZFmNzFa0D-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

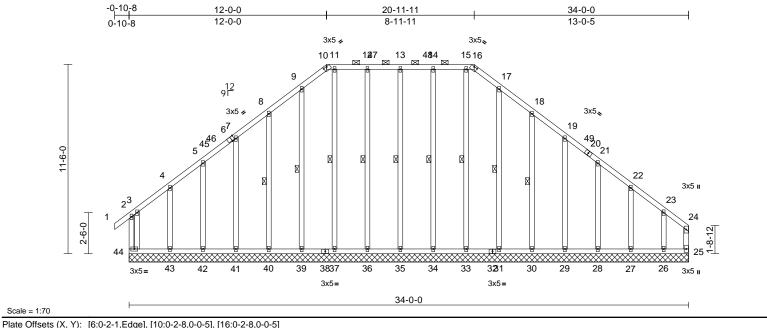


Plate Offsets (X, Y): [6:0-2-1,Edge]	, [10:0-2-8,0-0-5], [16:0-	-2-8,0-0-5]									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MR	0.39 0.23 0.18	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.01	(loc) - - 25	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 307 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD	Structural wood she	36-12,37-11:2x4 SP No. eathing directly applied of copt end verticals, and	.2 or	29=230 31=227 34=236 36=236 39=227 41=232	(LC 1), 2 (LC 39), (LC 39), (LC 38), (LC 38), (LC 39), (LC 39), (LC 47), (LC 24),	28=190 (LC 4) 30=231 (LC 3) 33=232 (LC 3) 35=228 (LC 3) 37=220 (LC 4) 40=231 (LC 3) 42=176 (LC 3) 44=256 (LC 4)	9), 39), 50), 38), 50), 39), 39),	this 2) Wir Vas Cat zon (2N Ext 24-	balanced design. d: ASCE d=103m . II; Exp e and C) 2-5-13 erior(2N) 5-13, Ex	E 7-16 nph; T(B; Enc -C Cor to 8-5) 15-4- terior(2	; Vult=130mph (3 CDL=6.0psf; BCI closed; MWFRS mer(3E) -0-10-8 -13, Corner(3R) 13 to 17-6-14, C 2N) 24-5-13 to 30	DL=6.0psť, h=25ft; (envelope) exterior to 2-5-13, Exterior 8-5-13 to 15-4-13, orner(3R) 17-6-14 to 0-5-7, Corner(3E)
BOT CHORD WEBS		y applied or 6-0-0 oc 13-35, 14-34, 15-33, 17-31, 18-30, 12-36, 11-37, 9-39, 8-40	TOP CHORD	Tension 2-44=-362/328, 1-2 3-4=-158/157, 4-5= 7-8=-175/292, 8-9= 10-11=-200/347, 1	2=0/37, 2 =-103/16 =-219/36	2-3=-192/187, 8, 5-7=-138/2 6, 9-10=-233/	28, ′391,	30- exp mei Lun	5-7 to 33 osed ; e mbers an nber DO	8-10-4 nd ver nd forc L=1.60	zone; cantilever tical left and righ ces & MWFRS fo plate grip DOL=	left and right it exposed;C-C for ir reactions shown;
	28=34-0- 31=34-0- 35=34-0- 39=34-0- 42=34-0- 42=34-0- 42=34-0- 42=34-0- 42=34-0- 42=34-0- 42=34-0- 42=34-0- 42=34-0- 44=-295 (12)=24-0- 27=-45 (12)=24- 29=-63 (13)=-20 (10)=24- 34=-34 (10)=24- 34=-34-34- 34=-34-34-34-34- 34=-34-34-34-34-34-34-34-34-34-34-34-34-3	0, 26=34-0-0, 27=34-0- 0, 29=34-0-0, 30=34-0- 0, 36=34-0-0, 34=34-0- 0, 40=34-0-0, 37=34-0- 0, 40=34-0-0, 41=34-0- 0, 43=34-0-0, 44=34-0- (LC 12) (LC 11), 26=-258 (LC 1) LC 15), 30=-81 (LC 15), LC 15), 33=-2 (LC 12), LC 11), 35=-25 (LC 10), LC 13), 35=-25 (LC 10), LC 14), 41=-71 (LC 14), LC 14), 43=-191 (LC 11)	0, 0, 0, 0 BOT CHORD 0),	$12-13=-200/347, 1\\14-15=-200/347, 1\\16-17=-233/391, 1\\18-19=-175/292, 1\\21-22=-161/183, 2\\23-24=-249/233, 2\\43-44=-175/174, 4\\439-40=-175/174, 4\\39-40=-175/174, 3\\36-37=-175/174, 3\\36-37=-175/174, 3\\31-33=-175/174, 3\\29-30=-175/174, 2\\27-28=-175/174, 2\\25-26=-175/174, 1\\3-35=-188/49, 14\\15-33=-192/48, 17\\18-30=-191/105, 1\\21-28=-145/93, 22\\23-26=-198/150, 1\\11-37=-180/48, 9-5\\8-40=-191/105, 7-4\\28-28-28-28-28-28-28-28-28-28-28-28-28-2$	5-16=-2(7-18=-2: 9-21=-1, 2-23=-11 4-25=-2: 2-43=-11 0-41=-17 7-39=-11 5-36=-11 3-34=-11 0-31=-11 8-29=-11 -34=-19(-31=-18 9-29=-11 -27=-12: 2-36=-11 39=-187/	00/347, 19/367, 40/229, 71/168, 13/187 75/174, 75/174, 75/174, 75/174, 75/174, 75/174, 75/174, 75/174, 75/174, 75/174, 5/68, 7/44, 99/88, 3/85, 90/68, 141,		see or c 4) TCI Pla DO Cs=	Standar consult q _L: ASC te DOL= L=1.15); =1.00; Ct	rd Indu ualified E 7-16 1.15); Is=1.(=1.10	stry Gable End I d building design ; Pr=20.0 psf (ro Pf=20.0 psf (Lur); Rough Cat B; I ; Rough Cat B; Rough Cat B; Rough Cat B; Rough Cat B; I ; Rough Cat B;	L

4-43=-224/174, 3-44=-455/428

May 19,2023

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Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building design rm ust verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	B3GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)	158430777
Carter Components (Sanford), S	anford, NC - 27332,	Run: 8.53 S Mar 9 2	023 Print: 8.	530 S Mar 9	2023 MiTek Industries, Inc. Thu May 18 10:08:26	Page: 2

ID:mNIIsnGAd4X?GtvokCZFmNzFa0D-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding. 7)
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing. 9)
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 14) N/A
- 15) 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.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

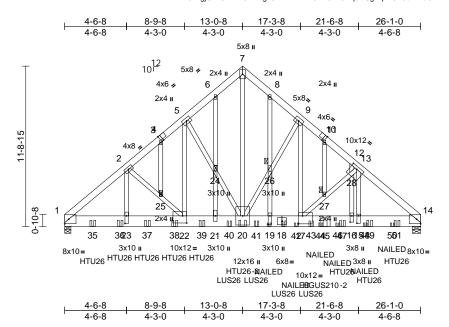
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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	CGR	Common Girder	1	2	Job Reference (optional)	158430778

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:27 ID:JDrgjGxvG?rXE5l?zYg182zFLBh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



		, [19:0-7-8,0-1-8], [22:0-3-8,0-6-4], [23:0-6-12,0-1-8]

							-	-		-			-
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.67	Vert(LL)	-0.15	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.54	Vert(CT)	-0.28	16-17	>999	180		
TCDL	10.0	Rep Stress Incr	NO		WB	0.99	Horz(CT)	0.05	14	n/a	n/a		
BCLL	0.0*	Code	IRC201	8/TPI2014	Matrix-MSH		, , , , , , , , , , , , , , , , , , ,						
BCDL	10.0	0000		0,1112011								Weight: 626 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS	2x6 SP No.2 2x10 SP 2400F 2.0E 2x4 SP No.3 *Excep		,	(0.131"x3") r	be connected to nails as follows: connected as follo				Inte R80	rnationa)2.10.2 a	I Resid	ned in accordance dential Code sect ferenced standare ong-Tie HTU26-2	tions R502.11.1 and d ANSI/TPI 1.
WED3	No.2	1 22-5,20-7,17-9.28	4 36		ds connected as	follows: 2	x10 - 3 rows						r equivalent at 13-0-8
OTHERS	2x4 SP No.3			staggered at									es) to front face of
BRACING				Web connec	ted as follows: 2>	(4 - 1 row	at 0-9-0 oc.		bot	om chor	d.		,
TOP CHORD	Structural wood she 3-9-9 oc purlins.	athing directly applie	d or 2)	except if not	considered equa ed as front (F) or	back (B)	face in the LO		Í 11-	10dx1 1/	2 Trus		der) or equivalent
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 oc	;	provided to c	ction. Ply to ply co distribute only loa				enc	to 10-0	-12 to	c max. starting at connect truss(es)	t 2-0-12 from the left) to back face of
JOINTS	1 Brace at Jt(s): 24, 25, 26, 27		3)		wise indicated. roof live loads ha	ave been	considered fo	or	14) Use		on Stro		-10d Girder, 3-10d lent spaced at 2-0-0
	(size) 1=0-5-8, 2 Max Horiz 1=255 (LC Max Grav 1=10493	C 11)	4) C 22)	Wind: ASCE Vasd=103m	7-16; Vult=130m oh; TCDL=6.0psf 3; Enclosed; MW	; BCDL=6	6.0psf; h=25ft		oc i to c	nax. sta onnect t	rting a russ(e	t 12-0-12 from the s) to back face of	e left end to 18-0-12
FORCES	(lb) - Maximum Com Tension	pression/Maximum		zone; cantile	ver left and right bosed; Lumber D	exposed	; end vertical					equivalent at 19-1 s) to back face of	1-0 from the left end f bottom chord.
TOP CHORD	1-2=-13463/0, 2-3=-			DOL=1.60									
	5-6=-8411/0, 6-7=-7		5)		ned for wind load								
	8-9=-8434/0, 9-11=-				ids exposed to w							ORTH CA	11111
	11-12=-10873/0, 12-	-13=-12182/0,			d Industry Gable							WAH CA	ROUL
DOTOUODD	13-14=-15123/0	0.0/10000			alified building d						1	A	
BOT CHORD	1-23=0/10390, 22-23	,	6)		7-16; Pr=20.0 p						Nº.	ORTH CA	to a la
	21-22=0/8373, 20-2		541,		1.15); Pf=20.0 pst								A start
	17-19=0/8541, 16-1				Is=1.0; Rough Ca	at B; Fully	Exp.; Ce=0.	9;		~	-		
	15-16=0/11600, 14-		o/o –	Cs=1.00; Ct=						-	()		
WEBS		-2708/0, 22-25=-284			snow loads have	been co	nsidered for t	nis				SEA	.L : =
	,	-4245/0, 20-24=-444	,	design.						=		0363	22 : =
	7-20=0/8200, 20-26	,			spaced at 2-0-0					1		0303	~~ : :
		=-4428/0, 27-28=-42			is been designed						8	1. Sec. 1. Sec	1 2
	13-28=-3987/0, 13-1	=-196/0, 8-26=0/141	. '		ad nonconcurrent					5	5	·	all S
	19-26=0/1641, 11-2				nas been designe n chord in all are			Upsf			215	S. NGIN	EELA
	16-28=0/2460				by 2-00-00 wide w			tom			1	CA -	BEN
NOTES					y other members							SEA 0363	IIIIIIIII
												N/~.	. 10 0000

Scale = 1:84.4

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



May 19,2023

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	CGR	Common Girder	1	2	Job Reference (optional)	158430778

- 16) Use Simpson Strong-Tie HTU26 (20-10d Girder, 11-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 20-4-4 from the left end to 24-4-4 to connect truss(es) to back face of bottom chord.
- 17) Fill all nail holes where hanger is in contact with lumber. 18) "NAILED" indicates 3-10d (0.148"x3") or 3-12d
- (0.148"x3.25") toe-nails per NDS guidlines. LOAD CASE(S) Standard
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (lb/ft) Vert: 1-7=-60, 7-14=-60, 29-32=-20
 - Concentrated Loads (lb)
 - Vert: 18=-360 (B), 20=-243 (F), 19=5 (F), 35=-1618 (B), 36=-1618 (B), 37=-1618 (B), 38=-1618 (B), 39=-1618 (B), 40=-360 (B), 41=-360 (B), 42=5 (F), 43=-360 (B), 44=5 (F), 45=-2611 (B), 46=-74 (F), 47=4927 (B), 46=-74 (F), 48=-74 (F),

 - 47=-1827 (B), 48=-74 (F), 49=-1827 (B), 50=-74 (F), 51=-1827 (B)

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:27 ID:JDrgjGxvG?rXE5I?zYg182zFLBh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

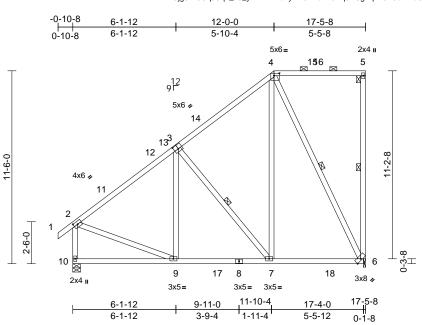
Page: 2

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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	D	Piggyback Base	3	1	Job Reference (optional)	158430779

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Scale = 1:68.7

2)

Cs=1.00; Ct=1.10

Plate Offsets (X, Y): [2:0-2-14,0-2-0], [3:0-3-0,0-3-0], [4:0-3-12,0-1-12]

2-1-8 to 7-9-1, Exterior(2R) 7-9-1 to 14-3-12, Exterior

(2E) 14-3-12 to 17-3-12 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15

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;

	7, 1). [2.0 2 11,0 2 0], [0:0 0 0,0 0 0], [1	.0 0 12,0	2)	·								
Loading	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.70	Vert(LL)	-0.05	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.40	Vert(CT)	-0.08	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES		WB	0.51	Horz(CT)	-0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC20	18/TPI2014	Matrix-MSH								
BCDL	10.0											Weight: 143 lb	FT = 20%
LUMBER			:	3) Unbalanced	snow loads have b	een coi	nsidered for t	this					
TOP CHORD	2x4 SP No.2			design.									
BOT CHORD	2x4 SP No.2				as been designed fo	or great	er of min roo	of live					
WEBS	2x4 SP No.3 *Excep	t* 5-6,7-4,6-4:2x4 S	P	load of 12.0	psf or 1.00 times fla	at roof l	oad of 20.0 p	osf on					
	No.2			overhangs r	non-concurrent with	other li	ve loads.						
BRACING				Provide ade	quate drainage to p	revent	water pondin	ng.					
TOP CHORD	Structural wood she	athing directly applie	ed or		as been designed fo								
	6-0-0 oc purlins, ex	cept end verticals, a			ad nonconcurrent w								
	2-0-0 oc purlins (6-0	-0 max.): 4-5.			has been designed			.0psf					
BOT CHORD	Rigid ceiling directly	applied or 9-8-14 o	с	on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom									
	bracing.												
WEBS	1 Row at midpt	5-6, 3-7, 4-6			ny other members, e assumed to be: , .								
REACTIONS	(size) 6=0-1-8, 1	10=0-5-8		capacity of			SP INU.2 CIUS	sning					
	Max Horiz 10=323 (L	_C 14)			pint(s) 6 considers p	arallel	o arain value	<u>م</u>					
	Max Uplift 6=-199 (L	,			TPI 1 angle to grain			0					
	Max Grav 6=816 (LC	C 37), 10=919 (LC 4	10)		ould verify capacity								
FORCES	(lb) - Maximum Com	pression/Maximum			chanical connection			to					
	Tension				e at joint(s) 6.	()	,						
TOP CHORD	1-2=0/37, 2-4=-799/				Simpson Strong-Tie	conne	ctors						
	5-6=-243/67, 2-10=-			recommend	ed to connect truss	to bear	ing walls due	e to					
BOT CHORD	9-10=-361/200, 7-9=	,		UPLIFT at j	(s) 6. This connection	on is fo	r uplift only a	and				minin	UIII.
WEBS	3-9=-60/161, 3-7=-4	,			nsider lateral forces							W'TH CA	ROUL
	4-6=-738/221, 2-9=0)/554			designed in accord						S	R	Alle
NOTES				does not consider lateral forces. 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and									
	CE 7-16; Vult=130mph				and referenced stan					4	ès		A. Tim
	mph; TCDL=6.0psf; B		,		urlin representation			size				:2	
	Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1)				ation of the purlin a	long the	e top and/or			-		CEA	1 1 2
zone and	C-C Exterior(2E) -0-10	-8 to 2-1-8, Interior	(1)	bottom chor	u.					-	•	SEA	L

LOAD CASE(S) Standard



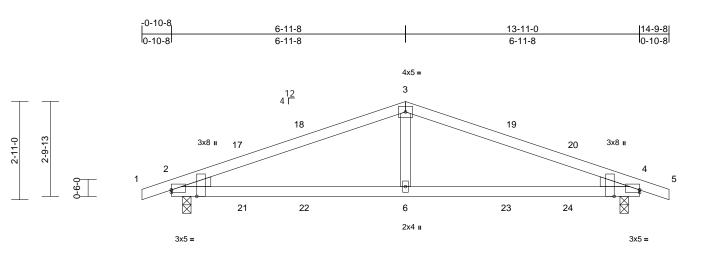
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	russ Type Qty Ply 12 Serenity-Roof-B330-E		12 Serenity-Roof-B330-E		
23050027-01	E	Common	4	1	Job Reference (optional)	158430780

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:29 ID:fh2gqmk?gmJcqjp5zBFAIOzFa?d-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:34.2

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

TCLL (roof) 20.0 I Snow (Pf) 20.0 I TCDL 10.0 I	Plate Grip DOL1.Lumber DOL1.Rep Stress IncrYE	-0-0 15 15 ES RC2018	/TPI2014	CSI TC BC WB Matrix-MSH	0.72 0.56 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.13 0.02	(loc) 6-11 6-11 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 51 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 WEDGE Left: 2x4 SP No.3 WEDGE Left: 2x4 SP No.3 BRACING TOP CHORD Structural wood sheatt 4-1-1 oc purlins. BOT CHORD Rigid ceiling directly ap bracing. REACTIONS (size) 2=0-3-0, 4=1 Max Horiz 2=41 (LC 14 Max Uplift 2=-221 (LC Max Grav 2=708 (LC 2 FORCES (lb) - Maximum Compr TOP CHORD 1-2=0/17, 2-3=-901/11 4-5=0/17 BOT CHORD 2-6=-943/775, 4-6=-94 WEBS 3-6=-425/268	:0-3-0 4) 10), 4=-221 (LC 11) 21), 4=708 (LC 22) ression/Maximum 104, 3-4=-901/1104,	4) 5) 6) 7) 8)	Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 µ overhangs nu This truss ha chord live loa * This truss ha chord live loa * This truss ha chord of 12.0 µ overhangs nu * This truss ha chord and ar One H2.5A S recommende UPLIFT at It(and does not) This truss is International	7-16; Pr=20.0 psf (1.15); Pf=20.0 psf (L s=1.0; Rough Cat B 1.10 snow loads have be s been designed for bosf or 1.00 times fla on-concurrent with s been designed for d nonconcurrent with n chord in all areas y 2-00-00 wide will by other members. Simpson Strong-Tie d to connect truss i s) 2 and 4. This cordinates (consider lateral for designed in accord: Residential Code s and referenced stance	um DC 3; Fully een cor r greate t roof le other lin to a 10.0 ith any for a liv where fit betw connection coes. ance w ections	L=1.15 Plate Exp.; Ce=0.9 isidered for the er of min roof pad of 20.0 pre loads. 0 psf bottom other live loa e load of 20.0 a rectangle recen the botte ctors ng walls due h is for uplift of th the 2018 R502.11.1 a	e); his live sf on ds. Dpsf com to conly					1111.
NOTES 1) Unbalanced roof live loads have be this design.	een considered for	LO	AD CASE(S)	Standard						, IN	WITH CA	ROLINI

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-8, Exterior(2R) 3-11-8 to 9-11-8, Interior (1) 9-11-8 to 11-9-8, Exterior(2E) 11-9-8 to 14-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



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818 Soundside Road Edenton, NC 27932

ſ	Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
	23050027-01	EGE	Common Supported Gable	1	1	Job Reference (optional)	158430781

TCDL

BCLL

BCDL

WEBS

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-0-10-8 14-9-8 6-11-8 13-11-0 0-10-8 6-11-8 6-11-8 0-10-8 4x5 =5 12 4 Г 6 4 21 22 6 3 7 2-9-13 2-11-0 P 8 9 0-9-C 0 0 þ 10 13 14 12 11 3x5 = 3x5 = 13-11-0 13-7-0 Scale = 1:31.9 2-0-0 CSI DEFL l/defl L/d PLATES GRIP Loading (psf) Spacing in (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.11 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf) 20.0 BC Lumber DOL 1 15 0.02 Vert(CT) n/a n/a 999 10.0 Rep Stress Incr YES WB 0.04 Horz(CT) 0.00 2 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MSH 10.0 Weight: 56 lb FT = 20%Wind: ASCE 7-16; Vult=130mph (3-second gust) LUMBER 2) 13) N/A Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 2x4 SP No.2 TOP CHORD 2x4 SP 2400F 2.0E Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior BOT CHORD zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2x4 SP No.3 OTHERS 2-1-8 to 3-11-8, Corner(3R) 3-11-8 to 9-11-8, Exterior 14) Non Standard bearing condition. Review required. BRACING (2N) 9-11-8 to 11-9-8, Corner(3E) 11-9-8 to 14-9-8 zone; 15) This truss is designed in accordance with the 2018 TOP CHORD Structural wood sheathing directly applied or cantilever left and right exposed ; end vertical left and International Residential Code sections R502.11.1 and 6-0-0 oc purlins. right exposed:C-C for members and forces & MWFRS R802.10.2 and referenced standard ANSI/TPI 1. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc for reactions shown; Lumber DOL=1.60 plate grip LOAD CASE(S) Standard bracing. DOL=1.60 **REACTIONS** (size) 2=13-3-0. 8=13-3-0, 10=13-3-0, Truss designed for wind loads in the plane of the truss 3) 11=13-3-0, 12=13-3-0, 13=13-3-0, only. For studs exposed to wind (normal to the face), 14=13-3-0, 17=13-3-0, 20=13-3-0 see Standard Industry Gable End Details as applicable Max Horiz 2=61 (LC 10), 8=-61 (LC 11), or consult qualified building designer as per ANSI/TPI 1 17=61 (LC 10), 20=-61 (LC 11) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Max Uplift 2=-45 (LC 10), 8=-45 (LC 11), Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate 10=-40 (LC 15), 11=-36 (LC 15), DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 13=-36 (LC 14), 14=-40 (LC 14), Cs=1.00; Ct=1.10 17=-45 (LC 10), 20=-45 (LC 11) 5) Unbalanced snow loads have been considered for this Max Grav 2=232 (LC 21), 8=232 (LC 22), desian. 10=255 (LC 22), 11=220 (LC 22), This truss has been designed for greater of min roof live 6) 12=144 (LC 21), 13=220 (LC 21), load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on 14=255 (LC 21), 17=232 (LC 21), overhangs non-concurrent with other live loads. 20=232 (LC 22) All plates are 2x4 MT20 unless otherwise indicated. ORT Max Mom 2=260 (LC 7), 8=172 (LC 20), Gable studs spaced at 2-0-0 oc. 8) \cap 17=260 (LC 7), 20=172 (LC 20) 9) This truss has been designed for a 10.0 psf bottom FORCES (lb) - Maximum Compression/Maximum chord live load nonconcurrent with any other live loads. Tension 10) * This truss has been designed for a live load of 20.0psf Contraction of the ATTEND OF THE TOP CHORD 1-2=0/17, 2-3=-92/95, 3-4=-44/22, on the bottom chord in all areas where a rectangle 4-5=-46/70, 5-6=-46/70, 6-7=-44/22, 3-06-00 tall by 2-00-00 wide will fit between the bottom SEAL 7-8=-92/95. 8-9=0/17 chord and any other members. BOT CHORD 2-14=-43/46, 13-14=0/0, 12-13=0/0, 036322 11) Solid blocking is required on both sides of the truss at 11-12=0/0, 10-11=0/0, 8-10=-43/46 joint(s), 2. 5-12=-103/63, 4-13=-182/126, 12) _{N/A} 3-14=-208/128, 6-11=-182/126, 7-10=-208/128 NOTES G 1) Unbalanced roof live loads have been considered for minin this design. May 19,2023

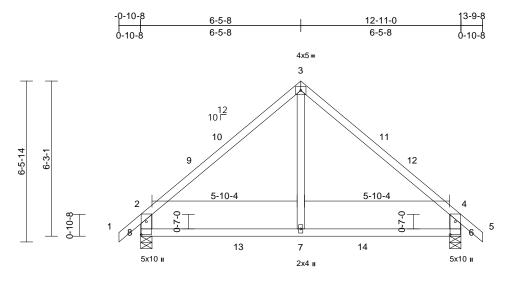


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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E			
23050027-01	F	Common	3	1	Job Reference (optional)	158430782		

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Page: 1



6-5-8	12-11-0
6-5-8	6-5-8

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

Scale = 1:46.5

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	3/TPI2014	CSI TC BC WB Matrix-MR	0.76 0.42 0.14	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.09 0.01	(loc) 6-7 6-7 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 59 lb	GRIP 244/190 FT = 20%
	2x4 SP No.2 2x4 SP No.2 2x6 SP No.2 *Excep Structural wood she 5-1-1 oc purlins, ex Rigid ceiling directly bracing. (size) 6=0-5-8, 8 Max Horiz 8=-169 (L Max Uplift 6=-55 (LC Max Grav 6=685 (LC (Ib) - Maximum Com Tension 1-2=0/42, 2-3=-619/ 4-5=0/42, 2-8=-603/ 7-8=0/408, 6-7=0/40	athing directly applie cept end verticals. applied or 10-0-0 or 3=0-5-8 C 12) C 15), 8=-55 (LC 14) C 6), 8=-655 (LC 5) pression/Maximum 136, 3-4=-619/136, 195, 4-6=-603/195	; 7) 8) 9)	design. This truss ha load of 12.0 overhangs n This truss ha chord live loa * This truss h on the bottor 3-06-00 tall k chord and ar One H2.5A S recommended UPLIFT at jit and does no This truss is International	snow loads have I s been designed f post or 1.00 times flo on-concurrent with s been designed f ad nonconcurrent vi has been designed n chord in all area y 2-00-00 wide wi by other members, Simpson Strong-Ti d to connect truss s) 8 and 6. This co t consider lateral fi designed in accord Residential Code nd referenced star Standard	or great lat roof lo other liv or a 10.0 with any l for a liv s where ll fit betw with BC 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 e load of 20. a rectangle veen the bott DL = 10.0ps ctors ing walls due n is for uplift ith the 2018 is R502.11.1 a	f live ads. Opsf com f. e to only					
NOTES 1) Unbalanced roof live loads have been considered for this design.								Route					

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

TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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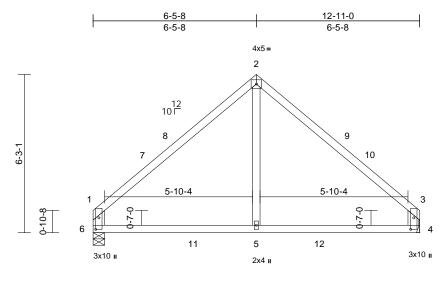
818 Soundside Road Edenton, NC 27932

SEAL

036322

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E			
23050027-01	F1	Common	1	1	Job Reference (optional)	158430783		

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:30 ID:LfoHGb6J4AUgsWYIcsT3YVzFZbJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



6-5-8	12-11-0
6-5-8	6-5-8

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

Scale = 1:45.6

	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	[0.0 0 0,0 1 0]											
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MR	0.92 0.41 0.13	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.05 -0.09 0.01	(loc) 5-6 5-6 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 56 lb	GRIP 244/190 FT = 20%
	2x4 SP No.2 2x4 SP No.2 2x6 SP No.2 *Excep Structural wood she 2-2-0 oc purlins, ex Rigid ceiling directly bracing. (size) 4= Mecha Max Horiz 6=147 (L0 Max Uplift 4=-33 (L0 Max Grav 4=629 (L0 (lb) - Maximum Com Tension 1-2=-611/134, 2-3=- 3-4=-522/144 5-6=0/401, 4-5=0/40 2-5=0/342	athing directly applie cept end verticals. applied or 10-0-0 or anical, 6=0-5-8 C 11) C 15), 6=-33 (LC 14) C 6), 6=629 (LC 5) apression/Maximum 611/134, 1-6=-522/1	ed or 7 5 8 5 9 1 44,	 chord live lo. * This truss I on the bottoo 3-06-00 tall I chord and ai ?) Refer to gird earing plate 4. One H2.5A S recommended UPLIFT at jt does not cor 0) This truss is International 	as been designed f ad nonconcurrent of has been designed m chord in all area by 2-00-00 wide win y other members, ter(s) for truss to tru- chanical connection e capable of withst Simpson Strong-Ti ed to connect truss (s) 6. This connect nsider lateral forces designed in accord Residential Code nd referenced star Standard	with any I for a liv s where II fit betw with BC uss conre- the conne- to bear ion is for s. dance w sections	other live loa e load of 20.0 a rectangle veen the bottwo IDL = 10.0psf nections. ers) of truss t i3 lb uplift at j ctors ing walls due uplift only ar ith the 2018 i R502.11.1 a	Dpsf om c oont to nd					
this design 2) Wind: ASC Vasd=103 Cat. II; Exp zone and 0	ed roof live loads have CE 7-16; Vult=130mph mph; TCDL=6.0psf; B p B; Enclosed; MWFR C-C Exterior(2E) 0-2-1 2 to 0.8 4 Exterior(2E)	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio 2 to 3-2-12, Exterior	r							4	A. I.	OR FESS	ROLIN

Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Exterior (2R) 3-2-12 to 9-8-4, Exterior(2E) 9-8-4 to 12-8-4 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

 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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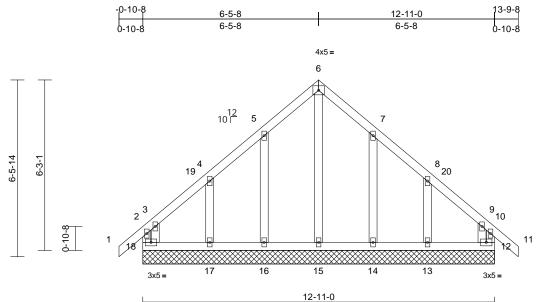
Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	FGE	Common Supported Gable	1	1	Job Reference (optional)	158430784

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:31 ID:WvJLc0ujCyCaeqGFIVRNNQzFZxY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

13-9-8 0-10-8

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Scale = 1:42.3	

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Plate Grip DOL1Lumber DOL1Rep Stress Incr1	2-0-0 1.15 1.15 YES RC2018/TPI2014	CSI TC BC WB Matrix-MR	0.13 0.05 0.18	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 12	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 79 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 12=12-11 16=12-11 18=12-11 Max Horiz 18=-166 (Max Uplift 12=-37 (L 17=-121 (Max Grav 12=172 (L 14=270 (L	applied or 6-0-0 oc -0, 13=12-11-0, -0, 15=12-11-0, -0, 17=12-11-0, -0 LC 12) C 14), 13=-117 (LC 15) C 15), 16=-65 (LC 14), LC 14), 18=-47 (LC 15) C 1), 13=211 (LC 22), -C 22), 15=178 (LC 15) -C 21), 17=216 (LC 24)	Vasd=103r Cat. II; Exp zone and C 2-1-8 to 3-0 9-5-8 to 10 or right expos for reaction DOL=1.60 3) Truss des only. For s see Standa or consult 4 4) TCLL: ASC Plate DOL=1.157 Cs=1.00; C 5) Unbalance design. 6) This truss 1 9 Cs=1.00; C	E 7-16; Vult=130m, nph; TCDL=6.0psf; B; Enclosed; MWF -C Corner(3E) -0-1 5-8, Corner(3E) 10 5-8, Corner(3E) 10 5-8, Corner(3E) 10 5-8, Corner(3E) 10 5-9-8,	BCDL=6 RS (env. 0-8 to 2 8 to 9-5- 9-9-8 to 1 ed; end v s and for DOL=1.6(s in the p nd (norm End Deta signer at f (roof LL (Lum DC t B; Fully been cor for greate fat roof lo	6.0psf; h=25ft; elope) exterior 1-8, Exterior(21 3-9-8 zone; vertical left an rces & MWFR 0 plate grip lane of the tru al to the face ils as applical s per ANSI/TF L=1.15 Plate Exp.; Ce=0.9 ansidered for the er of min roof pad of 20.0 ps	or (2N) N) ad RS ble, Pl 1. 1.5 e 9; his	Ínte R8	ernationa	al Resid and ref) Star	dential Code sec erenced standar ndard	ce with the 2018 tions R502.11.1 and d ANSI/TPI 1.
FORCES	(lb) - Maximum Com Tension		All plates a	re 2x4 MT20 unless ires continuous bot	s otherwi	se indicated.					ORTH CA	RO
TOP CHORD	6-7=-158/275, 7-8=-	=0/39, 2-3=-17/79, 12/182, 5-6=-158/275, 112/182, 8-9=-100/74, =0/39, 10-12=-112/185	9) Truss to be braced aga 10) Gable stud	fully sheathed from inst lateral movements s spaced at 2-0-0 on mas been designed	n one fac ent (i.e. d c.	e or securely liagonal web)			6	in		Bar
BOT CHORD	17-18=-67/106, 16-1 15-16=-67/106, 14-1 13-14=-67/106, 12-1	5=-67/106,	chord live l 12) * This truss	bad nonconcurrent has been designed	with any d for a liv	other live loa e load of 20.0					SEA	
WEBS	6-15=-268/100, 5-16 4-17=-165/177, 3-18	6=-233/122, 3=-145/89,	3-06-00 tal chord and	om chord in all area by 2-00-00 wide w any other members	ill fit betv	veen the botto					0363	
NOTES 1) Unbalance this design	ed roof live loads have	3=-165/177, 9-12=-126/6	bearing pla 18, 37 lb u	chanical connectio te capable of withsi blift at joint 12, 65 lb t 17, 65 lb uplift at j	tanding 4 o uplift at	7 lb uplift at j joint 16, 121	joint Ib		CONTRACTOR OF	THE REAL	10000	EER. KIN

May 19,2023

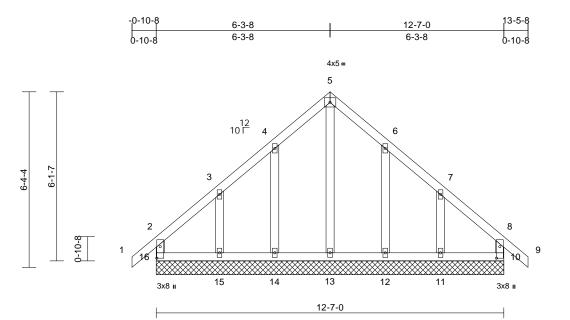


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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	GGE	Common Supported Gable	1	1	Job Reference (optional)	158430785

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:31 ID:513vPqZ1ErMqVrm87zA2MWzFZdJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



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		 	~ 7	 -	~ ~	~ *

Plate Offsets ((X, Y): [10:0-5	-0,0-1-8], [16:0-5-0,0-1-8]	-									-	
Loading TCLL (roof) Snow (Pf) TCDL BCLL		(psf) 20.0 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MR	0.14 0.05 0.17	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 10	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCDL		10.0											Weight: 75 lb	FT = 20%
	2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural we 6-0-0 oc pur Rigid ceiling bracing. (size) 10 13 16 Max Horiz 16 Max Uplift 10 12 14 Max Grav 10 12 14	2 3 3 0 ood shea 1 ins, exc 3 = 12-7-0 3 = 12-7-0 5 = -163 (0 = -37 (L 2 = -67 (L 5 = -116 (0 = 158 (L 2 = 273 (L 4 = 273 (L 6 = 172 (L 6 = 172 (L	LC 12) C 14), 11=-113 (LC C 15), 14=-67 (LC LC 14), 16=-47 (LC LC 14), 16=-47 (LC C 24), 11=204 (LC C 22), 13=183 (LC C 21), 15=208 (LC C 25)	AC 12-7-0, 12-7-0, (C 15), (C 15),	Vasd=103r Cat. II; Exp zone and C 2-3-8 to 3-3 9-3-8 to 10 cantilever I right expos for reaction DOL=1.60) Truss desi only. For s see Standa or consult () TCLL: ASC Plate DOL= DOL=1.15) Cs=1.00; C Ubalance design.	E 7-16; Vult=130mp ph; TCDL=6.0psf; B; Enclosed; MWF -C Corner(3E) -0-1 i-8, Corner(3E) 10 eft and right expose ed;C-C for member s shown; Lumber D gned for wind loads tuds exposed to wir rd Industry Gable E jualified building de E 7-16; Pr=20.0 psf ; Is=1.0; Rough Cat t=1.10 d snow loads have I has been designed f 0 psf or 1.00 times f	BCDL=6 RS (env 0-8 to 2- -8 to 9-3 -3-8 to 1 d; end 5 s and fo 0OL=1.60 in the p nd (norm ind Deta signer a f (roof LL (Lum DC B; Fully been col	6.0psf; h=25ft; elope) exterior 3-8, Exterior(2k -8, Exterior(2k -8, Exterior(2k -3-5-8 zone; vertical left and rcces & MWFR D plate grip lane of the tru ial to the face) ils as applicat s per ANSI/TF s per ANSI/TF L=1.15 Plate Exp.; Ce=0.9 nsidered for th er of min roof	r 2N) d S S S S S S S S S S S S S S S S S S	bea 16, upli join 14) This Inte	ring plat 37 lb up ft at join t 11. s truss is rnationa 02.10.2 a	te capa blift at ji t 15, 6 s desig al Resig and ref	able of withstandi oint 10, 67 lb upli 7 lb uplift at joint ned in accordand dential Code sect erenced standard	ions R502.11.1 and
FORCES	· · /	um Com	pression/Maximur	n	overhangs	non-concurrent with	n other li	ve loads.					WH CA	Pall
TOP CHORD	3-4=-96/177	, 4-5=-1 , 7-8=-9	0/39, 2-3=-109/94 44/274, 5-6=-144/2 4/75, 8-9=0/39,) Gable requ) Truss to be	re 2x4 MT20 unless ires continuous bott fully sheathed from inst lateral moveme	tom choi n one fac	d bearing. or securely			4	and the second s	RTESS	

braced against lateral movement (i.e. diagonal web). 10) Gable studs spaced at 2-0-0 oc.

- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



this design. WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11** Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

818 Soundside Road Edenton, NC 27932

WEBS 5-13=-266/83, 4-14=-234/127, 3-15=-161/172, 6-12=-234/127, 7-11=-161/172 NOTES

BOT CHORD

8-10=-136/137

15-16=-71/105, 14-15=-71/105,

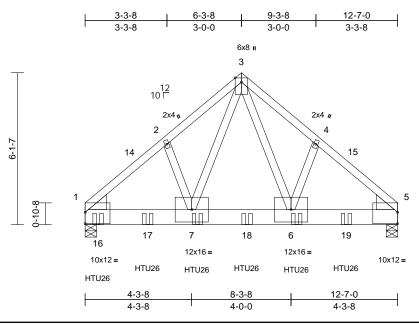
13-14=-71/105, 12-13=-71/105,

11-12=-71/105, 10-11=-71/105

1) Unbalanced roof live loads have been considered for

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	GGR	Common Girder	1	2	Job Reference (optional)	158430786

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:32 ID:WxIQrCSx8yoBaXYWLowRWhzFYyr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:46.4

Plate Offsets (X, Y): [1	:Edge,0-5-7], [5:Edge,0-5-7]
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	(x, i): [1:Edge,e e i],	[0:=ug0;0 0 7]											
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL LUMBER TOP CHORD BOT CHORD WEBS		Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code		Vasd=103m Cat. II; Exp E zone; cantile	CSI TC BC WB Matrix-MSH 7-16; Vult=130mp ph; TCDL=6.0psf; 3; Enclosed; MWF ever left and right e	BCDL=6 RS (env exposed	0.0psf; h=25ft elope) exteri ; end vertical	or	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 186 lb	GRIP 244/190 FT = 20%
WEDGE	Left: 2x8 SP No.2 Right: 2x8 SP No.2		-	DOL=1.60	bosed; Lumber DC								
BRACING TOP CHORD	4-4-12 oc purlins.	• • • • •	d or	Plate DOL=1	7-16; Pr=20.0 ps 1.15); Pf=20.0 psf Is=1.0; Rough Cat =1.10	(Lum DC	DL=1.15 Plate	е					
BOT CHORD	bracing.		6)	Unbalanced design.	snow loads have l			this					
	Max Horiz 1=-123 (L Max Grav 1=7673 (L	C 36) .C 5), 5=5967 (LC 6)		 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 8) * This truss has been designed for a live load of 20.0psf 									
FORCES	(lb) - Maximum Com Tension			on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom									
TOP CHORD	4-5=-6813/0	, ,		This truss is	ny other members. designed in accor	dance w							
BOT CHORD WEBS	1-7=-125/5282, 6-7= 3-6=0/4250, 4-6=-11 2-7=-128/213	,		International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 10) Use Simpson Strong-Tie HTU26 (20-10d Girder,									
(0.131"x3 Top chord oc. Bottom ch staggered Web conr 2) All loads a except if r CASE(S) provided 1 unless oth	s to be connected togel ") nails as follows: ds connected as follows: nords connected as follows to at 0-5-0 oc. nected as follows: 2x4 - are considered equally noted as front (F) or bat section. Ply to ply conr to distribute only loads nerwise indicated. red roof live loads have n.	5: 2x4 - 1 row at 0-9-0 ows: 2x8 - 3 rows 1 row at 0-9-0 oc. applied to all plies, ck (B) face in the LO. tections have been noted as (F) or (B),) 11) LO 1)	11-10dx1 1/2 max. starting connect trus: Fill all nail ho AD CASE(5) Dead + Sm Increase=1 Uniform Lo Vert: 1-3 Concentrat Vert: 6=-	2 Truss) or equival g at 0-6-4 from the s(es) to back face bles where hanger Standard bw (balanced): Lur .15	lent space left end of bottoo is in cor mber Inc 1=-20 3 (B), 16:	eed at 2-0-0 of to 10-6-4 to n chord. ntact with lurr rease=1.15, =-1868 (B),	nber.		Continue.		SEA 0363	22 EER ALU

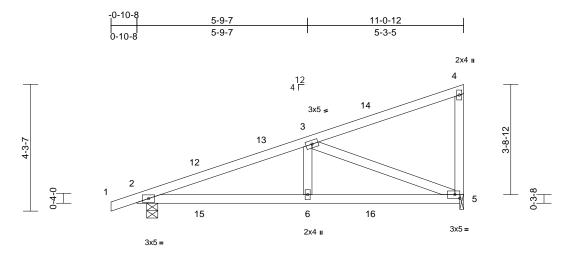
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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	н	Monopitch	6	1	Job Reference (optional)	158430787

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:32 ID:CihnP7xvpEw3TAwJzLguQ6zFZ_p-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



0-4-0	5-9-7	10-11-4	11-0-12
0-4-0	5-5-7	5-1-13	0-1-8

Loading	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.44	Vert(LL)	0.06	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.31	Vert(CT)	0.05	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES		WB	0.50	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC20	18/TPI2014	Matrix-MSH								
BCDL	10.0											Weight: 50 lb	FT = 20%
	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shee 6-0-0 oc purlins, exc Rigid ceiling directly bracing. (size) 2=0-4-8, 5 Max Horiz 2=152 (LC Max Uplift 2=-193 (LI Max Grav 2=565 (LC	cept end verticals. applied or 6-3-7 oc 5=0-1-8 C 13) C 10), 5=-168 (LC 10	d or 7 8 9)	 chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar 7) Bearings are capacity of 5 8) Bearing at jo using ANSI/7 designer sho Provide mec bearing plate 	s been designed ad nonconcurrent has been designed n chord in all area by 2-00-00 wide w hy other members assumed to be: 6 65 psi. int(s) 5 considers IPI 1 angle to grai uld verify capacity hanical connection at joint(s) 5.	with any d for a liv s where ill fit betw loint 5 SF parallel t n formula / of beari n (by oth	other live loa e load of 20.0 a rectangle veen the bottu P No.3 crushi to grain value a. Building ing surface. ers) of truss t	Opsf om ing					
FORCES	(lb) - Maximum Com Tension			recommende UPLIFT at jt(ed to connect trus s) 5 and 2. This c	s to beari onnectio	ing walls due						
TOP CHORD	1-2=0/17, 2-3=-914/8 4-5=-194/104	819, 3-4=-107/52,	1		t consider lateral f designed in accor		ith the 2018						
BOT CHORD	2-6=-788/829, 5-6=-7	788/829			Residential Code			nd					
WEBS	3-6=-328/232, 3-5=-8	860/883		R802.10.2 a	nd referenced star	ndard AN	ISI/TPI 1.						
NOTES			L	OAD CASE(S)	Standard								

Scale = 1:39

- Wind: ASCE 7-16; Vult=130mph (3-second gust) 1) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-11-0, Exterior(2E) 7-11-0 to 10-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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
- Unbalanced snow loads have been considered for this 3) desian.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

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818 Soundside Road Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E
23050027-01	HSE	Monopitch	1	1	I58430788 Job Reference (optional)

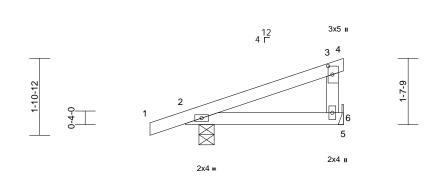
-0-10-8

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

Run: 8,53 E Oct 7 2022 Print: 8,530 E Oct 7 2022 MiTek Industries, Inc. Thu May 18 14:29:25 ID:kbE6T1kw1pMY?TYBOvNbdFzFYzm-02ouK2ddH3RbdZpJWSE4ANzS25aL?ejzhwr34hzFEde







3-10-12

3-10-12

Scale = 1:28.4

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

	(, .). [
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MP	0.18 0.11 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.01 -0.01 0.00	(loc) 6-11 6-11 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 15 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES NOTES	 2x4 SP No.2 2x4 SP No.3 Structural wood she 3-10-12 oc purlins, Rigid ceiling directly bracing. (size) 2=0-4-8, 6 Max Horiz 2=57 (LC Max Uplift 2=-60 (LC Max Grav 2=311 (LC) 	C 10), 6=-24 (LC 14) C 21), 6=189 (LC 21) lax. Ten All forces 2	9) , 10	chord live loa * This truss I on the botto 3-06-00 tall I chord and ar Refer to gird)) Provide mec bearing plate 6. 1) One H2.5A S recommende UPLIFT at jt does not cor 2) This truss is International	as been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide w hy other members er(s) for truss to tu thanical connectio e capable of withs Simpson Strong-T ed to connect trus (s) 2. This connec usider lateral force designed in accol Residential Code nd referenced sta	with any d for a liv as where ill fit betv. russ conn n (by oth tanding 2 ie conne s to bear tion is fo s. rdance w s sections	other live load e load of 20. a rectangle veen the bott nections. ers) of truss 24 lb uplift at ctors ing walls due r uplift only a ith the 2018 \$ R502.11.1 a	ads. Opsf to joint e to nd					
Vasd=103 Cat. II; Ex zone and exposed ;	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B xp B; Enclosed; MWFR C-C Exterior(2E) zone ; end vertical left and rig and forces & MWFRS	CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and ri ght exposed;C-C for	ight	DAD CASE(S)	Standard							AN CA	Route

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.

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

- Unbalanced snow loads have been considered for this 4) desian.
- This truss has been designed for greater of min roof live 5) load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Gable studs spaced at 2-0-0 oc.

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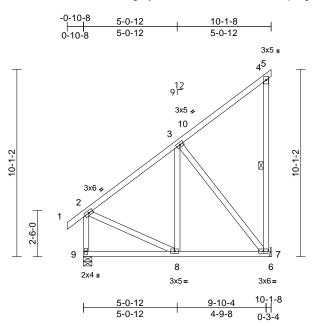
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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	1	Monopitch	1	1	I584 Job Reference (optional)	430789

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:33 ID:9i5Jg2r5yKCWf_29TVT76_zFa3M-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:62.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	0.06	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	0.05	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 80 lb	FT = 20%

LOWIDER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 4-7:2x4 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or
	6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc
	bracing.
WEBS	1 Row at midpt 4-7
REACTIONS	(size) 7= Mechanical, 9=0-5-8
	Max Horiz 9=354 (LC 13)
	Max Uplift 7=-241 (LC 11), 9=-60 (LC 10)
	Max Grav 7=559 (LC 21), 9=490 (LC 21)
FORCES	(Ib) - Maximum Compression/Maximum
	Tension
TOP CHORD	1-2=0/37, 2-3=-365/294, 3-4=-206/126,
	4-5=-17/0, 4-7=-238/80, 2-9=-446/302
BOT CHORD	8-9=-340/233, 7-8=-182/227, 6-7=0/0
WEBS	3-8=-313/170, 3-7=-350/449, 2-8=-87/264
NOTES	

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

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

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

- 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.
- 6) * 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.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to 8) bearing plate capable of withstanding 241 lb uplift at joint 7.
- One H2.5A Simpson Strong-Tie connectors 9) recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. 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.

LOAD CASE(S) Standard



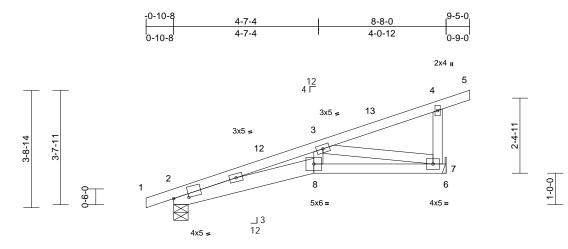
818 Soundside Road Edenton, NC 27932

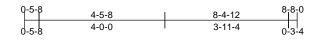
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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	J	Monopitch	3	1	Job Reference (optional)	158430790

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:33 ID:U5uUeHwHZsumLL6FLBFxXYzFZgj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:36.6

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

Loading	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.29	Vert(LL)	-0.05	8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.37	Vert(CT)	-0.08	8	>999	180		
TCDL	10.0	Rep Stress Incr	YES		WB	0.40	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0*	Code	IRC20	18/TPI2014	Matrix-MP								
BCDL	10.0											Weight: 42 lb	FT = 20%
LUMBER			4) This truss ha	as been designed f	or great	er of min roo	f live					
TOP CHORD	2x4 SP No.2				psf or 1.00 times fl								
BOT CHORD		ot* 8-6:2x4 SP No.2			on-concurrent with								
WEBS	2x4 SP No.3		5) This truss ha	as been designed f	or a 10.	0 psf bottom						
BRACING					ad nonconcurrent v								
TOP CHORD	Structural wood shea	athing directly appli	ed or 6	/	has been designed			0psf					
	4-10-15 oc purlins,	except end verticals	5.		m chord in all area								
BOT CHORD	Rigid ceiling directly	applied or 8-4-1 oc			by 2-00-00 wide wi		veen the bott	tom					
	bracing.		7		ny other members. ler(s) for truss to tru		actiona						
REACTIONS	(size) 2=0-5-8, 7	7= Mechanical	י ז	, 0	pint(s) 2 considers			_					
	Max Horiz 2=118 (LC	,			TPI 1 angle to grain								
	Max Uplift 2=-71 (LC	,, , , ,			ould verify capacity								
	Max Grav 2=438 (LC		, 5) Provide med	chanical connection	h (by oth	ers) of truss	to					
FORCES	(lb) - Maximum Com	pression/Maximum			e capable of withsta	anding 8	85 lb uplift at	joint					
TODOUODD	Tension			7.									
TOP CHORD	1-2=0/17, 2-3=-1394 4-5=-29/0, 4-7=-260/		1		Simpson Strong-Ti								
BOT CHORD					ed to connect truss								
WEBS	3-8=-101/385, 3-7=-	,	,		(s) 2. This connect sider lateral forces		r upliπ only a	na					
NOTES	0 0= 101/000, 0 7=	12-10/0-10	1		designed in accord		ith the 2018						
	CE 7-16; Vult=130mph	(3-second quet)			Residential Code			and				OP. FESS	U11.
	Bmph; TCDL=6.0psf; B				nd referenced star							WHY CA	Dall
	p B; Enclosed; MWFR		,	OAD CASE(S)	Standard						1	"ath or	10/11/
	C-C Exterior(2E) -0-10	· · · ·									25	O EESS	1.1.1
(1) 1-11-13	3 to 6-5-0, Exterior(2E)) 6-5-0 to 9-5-0 zone	e;								20	CP ,	14 AL

- (1) F111215 (2006); Letteriot(22) 0050 (2016); Cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.11); Plate DOL=1.15; Pl=20.0 psf (Lum DOL=1.15); Pl=20.0 psf (Lum DDL=1.15); Pl=20.0 p
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.

AMTEK AMILIA B18 Soundside Road Edenton, NC 27932

May 19,2023

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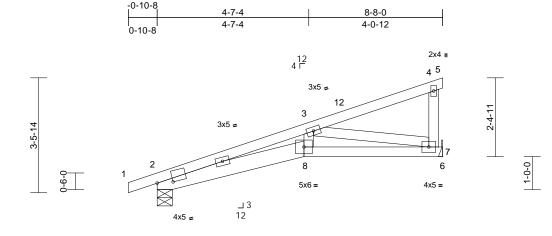
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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	J1	Monopitch	6	1	Job Reference (optional)	158430791

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:33 ID:QJtH?fvirB7cBLSqAps07UzFciP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:35

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

Loading (psf) Spacing 2-0-0 CSI DEFL in (loc) I/defl L/d PLATES GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.33 Vert(LL) -0.06 8 >999 240 MT20 244/190 Snow (Pf) 20.0 Lumber DOL 1.15 BC 0.39 Vert(CT) -0.09 8 >999 180 TCDL 10.0 Rep Stress Incr YES WB 0.43 Horz(CT) 0.03 7 n/a n/a BCLL 0.0* Code IRC2018/TPI2014 Matrix-MP Vert											
	TCLL (roof) Snow (Pf) TCDL BCLL	20.0Plate Grip DOL20.0Lumber DOL10.0Rep Stress Incr	1.15 1.15 YES IRC2018/TPI2014	TC C BC C WB C Matrix-MP	0.33 Vert(LL) 0.39 Vert(CT) 0.43 Horz(CT)	-0.06 -0.09 0.03	8 8	>999 >999	240 180	-	
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 EXA	TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3 BRACING TOP CHORD Structural wo 4-8-12 oc pu BOT CHORD Rigid ceiling bracing. REACTIONS (size) 2= Max Horiz 2= Max Uplift 2= Max Uplift 2= Max Uplift 2= Max Uplift 2= Max Uplift 2= Max Uplift 2= Max Grav 2= FORCES (lb) - Maximu Tension TOP CHORD 1-2=0177, 2- 4-5=-8/0, 4-7 BOT CHORD 2-8=-604/141 WEBS 3-8=-109/410 NOTES 1) Wind: ASCE 7-16; Vult=1 Vasd=103mph; TCDL=6. Cat. II; Exp B; Enclosed; zone and C-C Exterior(21 (1) 1-11-13 to 5-8-0, Exter cantilever left and right e right exposed; C-C for me for reactions shown; Lum DOL=1.60 2) TCLL: ASCE 7-16; Pr=20 Plate DOL=1.15); Is=1.0; Roug Cs=1.00; Ct=1.10 3) Unbalanced snow loads	od sheathing directly applied directly applied or 7-10-3 oc 0-5-8, 7= Mechanical 108 (LC 11) -75 (LC 10), 7=-67 (LC 14) 462 (LC 21), 7=478 (LC 21) m Compression/Maximum 3=-1495/572, 3-4=-60/38, =-179/95 12, 7-8=-562/1308, 6-7=0/0 , 3-7=-1332/608 30mph (3-second gust) 0psf; BCDL=6.0psf; h=25ft; MWFRS (envelope) exterior c) -0-0-8 to 1-11-13, Interior rior(2E) 5-8-0 to 8-8-0 zone; posed ; end vertical left and mbers and forces & MWFRS ber DOL=1.60 plate grip -0 psf (roof LL: Lum DOL=1. 0 psf (coof LL: Lum DOL=1. 0 psf (Lum DOL=1.15 Plate h Cat B; Fully Exp.; Ce=0.9;	load of 12 overhangs 5) This truss chord live 6) * This truss on the bot 3-06-00 ta chord and 7) Refer to g 8) Bearing at using ANS designer s 9) Provide m bearing pl 7. 10) One H2.5, recommer UPLIFT at does not c 11) This truss Internation R802.10.2 LOAD CASE(2.0 psf or 1.00 times flat r s non-concurrent with oth has been designed for a load nonconcurrent with s has been designed for ttom chord in all areas will all by 2-00-00 wide will fit a any other members. jirder(s) for truss to truss f joint(s) 2 considers para SI/TPI 1 angle to grain fo should verify capacity of nechanical connection (b) late capable of withstand A Simpson Strong-Tie con nded to connect truss to t t jt(s) 2. This connection consider lateral forces. is designed in accordan nal Residential Code sec 2 and referenced standar	oof load of 20.0 p her live loads. a 10.0 psf bottom a any other live loa a live load of 20. here a rectangle between the bot connections. allel to grain value rmula. Building bearing surface. y others) of truss bing 67 lb uplift at connectors bearing walls due is for uplift only a cce with the 2018 ctions R502.11.1	osf on ads. .0psf tom e to joint e to nd		With the second s			• -

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

818 Soundside Road Edenton, NC 27932

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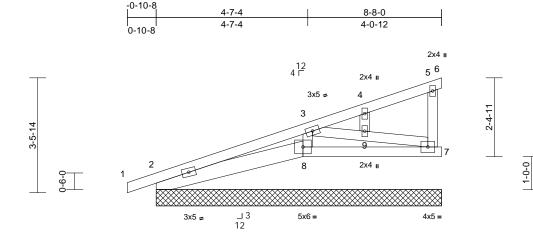
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Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	JSE	Monopitch	1	1	Job Reference (optional)	158430792

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:34 ID:j2I8QGxHBI3g4tfrPjOVI8zFZEI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





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

Scale =	1:35
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00010 - 1100													
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	3/TPI2014	CSI TC BC WB Matrix-MP	0.23 0.19 0.15	Vert(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: 42 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x6 SP No.2 *Except* 8-7:2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. (size) 2=8-8-0, 6=8-8-0, 7=8-8-0, 8=8-8-0, 10=8-8-0 Max Horiz 2=108 (LC 11), 10=108 (LC 11) Max Uplift 2=-44 (LC 10), 6=-198 (LC 21), 7=-107 (LC 10), 8=-65 (LC 14), 10=-44 (LC 10) Max Grav 2=242 (LC 21), 6=68 (LC 10), 7=435 (LC 21), 8=455 (LC 21), 10=242 (LC 21)		(2 4) 5) 1) 6) 1), 7) 1), 8) 2), 8)	only. For sti see Standar or consult qr TCLL: ASCE Plate DOL= DOL=1.15); Cs=1.00; Ct Unbalanced design. This truss ha load of 12.0 overhangs n Gable requin Gable studs This truss ha load of 12.0 overhangs n Gable studs This truss ha load of 12.0 overhangs n Gable studs This truss ha load of 12.0 overhangs n Gable studs This truss ha chord live lo * This truss on the botto	ned for wind load: uds exposed to wi d Industry Gable I Jalified building de 7-16; Pr=20.0 ps 1.15); Pf=20.0 ps Is=1.0; Rough Ca =1.10 snow loads have as been designed psf or 1.00 times ion-concurrent wit res continuous boi spaced at 2-0-0 cas been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide w	ind (norm End Deta ssigner a: sf (roof Ll (Lum DC (Lum DC that B; Fully been cor for great flat roof li th other li ttom chor oc. for a 10. with any d for a li as where	al to the face ils as applica is per ANSI/T \geq Lum DOL= \geq L=1.15 Plate Exp.; Ce=0. asidered for t er of min roo bad of 20.0 p ve loads. d bearing. D psf bottom other live loa e load of 20. a rectangle	e), able, PI 1. =1.15 e 9; this f live asf on ads. Opsf					
FORCES	Tension	mpression/Maximum	10	chord and a Provide med	ny other members chanical connectio	s. on (by oth	ers) of truss	to					
TOP CHORD	1-2=0/17, 2-3=-159 4-5=-38/43, 5-6=-7	0/53, 5-7=-358/285		2, 65 lb uplif	e capable of withs t at joint 8, 198 lb	uplift at j	oint 6, 107 lb						Dilli
BOT CHORD WEBS	2-8=-138/154, 7-8= 3-9=-89/112, 7-9=- 3-8=-326/234	71/91 97/120, 4-9=-45/41,	11	 bearing plate capable of withstanding 44 lb uplift at joint 2, 65 lb uplift at joint 8, 198 lb uplift at joint 7 and 44 lb uplift at joint 2. 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 8, 6, 7, 10. 									
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: MWEBS (envelope) exterior				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									

Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 1-11-13, Exterior (2N) 1-11-13 to 8-8-0 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 LOAD CASE(S) Standard

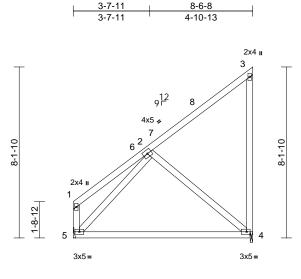


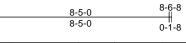
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1** Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	к	Jack-Closed	4	1	Job Reference (optional)	158430793

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:34 ID:YkpcEy_AjDydrxw7i575fpzFa?I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale =	1:54.8
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Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.56	DEFL Vert(LL)	in -0.24	(loc) 4-5	l/defl >407	L/d 240	PLATES MT20	GRIP 244/190
Snow (Pf) TCDL BCLL	20.0 10.0 0.0*	Lumber DOL Rep Stress Incr Code	1.15 YES	3/TPI2014	BC WB Matrix-MP	0.68 0.22	Vert(CT) Horz(CT)	-0.49 0.00	4-5 4	>204 n/a	180 n/a		
BCDL	10.0	oode	11(0201)	5/11/2014								Weight: 58 lb	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.1 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 4=0-1-8, 9 Max Horiz 5=207 (L0 Max Uplift 4=-140 (L Max Grav 4=469 (L0 (lb) - Maximum Com Tension 1-5=-65/53, 1-2=-29 3-4=-208/127 4-5=-218/216 2-5=-337/0, 2-4=-28	cept end verticals. applied or 10-0-0 or 5= Mechanical C 14) C 14) C 21), 5=380 (LC 21 pression/Maximum /98, 2-3=-164/95,	7) 8) 9) 10 11	on the botton 3-06-00 tall I chord and ar Bearings are capacity of 5 Refer to gird Bearing at jo using ANSI/ designer sho Provide meo bearing plate) One H2.5A \$ recommendu UPLIFT at ji does not cor) This truss is International	er(s) for truss to t int(s) 4 considers IFI 1 angle to gra buld verify capacit shanical connectic at joint(s) 4. Simpson Strong-T ad to connect trus (s) 4. This connec usider lateral force designed in acco Residential Code nd referenced sta	as where vill fit betv , , Joint 4 \$ russ conr ; parallel 1 in formul y of bear in (by oth "ie conne s to bear sto bear sto bear s to bear s for bear ris for ss. rdance w	a rectangle veen the bott SP No.3 crus nections. o grain value a. Building ng surface. ers) of truss ctors ing walls due uplift only au ith the 2018 s R502.11.1 a	to to					
1) Wind: ASC	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B	· · · · ·										ann	tina

 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) 1-4-12 to 4-4-12, Interior (1) 4-4-12 to 5-4-13, Exterior(2R) 5-4-13 to 9-7-12 zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

d READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. tectors. This design is based only upon parameters shown, and is for an individual building component, not signer must write the approximation of t



A. GILP.... May 19,2023 Mannanna

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SEAL

036322

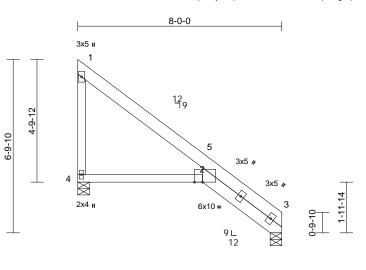
STITUTE STATES

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11** Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	L	Roof Special	4	1	Job Reference (optional)	'94

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:35 ID:M?dRJCJWSO5p3cPyOYqP1ozFbzP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:45.2

Plate Offsets (X	Y):	[2:0-3-12,Edge]
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	5 (X, 1): [2:0 0 12,Edge	1											
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.62 0.61 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.13 -0.21 0.11	(loc) 2-4 2-4 3	l/defl >717 >440 n/a	L/d 240 180 n/a		GRIP 244/190 FT = 20%
LUMBER TOP CHORE BOT CHORE WEBS BRACING TOP CHORE BOT CHORE REACTIONS	 2x4 SP No.2 *Excep 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 3=0-5-8, 4 Max Horiz 4=-188 (L Max Uplift 3=-27 (LC Max Grav 3=364 (LC (Ib) - Maximum Com Tension 1-4=-331/110, 1-2=- 	athing directly applie cept end verticals. applied or 10-0-0 or 4=0-5-8 C 10) C 15), 4=-63 (LC 15) C 21), 4=438 (LC 21 pression/Maximum	c 7) 8)) LO	on the botto 3-06-00 tall a bearing at jo using ANSI/ designer sho One H2.5A s recommend UPLIFT at jt and does no This truss is International	has been designed m chord in all area by 2-00-00 wide winy other members. bint(s) 3 considers TPI 1 angle to grai buld verify capacity Simpson Strong-Ti ed to connect truss (s) 4 and 3. This co to consider lateral fi designed in accor I Residential Code and referenced star Standard	s where parallel n formul of bear e conne s to bear ponnectio porces. dance w sections	a rectangle veen the bott to grain value a. Building ing surface. ctors ing walls due n is for uplift ith the 2018 s R502.11.1 a	tom e e to only					
BOT CHORE	0 2-4=-81/199												
Vasd=10 Cat. II; E zone and 3-1-12 to cantileve right exp for reacti DOL=1.6 Plate DC DOL=1.1 Cs=1.00	SCE 7-16; Vult=130mph J3mph; TCDL=6.0psf; Bi ixp B; Enclosed; MWFR d C-C Exterior(2E) 0-1-1 o 4-8-5, Exterior(2E) 4-8 er left and right exposed ioosed;C-C for members. ioos shown; Lumber DO 60 SCE 7-16; Pr=20.0 psf (L DL=1.15); Pf=20.0 psf (L 15); Is=1.0; Rough Cat E ; Ct=1.10	CDL=6.0psf; h=25ft; S (envelope) exterio 2 to 3-1-12, Interior -5 to 7-8-5 zone; ; end vertical left an and forces & MWFR L=1.60 plate grip roof LL: Lum DOL= um DOL=1.15 Plate s; Fully Exp.; Ce=0.9	or (1) d SS 1.15 								in a	ORTH CA ORTESS SEA 0363	• -

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

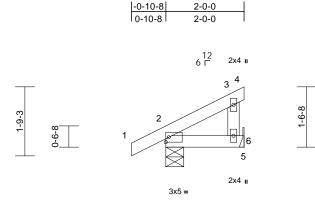
SEAL 036322 MGINEER A. GILBER May 19,2023

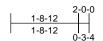
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	М	Monopitch	3	1	I58430795 Job Reference (optional)	

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:35 ID:qOPWcZXGrwuiZukTAibHTuzFZam-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:29.4

	1		i		· · · · · ·					i	
Loading (psf)	Spacing 2-0	0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.1	15	тс	0.08	Vert(LL)	0.00	6-9	>999	240	MT20	244/190
Snow (Pf) 20.0	Lumber DOL 1.1	15	BC	0.05	Vert(CT)	0.00	6-9	>999	180		
TCDL 10.0	Rep Stress Incr YE	ES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL 0.0 ³	Code IR	C2018/TPI2014	Matrix-MP								
BCDL 10.0										Weight: 9 lb	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 sl 2-0-0 oc purlins, of BOT CHORD Rigid ceiling direct bracing. REACTIONS (size) 2=0-5-8 Max Horiz 2=48 (L Max Uplift 2=-50 (L Max Grav 2=199 (C) FORCES (Ib) - Maximum Co Tension	C 14), 5=-16 (LC 14) .C 21), 5=91 (LC 21) mpression/Maximum 56, 3-4=-11/0, 3-6=-86/31 0 h (3-second gust) 3CDL=6.0psf; h=25ft; RS (envelope) exterior e; cantilever left and right ight exposed; C-C for 8 for reactions shown; DL=1.60 (roof LL: Lum DOL=1.15 Lum DOL=1.15 Plate B; Fully Exp.; Ce=0.9; ween considered for this or greater of min roof live at roof load of 20.0 psf on other live loads. or a 10.0 psf bottom	 on the bottor 3-06-00 tall b chord and ar 7) Refer to gird 8) Provide mec bearing plate 5. 9) H10A Simps connect truss This connect lateral forces 10) This truss is International 	designed in accorda Residential Code se nd referenced standa	where fit betw s conr by oth iding 1 ectors i le to U and do ince w ections	a rectangle veen the botton ections. ers) of truss to 6 lb uplift at joi recommended PLIFT at jt(s) 2 es not conside ith the 2018 s R502.11.1 and	n nt to r				SEA 0363	ROUTE

- 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.

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GI 1000 min May 19,2023

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	M1	Monopitch	3	1	Job Reference (optional)	58430796

<u>-2-4</u>-8

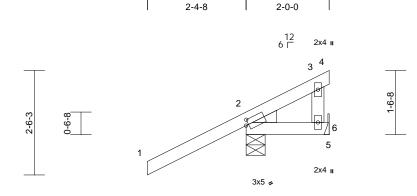
Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:35 ID:eKcYCFta4IWtehgdnAZeuqzFcQN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2-0-0



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Scale = 1:27.7

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

	,, ,, ,, [2.0 0 10,0 10	1				-						•	
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MP	0.64 0.24 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.01 0.00	(loc) 6-9 6-9 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 13 lb	GRIP 244/190 FT = 20%
	2x4 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Structural wood she 2-0-0 oc purlins, ex Rigid ceiling directly bracing.	cept end verticals. applied or 10-0-0 od 5= Mechanical 13) 2 14), 5=-45 (LC 20) C 21), 5=-37 (LC 10) apression/Maximum 448, 3-4=-11/0,	6) ed or 7) 8) c 9) 10	chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Refer to gird Provide mec bearing plate 5. H10A Simps connect trus This connect lateral forces) This truss is International	designed in acco Residential Code nd referenced sta	with any d for a liv as where vill fit betw s. russ conr n (by oth standing 4 nnectors due to U ly and do rdance w e sections	other live loa e load of 20.0 a rectangle veen the bottu- nections. ers) of truss t 5 lb uplift at j recommende PLIFT at jt(s) es not consid ith the 2018 c R502.11.1 a	Dpsf om oint d to 2. der					
NOTES	2-0=-204/150, 5-0=0	0/0											
 Vasd=103 Cat. II; Exp zone and (exposed ; members Lumber DD TCLL: AS(Plate DOL DOL=1.15 Cs=1.00; (3) Unbalance design. This truss load of 12 	CE 7-16; Vult=130mph imph; TCDL=6.0psf; Bi p B; Enclosed; MWFR C-C Exterior(2E) zone end vertical left and riq and forces & MWFRS OL=1.60 plate grip DC CE 7-16; Pr=20.0 psf (_=1.15); Pf=20.0 psf (L _=1.15); Pf=20.0 psf (L _=1.10) ed snow loads have be has been designed for .0 psf or 1.00 times fla s non-concurrent with o	CDL=6.0psf; h=25ft; S (envelope) exterio ; cantilever left and r ght exposed;C-C for for reactions shown JL=1.60 roof LL: Lum DOL=1 um DOL=1.15 Plate B; Fully Exp.; Ce=0.9 een considered for th r greater of min roof t roof load of 20.0 ps	r ight ; I.15 ; is live							A . 11111		A. 0	EEP. R.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

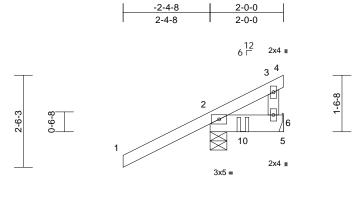
ENGINEERING BY

818 Soundside Road Edenton, NC 27932

May 19,2023

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	M1GR	Monopitch Girder	1	2	Job Reference (optional)	158430797

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:36 ID:tkmLd3IMJ4VPnznpYDlqCtzFZb3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



LUS26

2-0-0 1-8-12 1-8-12 0-3-4

Scale = 1:31.5

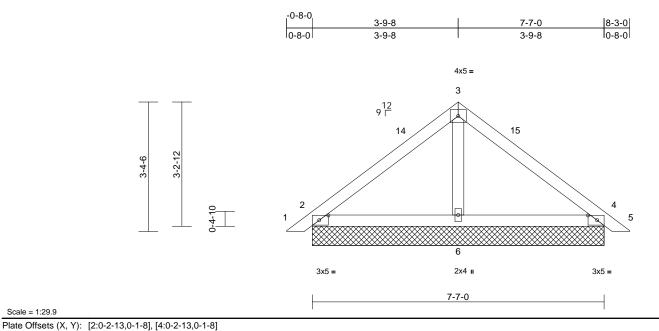
	0-0 15	TC	0.37	DEFL Vert(LL)	in 0.00	(loc) 6-9	l/defl >999	L/d 240	PLATES MT20	GRIP 244/190
	15	BC	0.13	Vert(CT)	0.00	6-9	>999	180	101120	244/130
CDL 10.0 Rep Stress Incr No		WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
CLL 0.0* Code IR	C2018/TPI2014	Matrix-MP								
3CDL 10.0									Weight: 26 lb	FT = 20%
UMBER OP CHORD 2x4 SP No.2 OT CHORD 2x6 SP No.2 /EBS 2x4 SP No.3 RACING DP CHORD OP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals. OT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. EACTIONS (size) 2=0-5-8, 5= Mechanical	 Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 overhangs n This truss ha 	snow loads have is been designed psf or 1.00 times on-concurrent with is been designed	(Lum DC t B; Fully been cor for greate flat roof lo h other liv for a 10.0	DL=1.15 Plate Exp.; Ce=0.9 nsidered for the er of min roof bad of 20.0 ps ve loads. D psf bottom); nis live sf on					
Max Horiz 2=59 (LC 11) Max Uplift 2=-112 (LC 12), 5=-16 (LC 15) Max Grav 2=776 (LC 19), 5=292 (LC 24)	 This truss h on the bottor 	ad nonconcurrent has been designe n chord in all area by 2-00-00 wide w	d for a liv as where	e load of 20.0 a rectangle	Opsf					
ORCES (Ib) - Maximum Compression/Maximum Tension		y other members er(s) for truss to tr		octions						
OP CHORD 1-2=0/99, 2-3=-122/185, 3-4=-11/0, 3-6=-94/18	10) Provide mec	hanical connectio	n (by oth	ers) of truss t						
BOT CHORD 2-6=-283/112, 5-6=0/0	5.									
 OTES 2-ply truss to be connected together as follows: Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-9-0 oc. All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated. 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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 	recommende UPLIFT at it(does not cor 12) This truss is International R802.10.2 at 13) Use Simpson Truss, Single the left end t chord. 14) Fill all nail ho LOAD CASE(S) 1) Dead + Sno Increase=1 Uniform Lo. Vert: 1-3	e Ply Girder) or ec o connect truss(e: Standard ow (balanced): Lu .15 ads (lb/ft) =-60, 3-4=-60, 5-7 ed Loads (lb)	s to beari tion is for is. dance w sections ndard AN 26 (4-10c juivalent s) to back r is in cor mber Inc	ing walls due uplift only ar ith the 2018 R502.11.1 a ISI/TPI 1. I Girder, 3-10 at 0-10-12 frc k face of botto itact with lum	nd nd d om om ber.		Weining.		SEA 0363	22 EERER III



Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	PB1	Piggyback	17	1	Job Reference (optional)	158430798

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:36 ID:zOi7wmSoRzy7PzV2isDxIvzFbc_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale =	1.29.9	

..... 4.00.0

Loading TCLL (roof)		(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.30	DEFL Vert(LL)	in n/a	(loc) -	l/defl n/a	L/d 999	PLATES MT20	GRIP 244/190
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.30	Vert(CT)	n/a	-	n/a	999		
TCDL		10.0	Rep Stress Incr	YES		WB	0.02	Horz(CT)	0.00	2	n/a	n/a		
BCLL BCDL		0.0* 10.0	Code	IRC2018	3/TPI2014	Matrix-MP							Weight: 32 lb	FT = 20%
BODL		10.0								-			weight. 32 ib	FT = 20 /0
LUMBER				3)		ned for wind loads								
TOP CHORD BOT CHORD	2x4 SP N					ds exposed to wind to wind to wind to be a second t								
OTHERS	2x4 SP N 2x4 SP N					alified building de								
BRACING	274 01 14	0.0		4)		7-16; Pr=20.0 ps								
TOP CHORD	Structura	l wood she	athing directly applie	ed or		.15); Pf=20.0 psf								
	6-0-0 oc					s=1.0; Rough Cat	t B; Fully	Exp.; Ce=0.	9;					
BOT CHORD	Rigid ceil bracing.	ing directly	applied or 10-0-0 oc	5)		1.10 snow loads have	been cor	nsidered for t	his					
REACTIONS	(size)	,	4=7-7-0, 6=7-7-0,	6)	design. This truss ha	s been designed	for greate	er of min roo	live					
	Max Hariz	7=7-7-0, 1	11=7-7-0 13), 7=74 (LC 13)			osf or 1.00 times f			sf on					
			13), 7=74 (LC 13) 2 14), 4=-49 (LC 15),		•	on-concurrent with								
			2 14), 11=-49 (LC 15)	\ <i>')</i>		es continuous bot		d bearing.						
	Max Grav	(C 21), 4=310 (LC 22)	γ <u>δ</u> ι		spaced at 4-0-0 o s been designed) pef bottom						
		6=251 (LC	C 21), 7=310 (LC 21)), 9)		ad nonconcurrent			aha					
		11=310 (L	,	10		as been designed								
FORCES	· · /	imum Com	pression/Maximum		on the bottor	n chord in all area	s where	a rectangle						
	Tension	0.0.004/	100 0 1 001/100			y 2-00-00 wide w		veen the bott	om					
TOP CHORD	4-5=0/26	,	106, 3-4=-204/106,			y other members	•							
BOT CHORD		32, 4-6=-19	/82	11) N/A								WITH CA	2111
WEBS	3-6=-96/2	,											THUA	HON
NOTES												1	ON FERS	10-11
				10	This truce is	designed in accor	donco w	ith the 2010						

- 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) 0-3-1 to 3-3-1, Exterior(2R) 3-3-1 to 5-8-9, Exterior(2E) 5-8-9 to 8-8-9 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.
- 13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer

LOAD CASE(S) Standard

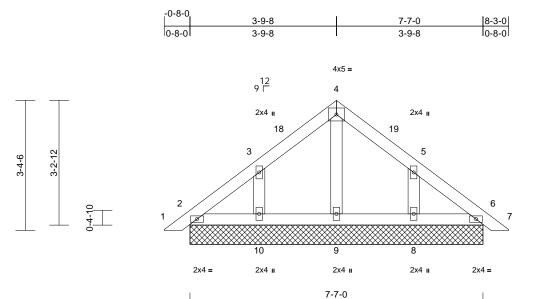




Job	Truss	Truss Type	Qty	Ply 12 Serenity-Roof-B330-E		
23050027-01	PB1GE	Piggyback	2	1	Job Reference (optional)	158430799

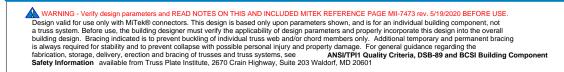
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Scale = 1:29.8

Scale = 1.29.0															
Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)		20.0	Plate Grip DOL	1.15		тс	0.08	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	1		
TCDL		10.0	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	6	n/a	n/a	1		
BCLL		0.0*	Code		018/TPI2014	Matrix-MP	0.04	11012(01)	0.00	0	Π/a	n/a			
BCDL		10.0	Code	11102	510/11/2014	Width A-IVII							Weight: 35 lb	FT = 20%	
				-	 Truss desid 	ned for wind loa	ds in the n	lane of the tri	199						
TOP CHORD	2x4 SP N	lo 2				uds exposed to v									
BOT CHORD	2x4 SP N					rd Industry Gable									
OTHERS	2x4 SP N					ualified building of									
BRACING	ZAT OF T	0.0				E 7-16; Pr=20.0 p									
	Ctructure	l wood obo	othing directly opplie	d or		1.15); Pf=20.0 ps									
TOP CHORD			athing directly applie			Is=1.0; Rough C									
BOT CHORD	6-0-0 oc		applied or 10-0-0 oc	•	Cs=1.00; Ct										
BOICHORD	0	ling directly	applied of 10-0-0 oc	5	5) Unbalanced	snow loads have	e been coi	nsidered for t	his						
DEADTIONS	bracing.	0 7 7 0 1			design.										
REACTIONS	(size)		6=7-7-0, 8=7-7-0,		 This truss h 	as been designe	d for great	er of min root	live						
		,	10=7-7-0, 11=7-7-0,		load of 12.0	psf or 1.00 times	s flat roof l	oad of 20.0 p	sf on						
		15=7-7-0			overhangs r	non-concurrent w	ith other li	ve loads.							
			2 12), 11=-74 (LC 12)	7) Gable requi	res continuous b	ottom choi	d bearing.							
	Max Uplift		15), 8=-81 (LC 15),	`	8) Gable studs	spaced at 2-0-0	OC.								
	May Cray		.C 14), 11=-6 (LC 15			as been designe									
	wax Grav		C 21), 6=144 (LC 22)		chord live lo	ad nonconcurrer	nt with any	other live loa	ids.						
			C 22), 9=114 (LC 21) LC 21), 11=144 (LC 2			has been design			0psf						
		15=144 (L		zı),		om chord in all are									
	(1)	(,			by 2-00-00 wide		veen the bott	om						
FORCES	(ID) - Max Tension	amum Corr	pression/Maximum			iny other membe	rs.								
		2.2 50/5	0.04.00/04		11) N/A										
TOP CHORD			2, 3-4=-96/84, //36, 6-7=0/26											1111	
		,	,										White CA	Dalle	
BOT CHORD	2-10=-22		22/71, 8-9=-22/71,										"aTH Ur	NON.	2
WEBS			4/4 40 5 0 004/4 40	`		designed in acc						5	O FESS	1 las	11
	4-9=-77/0	J, 3-10=-22	1/142, 5-8=-221/142	<u></u>		I Residential Coo			and				OFLO	· ····································	1-
NOTES						and referenced st					2			1 2	1
,		loads have	been considered for	r	,	rd Industry Piggy									-
this design			(a			onnection to base		applicable, of			=		SEA	AL :	=
			(3-second gust)			lified building des	signer.				=	:	0363	:	=
	· · ·	· · ·	CDL=6.0psf; h=25ft;		LOAD CASE(S)) Standard					1		0303	22 :	
			S (envelope) exterio									e (-
			to 3-3-1, Exterior(2	R)								-	1. A	air	-
			9 to 8-8-9 zone;	a								25	S. SNGIN	FERIA	5
			; end vertical left and and forces & MWFR									1	SEA 0363	E. E.	Mannan
• •			L=1.60 plate grip										IL A C	HLB I'	
DOL=1.60													A. C	in the second se	
DOL-1.00	,													v 19 2023	
													Ma	v 14 2023	





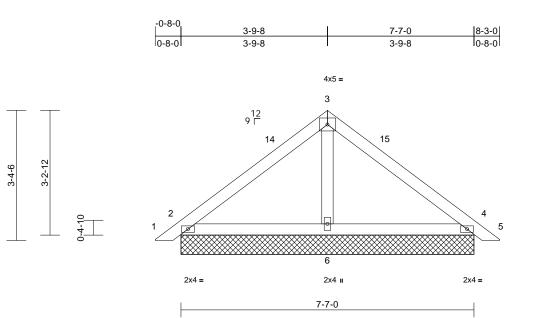
May 19,2023

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	PB1GR	Piggyback	1	2	Job Reference (optional)	158430800

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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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 63 lb	FT = 20%

LOWIDEN		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	Structura 6-0-0 oc j	I wood sheathing directly applied or purlins.
BOT CHORD	Rigid ceil bracing.	ing directly applied or 10-0-0 oc
REACTIONS	(size)	2=7-7-0, 4=7-7-0, 6=7-7-0, 7=7-7-0, 11=7-7-0
	Max Horiz	2=74 (LC 13), 7=74 (LC 13)
	Max Uplift	2=-40 (LC 14), 4=-49 (LC 15),
		7=-40 (LC 14), 11=-49 (LC 15)
	Max Grav	2=310 (LC 21), 4=310 (LC 22),
		6=252 (LC 21), 7=310 (LC 21),
		11=310 (LC 22)
FORCES	(lb) - Max Tension	imum Compression/Maximum
TOP CHORD	1-2=0/26, 4-5=0/26	2-3=-202/106, 3-4=-202/106,
BOT CHORD	2-6=-37/1	01, 4-6=-22/101
WEBS	3-6=-98/2	2
NOTES		
 1) O mbu Amura 		a stad to so the sa fellows.

- 2-ply truss to be connected together as follows: Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 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) 0-3-1 to 3-3-1, Exterior(2R) 3-3-1 to 5-8-9, Exterior(2E) 5-8-9 to 8-8-9 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
- 5) 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; P=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 8) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 4-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

13) _{N/A}

14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 LOAD CASE(S) Standard

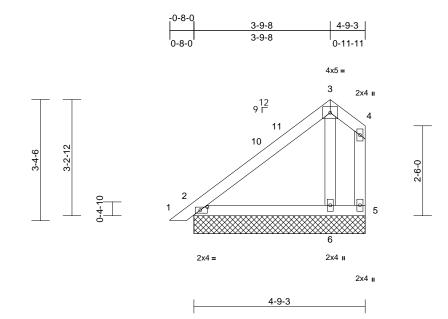




Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	PB2	Piggyback	3	1	Job Reference (optional)	0801

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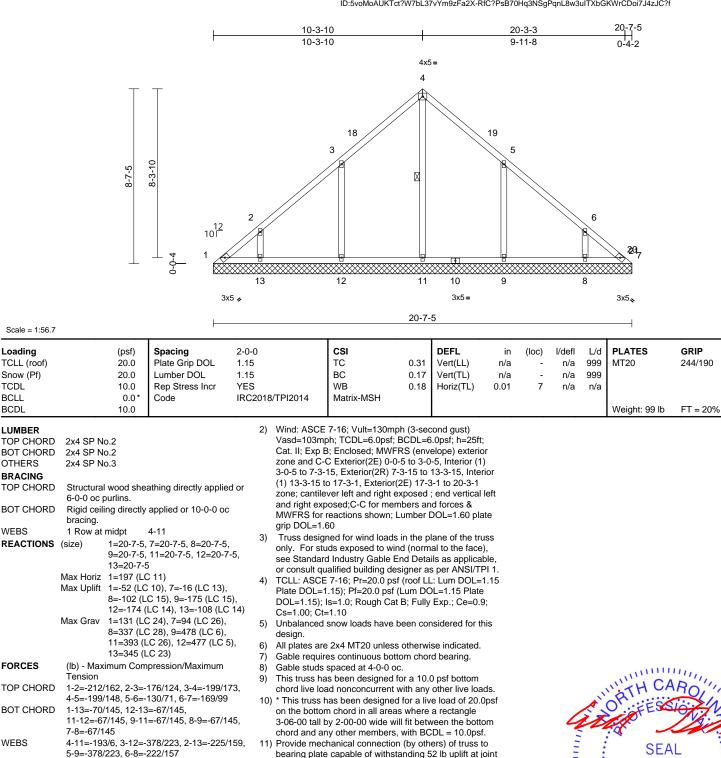
Plate Offsets (X, Y): [2:0-2-5,0-1-0]

Plate Offsets ((X, Y): [2:0-2-5,0-1-0]												
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MP	0.22 0.20 0.03	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - 2	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 24 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES	2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 5-5-8 oc purlins, ex Rigid ceiling directly bracing. (size) 2=4-9-3, § Max Horiz 2=101 (LC Max Uplift 2=-15 (LC 6=-33 (LC Max Grav 2=171 (LC 6=293 (LC (lb) - Maximum Com Tension 1-2=0/16, 2-3=-101/ 4-5=-58/65 2-6=-39/51, 5-6=-39 3-6=-137/51	applied or 10-0-0 oc 5=4-9-3, 6=4-9-3, 7=-(C 13), 7=101 (LC 13) C 14), 5=-55 (LC 24), C 14), 7=-15 (LC 14) C 21), 5=22 (LC 11), C 24), 7=171 (LC 21) hpression/Maximum 67, 3-4=-66/78, /43	5) 4-9-3 6) 7) 8) 9) 10 11	only. For sti see Standar, or consult qu TCLL: ASCE Plate DOL=' DOL=1.15); Cs=1.00; Ct: Unbalanced design. This truss ha load of 12.0 overhangs n Gable requir Gable studs This truss ha chord live loo) * This truss ha chord live loo 3-06-00 tall h	ned for wind loads uds exposed to wi d Industry Gable B Jalified building de 7-16; Pr=20.0 ps 1.15); Pf=20.0 ps 1.15); Pf=20.0 ps 1.10; Rough Ca =1.10 snow loads have as been designed psf or 1.00 times to on-concurrent witt es continuous bot spaced at 4-0-0 c as been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide w ny other members	nd (norm End Deta esigner a signer a for for of Ll (Lum DC t B; Fully been cou for great flat roof I h other li tom chor to: for a 10. with any d for a liv as where vill fit betw	al to the face ils as applica s per ANS/TI .: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 asidered for the er of min roof pad of 20.0 p: ve loads. d bearing. D psf bottom other live loa e load of 20.0 a rectangle), ble, PI 1. 1.15 9; blis 9; f live sf on ds. 0psf				WITH CA	ROLAR
this design 2) Wind: AS(Vasd=103 Cat. II; Ex zone and 3-3-1 to 4 cantilever right expo for reactio	 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) 0-3-1 to 3-3-1, Exterior(2R) 3-3-1 to 4-5-13, Exterior(2E) 4-5-13 to 5-3-12 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 				designed in accor Residential Code nd referenced sta rd Industry Piggyb nnection to base i ified building desig Standard	e sections ndard Al ack Trus truss as	R502.11.1 a ISI/TPI 1. s Connection			Antitution	K. W. M.	SEA 0363	• -



Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	V1	Valley	1	1	Job Reference (optional)	158430802

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:37 ID:5voMoAUKTct?W7bL37vYm9zFa2X-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



WEBS NOTES

FORCES

Loading

TCDL

BCLL

BCDL

OTHERS

WEBS

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

bearing plate capable of withstanding 52 lb uplift at joint 1, 16 lb uplift at joint 7, 174 lb uplift at joint 12, 108 lb uplift at joint 13, 175 lb uplift at joint 9 and 102 lb uplift at ioint 8.

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

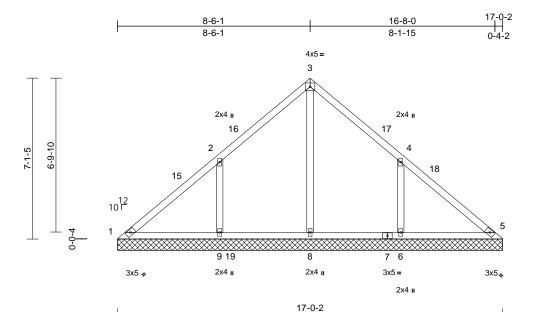




Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	V2	Valley	1	1	Job Reference (optional)	158430803

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Page: 1



Scale = 1:50.9

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20 ⁷	18/TPI2014	CSI TC BC WB Matrix-MSH	0.39 0.18 0.42	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: 76 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.3 Structural wood she 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=17-0-2 8=17-0-2 Max Horiz 1=162 (LU Max Uplift 1=-58 (LC 9=-191 (L Max Grav 1=84 (LC	, 5=17-0-2, 6=17-0-2 , 9=17-0-2, 14=17-0- C 11) C 10), 6=-185 (LC 15 ,C 14) 33), 5=1 (LC 24), 6= 3=659 (LC 23), 9=51	d or 5 , 6 2 7), 8 -515 9	 only. For stt see Standar, or consult qu TCLL: ASCE Plate DOL=' 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 l 	snow loads have es continuous be spaced at 4-0-0 as been designed an onconcurren has been designed m chord in all are by 2-00-00 wide	vind (norm End Deta esigner a: sf (roof LL f (Lum DC at B; Fully e been cor bottom chor oc. I for a 10.1 t with any ed for a liv as where will fit betw	al to the face ils as applica s per ANS//T :: Lum DOL= :L=1.15 Plate Exp.; Ce=0. nsidered for t d bearing. 0 psf bottom other live loa re load of 20. a rectangle veen the bott), ble, PI 1. 1.15 e 9; his dds. opsf om					
FORCES	(lb) - Maximum Con Tension	()	1	0) Provide med	ny other member chanical connecti e capable of with	on (by oth	ers) of truss	to					
TOP CHORD	1-2=-105/378, 2-3=- 4-5=-146/299	22/325, 3-4=0/304,		1, 191 lb upl	ift at joint 9 and 1	85 lb upli	ft at joint 6.	Joint					
BOT CHORD		86/76, 6-8=-186/76,	1	Ínternational	designed in acco Residential Cod nd referenced sta	e sections	s R502.11.1 a	and				WITH CA	11111
WEBS	3-8=-478/0, 2-9=-39	5/223, 4-6=-395/221	L	OAD CASE(S)								OR FESS	ROY
NOTES				.,							3	ON JESS	A
 Unbalance this design 	ed roof live loads have	been considered for									53	in the second	
2) Wind: ASC Vasd=103 Cat. II; Ex	 CE 7-16; Vult=130mph mph; TCDL=6.0psf; B p B; Enclosed; MWFR C-C Exterior(2E) 0-0-5	CDL=6.0psf; h=25ft; S (envelope) exterio										SEA 0363	

3-0-5 to 5-6-6, Exterior(2R) 5-6-6 to 11-6-6, Interior (1) 11-6-6 to 13-7-14, Exterior(2E) 13-7-14 to 16-7-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	V3	Valley	1	1	Job Reference (optional)	158430804

Scale = 1:41.6 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

TOP CHORD

BOT CHORD

this design.

WFBS

NOTES

1)

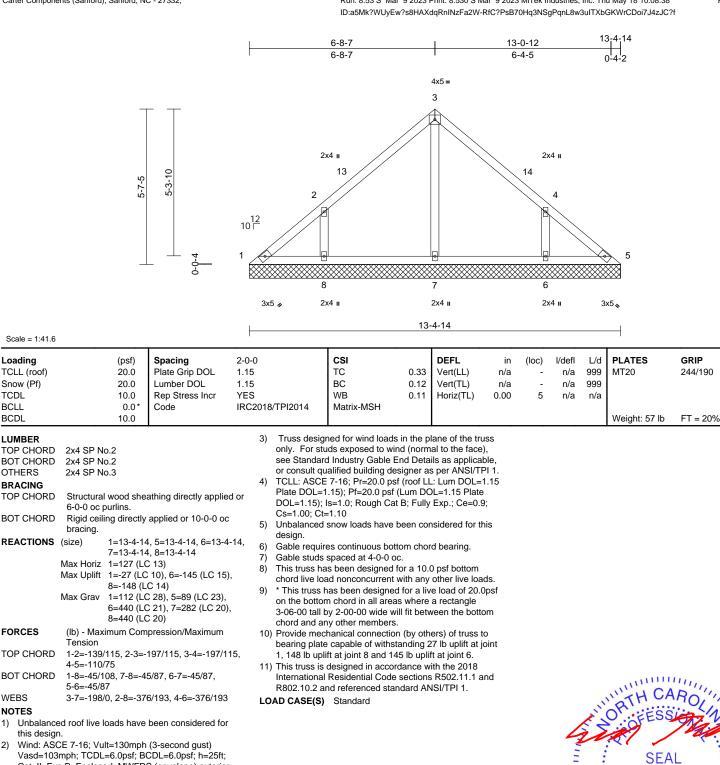
TCDL

BCLL

BCDL

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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) 0-0-5 to 2-8-12, Interior (1) 2-8-12 to 3-8-12, Exterior(2R) 3-8-12 to 9-8-12, Interior (1) 9-8-12 to 10-5-3, Exterior(2E) 10-5-3 to 13-5-3 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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



G mmm May 19,2023

036322

VIIIIIIIIIII

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	V4	Valley	1	1	Job Reference (optional)	158430805

4-10-14

4-10-14

Carter Components (Sanford), Sanford, NC - 27332

Scale = 1:33.5 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

REACTIONS

TCDL

BCLL

BCDL

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4x5 =

9-5-9

4-6-12



GRIP

244/190

FT = 20%

2 9 10 4-1-5 3-9-12 10 Г 3 4 3x5 🍫 2x4 II 3x5 💊 9-9-11 Spacing 2-0-0 CSI DEFL l/defl L/d PLATES in (loc) 20.0 Plate Grip DOL 1.15 TC 0.47 Vert(LL) n/a n/a 999 MT20 BC 1 15 Lumber DOL 0.44 Vert(TL) n/a n/a 999 10.0 Rep Stress Incr YES WB 0.19 Horiz(TL) 0.01 4 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MSH Weight: 37 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 Unbalanced snow loads have been considered for this 5) desian. Structural wood sheathing directly applied or Gable requires continuous bottom chord bearing. 6) 7) Gable studs spaced at 4-0-0 oc. Rigid ceiling directly applied or 6-0-0 oc 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 1=9-9-11, 3=9-9-11, 4=9-9-11 * This truss has been designed for a live load of 20.0psf Max Horiz 1=-92 (LC 10) on the bottom chord in all areas where a rectangle 1=-54 (LC 21), 3=-54 (LC 20), 3-06-00 tall by 2-00-00 wide will fit between the bottom 4=-112 (LC 14) chord and any other members. 1=94 (LC 20), 3=94 (LC 21), 4=796 10) Provide mechanical connection (by others) of truss to

Max Grav (LC 21) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-119/387, 2-3=-119/387 BOT CHORD 1-4=-221/176, 3-4=-221/176 WFBS 2-4=-616/277 NOTES

(psf)

20.0

10.0

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

2x4 SP No.3

bracing.

Max Uplift

(size)

9-9-11 oc purlins.

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

Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 6-10-0, Exterior(2E) 6-10-0 to 9-10-0 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.

bearing plate capable of withstanding 54 lb uplift at joint 1, 54 lb uplift at joint 3 and 112 lb uplift at joint 4. 11) This truss is designed in accordance with the 2018

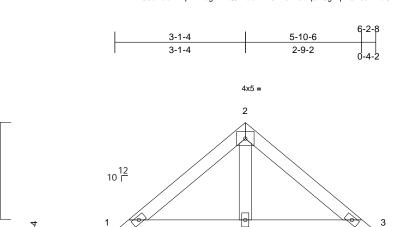
International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. LOAD CASE(S) Standard





Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	V5	Valley	1	1	Job Reference (optional)	158430806

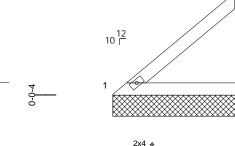
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4 2x4 🛚

6-2-8

2x4 💊



2-3-10

2-7-5



Scale = 1:27.4													
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		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	IRC2018	3/TPI2014	Matrix-MP								
BCDL	10.0											Weight: 23 lb	FT = 20%
TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-2-8 oc purlins.	0 7 11	9)	Gable stud This truss f chord live l * This truss	ires continuous b s spaced at 4-0-0 nas been designe oad nonconcurrer has been design om chord in all are	oc. d for a 10.0 nt with any ned for a liv) psf bottom other live loa e load of 20.0						
BOT CHORD	Rigid ceiling directly bracing. (size) 1=6-2-8, 3 Max Horiz 1=-57 (LC	3=6-2-8, 4=6-2-8		3-06-00 tal chord and a	I by 2-00-00 wide any other membe echanical connect	will fit betv rs.	veen the botto						

- bearing plate capable of withstanding 3 lb uplift at joint 3 and 54 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



Page: 1

818 Soundside Road Edenton, NC 27932

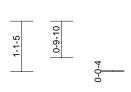
F Max Horiz 1=-57 (LC 10) Max Uplift 3=-3 (LC 10), 4=-54 (LC 14) 1=100 (LC 20), 3=100 (LC 21), Max Grav 4=422 (LC 21) FORCES (Ib) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-88/169, 2-3=-88/169 BOT CHORD 1-4=-124/126, 3-4=-124/126 2-4=-286/155 WFBS NOTES Unbalanced roof live loads have been considered for 1) this design. 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right

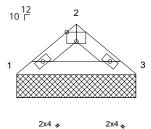
- exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face),
- see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	V6	Valley	1	1	I58430807 Job Reference (optional)	

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3x5 =



2-7-5

Scale = 1:25.2

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

Loading (ps) Spacing 2-0-0 CSI DEFL in (loc) ldel Lid PLATES GRP TCLL (odd) 200 Plate Grp DOL 1.15 BC 0.05 Veri[TL) n/a - n/a 959 Plates GRP TCDL 10.0 Rep Stress fine YES WB 0.00 WB 0.00 Weight: 8 ib FT = 20% UMBER 10.0 2-44 PN 0.2 ERACING This truss has been designed for a 10.0 pf bottom 3 n/a n/a Neight: 8 ib FT = 20% UMBER 2-7.5 or purifies Figld calling directly applied or 10-0-0 cc 10 This truss has been designed for a 10.0 pf bottom 0 10 10 10 100 10 100 10 100 10 11 100 10 11		, .). [<u></u> e <u>_</u> . <u>,</u> go]											
 TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BOT CHORD Structural wood sheathing directly applied or 2-7-5 or putrins. BOT CHORD Rigid ceiling directly applied or 10-0-0 or bracing. BOT CHORD Rigid ceiling directly applied or 10-0-0 or bracing. BOT CHORD Rigid ceiling directly applied or 10-0-0 or bracing. Structural wood sheathing directly applied or 10-0-0 or bracing. Size) 1=2-7-5, 3=2-7-5 Max Horiz 1=22 (LC 11) Max Upilit 1=22 (LC 11) Max Upilit 1=0 (LC 14), 3=-9 (LC 15) Max Grav 1=118 (LC 20), 3=118 (LC 21). FORCES [Ib) - Maximum Compression/Maximum Tension TOP CHORD 1:2=-144/64, 2:3=-144/64 (2:3=-146 (2:3=-166 (2:3=-160) (2:3	TCLL (roof) Snow (Pf) TCDL BCLL	20.0 20.0 10.0 0.0*	Plate Grip DOL Lumber DOL Rep Stress Incr	1.15 1.15 YES	TC BC WB	0.05	Vert(LL) Vert(TL)	n/a n/a	-	n/a n/a	999 999	MT20	244/190
 5) Unbalanced snow loads have been considered for this design. 6) Gable requires continuous bottom chord bearing. 	TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD REACTIONS (s M M FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Unbalanced this design. 2) Wind: ASCE Vasd=103m Cat. II; Exp Zone and C- exposed ; er members ar Lumber DOI 3) Truss desig only. For stu- see Standar or consult qu 4) TCLL: ASCE Plate DOL=: DOL=1.15); Cs=1.00; Ct 5) Unbalanced design.	2x4 SP No.2 Structural wood she 2-7-5 oc purlins. Rigid ceiling directly bracing. size) 1=2-7-5, 3 Aax Horiz 1=22 (LC Aax Uplift 1=-9 (LC Aax Grav 1=118 (LC (lb) - Maximum Com Tension 1-2=-144/64, 2-3=-1 1-3=-35/104 Ar oof live loads have E 7-16; Vult=130mph ph; TCDL=6.0psf; B/ B; Enclosed; MWFR C Exterior(2E) zone nd forces & MWFRS L=1.60 plate grip DC gned for wind loads in uds exposed to wind rd Industry Gable En ualified building desi; E 7-16; Pr=20.0 psf (L Is=1.0; Rough Cat E L=1.10 I snow loads have be	applied or 10-0-0 or 3=2-7-5 11) 14), 3=-9 (LC 15) C 20), 3=118 (LC 21 pression/Maximum 44/64 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio ; cantilever left and r ght exposed;C-C for for reactions shown DL=1.60 n the plane of the trul (normal to the face) d Details as applicat gner as per ANSI/TF roof LL: Lum DOL= 1.5 Plate 3; Fully Exp.; Ce=0.9 pen considered for th	8) This t chord 9) * This ed or on the 3-06- c 0) Provie bearing and 9 11) This t Intern) R802 LOAD CA r r sr right ; iss), ble, PI 1. 1.15	russ has been designed live load nonconcurren truss has been design bottom chord in all are 0 tall by 2-00-00 wide and any other member de mechanical connecti 1g plate capable of with 1b uplift at joint 3. russ is designed in acct ational Residential Cool 10.2 and referenced st	d for a 10.0 at with any ed for a liv eas where will fit betw rs. ion (by oth standing s ordance w de sections	other live loa re load of 20.0 a rectangle veen the botto ers) of truss t b lo uplift at jo ith the 2018 \$ R502.11.1 a	Dpsf om oo int 1				ORTH CA ORTESS SEA 0363	EER A

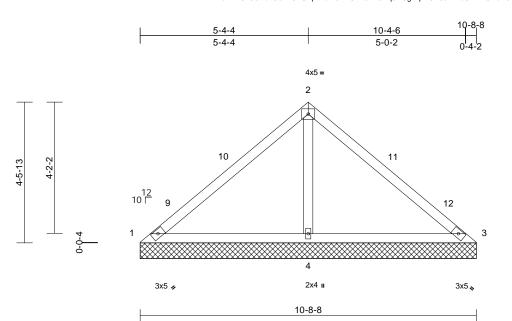
818 Soundside Road Edenton, NC 27932

May 19,2023

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	V11	Valley	1	1	Job Reference (optional)	158430808

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Page: 1



- ·		
Scale	=	1:36.7

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.57 0.50 0.25	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 41 lb	GRIP 244/190 FT = 20%
	10-0-0 oc purlins. Rigid ceiling directl bracing. (size) 1=10-8-6 Max Horiz 1=101 (L Max Uplift 1=-71 (L 4=-134 (Max Grav 1=77 (LC (LC 21)	C 21), 3=-71 (LC 20), LC 14) C 20), 3=77 (LC 21), 4	6) 7) 8) 9)	Plate DOL=1 DOL=1.15); Cs=1.00; Ct Unbalancet design. Gable requir Gable studs This truss ha chord live loa * This truss f on the bottor 3-06-00 tall t chord and ar) Provide mec bearing plate	snow loads have h es continuous bott spaced at 4-0-0 or is been designed f ad nonconcurrent v has been designed in chord in all area by 2-00-00 wide wi hy other members. hanical connection e capable of withst	Lum DC B; Fully been cor om chor C. or a 10.0 with any I for a liv s where II fit betw h (by oth anding 7	DL=1.15 Plate Exp.; Ce=0.9 Insidered for the d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t '1 lb uplift at j	ds. Opsf om					
FORCES TOP CHORD BOT CHORD	Tension 1-2=-140/443, 2-3= 1-4=-257/195, 3-4=		11) This truss is International	t at joint 3 and 134 designed in accord Residential Code nd referenced star	dance w sections	ith the 2018 R502.11.1 a	nd					
WEBS NOTES 1) Unbalance	2-4=-699/308 ed roof live loads have	e been considered for		DAD CASE(S)	Standard							mmm	11111

1) this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 7-8-13, Exterior(2E) 7-8-13 to 10-8-13 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

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. Vanananan anninnana. SEAL 036322 G minin May 19,2023



Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E
23050027-01	V13	Valley	1	1	I58430809 Job Reference (optional)

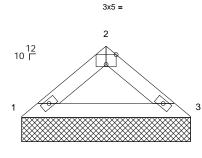
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3-2-0

1-4-15



1-2-2 1-5-13 0-0-4 2x4 🍫



1-9-1

1-9-1

2x4 💊

3-6-2

Scale = 1:23.9

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	Spacing2-CPlate Grip DOL1.1Lumber DOL1.1Rep Stress IncrYECodeIRC	5 5	BC	0.09 0.08 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 11 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING TOP CHORD Structural wood shea 3-6-2 oc purlins.	: 10) : 14), 3=-12 (LC 15) C 20), 3=164 (LC 21) pression/Maximum	 8) This truss ha chord live loa 9) * This truss h on the bottor 3-06-00 tail li chord and ar 10) Provide mec bearing plate 1 and 12 lb u 11) This truss is International 	spaced at 4-0-0 oc. as been designed for ad nonconcurrent with has been designed for n chord in all areas v by 2-00-00 wide will f ny other members. thanical connection (I e capable of withstan uplift at joint 3. designed in accorda Residential Code se nd referenced standa Standard	th any or a liv where fit betv by oth iding 1 ince w ections	other live load e load of 20.0 a rectangle veen the botto ers) of truss to 2 lb uplift at jo ith the 2018 R502.11.1 a	ipsf om o pint				vveignt: 11 lb	r I = 20%
 NOTES Unbalanced roof live loads have this design. Wind: ASCE 7-16; Vult=130mph Vasd=103mph; TCDL=6.0ps; BC Cat. II; Exp B; Enclosed; MWFR3 zone and C-C Exterior(2E) zone; exposed ; end vertical left and rig members and forces & MWFRS Lumber DOL=1.60 plate grip DO Truss designed for wind loads ir only. For studs exposed to wind see Standard Industry Gable Enr or consult qualified building desig TCLL: ASCE 7-16; Pr=20.0 psf (L DOL=1.15); Is=1.0; Rough Cat B Cs=1.00; Ct=1.10 Unbalanced snow loads have be design. Gable requires continuous bottor 	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and right ght exposed;C-C for for reactions shown; IL=1.60 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 B; Fully Exp.; Ce=0.9; een considered for this								No. Contraction of the second	SEA 0363	EER RUU

818 Soundside Road Edenton, NC 27932

May 19,2023

Job	Truss	Truss Type	Qty	Ply	12 Serenity-Roof-B330-E	
23050027-01	V21	Valley	1	1	Job Reference (optional)	158430810

3-6-10

3-6-10

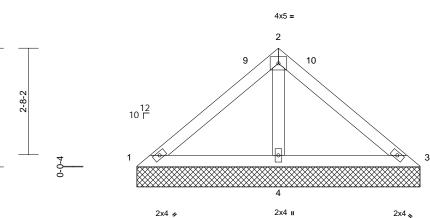
Carter Components (Sanford), Sanford, NC - 27332,

2-11-13

Run: 8.53 S Mar 9 2023 Print: 8.530 S Mar 9 2023 MiTek Industries, Inc. Thu May 18 10:08:40 ID:Zy5r2MN??wL6aNY3Bctlj8zFZdZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



6-9-3 3-2-8



7-1-5

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	20.0 P 20.0 Lu 10.0 R	late Grip DOL umber DOL tep Stress Incr	2-0-0 1.15 1.15 YES IRC2018	/TPI2014	CSI TC BC WB Matrix-MP	0.25 0.25 0.08	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 26 lb	GRIP 244/190 FT = 20%
	2x4 SP No.3 Structural wood sheathi 7-1-5 oc purlins. Rigid ceiling directly app bracing. (size) 1=7-1-5, 3=7 Max Horiz 1=66 (LC 13) Max Uplift 1=-15 (LC 21 4=-71 (LC 14) Max Grav 1=104 (LC 20 4=518 (LC 20)	plied or 6-0-0 oc -1-5, 4=7-1-5), 3=-15 (LC 20), i) 0), 3=104 (LC 21), 0)	5) or 6) 7) 8) 9)	Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced Gable require Gable studs s This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Provide meck	7-16; Pr=20.0 psf .15); Pf=20.0 psf (I s=1.0; Rough Cat I .1.10 snow loads have be es continuous botto spaced at 4-0-0 oc s been designed for d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. nanical connection capable of withsta	Lum DC B; Fully een cor om chor or a 10.0 rith any for a liv where fit betw (by oth	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 to	; is ds. psf m					
FORCES TOP CHORD BOT CHORD WEBS NOTES	(lb) - Maximum Compre Tension 1-2=-85/221, 2-3=-85/22 1-4=-156/148, 3-4=-156 2-4=-367/194	21	,	This truss is International	at joint 3 and 71 lb designed in accord Residential Code s ad referenced stand Standard	ance w	ith the 2018 R502.11.1 ar	nd					

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) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 4-1-10, Exterior(2E) 4-1-10 to 7-1-10 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

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.

TH CAS ORTH annunnin ann CHILLING WIND SEAL 036322 G minin May 19,2023



