

Trenco 818 Soundside Rd Edenton, NC 27932

Re: P02233-24936 997 Serenity

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Lumber 2383 (Dunn, NC).

Pages or sheets covered by this seal: I73354142 thru I73354186

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844



May 8,2025

# Pace, Adam

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

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	A01	Common	4	1	Job Reference (optional)	173354142

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:41 ID:pr4A4?lavojbgrPBjiG1vuzJXsd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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		L	9-	4-13		18-6-3		1	2	27-11-0		i	
Scolo - 1:74 2			9-	4-13	I	9-1-5		I		9-4-13		1	
Plate Offsets	(X Y) [2:0-3-9 0-0-1]	[10:0-3-9 0-0-1]											
	(7, 1). [2:000,001],	[10.0 0 0,0 0 1]	-					-					
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MS	0.63 0.90 0.17	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.29 -0.45 0.06	(loc) 12-14 12-14 10	l/defl >999 >738 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 134 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep Left 2x4 SP No.3 1 1-6-0 Structural wood shea 3-4-15 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 1 Max Horiz 2=-94 (LC Max Uplift 2=-110 (LI Max Grav 2=1278 (L	t* 12-8,14-4:2x4 SP I-6-0, Right 2x4 SP athing directly applie applied or 10-0-0 o 10=0-5-8 : 17) C 12), 10=-110 (LC C 2), 10=1277 (LC	4) 5) No.3 6) ed or c 7) 8) 13) 2) LC	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Provide mec bearing plate 2 and 110 lb This truss is International R802.10.2 au ATTIC SPAC UNINHABITA	Is been designed ad nonconcurren nas been designen n chord in all are yy 2-00-00 wide e yy other member hanical connecti e capable of with uplift at joint 10. designed in accc Residential Cod nd referenced st CE SHOWN IS D ABLE. Standard	f for a 10.0 t with any ad for a live as where will fit betw s, with BC on (by oth standing 1 ordance w e sections andard AN ESIGNED	D psf bottom other live load e load of 20. a rectangle veen the bott iDL = 10.0ps ers) of truss i 10 lb uplift a ith the 2018 c R502.11.1 a ISI/TPI 1. AS	ads. Opsf om f. to t joint and					
FORCES	(lb) - Maximum Com Tension	pression/Maximum											
TOP CHORD	1-2=0/32, 2-4=-1963 6-8=-1805/213, 8-10	8/185, 4-6=-1806/21 )=-1962/185, 10-11=	3, ⊧0/32										
BOT CHORD	2-14=-167/1699, 12- 10-12=-94/1698	14=-28/1166,											
WEBS	6-12=-100/733, 8-12 6-14=-100/735, 4-14	=-384/160, =-384/160										minin	11111
NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=91r II; Exp B; and C-C B 13-11-8, B 16-11-8 tc exposed ; members Lumber D 3) Building D verifying B requirement	ed roof live loads have n. CE 7-16; Vult=115mph mph; TCDL=6.0psf; BCI Enclosed; MWFRS (en Exterior(2E) -1-2-8 to 1- Exterior(2E) 1-1-2-8 to 1- Exterior(2E) 1-2-8 to 1- Exterior(2E) 1-2-8 to 1- end vertical left and rig and forces & MWFRS IOL=1.60 plate grip DO Designer/Project engine Rain Load = 5.0 (psf) co ents specific to the use	been considered fo (3-second gust) DL=3.0psf; h=25ft; (velope) exterior zor 9-8, Interior (1) 1-9- 16-11-8, Interior (1) er left and right ght exposed;C-C for for reactions shown L=1.60 wer responsible for overs rain loading of this truss compor	r Cat. 1e -8 to ; ;								in the second second	SEA 0578	RO N 87 ACE N 8,2025



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

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	A01H	Common	3	1	Job Reference (optional)	173354143

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:42 ID:pr4A4?lavojbgrPBjiG1vuzJXsd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





	9-4-13	15-11-0	18-6-3	27-11-0	1
Scale = 1:75.3	9-4-13	6-6-3	2-7-3	9-4-13	

Plate Offsets (X, Y): [2:0-3-9,0-0-1],	[7:0-3-0,Edge], [12:0-3-9,0-0	)-1], [14:0-1-8,0-2-0], [16:0-1-8,0-2-0]
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<b>Loading</b> TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 NO IRC2018	3/TPI2014	CSI TC BC WB Matrix-MS	0.60 0.93 0.49	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.23 -0.35 0.05	(loc) 14-23 16-19 12	l/defl >999 >957 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 162 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 *Excep 2x4 SP No.3 *Excep Left 2x4 SP No.3 1 1-6-0 Structural wood shee 3-9-1 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 1	t* 16-14:2x8 SP DS t* 14-8,16-6:2x4 SP -6-0, Right 2x4 SP athing directly applie applied or 10-0-0 or 2=0-5-8	3) No.2 4) No.3 5) ed or c 6) 7)	Building Desiverifying Rain requirements This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Provide mech bearing plate 2 and 110 lb This truss is	igner/Project engi n Load = 5.0 (psf) s specific to the us is been designed ad nonconcurrent has been designed n chord in all area by 2-00-00 wide w yy other members. hanical connection e capable of withst uplift at joint 12. designed in accor	neer res covers r se of this for a 10.0 with any d for a liv s where ill fit betw , with BC n (by oth anding 1 dance w	consible for ain loading truss compoi o psf bottom other live loa e load of 20.1 a rectangle veen the bott DL = 10.0psi ers) of truss t 10 lb uplift at	nent. ads. Opsf om f. to t joint						
FORCES TOP CHORD	Max Horiz 2=-94 (LC Max Uplift 2=-110 (L Max Grav 2=1287 (L (lb) - Maximum Com Tension 1-2=0/32, 2-4=-1959 6-7=-104/34, 7-8=-11 10_12=-1959/482 12	17) C 12), 12=-110 (LC C 2), 12=1287 (LC pression/Maximum /182, 4-6=-1806/20 04/34, 8-10=-1806/2 213=0/22	13) 2) 8) LC 11, 201,	International R802.10.2 ar ATTIC SPAC UNINHABIT/ DAD CASE(S)	Residential Code nd referenced star CE SHOWN IS DE ABLE. Standard	sections ndard AN SIGNED	R502.11.1 a ISI/TPI 1. AS	and						
BOT CHORD	2-16=-158/1692, 14- 12-14=-91/1692	16=-45/1332,												
WEBS	8-14=-79/647, 10-14 6-16=-79/647, 4-16=	=-381/159, -381/159, 6-8=-128	4/187									TH CA	Ro	
NOTES 1) Unbalance this design 2) Wind: AS( Vasd=91n II; Exp B; and C-CE 13-11-8, E	ed roof live loads have n. CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior(2E) -1-2-8 to 1- Exterior(2R) 13-11-8 to 02 0.4 9 conserver setting 20 1.9 conserver setting	been considered fo (3-second gust) DL=3.0psf; h=25ft; ( velope) exterior zor 9-8, Interior (1) 1-9- 16-11-8, Interior (1)	or Cat. ne -8 to )								in the second se	SEAL 0578	977 37	and the second s

13-11-8, Exterior(2R) 13-11-8 to 16-11-8, Interior (1) 16-11-8 to 29-1-8 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 SEAL 057887

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	A01HA	Common	2	1	Job Reference (optional)	173354144

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:42 ID:pr4A4?lavojbgrPBjiG1vuzJXsd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





	9-4-13	15-11-0	18-6-3	27-11-0	1
Scale = 1:75.3	9-4-13	6-6-3	2-7-3	9-4-13	

				-											
<b>Loading</b> TCLL (roof) TCDL BCLL	(p 20 10	osf) 0.0 0.0 0.0*	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr	2-3-8 1.25 1.25 NO		CSI TC BC WB	0.68 0.77 0.56	<b>DEFL</b> Vert(LL) Vert(CT) Horz(CT)	in -0.25 -0.38 0.05	(loc) 14-23 16-19 12	l/defl >999 >888 n/a	L/d 240 180 n/a	<b>PLATES</b> MT20	<b>GRIP</b> 244/190	
BCDL	1	0.0	Code	IRC20	18/TPI2014	Matrix-MS							Weight: 162 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: AS( Vasd=91n II; Exp B; and C-C E 13-11-8, E 16-11-8 tc exposed ; members Lumber D	2x4 SP No.2 2x4 SP No.3 *1 Left 2x4 SP No.3 *1 Left 2x4 SP No.3 *1 Left 2x4 SP No.3 *1 Commonstrain 2 Structural wood 3-4-8 oc purlin Rigid ceiling (size) 2=0 Max Horiz 2=-1 Max Uplift 2=-1 Max Grav 2=1. (lb) - Maximur Tension 1-2=0/37, 2-4= 6-7=-118/38, 7 10-12=-2245/2 2-16=-181/193 12-14=-102/19 8-14=-89/738, 6-16=-89/738, 6-16=-89/738, 6-16=-89/738, ced roof live loads n. CE 7-16; Vult=11 nph; TCDL=6.0pp Enclosed; MWFF Exterior(2E) -1-2- Exterior(2E) 1-2- Exterior(2E) 1-2-	Except Except 2.3 - 1 od shea is. irectly : -5-8, 1: 108 (LC 126 (LC 474 (Lt n Comp 2245/, -7-811 208, 12 208, 12- 239, 14-1 208, 12 239, 14-1 208, 12 239, 14-1 208, 12 239, 14-1 208, 12 339 10-14= 	* 16-14:2x8 SP DSS * 14-8,16-6:2x4 SP I -6-0, Right 2x4 SP N thing directly applied applied or 10-0-0 oc 2=0-5-8 2 17) 2 12), 12=-126 (LC 1 C 2), 12=-126 (LC 1 C 2), 12=-1474 (LC 2 pression/Maximum 208, 4-6=-2069/230 8/38, 8-10=-2069/230 8/38, 8-10=-2069/230 8/39, 8-10=-2069/230 8/39, 8-10=-2069/230 8/39, 8-10=-2069/230 8/39, 8-10=-2069/230 8/39, 8-10=-2069/230 8/39, 8-10=-2069/230 8/39, 8-10=-2069/230 8/39, 8-10=-2069/230 8/39, 8-10=-2069/20000000000000000000000000000000000	3 No.2 4 Io.3 5 dor 6 7 3) 8 , 30, /214 at. 3 to	<ul> <li>Building Des verifying Raii requirements</li> <li>This truss ha chord live loa</li> <li>* This truss h on the bottor 3-06-00 tall b chord and ar</li> <li>Provide mec bearing plate 2 and 126 lb</li> <li>This truss is International R802.10.2 ai</li> <li>ATTIC SPAC UNINHABIT/</li> <li>CAD CASE(S)</li> </ul>	igner/Project engind Load = 5.0 (psf) c specific to the use s been designed fo in chord in all areas y 2-00-00 wide will y other members, to nanical connection capable of withsta uplift at joint 12. designed in accord: Residential Code s and referenced stanc E SHOWN IS DES BLE. Standard	eer resp overs r of this r a 10.0 ith any fit betw with BC (by oth ance w ections dard AN SIGNED	ponsible for ain loading truss compor ) psf bottom other live load e load of 20.0 a rectangle veen the botto DL = 10.0psf 26 lb uplift at ith the 2018 R502.11.1 a ISI/TPI 1. AS	nent. ds. )psf om joint nd				SEAL 05788	BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINIA BOLINI	

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May 8,2025

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	A02	Common	6	1	Job Reference (optional)	173354145

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:43 ID:4\_n?QB7AsPgNB6ISgSfk3YzJY1A-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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May 8,2025

818 Soundside Road Edenton, NC 27932





	9-4-13	18-6-3	27-11-0	
Scale = 1:74.2	9-4-13	9-1-5	9-4-13	
Plate Offsets (X X): [2:0-3-9 0-0-1] [9:0-3-9 0-0-1]				

	, , <u>,</u> <u>,</u> <u>,</u> <u>,</u> <u>,</u>	2											
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC2018	3/TPI2014	<b>CSI</b> TC BC WB Matrix-MS	0.63 0.90 0.17	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.28 -0.45 0.06	(loc) 10-12 10-12 9	l/defl >999 >747 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 132 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS FORCES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep Left 2x4 SP No.3 - 1 1-6-0 Structural wood shea 3-4-2 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8,9 Max Horiz 2=101 (LC Max Uplift 2=-110 (LI Max Grav 2=1279 (L (lb) - Maximum Com	t* 10-7,12-4:2x4 SP I-6-0, Right 2x4 SP f athing directly applie applied or 10-0-0 oc 9= Mechanical C 12) C 12), 9=-94 (LC 13) .C 2), 9=-94 (LC 2) pression/Maximum	4) 5) No.3 No.3 6) d or 7) ; 8) (	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Refer to gird. Provide mec bearing plate 9 and 110 lb This truss is International R802.10.2 ar	s been designed for da nonconcurrent w has been designed in chord in all areas y 2-00-00 wide will yo other members, er(s) for truss to tru- hanical connection capable of withsta uplift at joint 2. designed in accord Residential Codes and referenced stand Standard	or a 10. vith any for a liv s where I fit betw with BC lass conr (by oth unding S lance w sections dard AN	) psf bottom other live loa e load of 20.0 a rectangle veen the bott DL = $10.0$ psf hections. ers) of truss t 4 lb uplift at j ith the 2018 R502.11.1 a ISI/TPI 1.	ids. Dpsf om f. ro oint					
TOP CHORD BOT CHORD WEBS	(lb) - Maximum Compression/Maximum Tension 2D 1-2=0/32, 2-4=-1966/185, 4-6=-1809/214, 6-7=-1813/221, 7-9=-1970/193 2D 2-12=-173/1701, 10-12=-36/1169, 9-10=-114/1706 6-10=-102/740, 7-10=-389/161, 6-12=-100/734, 4-12=-384/160												
NOTES 1) Unbalance this design 2) Wind: ASC Vasd=91m II; Exp B; I and C-C E 13-11-8, E 16-11-8 to exposed; Lumber DO 3) Building D verifying R requirement	ed roof live loads have h. CE 7-16; Vult=115mph hph; TCDL=6.0psf; BCI Enclosed; MWFRS (en exterior(2E) -1-2-8 to 1- exterior(2E) 1-2-8 to 1-	been considered for (3-second gust) DL=3.0psf; h=25ft; C welope) exterior zon -9-8, Interior (1) 1-9-i 16-11-8, Interior (1) /er left and right sht exposed; C-C for for reactions shown; L=1.60 er responsible for overs rain loading of this truss compon	e 8 to ent.								A A A A A A A A A A A A A A A A A A A	SEAL 05788	ROX 2 R

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	A03	Нір	1	1	Job Reference (optional)	173354146

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:43 ID:coDcCr6Y55YWZyjG7k8VWLzJY1B-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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			14-5-9	
1	6-11-5	13-5-7	20-11-11	27-11-0
	6-11-5	6-6-1	6-6-1	6-11-5
			1-0-3	

# Scale = 1:75.3 Plate Offsets (X, Y): [2:0-3-13,0-0-1], [6:0-3-0,0-2-0], [7:0-3-0,0-2-0], [10:0-3-13,0-0-1]

														_
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC2018	3/TPI2014	<b>CSI</b> TC BC WB Matrix-MS	0.54 0.61 0.57	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.20 0.07	(loc) 14-15 14-15 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 147 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Exc Left 2x4 SP No.3 1-6-0	ept* 4-15,8-11:2x4 SF - 1-6-0, Right 2x4 SP	2) <sup>D</sup> No.3 <sup>D</sup> No.3	Wind: ASCE Vasd=91mph II; Exp B; End and C-C Exte 13-7-3, Exter 14-3-13 to 18 cantilever left	7-16; Vult=115mp ; TCDL=6.0psf; Bic closed; MWFRS (e prior(2E) -1-2-8 to ior(2E) 13-7-3 to 1 -6-12, Interior (1) - and right expose	h (3-sec CDL=3.0 nvelope 1-9-8, Ir 4-3-13, 18-6-12	ond gust) Opsf; h=25ft; exterior zon terior (1) 1-9 Exterior(2R) to 27-11-0 zon ertical left ar	Cat. ne -8 to one;						
BRACING TOP CHORD	Structural wood si 3-8-6 oc purlins, e 2-0-0 oc purlins (5	neathing directly appli xcept -2-12 max.): 6-7.	ied or	right exposed for reactions DOL=1.60	l;C-C for members shown; Lumber D	and for OL=1.60	ces & MWFF plate grip	RS						
BOT CHORD	Rigid ceiling direc bracing.	ly applied or 10-0-0 c	oc 3)	Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading										
REACTIONS	(size) 2=0-5-8 Max Horiz 2=99 (L Max Uplift 2=-108 Max Grav 2=1191	, 10= Mechanical C 12) (LC 12), 10=-93 (LC (LC 1), 10=1115 (LC	4) 5) 13)	requirements Provide adec This truss ha chord live loa	specific to the use uate drainage to p s been designed fo d nonconcurrent v	e of this prevent v or a 10.0 vith any	truss compore vater ponding ) psf bottom other live load	nent. g. Ids.						
FORCES	(lb) - Maximum Co Tension	mpression/Maximum	, 0) I	on the botton 3-06-00 tall b	on the bottom chord in all areas where a rectangle									
TOP CHORD	1-2=0/32, 2-4=-18 6-7=-1109/168, 7- 8-10=-1843/164	35/162, 4-6=-1344/16 8=-1344/168,	54, 7) 8)	chord and an Refer to girde	y other members. er(s) for truss to tru	ISS CONF	ections.	'n						
BOT CHORD	2-15=-164/1573, <sup>-</sup> 13-14=-27/1109, <sup>-</sup>	4-15=-164/1573, 1-13=-84/1581,	0)	bearing plate 10 and 108 lk	capable of withsta uplift at joint 2.	anding 9	3 lb uplift at j	oint				Multi CA	Politic	
WEBS	4-15=0/248, 4-14= 7-13=-35/354, 8-1	575/158, 6-14=-35/3 3=-585/160, 8-11=0/2	9) 350, 249	Inis truss is International R802.10.2 ar	Residential Code	ance w sections dard AN	th the 2018 R502.11.1 a ISI/TPI 1.	and			J.	OFFERS	ON No.	
NOTES 1) Unbalance this design	ed roof live loads ha	) Graphical pu or the orienta bottom chord	rlin representation tion of the purlin a	does no long the	t depict the stop and/or	size			C	the c	in gige			

this design.

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	A04	Нір	1	1	Job Reference (optional)	173354147

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:43 ID:YBLNdX8odioEoGtfE9AzbmzJY19-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







1	5-3-5	10-1-7	17-9-9	22-7-11	27-11-0
Scale = 1:66.4	5-3-5	4-10-1	7-8-3	4-10-1	5-3-5

# Plate Offsets (X, Y): [2:0-3-13,0-0-1], [5:0-3-0,0-2-0], [6:0-3-0,0-2-0], [9:0-3-9,0-1-5]

Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC201	8/TPI2014	<b>CSI</b> TC BC WB Matrix-MS	0.77 0.76 0.18	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.15 -0.29 0.07	(loc) 11-13 11-13 9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 146 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	2x4 SP No.2 *Exca 2x4 SP No.2 *Exca 2x4 SP No.3 *Exca Left 2x4 SP No.3 *Exca Left 2x4 SP No.3 - 1-6-0 Structural wood sh 3-4-11 oc purlins, 2-0-0 oc purlins (3 Rigid ceiling direct bracing. 1 Row at midpt (size) 2=0-5-8 Max Horiz 2=79 (L Max Uplift 2=-89 (I Max Grav 2=1269 (Ib) - Maximum Co Tension 1-2=0/32, 2-4=-19( 5-6=-1469/177, 6- 7-9=-1984/173 2-14=-125/1720, 1 11-13=-56/1481, 1 9-10=-109/1720 4-14=0/125, 4-13= 6-11=-1/417, 7-11: 5-11=-130/134 ed roof live loads have	<ul> <li>apt* 5-6:2x4 SP No.1</li> <li>apt* 11-5:2x4 SP No.</li> <li>1-6-0, Right 2x4 SP</li> <li>apt* 11-5:2x4 SP No.</li> <li>1-6-0, Right 2x4 SP</li> <li>apti additional content of the second of</li></ul>	2) 2 No.3 ied or 3) 4) 5) ) 2) 6) 1 76, 7) 8) 9) 441, 10 50 C	Wind: ASCE Vasd=91mph II; Exp B; En- and C-C Exte 10-3-3, Exter to 17-7-13, E 21-10-12 to 2 exposed ; en members an- Lumber DOL Building Des verifying Rair requirements Provide adec This truss ha chord live loa * This truss ha on the bottom 3-06-00 tall b chord and ar Refer to girdd Provide mecl bearing plate 9 and 89 lb u This truss is International R802.10.2 ar 0) Graphical pu or the orienta bottom chore <b>DAD CASE(S)</b>	7-16; Vult=115mp 7-16; Vult=115mp 1; TCDL=6.0psf; Bl closed; MWFRS (e erior(2R) 1-2-8 to ior(2R) 1-2-8 to ior(2R) 1-2-8 to ior(2R) 17-7-1: 27-11-0 zone; cant d vertical left and r d vertical left and r d roces & MWFRS =1.60 plate grip Di igner/Project engin n Load = 5.0 (psf) a specific to the use puate drainage to p s been designed fr d nonconcurrent v ias been designed in accord Residential Code in tion of the purlin a I. Standard	h (3-sec CDL=3.0 cnvelope 1-9-8, Ir 4-6-1, Ii 3 to 21- ilever le right exp 5 for rea OL=1.60 heer resp covers r e of this prevent v for a 10.0 with any for a 110.0 with BC uss comr (by oth anding 7 dance w sections dard AN does no long the	orond gust) Opsf; h=25ft; ) exterior zc terior (1) 1-5 terior (1) 14 10-12, Interior ft and right losed;C-C fc ctions shown ) bonsible for ain loading truss compo water pondiri ) psf bottom other live load e load of 20. a rectangle veen the bott DL = 10.0ps lections. ers) of truss 4 lb uplift at ith the 2018 R502.11.1 : ISI/TPI 1. ot depict the top and/or	Cat. one 3-8 to 4-6-1 or (1) or n; onent. ng. ads. .0psf tom sf. to joint and size				SEAL 05788	ROLUTION STATE	
WARN	IING - Verify design param				FERENCE PAGE MILT	473 rev. 1	/2/2023 BEFOR	FUSE					y 0,2020	

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



Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	ACJ01	Jack-Closed	1	1	Job Reference (optional)	173354148

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:44 ID:nesLyo2nWFoMr1G6mU15G4zJY1H-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



NAILED



Scale =	1:40.4
00000 -	

Loading (psf) Spacing 2-0-0 CSI DEFL in (loc)	l/defl L/d	PLATES GRIP								
ICLL (root)         20.0         Plate Grip DOL         1.15         IC         0.96         Vert(LL)         -0.16         4-5           CLL (root)         ZZ (root)         ZZ (root)         L15         IC         0.96         Vert(LL)         -0.16         4-5	>526 240	M120 244/190								
Snow (Pt/Pg) 7.1/10.0 Lumber DOL 1.15 BC 0.70 Vert(C1) -0.33 4-5	>260 180									
TCDL 10.0 Rep Stress Incr YES WB 0.07 Horz(CT) 0.00 3	n/a n/a									
BCEL 0.0° Code IRC2018/TPI2014 Matrix-MP										
BCDL 10.0		vveight: 43 lb $FI = 20\%$								
LUMBER 4) Unbalanced snow loads have been considered for this										
TOP CHORD 2x4 SP No.2 design.										
BOT CHORD 2x4 SP No.2 5) This truss has been designed for greater of min roof live	This truss has been designed for greater of min roof live									
WEBS 2x6 SP No.2 *Except* 3-4:2x4 SP No.3, load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on										
4-2:2x4 SP No.2 overhangs non-concurrent with other live loads.										
BRACING 6) Building Designer/Project engineer responsible for										
TOP CHORD Structural wood sheathing directly applied, verifying Rain Load = 5.0 (psr) covers rain loading										
except end verticals.	The trues has been designed for a 10.0 ref bettem									
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc (7) This flues has been designed to a 10-0-10 by bottom of the law has the processing of the law of										
bracing. 8) * This truss has been designed for a live load of 20 0nsf										
<b>REACTIONS</b> (size) 3= Mechanical, 4= Mechanical, on the bottom chord in all areas where a rectangle	on the bottom chord in all reas where a rectangle									
5=0.9-7 3-06-00 tall by 2-00-00 wide will fit between the bottom										
Max Horiz 5=131 (LC 16) chord and any other members.										
Max Uplint 3=-132 (LC 16), 4-9 (LC 16), 9) Refer to girder(s) for truss to truss connections.										
Max Gray $3-376$ (LC 0) $4-158$ (LC 7) $5-431$ 10) Provide mechanical connection (by others) of truss to										
(LC 2) (LC 2), 4-100 (LC 7), 5-401 bearing plate capable of withstanding 87 lb uplift at joint										
FORCES (Ib) - Maximum Compression/Maximum										
Tension										
TOP CHORD 2-5=-349/261, 1-2=0/46, 2-3=-136/68, B8/2012 10 2 402 404 404 401 404 404 404 404 404 404 404										
3-4=0/0 12) Gap between inside of ton chord bearing and first										
BOT CHORD 4-5=-237/75 diagonal or vertical web shall not exceed 0 500in										
WEBS 2-4=-76/238 13) "NAILED" indicates 3-10d (0.148"x3") or 2-12d		A MARTINE AND A								
NOTES (0.148"x3.25") toe-nails per NDS guidlines.		WAR CARO								
1) Unbalanced roof live loads have been considered for 14) In the LOAD CASE(S) section, loads applied to the face										
this design. of the truss are noted as front (F) or back (B).	S.	CLOFE DON V								
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) LOAD CASE(S) Standard	3 4	No. The states								
Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate	1) Dead + Snow (balanced): Lumber Increase=1.15, Plate									

II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-8-7 to 2-6-8, Exterior(2R) 2-6-8 to 7-5-1 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Increase=1.15
  - Uniform Loads (lb/ft)
  - Vert: 1-2=-35, 2-3=-35, 4-5=-20
  - Concentrated Loads (lb)





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Job	Truss Truss Type		Qty	Ply	997 Serenity	
P02233-24936	AE01	Common Supported Gable	1	1	Job Reference (optional)	173354149

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:44 ID:5IIqaixJHNcUEdrf9BFmNHzJXuN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





27-11-0

Scale = 1:66.2

Plate Offsets (X, Y): [18:0-3-0,0-3-0]

		-													
Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)		20.0	Plate Grip DOL	1.25		тс	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL		10.0	Lumber DOL	1.25		BC	0.13	Vert(TL)	n/a	-	n/a	999			
BCLL		0.0*	Rep Stress Incr	YES		WB	0.10	Horiz(TL)	0.00	13	n/a	n/a			
BCDI		10.0	Code	IRC201	8/TPI2014	Matrix-MS	00		0.00				Weight: 154 lb	FT – 20%	
DODL		10.0	Out	11(0201	0/11/2014			-			-		Weight. 104 lb	11 = 2070	
BELL BEDL LUMBER TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N Structural 6-0-0 oc p Rigid ceil bracing. (size) Max Horiz Max Uplift Max Grav (lb) - Max Tension 1-2=-101/ 4-5=-51/9	0.0* 10.0 0.2 0.2 0.3 *Except I wood sheat burlins. ing directly 1=27-11- 16=27-11- 16=27-11- 18=27-11- 20=27-11- 22=27-11- 24=27-11- 15=-20 (LC 17=-36 (LC 22=-39 (LC 22=-39 (LC 22=-39 (LC 14=323 (L 16=177 (L 18=169 (L 22=177 (L 22=177 (L 22=177 (L 23=169 (L 22=177 (L 24=323 (L 16=177 (L 18=169 (L 20=169 (L 22=177 (L 24=323 (L 16=177 (L 18=169 (L 20=169 (L 22=177 (L 24=323 (L 16=177 (L 24=323 (L) 16=177 (L) 17=17	Rep Stress Incr Code * 19-7:2x4 SP No.2 athing directly applied applied or 10-0-0 oc 0, 13=27-11-0, 0, 15=27-11-0, 0, 17=27-11-0, 0, 17=27-11-0, 0, 21=27-11-0, 0, 21=27-11-0, 0, 23=27-11-0, 0, 23=27-11-0, 13) 13), 14=-73 (LC 13), C 13), 16=-39 (LC 13), C 13), 16=-39 (LC 13), C 12), 21=-36 (LC 12), C 12), 23=-20 (LC 12), C 12), 23=-20 (LC 12), C 26), 15=90 (LC 1), C 26), 15=9152 (LC 2), C 25), 21=155 (LC 1), C 25), 23=91 (LC 1), C 25), 23=91 (LC 1), C 25), 3-4=-54/76, 129, 6-7=-88/163, D 129, 21-155 (LC 3), D 259, 3-4=-54/76, 129, 6-7=-88/163, D 129, 21-155 (LC 3), D 200, 12-155 (LC 3), D 200, 12-155 (LC 4), C 250, 12-155 (LC 4), C 250, 12-155 (LC 4), C 250, 23-91 (LC 4), C 250, 23-9	YES IRC201 B( W or 1) 2) 1, 3, 3, 4) 4) 5), 5), 6) 7) 8) 9)	8/TPI2014 DT CHORD TEBS Unbalanced this design. Wind: ASCE Vasd=91mpl II; Exp B; En and C-C Cor 13-11-8, Cor 16-11-8 to 2: exposed ; en members an Lumber DOL Truss design only. For stu see Standard or consult qu Building Des verifying Rai requirements All plates are Gable requir Gable studs This truss ha chord live loa * This truss ha	WB Matrix-MS 1-24=-33/86, 23-24= 21-22=-33/86, 20-21 17-19=-33/86, 16-17 14-15=-32/86, 13-14 7-19=-113/19, 6-20= 4-22=-129/60, 3-23= 3-18=-128/52, 9-17= 11-15=-82/41, 12-14 roof live loads have 7-16; Vult=115mph n; TCDL=6.0psf; BC closed; MWFRS (er ner(3E) 0-0-0 to 3-0 ner(3E) 0-0-0 to 3-0 n	0.10 =-33/86 1=-33/8 7=-32/8 4=-32/1 =-128/5 =-82/41 =-117/5 4=-215/ a been of (3-sec CDL=3.0 nvelope 0-0, Ext 16-11-8 yel opt of the pla d (normal gner as per resp overs ra of this ess other m chorn r a 10.0 ith any for a livy where fit betw	Horiz(TL) , 22-23=-33/8 6, 19-20=-33/ 6, 15-16=-32/ 00 3, 5-21=-117/ , 2-24=-215/1 6, 10-16=-125 117 considered for ond gust) Dpsf; h=25ft; C o) exterior zon- erior(2N) 3-0- 8, Exterior(2N) and right osed; C-C for ctions shown; and right osed; C-C for ctions shown; b, per ANSI/TP ponsible for ain loading truss compon prwise indicated d bearing. D psf bottom other live load e load of 20.0 a rectangle	0.00 6, 86, 86, 57, 17, 9/60, Cat. e 0 to ) cs, le, 11. ent. ed. ds. psf m	13 10) Prov bear 36 II joint I b u joint 7 Ib 11) Bev surf: 12) This Inte R80 LOAD C	n/a vide metring plat o uplift at jo 22, 20 olift at jo uplift at eled pla ace with truss is mationa 2.10.2 a <b>ASE(S</b> )	n/a chanicc e capa at joint 1 lb uplif joint 1 te or s truss a desig and ref ) Stal	Weight: 154 lb al connection (b) able of withstand 20, 36 lb uplift at ft at joint 23, 74 ll , 36 lb uplift at joint ft at joint 15, 73 ll shim required to p chord at joint(s) med in accordan dential Code sec ferenced standar ndard	FT = 20% / others) of trus ing 7 lb uplift at i joint 21, 39 lb b uplift at joint nt 17, 39 lb upl b uplift at joint ce with the 201 tions R502.11. d ANSI/TPI 1.	ss to t joint 1, uplift at 24, 35 lift at 14 and rring 18 1 and
	10-11=-43	3/55, 11-12	=-60/31, 12-13=-118/-	42	chord and any other members.						AN GINER OF				
													MAM	PAULIN	
														III.	

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TRENCO A MI Tek Affiliate

818 Soundside Road Edenton, NC 27932

May 8,2025

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AG01	Half Hip Girder	1	2	Job Reference (optional)	173354150







L	3-7-7	6-10-4	12-0-5	17-2-6	22-4-7	27-6-8
	3-7-7	3-2-13	5-2-1	5-2-1	5-2-1	5-2-1
						0-4-8

Scale = 1:61.4

<b>Loading</b> TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	8/TPI2014	<b>CSI</b> TC BC WB Matrix-MS	0.25 0.37 0.46	<b>DEFL</b> Vert(LL) Vert(CT) Horz(CT)	in 0.07 -0.14 0.03	(loc) 14-16 14-16 11	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 359 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD	2x4 SP No.2 2x6 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exc 2-0-0 oc purlins (6-0	athing directly applie ept -0 max.): 4-10.	2 3 ed or 4	<ul> <li>All loads are except if note CASE(S) see provided to d unless othen Unbalanced this design.</li> <li>Wind: ASCE Vasd=91mph</li> </ul>	considered equall ed as front (F) or b titon. Ply to ply con istribute only load vise indicated. roof live loads hav 7-16; Vult=115mp ; TCDL=6.0psf; B	ly applied back (B) f nnection s noted f re been d bh (3-sec GDL=3.0	d to all plies, face in the LO s have been as (F) or (B), considered for cond gust) Dpsf; h=25ft; (	DAD	Co	oncentra Vert: 15 22=-18 27=-18 31=-18 35=-19 39=-19	ted Loa =-19 (F (F), 23 (F), 28 (F), 32 (F), 36 (F)	ads (lb) F), 17=-42 (F), 5= =-18 (F), 24=-18 =-18 (F), 29=-18 =-19 (F), 33=-19 =-19 (F), 37=-19	-18 (F), 16=-1 (F), 25=-18 (F) (F), 30=-18 (F) (F), 34=-19 (F) (F), 38=-19 (F)	9 (F), ), ), ), ),
BOT CHORD REACTIONS	Rigid ceiling directly bracing. (size) 2=0-5-8, 1 Max Horiz 2=116 (LC Max Uplift 2=-360 (LI	applied or 10-0-0 oc 11= Mechanical C 36) C 10), 11=-526 (LC C 22) 41, 4570 (LC	5 7)	<ul> <li>II; Exp B; Enc cantilever lef right exposed</li> <li>Building Des verifying Rain requirements</li> </ul>	closed; MWFRS ( t and right expose d; Lumber DOL=1. gner/Project engir n Load = 5.0 (psf) s specific to the us	envelope d ; end v .60 plate neer res covers r e of this	e) exterior zon vertical left and grip DOL=1.6 ponsible for ain loading truss compon	ie; d 60 nent.						
FORCES	(lb) - Maximum Com Tension 1-2=0/34, 2-3=-2428 4-5=-2882/939, 5-6=	/614, 3-4=-2464/717 2882/939,	2) 6 7 7, 8	<ul> <li>Provide adec</li> <li>This truss ha chord live loa</li> <li>* This truss h on the bottom</li> </ul>	Juate drainage to p s been designed f nd nonconcurrent v as been designed n chord in all areas	prevent v for a 10.0 with any I for a liv s where	water ponding 0 psf bottom other live load e load of 20.0 a rectangle	l. ds. Ipsf						
BOT CHORD	6-8=-1943/660, 8-9= 2-18=-610/2112, 17- 16-17=-652/2166, 14 13-14=-934/2792, 12 3-18=-217/92, 3-17=	1943/660, 9-10=0/( .18=-610/2112, 4-16=-934/2792, 2-13=0/0, 11-12=0/0 126/234_4-17=-30/	) 9 /337	3-06-00 tall b chord and an ) Refer to girde 0) Provide mech	y 2-00-00 wide wi y other members. er(s) for truss to tru- nanical connection	uss conr (by oth	veen the botto nections. ers) of truss to	om D				Ministra CA	Rout	
WEBG	9-12=-1604/564, 5-1 4-16=-377/958, 6-14 8-13=-462/232, 9-13 6-13=-1052/340	6=-435/220, =-2/258, 6-16=-28/1 =-818/2410,	22, 1	2 and 526 lb 1) This truss is International R802.10.2 ar	uplift at joint 11. designed in accord Residential Code nd referenced star	dance w sections	ith the 2018 R502.11.1 at	nd			0	POFESS	N. N.	ALL DATE OF
NOTES 1) 2-ply truss (0.131"x3" Top chords oc. Bottom che staggered Web conne	to be connected toget ) nails as follows: s connected as follows ords connected as follo at 0-9-0 oc. ected as follows: 2x4 -	ther with 10d s: 2x4 - 1 row at 0-9- ows: 2x6 - 2 rows 1 row at 0-9-0 oc.	1: 0 1: L 1	<ol> <li>Graphical pu or the orienta bottom chorce</li> <li>"NAILED" ind (0.148"x3.25</li> <li>OAD CASE(S)</li> <li>Dead + Sno Increase=1.</li> <li>Uniform Loa Vert: 1-4:</li> </ol>	rlin representation tition of the purlin a licates 3-10d (0.14 ) toe-nails per NE Standard w (balanced): Lur 15 ads (lb/ft) =-35. 4-10=-45. 11	along the 48"x3") c DS guidlin mber Inc	of depict the s e top and/or or 3-12d nes. rease=1.15, F	ize Plate		THINKS.		SEA 0578 ADAM	37 EER.	MUMBER

May 8,2025

CO

Page: 1

1/2/2023 BEFORE USE.	ENGINEERING BY
uilding component, not	
s design into the overall	
ary and permanent bracing	
e regarding the	A MLIe
available from Truss Plate Institute (www.tpinst.org)	818 Soundside Road

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual bu a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional tempora is always required for stability and to prevent oclapse with possible personal injury and property damage. For general guidance fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 and BCEL Building Component Sofety Information, available from the Structurel Building Component Acception and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AJ01	Jack-Open	1	1	Job Reference (optional)	173354151

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:45

ID:rFkbX60X\_eXecj6kf3?dBfzJY1J-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

# -1-2-8 3-11-7 3-11-7 1-2-8 3-11-7 12 6 ∟ 3x6 ≠ 11 2-7-12 3 2-10-14 10 <sup>2</sup> Fø 0-8-0 5 3x6 II 3-11-7

Scale = 1:28.7

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

Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.25		TC	0.18	Vert(LL)	0.01	<b>5</b> -8	>999	240	MT20	244/190
TCDL		10.0	Lumber DOL	1.25		BC	0.14	Vert(CT)	-0.02	5-8	>999	180		
BCLL		0.0*	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL		10.0	Code	IRC2018/TP	12014	Matrix-MP					-		Weight: 17 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD SLIDER BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 Left 2x4 SP N Structural wo 3-11-7 oc pu Rigid ceiling	No.3 1 bod shea irlins. directly a	-6-0 thing directly applied applied or 10-0-0 oc	6) Pro bea 4 a 7) Th Inta dor R8 LOAD	ovide mech aring plate and 19 lb u is truss is o ernational 02.10.2 ar CASE(S)	nanical connection capable of withsta plift at joint 2. designed in accord Residential Code s d referenced stand Standard	(by othe anding 3 lance wi sections dard AN	ers) of truss 8 lb uplift at th the 2018 R502.11.1 a SI/TPI 1.	to joint and					
REACTIONS	(size) 2= Max Horiz 2= Max Uplift 2= Max Grav 2=	=0-5-8, 4 echanica =71 (LC 1 =-19 (LC =239 (LC	= Mechanical, 5= 1 12) 12), 4=-38 (LC 12) 1), 4=97 (LC 1), 5=6	69										
FORCES	(Ib) - Maximu Tension	um Comp	pression/Maximum											
TOP CHORD BOT CHORD	1-2=0/32, 2-4 2-5=-116/84	4=-115/3	4											
NOTES														
<ol> <li>Wind: ASC Vasd=91n II; Exp B; I and C-C E 3-10-11 zc vertical lef forces &amp; M DOL=1.60</li> <li>Building D verifying F requireme</li> <li>This truss chord live</li> <li>* This truss on the bot 3-06-00 ta chord and</li> <li>Refer to g</li> </ol>	CE 7-16; Vult=1 nph; TCDL=6.0 Enclosed; MWI Exterior(2E) -1-2 one; cantilever ft and right expo MWFRS for reau plate grip DOL Jesigner/Projec Rain Load = 5.0 ints specific to t has been desig load nonconcu is has been desit tom chord in al all by 2-00-00 w any other men irder(s) for trus	115mph dipsf; BCI psf; BCI FRS (env 2-8 to 1-9 left and 1 soed;C-C ctions sh _=1.60 the use of gned for irrrent witt signed for il areas v ride will finbers. ss to trus	(3-second gust) DL=3.0psf; h=25ft; C: velope) exterior zone 9-8, Interior (1) 1-9-8 right exposed; end C for members and bown; Lumber er responsible for vers rain loading of this truss compone a 10.0 psf bottom h any other live load: r a live load of 20.0p where a rectangle it between the bottor is connections.	at. et to ent. s. ssf								and a second second	SEAL 0578	ROC

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AJ02	Jack-Open	1	1	Job Reference (optional)	173354152

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:45 ID:rFkbX60X\_eXecj6kf3?dBfzJY1J-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:32

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

Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.25		тс	0.07	Vert(LL)	0.00	5-8	>999	240	MT20	244/190
TCDL		10.0	Lumber DOL	1.25		BC	0.05	Vert(CT)	0.00	5-8	>999	180		
BCLL		0.0*	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL		10.0	Code	IRC20	18/TPI2014	Matrix-MP							Weight: 14 lb	FT = 20%
LUMBER				6	) Provide mec	nanical connection	(bv oth	ers) of truss to	0					
TOP CHORD	2x4 SP No	o.2			bearing plate	capable of withsta	nding 3	6 lb uplift at j	oint					
BOT CHORD	2x4 SP No	0.2			4 and 6 lb up	lift at joint 5.								
SLIDER	Left 2x6 S	P No.2 2	2-0-0	7	) This truss is	designed in accord	ance w	ith the 2018						
BRACING					International	Residential Code s	ections	R502.11.1 a	nd					
TOP CHORD	Structural	wood shea	athing directly applie	ed or	R802.10.2 ar	nd referenced stand	dard AN	ISI/TPI 1.						
	2-1-4 oc p	ourlins.	0 7 11	L	OAD CASE(S)	Standard								
BOT CHORD	Rigid ceili	ng directly	applied or 10-0-0 or	<b>b</b>										
	bracing.													
REACTIONS	(size)	2=0-5-8, 4	= Mechanical, 5=											
		Mechanica	al											
	Max Horiz	2=67 (LC	12)											
	Max Uplift	4=-36 (LC	12), 5=-6 (LC 12)											
	Max Grav	2=145 (LC (LC 3)	C 1), 4=53 (LC 19), 5	5=33										
FORCES	(lb) - Maxi		pression/Maximum											
1 ONOLO	Tension		proceden/maximum											
TOP CHORD	1-2=0/34,	2-4=-67/52	2											
BOT CHORD	2-5=-63/3	2												
NOTES														
1) Wind: AS	CE 7-16: Vul	t=115mph	(3-second gust)											
Vasd=91n	nph; TCDL=	6.0psf; BC	DL=3.0psf; h=25ft; 0	Cat.										11.
II; Exp B;	Enclosed; M	WFRS (en	velope) exterior zor	e									111 C/	D 111
and C-C E	Exterior(2E)	zone; canti	lever left and right										TH VA	014
exposed ;	end vertical	left and rig	ht exposed;C-C for									S	01-255	id Alle
members	and forces &	MWFRS	for reactions shown	;								5E	OFLOY	N. T.
Lumber D	OL=1.60 pla	ite grip DO	L=1.60										her	ave
2) Building D	esigner/Pro	ect engine	er responsible for								-	$\sim$		1.1.1
requirement	te specific	o.u (psi) CC	of this trues compor	ont								:	SEA	L ; =
3) This trues	has heen de	signed for	a 10.0 nsf hottom	ient.							=		0578	87
chord live	load noncor	ncurrent wit	th any other live load	ds.								9 8	0070	· I E

 \* 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.

5) Refer to girder(s) for truss to truss connections.

# SEAL 057887

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AJ03	Jack-Open	1	1	Job Reference (optional)	173354153

2 3x6 II

3-3-10

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:45 ID:rFkbX60X\_eXecj6kf3?dBfzJY1J-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

> X 5

Page: 1



Scale = 1:32.9

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

3-10-6

0-10-0

Loading	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	0.01	5-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.16	Vert(CT)	-0.01	5-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 18 lb	FT = 20%
			6) Provide	mechanical connectio	n (by oth	ers) of truss	to					
TOP CHORD	2x4 SP No.2		bearing	plate capable of withs	tanding 5	b3 lb uplift at	joint					
BOT CHORD	2X4 SP No.2	200	7) This tru	is upin at joint 5.	rdance w	ith the 2018						
BRACING	Leit 2x0 SF IN0.2 2	2-0-0	Internat	onal Residential Code	sections	R502.11.1	and					
	Structural wood she	athing directly applie	d or R802.1	).2 and referenced sta	ndard AN	ISI/TPI 1.						
	3-3-10 oc purlins.	at ing unectly applie	LOAD CAS	E(S) Standard								
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 oc										
REACTIONS	(size) 2=0-5-8, 4 Mochania	4= Mechanical, 5=										
	Max Horiz 2=95 (I C	12)										
	Max Uplift 4=-53 (LC	C 12), 5=-8 (LC 12)										
	Max Grav 2=189 (LC	C 1), 4=87 (LC 19), 5	=58									
	(LC 3)											
FORCES	(lb) - Maximum Com Tension	pression/Maximum										
TOP CHORD	1-2=0/34, 2-4=-105/4	49										
BOT CHORD	2-5=-138/73											
NOTES												
1) Wind: ASC	CE 7-16; Vult=115mph	(3-second gust)										
Vasd=91m	iph; TCDL=6.0psf; BC	DL=3.0psf; h=25ft; C	Cat.								minin	line.
	Enclosed; MVVERS (en	1Velope) exterior zone	e o							4	"TH CA	ROUL
to 3-2-14 z	one: cantilever left an	d right exposed : end	-0								A	A Line
vertical left	t and right exposed;C-	C for members and								SA	UT KEOP	ON: Vie
forces & M	WFRS for reactions s	hown; Lumber								5		1
DOL=1.60	plate grip DOL=1.60								-		auf	
2) Building De	esigner/Project engine	er responsible for							- 5		SFA	1 1 1
verifying R	ain Load = 5.0 (psf) co	overs rain loading							-		0570	07
requirement	nts specific to the use	of this truss compone	ent.						=	5 7	05/8	o/ ; :
chord live l	load nonconcurrent wi	thanv other live load	ls									1.1
<ol> <li>4) * This truss</li> </ol>	s has been designed f	or a live load of 20.0	psf							-	· En	R. S
on the bott	tom chord in all areas	where a rectangle								14	<b>V</b> GIN	EF
3-06-00 tal	II by 2-00-00 wide will	fit between the botto	m							1	, ADAN	ACEIN
chord and	any other members.										M	in the second se
5) Refer to gi	raer(s) for truss to tru	ss connections.										
											Ma	ay 8,2025

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AJ04	Jack-Open	10	1	Job Reference (optional)	173354154

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:45 ID:JSIzkS19lxfVDthwCmWsktzJY1I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:33.9

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

Loading		(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.25		TC	0.21	Vert(LL)	0.02	5-8	>999	240	MT20	244/190
TCDL		10.0	Lumber DOL	1.25		BC	0.24	Vert(CT)	-0.03	5-8	>999	180		
BCLL		0.0*	Rep Stress Incr	YES		WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL		10.0	Code	IRC2018	3/TPI2014	Matrix-MP							Weight: 20 lb	FT = 20%
LUMBER				6)	Provide mec	hanical connection	(by oth	ers) of truss	to					
TOP CHORD	2x4 SP No	o.2		,	bearing plate	capable of withsta	anding 6	3 lb uplift at	joint					
BOT CHORD	2x4 SP No	o.2			4 and 9 lb up	lift at joint 5.								
SLIDER	Left 2x6 S	P No.2 2	2-0-0	7)	This truss is	designed in accord	lance w	ith the 2018						
BRACING					International	Residential Code	sections	R502.11.1	and					
TOP CHORD	Structural	wood shea	athing directly applie	d or LC	R802.10.2 at AD CASE(S)	Standard	dard AN	ISI/TPI 1.						
BOT CHORD	Rigid ceili	ng directly	applied or 10-0-0 oc											
REACTIONS	(size)	2=0-5-8, 4	l= Mechanical, 5=											
	May Hariz	Mechanica												
	Max Liplift	2=112 (LC	(12) 5-0 (1C 12)											
	Max Grav	2=216 (1 C	(12), 0= 0 (10 12) (1) 4=106 (1 C 19)	5=72										
		(LC 3)	, , , ,	0.2										
FORCES	(lb) - Maxi Tension	imum Com	pression/Maximum											
TOP CHORD	1-2=0/34.	2-4=-163/5	58											
BOT CHORD	2-5=-188/	99												
NOTES														
1) Wind: ASC	CE 7-16; Vu	lt=115mph	(3-second gust)											
Vasd=91m	nph; TCDL=	6.0psf; BCI	DL=3.0psf; h=25ft; C	at.										111.
II; Exp B; E	Enclosed; M	WFRS (en	velope) exterior zon	Э									White CA	D
and C-C E	xterior(2E)	-0-10-8 to 2	2-1-8, Interior (1) 2-1	-8								1	ar	10/11
to 3-11-4 z	zone; cantile	ever left and	d right exposed ; end									1	OLLESS	B: Nº
	t and right e	xposed;C-	bown: Lumbers and									1 3		No. 7 -
DOI = 1.60	nlate grin F	OI = 1.60	IOWII, LUIIIDEI										jungo	n fer ?
2) Building D	esianer/Pro	iect engine	er responsible for								-		CEA	1 1 1
verifying R	Rain Load =	5.0 (psf) cc	overs rain loading								=	:	SEA	- : :
requireme	nts specific	to the use	of this truss compon	ent.							-		0578	87 : -
3) This truss	has been de	esigned for	a 10.0 psf bottom											
chord live	load noncor	ncurrent wit	th any other live load	S.								2	·	A 1 8
4) I his trus	s nas been tom chord ir	aesignea ia	or a live load of 20.0	DST								2	·SNGINI	EEN. S
3-06-00 ta	ll by 2-00-00	) wide will f	fit between the botto	m								11,	An	CENT
chord and	any other n	nembers.											AM	PAULIN
5) Refer to gi	irder(s) for t	truss to trus	ss connections.										111111	mm.
													Ma	av 8.2025
														·, <u>    ,                               </u>

ww.tpinst.org) 818 Soundside Road Edenton, NC 27932

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

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AV1	Valley	1	1	Job Reference (optional)	173354155

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:45 ID:cs7ela9SvBvd1xmNAm6j2RzIYQ8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



12-10-4

Scale = 1:58.3

		_												
Loading	(ps	sf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20	.0	Plate Grip DOL	1.25		TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10	.0	Lumber DOL	1.25		BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0	.0*	Rep Stress Incr	YES		WB	0.18	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10	.0	Code	IRC20	18/TPI2014	Matrix-S							Weight: 65 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.2 *E Structural wood 6-0-0 oc purling Rigid ceiling dir	xcept I shea s, exc rectly a	* 5-3:2x4 SP No.3 thing directly applied ept end verticals. applied or 10-0-0 oc	d or	<ol> <li>Building Des verifying Rai requirements</li> <li>Gable requir</li> <li>Gable studs</li> <li>This truss ha chord live loo</li> <li>* This truss I on the bottor</li> <li>3-06-00 tall I</li> </ol>	igner/Project eng n Load = 5.0 (psf s specific to the uses continuous bo' spaced at 4-0-0 c is been designed ad nonconcurrent nas been designe n chord in all ares v 2-00-00 wide w	ineer res ) covers r se of this ttom chor oc. for a 10.4 with any d for a liv as where <i>d</i> liv bety	ponsible for ain loading truss compor d bearing. 0 psf bottom other live loa e load of 20.0 a rectangle	ds. Opsf					
REACTIONS	bracing. (size) 4=12 7=12 Max Horiz 7=-1 Max Uplift 4=-1 7=-6 Max Grav 4=19 6=39	2-10-4 2-10-4 54 (LC 8 (LC 2 (LC 96 (LC 99 (LC	, 5=12-10-4, 6=12-1 ) (5) ), 5=-161 (LC 13), 12) 19), 5=526 (LC 20), 20), 7=208 (LC 19)	0-4, ,	<ul> <li>chord and ar</li> <li>Provide mec</li> <li>bearing plate</li> <li>7, 18 lb uplifi</li> <li>10) This truss is</li> <li>International</li> <li>R802.10.2 a</li> </ul>	by other members hy other members hanical connections capable of withs at joint 4 and 16 designed in acco Residential Code and referenced sta	s, with BC on (by oth tanding 6 1 lb uplift rdance w e sections ndard AN	CDL = 10.0psf ers) of truss t 52 lb uplift at j at joint 5. ith the 2018 \$ R502.11.1 a USI/TPI 1.	o o pint nd					
FORCES	(lb) - Maximum Tension	Comp	pression/Maximum		LOAD CASE(S)	Standard								
TOP CHORD	1-7=-127/78, 1- 3-4=-151/153	2=-91	/83, 2-3=-132/104,											
BOT CHORD WEBS	6-7=-96/152, 5- 2-6=-200/9, 3-5	6=-96 =-319	6/152, 4-5=-96/152 0/187											
NOTES 1) Unbalance this design	ed roof live loads n.	have t	been considered for									. III	TH CA	ROLIN

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 12-5-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

SEAL 057887 NGINEEFI May 8,2025

Page: 1

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

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AV2	Valley	1	1	Job Reference (optional)	173354156

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:46 ID:UMrk08?IzBGTzyHtvXOg0izIYQL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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11-7-14

Scale = 1:54.2

Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.25		тс	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL		10.0	Lumber DOL	1.25		BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL		0.0*	Rep Stress Incr	YES		WB	0.15	Horiz(TL)	0.00	4	n/a	n/a		
BCDL		10.0	Code	IRC2	18/TPI2014	Matrix-S							Weight: 56 lb	FT = 20%
LUMBER					4) Building Des	ianer/Proiect	engineer res	ponsible for						
TOP CHORD	2x4 SP N	lo.2			verifying Rai	n Load = 5.0 (	(psf) covers r	ain loading						
BOT CHORD	2x4 SP N	lo.2			requirements	s specific to th	e use of this	truss compo	onent.					
WEBS	2x4 SP N	lo.3			<ol><li>Gable requir</li></ol>	es continuous	bottom chor	d bearing.						
OTHERS	2x4 SP N	lo.3			<ol><li>Gable studs</li></ol>	spaced at 4-0	-0 oc.							
BRACING					<ol><li>This truss has</li></ol>	as been desigr	ned for a 10.0	0 psf bottom						
TOP CHORD	Structura	I wood she	athing directly applie	d or	chord live loa	ad nonconcurr	rent with any	other live loa	ads.					
	6-0-0 oc	purlins, exe	cept end verticals.		<li>B) * This truss I</li>	has been desi	gned for a liv	e load of 20.	.0psf					
BOT CHORD	Rigid cei	ling directly	applied or 10-0-0 oc		on the bottor	m chord in all	areas where	a rectangle						
	bracing.	• •			3-06-00 tall I	oy 2-00-00 wic	de will fit betv	veen the both	tom					
REACTIONS	(size)	4=11-7-14	l, 5=11-7-14, 6=11-7	-14,	chord and a	ny other memi	pers, with BC	DL = 10.0ps	st.					
	· · /	7=11-7-14	Ļ		<ol> <li>Provide med</li> </ol>	nanical conne	ection (by oth	ers) of truss	to					
	Max Horiz	7=-125 (L	C 13)		z 20 lb uplif	e capable of w	127 lb uplift	of in up int at	joint					
	Max Uplift	4=-29 (LC	9), 5=-137 (LC 13),		7, 29 ID upili 10) This trucs is	decigned in c		at juint 5.						
		7=-63 (LC	12)		International	Residential C	cooluance w	P502 11 1	and					
	Max Grav	4=153 (LC	C 19), 5=430 (LC 20)	,	D902 10 2 a	nd referenced	ctondard AN	ICI/TDI 1	anu					
		6=407 (LC	C 20), 7=198 (LC 19)			Ctandard	Stanuaru Ar	NOI/1111.						
FORCES	(lb) - Max	kimum Com	pression/Maximum		LUAD CASE(S)	Standard								
	Tension													
TOP CHORD	1-7=-131	/86, 1-2=-9	7/90, 2-3=-134/104,											
	3-4=-130	/125												

# BOT CHORD 6-7=-84/122, 5-6=-84/122, 4-5=-84/122 WEBS 2-6=-203/13, 3-5=-273/176

- NOTES
- Unbalanced roof live loads have been considered for this design.
- Wind: AŠCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 11-3-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

NGINEERI May 8,2025

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AV3	Valley	1	1	Job Reference (optional)	173354157

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:46

ID:vf?R4LqWGuVTHoCB5b7OSIzIYQZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

### 10-5-7 10-1-5 3-11-0 ++3-11-0 6-2-5 0-4-2 10-5-7 4x6 =2 10 $\uparrow$ 2x4 II 5-5-10 5-1-15 5-5-10 8 9 2x4 II 1 3 2-2-7 0-3-11 0-3-11 0-0-4 7 888 6 5 2x4 II 3x6. 2x4 🛛 2x4 🛛

10-5-7

Scale = 1:50.1

l	Loading		(psf)	Spacing	2-0-0		CSI	o 17	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
	ICLL (roof)		20.0	Plate Grip DOL	1.25		IC	0.17	Vert(LL)	n/a	-	n/a	999	M120	244/190
	TCDL		10.0	Lumber DOL	1.25		BC	0.13	Vert(TL)	n/a	-	n/a	999		
	BCLL		0.0*	Rep Stress Incr	YES		WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
	BCDL		10.0	Code	IRC201	8/TPI2014	Matrix-S							Weight: 48 lb	FT = 20%
	LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural w 6-0-0 oc pur Rigid ceiling bracing. (size) 4: 77 Max Uplift 4: 77 Max Uplift 4: 77 Max Grav 4: 6 (lb) - Maxim Tension 1-7=-137/97	2 2 3 3 erood sheat g directly =10-5-7, =10-5-7 =-96 (LC =-44 (LC =-46 (LC =-46 (LC =-42 (LC =-282 (LC =-282 (LC =-282 (LC)) =-282 (LC) =-282 (	athing directly applied pept end verticals. applied or 10-0-0 oc 5=10-5-7, 6=10-5-7, 13) 9), 5=-121 (LC 13), 12) 19), 5=311 (LC 20), 20), 7=169 (LC 19) pression/Maximum 05/101. 2-3=-140/111	4 5 6 7 dor 8 9 1 1	<ul> <li>Building Des verifying Rai requirements</li> <li>Gable requir</li> <li>Gable studs</li> <li>This truss ha chord live loa</li> <li>* This truss f on the bottor</li> <li>3-06-00 tall b</li> <li>chord and ar</li> <li>Provide mec</li> <li>bearing plate</li> <li>7, 44 lb upliff</li> <li>This truss is International R802.10.2 a</li> <li>DAD CASE(S)</li> </ul>	igner/Project eng n Load = 5.0 (psf s specific to the u es continuous bo spaced at 4-0-0 û is been designed ad nonconcurrent has been designe n chord in all area by 2-00-00 wide w ny other members hanical connectio c capable of withs at joint 4 and 12 designed in acco Residential Code nd referenced sta Standard	ineer res income se of this ttom chor oc. for a 10.1 with any d for a liv as where vill fit betv s. n (by oth tanding 6 1 lb uplift rdance w e sections indard AN	ponsible for ain loading truss compor d bearing. 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 36 lb uplift at j at joint 5. ith the 2018 s R502.11.1 a ISI/TPI 1.	ds. Dpsf om oint nd					
		3-4=-119/10	9												
	BOT CHORD	6-7=-71/95,	5-6=-71/	95, 4-5=-71/95											
	WEBS	2-6=-197/18	3, 3-5=-24	43/174											
	NOTES														1111
	1) I Inhalance	nd roof live loa	de have	been considered for									_	Nº al CA	D

- this design
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 10-0-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss 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.

NEER M PACE May 8,20° 

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AV4	Valley	1	1	Job Reference (optional)	173354158

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:46

ID:n9jXLvgMKutJDoihqMPLQ?zIYQm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334.

# 9-3-1 3-11-0 8-10-15 ++3-11-0 4-11-15 0-4-2 9-3-1 4x6 = 2 10 L 4-1-15 4-5-10 2x4 u 6 Ø 1-2-7 3 0-3-11 0-3-11 0-0-4 5 4 2x4 2x4 💊 2x4 II 9-3-1

S

Scale = 1:38.8													
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.21	Vert(TL)	n/a	-	n/a	999			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	3	n/a	n/a			
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3		<ol> <li>Gable requ</li> <li>Gable stud</li> <li>This truss t chord live le</li> <li>* This truss</li> </ol>	ires continuous l s spaced at 4-0-0 has been designe bad nonconcurre has been designe bas been designe	oottom chor 0 oc. ed for a 10.0 ent with any ned for a liv	d bearing. ) psf bottom other live loa e load of 20.0	ids. Opsf						

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. REACTIONS (size) 3=9-3-1, 4=9-3-1, 5=9-3-1 Max Horiz 5=-74 (LC 8) Max Uplift 3=-50 (LC 12), 4=-16 (LC 13), 5=-67 (LC 12) 3=204 (LC 1), 4=354 (LC 20), Max Grav 5=176 (LC 25) FORCES (lb) - Maximum Compression/Maximum

4-5-10

Tension TOP CHORD 1-5=-151/106, 1-2=-131/113, 2-3=-174/108 BOT CHORD 4-5=-63/90, 3-4=-63/90 WEBS 2-4=-232/39

## NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 8-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss 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) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

- 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 5, 50 lb uplift at joint 3 and 16 lb uplift at joint 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AV5	Valley	1	1	Job Reference (optional)	173354159

3-5-10



Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:46

Page: 1

Scale = 1:34.5

Loading FCLL (roof) FCDL BCLL BCDL		(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.22 0.20 0.13	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: 31 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD 30T CHORD DTHERS 3RACING TOP CHORD 30T CHORD REACTIONS	2x4 SP No 2x4 SP No 2x4 SP No 8-0-15 oc p Rigid ceilin bracing. (size) Max Horiz Max Uplift Max Grav	.2 .2 .3 wood shea purlins. Ig directly 1=8-3-5, 3 1=-60 (LC 1=-85 (LC (LC 13) 1=82 (LC :	athing directly applied applied or 6-0-0 oc =8-3-5, 4=8-3-5 8) 26), 3=-1 (LC 13), 4 25), 3=2 (LC 20), 4=1	6) 7) 8) d or 9) =-47 <sup>10</sup> 662	Gable studs This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Provide mecl bearing plate 1, 1 lb uplift a at joint 3. ) This truss is International R802.10.2 ar	spaced at 4-0-0 spaced at 4-0-0 s been designed as been designed n chord in all are y 2-00-00 wide v y other member nanical connectii capable of with at joint 3, 47 lb up designed in acco Residential Cod dr referenced sta	oc. I for a 10.0 t with any d for a live as where a will fit betw s. on (by othe standing 8 plift at joint ordance wi e sections andard AN	) psf bottom other live loa e load of 20.0 a rectangle reen the botto ers) of truss t 5 lb uplift at j : 4 and 1 lb u th the 2018 R502.11.1 a SI/TPI 1.	ids. Opsf om oint oint plift						

# LOAD CASE(S) Standard

FORCES (Ib) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-69/303, 2-3=-161/312 BOT CHORD 1-4=-208/122, 3-4=-230/141 2-4=-512/144 WEBS

# NOTES

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

(LC 1)

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-2-10 to 2-9-6, Interior (1) 2-9-6 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 8-0-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer/Project engineer responsible for 4) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing. 5)



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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	AV6	Valley	1	1	Job Reference (optional)	173354160



Scale = 1:33.3

Plate Offsets (X, Y):	[2:0-3-0,0-2-1],	[4:0-3-0,0-2-1]
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	( ) ) [ )- ];													
Loading TCLL (roof) TCDL BCLL	(psf) 20.0 10.0 0.0*	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.25 1.25 YES		CSI TC BC WB	0.09 0.18 0.04	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	<b>PLATES</b> MT20	<b>GRIP</b> 244/190	
BCDL	10.0	Code	IRC2018	/TPI2014	Matrix-MP							Weight: 21 lb	FT = 20%	
LUMBER TOP CHORD SOT CHORD THERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 *Excep 2x4 SP No.2 2x4 SP No.3 Structural wood she 5-10-8 oc purlins; ex 2-0-0 oc purlins; 2-4 Rigid ceiling directly bracing. (size) 1=5-10-8, Max Horiz 1=-35 (LC Max Uplift 1=-13 (LC (LC 12) Max Grav 1=-71 (LC 6=-332 (LC (lb) - Maximum Com Tension	t* 2-4:2x6 SP No.2 athing directly applie ccept applied or 6-0-0 oc 5=5-10-8, 6=5-10-8 : 8) : 13), 5=-25 (LC 8), 6 20), 5=111 (LC 26), 21) pression/Maximum	5) 6) 7) 8) d or 9) 10) =-54 11) 12)	Provide adec Gable requirr Gable studs: This truss ha chord live loa * This truss h on the bottom chord and ar Provide meci bearing plate 1, 25 lb uplift This truss is International R802.10.2 ar Graphical pu or the orienta bottom chorc <b>AD CASE(S)</b>	juate drainage to es continuous bot spaced at 4-0-0 o s been designed ad nonconcurrent nas been designed n chord in all area y 2-00-00 wide w y 2-00-00 wide w y other members hanical connectio capable of withsi at joint 5 and 54 designed in accor Residential Code nd referenced staa rlin representation tion of the purlin J. Standard	prevent v tom chor c. for a 10.0 with any d for a liv is where ill fit betw n (by oth tanding 1 lb uplift a 'dance w sections ndard AN n does no along the	water ponding d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 3 lb uplift at ju t joint 6. ith the 2018 R502.11.1 a ISI/TPI 1. ot depict the s top and/or	g. ds. )psf om oint ind size						
	4-5=-121/104	2/57, 3-4=-21/59,												
WEBS	3-6=-237/116	/93												
NOTES 1) Unbalance this design 2) Wind: ASC Vasd=91m II; Exp B; I and C-C E & MWFRS grip DOL= 3) Truss desi only. For see Stand or consult 4) Building D verifying F requireme	ed roof live loads have n. CE 7-16; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (er Exterior(2E) zone;C-C f S for reactions shown; I =1.60 igned for wind loads in studs exposed to wind lard Industry Gable En- qualified building desig Designer/Project engine Rain Load = 5.0 (psf) cc ents specific to the use	been considered for (3-second gust) DL=3.0psf; h=25ft; C welope) exterior zonu- or members and forc Lumber DOL=1.60 pl the plane of the trus (normal to the face), d Details as applicab gner as per ANSI/TP eer responsible for overs rain loading of this truss component	at. essate s le, l 1. ent.								and a second sec	SEA 0578	BOLL NE	Manual Inter

May 8,2025

Page: 1

ED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.	ENGINEERING
parameters shown, and is for an individual building component, not	
esign parameters and properly incorporate this design into the overall	= FK F. R
nd/or chord members only. Additional temporary and permanent bracing	
y and property damage. For general guidance regarding the	AM
see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org)	818 Soundside Road
ral Building Component Association (www.sbcacomponents.com)	Edenton, NC 27932

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDE Design valid for use only with MiTek® connectors. This design is based only upon a truss system. Before use, the building designer must verify the applicability of de building design. Bracing indicated is to prevent buckling of individual truss web an is always required for stability and to prevent ouldapse with possible personal injury fabrication, storage, delivery, erection and bracing of trusses and truss systems, sr and BCSI Building Component Safety Information available from the Structure

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	B01	Common	5	1	Job Reference (optional)	173354161

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:47 ID:X5EgMHJ8epEtephaFty0rQzJY2D-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



	1	9-10-8	1	19-9-0	
		9-10-8	1	9-10-8	
Scale = 1:80.2					
Plate Offsets (X, Y): [2:Edge,0-2-4], [8:Edge,0-2-4]					

	(, .). [=.=.9:,: = .],	[0:=:g0;0 = ·]											
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25		тс	0.49	Vert(LL)	-0.17	8-1Ó	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25		BC	0.91	Vert(CT)	-0.35	8-10	>661	180		
BCLL	0.0*	Rep Stress Incr	YES		WB	0.39	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code	IRC2018	8/TPI2014	Matrix-MS							Weight: 123 lb	FT = 20%
												0	
LUMBER			5)	* This truss h	has been designe	d for a liv	e load of 20.	.0psf					
TOP CHORD	2x4 SP No.2			on the bottor	n chord in all area	as where	a rectangle						
BOT CHORD	2x4 SP No.2			3-06-00 tall t	by 2-00-00 wide w	ull fit betw	een the bott	tom					
WEBS	2x4 SP No.2 *Excep	ot* 11-2,8-6:2x4 SP N	Vo.3	chord and ar	ly other members	i. 		4.0					
BRACING			6)	Provide med	nanical connectio	n (by oth tanding 6	2 lb uplift of	10 ioint					
TOP CHORD	Structural wood she	athing directly applie	ed or	11 and 62 lb	unlift at joint 9	tanung o	S ib upint at	joint					
	6-0-0 oc purlins, ex	cept end verticals.	7)	This trues is	designed in accor	rdance wi	ith the 2018						
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	; ')	International	Residential Code	sections	R502 11 1	and					
	bracing.			R802.10.2 a	nd referenced sta	ndard AN	ISI/TPI 1.	ana					
REACTIONS	(size) 8=0-5-8, 1	11=0-5-8	10	AD CASE(S)	Standard								
	Max Horiz 11=181 (L	_C 11)		, (C)	Otaridara								
	Max Uplift 8=-63 (LC	C 13), 11=-63 (LC 12	)										
	Max Grav 8=840 (LC	C 1), 11=840 (LC 1)											
FORCES	(lb) - Maximum Com	pression/Maximum											
	Tension	105 0 1 700/100											
TOP CHORD	1-2=0/39, 2-3=-415/	125, 3-4=-702/132,											
	4-5=-702/132, 5-6=-	415/125, 6-7=0/39,											
	2-11=-400/110,0-0=	-400/110											
WEBS	10-11=-02/042, 0-10	230/157											
WEDO	3-10=-229/157 3-11	= 200/107,  =-499/29 5-8=-499/	/29										
NOTES	0.10 220,101,011	100,20,00 100,	20										1.
1) Unbalance	ed roof live loads have	been considered for	r									WILL CA	5111
this desigr	n.											The	ROIL
2) Wind: ASC	CE 7-16; Vult=115mph	(3-second gust)									51	01.2549	in Alle
Vasd=91n	nph; TCDL=6.0psf; BC	DL=3.0psf; h=25ft; C	Cat.								SA	OFLEY	N. T.
II; Exp B; I	Enclosed; MWFRS (en	velope) exterior zon	e							Ξ.	5 ( 7	Aller Pl	intering -
and C-C E	Exterior(2E) -0-10-8 to 2	2-1-8, Interior (1) 2-1	I-8							2			
to 9-10-8,	Exterior(2R) 9-10-8 to	12-10-8, Interior (1)								=	:	SEA	
12-10-8 to	20-7-8 zone; cantileve	er left and right								=	:	0570	
exposed ;	end vertical left and rig	for reposed; C-C for										05760	o/ ; :
Lumber D	OI –1 60 plate grip DO	101 reactions shown;	,										1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
3) Building D	lesigner/Project engine	er responsible for									-	·	a: 3
verifying R	Rain Load = $5.0$ (nsf) or	overs rain loading									1	VGIN	E. N
requireme	ents specific to the use	of this truss compon	ient.								11	. 40	CEN
<ol> <li>This truss</li> </ol>	has been designed for	r a 10.0 psf bottom										MAM F	ACIN
chord live	load nonconcurrent wi	th any other live load	ds.									1111111	mm.

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



Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	BG01	Common Girder	1	2	Job Reference (optional)	173354162

Run: 8.83 E Dec 4 2024 Print: 8.830 E Dec 4 2024 MiTek Industries, Inc. Thu May 08 17:30:16 ID:UZT72D929K2x2a11MaCRgBzJY17-mK\_crGPX3Xf4yQmMR0GtfldGNY\_5Fu4vODVj??zIUw5 Page: 1



Scale = 1:72.6

Plate Offsets	(X, Y): [2:0-4-8,0-1-3],	[6:Edge,0-5-12], [7:	0-6-0,0-1-8	8], [9:0-5-0,0-4-	8]									
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 NO IRC2018	3/TPI2014	<b>CSI</b> TC BC WB Matrix-MS	0.53 0.44 0.69	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.10 -0.20 0.03	(loc) 9-10 9-10 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 272 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD 3OT CHORD WEDGE BRACING TOP CHORD 3OT CHORD REACTIONS FORCES TOP CHORD BOT CHORD	2x4 SP No.2 2x6 SP DSS *Excep 2x4 SP No.2 *Excep Left: 2x6 SP No.2 Right: 2x6 SP No.2 Right: 2x4 SP No.3 Structural wood shee 4-3-12 oc purlins. Rigid ceiling directly bracing. (lb/size) 2=5182/0 Max Horiz 2=160 (LC Max Uplift 2=-699 (L Max Grav 2=5182 (L (lb) - Max. Comp./Mi (lb) or less except w 2-3=-6854/903, 3-4= 4-5=-5048/576, 5-6 2-17=-717/5192, 10 10-18=-717/5192, 12	t* 8-6:2x8 SP DSS t* 5-7,3-10:2x4 SP N athing directly applie applied or 10-0-0 oc -5-8, 6=6910/0-5-8 C 8), 6=-579 (LC 9) C 1), 6=7191 (LC 2), ax. Ten All forces : hen shown. -5023/576, -7436/663 -17=-717/5192, 3-19=-717/5192, 0=-459/5658,	1) No.3 ed or 2) c 3) ) 4) 250 5)	2-ply truss to (0.131"x3") n Top chords c oc. Bottom chords c oc. Web connect All loads are except if note CASE(S) sec provided to d unless otherw Unbalanced this design. Wind: ASCE Vasd=91mph II; Exp B; End cantilever left right exposed Building Desi verifying Rair requirements	be connected toga ails as follows: onnected as follows: onnected as follow is connected as follow is connected as follow is considered equally ad as front (F) or ba- tion. Ply to ply con- istribute only loads vise indicated. roof live loads have 7-16; Vult=115mpl ; TCDL=6.0psf; BC closed; MWFRS (et and right exposed ; Lumber DOL=1.0; gner/Project engin h Load = 5.0 (psf) of specific to the use	ether wi rs: 2x4 - llows: 2: bws stat - 1 row r applied ack (B) f inection a noted : e been o h (3-sec CDL=3.0 nveloped ; end v 60 plate eer res covers r e of this	th 10d 1 row at 0-9 x6 - 2 rows ggered at 0-6 at 0-9-0 oc. t to all plies, ace in the LO s have been as (F) or (B), considered for ond gust) opsf; h=25ft; C ) exterior zon ertical left and grip DOL=1.6 ponsible for ain loading truss compon	0 -0 PAD - Cat. e; d S0 went.	10) This Inte R80 11) Loa des for t 12) Use 4-1( con 13) Use SDS at 4 18- <sup></sup>	s truss is rnationa 12.10.2 a d case(s igner mu he inten s Simpso 201 Truss Simpso 2212 Tru -0-0 oc r -0-0 oc r -0-0 oc r d. Simpso ss) or eq s(es) to	desigu I Resic Ind reff s) 1 ha: s) t ha: st revi ded us n Stroi vis (es) t n Stroi vis (es) t n Stroi uivalei back fa	ned in accordance lential Code sect erenced standards s/have been moor ew loads to verif ee of this truss. ng-Tie HHUS26- juivalent at 4-1-1 to back face of bo ng-Tie LUS26 (4 ngle Ply Girder) to tarting at 6-0-4 fr t truss(es) to bac ng-Tie LUS26 (4 nt at 8-0-4 from t ace of bottom cho	in Figure 2018 with the 2018 dANSI/TPI 1. diffied. Building y that they are correct the figure 2 (14-10d Girder, 0 from the left end to tottom chord. -SD9112 Girder, 4- or equivalent space om the left end to k face of bottom -10d Girder, 4-10d he left end to conne ord.	i oo d
WEBS	6-20=-459/5658, 7-8 7-21=-459/5658, 21- 22-23=-459/5658, 6- 4-9=-648/6089, 5-9= 5-7=-171/3001, 3-9= 3-10=-497/2238	==-400/5767, 22=-459/5658, 23=-459/5658 2504/278, 1888/527,	6) 7)	This truss has chord live loa * This truss h on the bottom 3-06-00 tall b chord and an	s been designed to id nonconcurrent w as been designed in chord in all areas y 2-00-00 wide wil y other members.	or a 10.0 vith any for a liv where I fit betw	) psf bottom other live load e load of 20.0 a rectangle veen the botto	ds. Ipsf om						
NOTES			8)	All bearings a	are assumed to be	SP No.	2.	_						

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 699 lb uplift at joint 2 and 579 lb uplift at joint 6.

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



Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	BG01	Common Girder	1	2	Job Reference (optional)	173354162

15) Fill all nail holes where hanger is in contact with lumber. LOAD CASE(S) Standard

LON	
1)	Dead + Roof Live (balanced): Lumber Increase=1.25,
	Plate Increase=1.25
	Uniform Loads (lb/ft)

Vert: 1-4=-60, 4-6=-60

Concentrated Loads (lb)

Vert: 8=-1095 (B), 9=-1095 (B), 17=-1550 (B), 18=-1095 (B), 19=-1095 (B), 20=-1095 (B), 21=-1095 (B), 22=-1095 (B), 23=-1096 (B)

Trapezoidal Loads (lb/ft)

 $\begin{array}{l} \mbox{Vert: } 11=-20\mbox{-to}-13=-20\ (F=0), 13=-20\ (F=0)\mbox{-}to-17=-23\ (F=-3), 17=-23\ (F=-3)\mbox{-}to-10=-24\ (F=-4)\mbox{,} \\ 10=-24\ (F=-4)\mbox{-}to-18=-25\ (F=-5)\mbox{-}to-19=-26\ (F=-6)\mbox{-}to-9=-27\ (F=-7)\mbox{-}to-20=-29\ (F=-9)\mbox{,} \\ 20=-27\ (F=-7)\mbox{-}to-20=-29\ (F=-9)\mbox{,} \\ 20=-29\ (F=-9)\mbox{-}to-20=-29\ (F=-9)\mbox{,} \\ 20=-29\ (F=-11)\mbox{,} \\ 8=-31\ (F=-11)\mbox{,} \\ 8=-31\ (F=-11)\mbox{-}to-21=-32\ (F=-12)\mbox{,} \\ 21=-32\ (F=-12)\mbox{,} \\ 21=-32\ (F=-12)\mbox{-}to-23=-34\ (F=-14)\mbox{-}to-23=-34\ (F=-14)\mbox{-}to-16=-35\ (F=-15)\mbox{,} \\ 10=-35\ (F=-15)\mbox{-}to-14=-35\ (F=-15)\mbox{,} \\ 10=-35\ (F=-15)\mbox{-}to-21=-32\ (F=-15)\mbox{,} \\ 10=-35\ (F=-15)\mbox{-}to-21=-32\ (F=-15)\mbox{-}to-21=-32\ (F=-15)\mbox{,} \\ 10=-35\ (F=-15)\mbox{-}to-21=-32\ (F=-15)\mbox{,} \\ 10=-35\ (F=-15)\mbox{-}to-21=-32\ (F=-15)\mbox{,} \\ 10=-35\ (F=-15)\mbox{-}to-21=-32\ (F=-15)\$ 

Run: 8.83 E Dec 4 2024 Print: 8.830 E Dec 4 2024 MiTek Industries, Inc. Thu May 08 17:30:16 ID:UZT72D929K2x2a11MaCRgBzJY17-mK\_crGPX3Xf4yQmMR0GtfldGNY\_5Fu4vODVj??zIUw5 Page: 2

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



Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	BSE01	Common Structural Gable	1	1	Job Reference (optional)	173354163

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:47 ID:pYTKr\_yu0P7mCb73hMxmlpzJY3z-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





	5-6-8	10-9-4	19-9-0	
Scale = 1:78.6	5-6-8	5-2-12	8-11-12	

Plate Offsets (X, Y): [2	2:0-3-15,0-0-2], [4:0-2-0,0-2-4], [	[13:0-3-8,Edge], [17:0-0-11,0-2-0]
--------------------------	-------------------------------------	------------------------------------

Loading TCLL (roof) TCDL		(psf) 20.0 10.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.25 1.25		CSI TC BC	0.26	DEFL Vert(LL) Vert(CT)	in 0.03 -0.04	(loc) 20-23 20-23	l/defl >999 >999	L/d 240 180	PLATES MT20	<b>GRIP</b> 244/190	
BCDL		10.0	Code	IRC20	18/TPI2014	Matrix-MS	0.10		-0.01	2	n/a	n/a	Weight: 132 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS WEDGE SLIDER BRACING TOP CHORD BOT CHORD JOINTS REACTIONS	2x4 SP No 2x4 SP No 2x4 SP No 2x4 SP No 2x4 SP No 2x4 SP No 2x4 SP No 2x5 Right: 2x4 Left 2x6 S Structural 6-0-0 oc p Rigid ceilin bracing. 1 Brace at 5 (size) Max Horiz Max Uplift Max Grav	5.2 5.3 5.3 *Except 5 SP No.3 9 No.2 2 wood shea burlins. ng directly t Jt(s): 7, 2=0-5-8, 1 15=9-1-8, 18=0-3-8 2=157 (LC 2=-46 (LC 14=-73 (Ld 2=594 (LC 14=177 (L 16=168 (L 18=199 (L	<ul> <li>* 7-8,17-9:2x4 SP N</li> <li>* 0-0</li> <li>athing directly applied</li> <li>applied or 10-0-0 oc</li> <li>3=9-1-8, 14=9-1-8, 16=9-1-8, 17=9-1-8, 17=9-18, 17=9-19, (LC 12), 13, 15=-54 (LC 12), 13, 15=-54 (LC 12), 13, 15=-54 (LC 12), 20, 15=-164 (LC 22), 20, 15=-164 (LC 22), 20, 17=-283 (LC 12), 17=-283 (LC 12), 15=-283 (LC 12), 15=-283</li></ul>	d or 3), 4 (1), 5	<ul> <li>WEBS</li> <li>NOTES</li> <li>1) Unbalanced this design.</li> <li>2) Wind: ASCE Vasd=91mpl II; Exp B; En and C-C Ext to 9-10-8, Ep 12-10-8 to 1 exposed; er members an Lumber DOL</li> <li>3) Truss design only. For stu see Standar or consult qu</li> <li>4) Building Des verifying Rai requirement:</li> <li>5) Provide ader</li> <li>6) All plates are</li> <li>7) Gable studs</li> <li>8) This truss has</li> </ul>	4-20=0/225, 7-8=-6 9-17=-130/60, 10-11 11-15=-128/71, 12- roof live loads have 7-16; Vult=115mph h; TCDL=6.0psf; BC iclosed; MWFRS (ei erior(2E) -0-10-8 to derior(2E) -0-10-8 to derior(2E) -0-10-8 to g-9-0 zone; cantilev nd vertical left and ri di forces & MWFRS =1.60 plate grip DC hed for wind loads ir uds exposed to wind d Industry Gable Er jalified building desi signer/Project engine in Load = 5.0 (psf) c s specific to the use quate drainage to p e 2x4 (  ) MT20 unit spaced at 2-0-0 oc.	1/75, 5-6=-123, 14=-123, 14=-123, 14=-123, 14=-123, 14=-123, 14=-123, 14=-123, 15=-123, 15=-123, 15=-123, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=-133, 15=	6=-67/41, 82, 2/76 considered fo ond gust) 0psf; h=25ft; ( 0) exterior zor nterior (1) 2- 8, Interior (1) exterior zor nterior (1) 2- 8, Interior	or Cat. ne 1-8 ) r; ss ), ble, PI 1. PI 1. g. ted.	12) Gra or t bott LOAD	uphical p he orient tom chor CASE(S)	urlin re ration ( d. ) Star	presentation doe of the purlin along ndard	s not depict the t the top and/or	size
FORCES	(lb) - Maxi Tension	imum Com	pression/Maximum	Ň	chord live lo	ad nonconcurrent w	ith any	other live loa	ids.		7	5)8	OFESU	ON: Y	1
TOP CHORD	1-2=0/34, 5-7=-357/ 9-10=-218 12-13=-25	2-4=-482/5 146, 7-17= 3/68, 10-11 57/69, 4-6=	58, 4-5=-312/120, -310/108, 8-9=-212/5 =-233/46, 11-12=-24 -228/42, 6-8=-185/75	92, I5/51, 9 .	<ul> <li>* This truss I on the bottor 3-06-00 tall I chord and ar</li> <li>10) Provide med</li> </ul>	has been designed m chord in all areas by 2-00-00 wide will my other members. chanical connection	tor a liv where fit betv (by oth	e load of 20.0 a rectangle veen the botto ers) of truss t	upsf om to		- Junio	Ľ	SEA 0578	37	Sector 1
BOT CHORD	2-20=-160 17-18=-74 15-16=-50 13-14=-50	)/437, 18-2 4/431, 16-1 )/199, 14-1 )/199	0=-74/431, 7=-50/199, 5=-50/199,		bearing plate 2, 19 lb uplif at joint 16, 5 and 19 lb up 11) This truss is	e capable of withsta t at joint 13, 90 lb up 4 lb uplift at joint 15 lift at joint 13. designed in accord	nding 4 olift at jo , 83 lb i ance w	th the 2018	oint uplift 14			in the second se	ADAM N	E.P.	1111.

International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	BSE02	Common Supported Gable	1	1	Job Reference (optional)	173354164

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:48 ID:lo9PbLAapBq4xSSHud5fnRzIYNY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



	11-1-0	
Scale = 1:44.7		
Plate Offsets (X, Y): [7:Edge,0-1-8]		

Loading TCLL (roof) TCDL BCLL BCDL		(psf) 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MS	0.05 0.03 0.04	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 7	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 57 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	2x4 SP No 2x4 SP No 2x4 SP No 2x4 SP No Structural 6-0-0 oc p Rigid ceili bracing. (size) Max Horiz Max Uplift Max Grav (lb) - Maxi Tension 1-2=-92/6 4-5=-74/1 1-12=-48/ 9-10=-30/ 4-10=-85/ 5-9=-136/ ed roof live lo	0.2 0.2 0.3 wood shead burlins. ng directly 1=11-1-0, 1=211-1-0, 1=-87 (LC 1=-20 (LC (LC 13), 9 (LC 20), 9 (LC 22), 1 (LC 19) imum Com 6, 2-3=-86/ 12, 5-6=-61 95, 3-11=-12 95, 8-9=-30 9, 3-11=-12 119, 6-8=-1 oads have	athing directly applie applied or 10-0-0 oc 7=11-1-0, 8=11-1-0, 10=11-1-0, 11=11-1 8) 8), 7=-2 (LC 9), 8=-4 63 (LC 13), 11=-63 9 (LC 12) 20), 7=75 (LC 20), 10=12 1=175 (LC 20), 10=12 1=175 (LC 19), 12=1 pression/Maximum (48, 3-4=-75/112, 7/24, 6-7=-86/41 -30/95, 10-11=-30/95 37/119, 2-12=-116/13 116/129 been considered for	2) d or -0, 3) -0, -0, -0, -0, -10 -0, -10 -0, -10 -0, -10 -0, -10 -0, -0, -0, -0, -0, -0, -0, -0, -0, -0	Wind: ASCE Vasd=91mph II; Exp B; End and C-C Corr 5-6-8, Corner 11-1-0 zone; vertical left ar forces & MW DOL=1.60 pla Truss design only. For stu see Standarc or consult qu Building Desi verifying Rair requirements All plates are Gable require Gable studs s This truss ha chord live load * This truss ha chord live load * This truss ha on the bottom 3-06-00 tall b chord and an ) Provide mect bearing plate 1, 2 lb uplift ar joint 12, 63 lb lb uplift at sjoir This truss is o International R802.10.2 ar	7-16; Vult=115mph ; TCDL=6.0psf; BC closed; MWFRS (en- ener(3E) 0-0-0 to 3-0 (3R) 5-6-8 to 8-6-8 cantilever left and ind right exposed; CFRS for reactions sate grip DOL=1.60 ed for wind loads in ds exposed to wind Industry Gable En- alified building desi gner/Project enginu- to Load = 5.0 (psf) of specific to the use 2x4 (  ) MT20 unless continuous botto spaced at 2-0-0 oc. s been designed for d nonconcurrent w as been designed for d nonconcurrent w as been designed for d nonconcurrent w as been designed for the chord in all areas y 2-00-00 wide will y other members. nanical connection capable of withsta t joint 7, 63 lb uplifi uplift at joint 9, 68 at 1. Besigned in accord Residential Code s d referenced stance Standard	n (3-sec CDL=3.( nvelope )-0, Exter right ex- -C for n shown; n the plat d (norm d Detai gener as ever resp covers n of this ess other m chor r a 10.( ith any for a liv (by oth- nding 2 t at join lb uplif ance wise covers and ance wise	ond gust) opsf; h=25ft; ( ) exterior zor erior(2N) 8-6-8 posed; end hembers and Lumber ane of the tru: al to the face; ls as applical s per ANSI/TF oonsible for ain loading truss compor erwise indicat d bearing. ) psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 0 lb uplift at j t 11, 69 lb up t at joint 8 and th the 2018 R502.11.1 a SI/TPI 1.	Cat. The -0 to to ss ), ble, Pl 1. hent. ted. ds. Opsf om o oint lift at d 20 nd				SEA 0578	ROUTE 37 54CE 11111	



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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	C1	Monopitch	3	1	Job Reference (optional)	173354165

2x4

3 20

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

7-1-15

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:48 ID:JuB\_fBXJibYFjDZz52u\_bGzIaOB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





May 8,2025

818 Soundside Road Edenton, NC 27932

12 4x6 ≠ 5 1

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13

3x6 🚅

4

2x4 II 6

> . 7

6-1-15



	-3-5-9	8-6-9	17-0-7
Scale = 1:67.2	3-5-9	8-6-9	8-5-14

2

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

•		-												
Loading	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25		тс	0.86	Vert(LL)	-0.41	9-12	>587	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25		BC	0.72	Vert(CT)	-0.87	9-12	>278	180			
BCLI	0.0*	Rep Stress Incr	YES		WB	0.84	Horz(CT)	0.27	7	n/a	n/a			
BCDI	10.0	Code	IRC2018	7.7PI2014	Matrix-MS	0.01		0.2.				Weight: 105 lb	FT - 20%	
BODE	10.0	0000	11102010		Matrix Me							Wolgin. Too ib	11-20/0	—
L <b>UMBER</b> TOP CHORD BOT CHORD	2x6 SP No.2 *Excep 2x4 SP No.1 *Excep	ot* 1-4:2x6 SP DSS ot* 8-7:2x4 SP No.2	5)	* This truss h on the bottor 3-06-00 tall b	has been designed n chord in all areas by 2-00-00 wide wil	for a liv where I fit betv	e load of 20. a rectangle veen the bott	0psf om						
WEBS	2x4 SP No.3 *Excep	ot* 7-5:2x4 SP No.2		chord and ar	y other members.									
BRACING			6)	Refer to gird	er(s) for truss to tru	iss conr	nections.							
TOP CHORD	Structural wood she 2-2-0 oc purlins, ex	athing directly applie cept end verticals.	d or 7)	Bearing at jo using ANSI/	int(s) 1 considers p PI 1 angle to grain	formul	to grain value a. Building	9						
BOT CHORD	Rigid ceiling directly bracing.	applied or 9-5-7 oc	8)	Provide mec	hanical connection	of bear (by oth	ers) of truss	to t ioint						
REACTIONS	(size) 1=0-5-8, 7 Max Horiz 1=199 (LC Max Uplift 1=-87 (LC Max Grav 1=823 (LC	7= Mechanical C 9) C 8), 7=-123 (LC 12) C 1), 7=809 (LC 1)	9)	7 and 87 lb u This truss is International R802 10 2 au	plift at joint 1. designed in accord Residential Code s	lance w sections	ith the 2018 R502.11.1 a	and						
FORCES	(lb) - Maximum Com	pression/Maximum	10	AD CASE(S)	Standard									
	Tension			///D 0///02(0)	olandara									
TOP CHORD	1-2=-338/112, 2-3=-	3617/483,												
	3-5=-1590/215, 5-6=	-110/79, 6-7=-155/7	4											
BOT CHORD	2-9=-508/2816, 7-9=	-215/869												
WEBS	3-9=-1035/214, 5-9=	-88/975, 5-7=-1042/	200											
NOTES														
1) Unbalance	d roof live loads have	been considered for												
	l. NE 7.40. V/ult 445mmh	(2 accord such)											1111	
2) Wind: ASC	E 7-16; Vult=115mpn	(3-second gust)	<b>N</b>									"TH CA	ROUN	
	ipii, TCDL=0.0psi, BC	DL=3.0psi, n=25n, C	λαι. Ο									At least	· · · · · ·	
	$rac{1}{2}$ $rac{$	5.6 Interior (1) 1.5	e 6 to								Y	O'FESDI	OA: V.	
19 4 1 zon	xienor(2E) - 1-9-7 io 1-	-5-6, Intenor (1) 1-5-	6 10								1 <		4.7.	
vortical loft	and right expected.	C for mombars and										section of		
forces & M	MERS for reactions s	bown: Lumber								-	8 - E	OFAL		
	nlate grin DOI –1 60	nown, Lumber								-		SEAL	- 1 1	
3) Building D	esigner/Project engine	er responsible for										05788	87 : 2	
verifying R	ain Load - 5.0 (nsf) co	overs rain loading								-		. 00700	1 I E	
requirement	nts specific to the use	of this truss compon	ent								1	1	1 5	
4) This truss	has been designed for	r a 10.0 psf bottom									1	· En	-R	
chord live l	load nonconcurrent wi	ith any other live load	ds.								1.	GINE		
		,,	-								11	AD	CEN	
												MAM F	ACTIN	
												· · · · · · · · · · · · · · · · · · ·	11111	

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	C2	Half Hip	1	1	Job Reference (optional)	173354166

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:48 ID:rnkJj5LKwB?kFWBrWdbhpPzIaN8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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		L	-3-5-9	1	7-9-5		15-0	)-11		17-0-7			
Scale - 1:64	7		3-5-9	1	7-9-5	I	7-3	-6	١,	1-11-12			
	(nsf)	Spacing	2-0-0		CSI		DEEL	in	(loc)	l/defl	h/l		GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25		TC	0.86	Vert(LL)	-0.52	10-13	>463	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25		BC	0.98	Vert(CT)	-1.08	10-13	>223	180		
BCLL	0.0*	Rep Stress Incr	YES		WB	0.48	Horz(CT)	0.32	7	n/a	n/a		
BCDL	10.0	Code	IRC2018	3/TPI2014	Matrix-MS		. ,					Weight: 112 lb	FT = 20%
LUMBER TOP CHORE BOT CHORE WEBS BRACING TOP CHORE BOT CHORE WEBS REACTIONS	<ul> <li>2x6 SP No.2 *Exception</li> <li>2x4 SP No.1 *Exception</li> <li>2x4 SP No.3 *Exception</li> <li>Structural wood shether 2-2-0 oc purlins, exception</li> <li>Structural wood shether 2-0-0 oc purlins, (e-Constructuration)</li> <li>Rigid ceiling directly bracing.</li> <li>1 Row at midpt</li> <li>(size) 1=0-5-8, 1</li> <li>Max Horiz 1=181 (LC</li> <li>Max Grav 1=823 (LC</li> </ul>	ot* 1-4:2x6 SP DSS t* 9-7:2x4 SP No.2 athing directly appli cept end verticals, a 0-0 max.): 5-6. applied or 2-2-0 oc 3-8 7= Mechanical C 9) 2 8), 7=-120 (LC 8) C 1), 7=809 (LC 1)	5) 6) and 7) 8) 9)	This truss hi chord live lo * This truss on the botto 3-06-00 tall chord and a Refer to girc Bearing at jc using ANSI/ designer shi Provide mea bearing plat 7 and 89 lb ) This truss is Internationa R802.10.2 a	as been designed ad nonconcurrent has been designe m chord in all are by 2-00-00 wide v ny other member jer(s) for truss to i bint(s) 1 considers TPI 1 angle to gra ould verify capaci chanical connectio e capable of withs uplift at joint 1. designed in accc I Residential Cod und referenced sta	I for a 10. t with any ed for a liv as where will fit betw s. truss conr s parallel ain formul ty of bear on (by oth standing 1 ordance w e sections andard AN	0 psf bottom other live loa e load of 20. a rectangle veen the bott nections. to grain value a. Building ing surface. ers) of truss 20 lb uplift a s R502.11.1 a s R502.11.1 a	ads. Opsf tom to t joint					
TOP CHORE	(lb) - Maximum Com Tension 1-2=-324/93, 2-3=-3	pression/Maximum	97.	) Graphical po or the orient	urlin representatic ation of the purlin	on does no along the	ot depict the e top and/or	size					
	5-6=-74/79, 6-7=-59	/32	۰., ۱	AD CASE(S)	u. Standard								
BOT CHORE	2-10=-546/2789, 8-1 7-8=-112/249	10=-407/1865,	20		Otandard								
WEBS	3-10=0/372, 3-8=-17 5-7=-792/205	703/313, 5-8=-62/65	59,										
NOTES													11111
<ol> <li>Unbaland this deside</li> </ol>	ced roof live loads have	been considered for	or									"TH L	Rojin
<ol> <li>Wind: AS Vasd=91 II; Exp B; and C-C 15-8-0, E and right C for mei shown; L</li> </ol>	SCE 7-16; Vult=115mph mph; TCDL=6.0psf; BC ; Enclosed; MWFRS (er Exterior(2E) -2-9-4 to 0 ixterior(2E) 15-8-0 to 17 exposed ; end vertical mbers and forces & MW umber DOL=1.60 plate	(3-second gust) IDL=3.0psf; h=25ft; Ivelope) exterior zoi -5-9, Interior (1) 0-5 -4-4 zone; cantileve left and right exposs /FRS for reactions grip DOL=1.60	Cat. ne i-9 to er left ed;C-								in C	SEA 0578	рууна L 87
3) Building verifying requirem	Designer/Project engine Rain Load = 5.0 (psf) c ents specific to the use	eer responsible for overs rain loading of this truss compo	nent.								in the	ADAM I	ACE

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-9-4 to 0-5-9, Interior (1) 0-5-9 to 15-8-0, Exterior(2E) 15-8-0 to 17-4-4 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
- Building Designer/Project engineer responsible for 3) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.

J87 NGINEER May 8,20 NGINEER

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	C3	Half Hip	1	1	Job Reference (optional)	173354167

6-3-5

6-3-5

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,



17-0-7

4-10-0

12-2-7

5-11-2



Page: 1



20-6-0

	-3-5-9	6-3-5	12-0-11	17-0-7	
Scale = 1:60.5	3-5-9	6-3-5	5-9-6	4-11-12	

-3-5-9

3-5-9

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

	i <b>ding</b> LL (roof) DL LL DL	(psf) 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC2018	8/TPI2014	<b>CSI</b> TC BC WB Matrix-MS	0.86 0.97 0.70	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.43 -0.89 0.28	(loc) 10-13 10-13 7	l/defl >562 >273 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 107 lb	<b>GRIP</b> 244/190 FT = 20%	
LUN FOF 307 WE 3R/ FOF 3R/	MBER P CHORD T CHORD BS ACING P CHORD T CHORD BS	2x6 SP No.2 *Excep 2x4 SP No.1 *Excep 2x4 SP No.3 Structural wood shea 2-2-0 oc purlins, ext 2-0-0 oc purlins (6-0 Rigid ceiling directly bracing. 1 Row at midpt	t* 1-4:2x6 SP DSS t* 8-7:2x4 SP No.2 athing directly applie cept end verticals, ar -0 max.): 5-6. applied or 2-2-0 oc 3-9	4) 5) 6) d or nd 7) 8)	Provide adec This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Refer to gird Bearing at jo using ANSI/7 designer sho	uate drainage to p s been designed for ad nonconcurrent w has been designed n chord in all areas y 2-00-00 wide will by other members. er(s) for truss to tru int(s) 1 considers p PI 1 angle to grain uld verify capacity	revent v or a 10.0 ith any for a liv where fit betv ss conr arallel t formula of bear	vater ponding o psf bottom other live loa e load of 20.0 a rectangle veen the botto ections. o grain value a. Building ng surface.	g. ds. Dpsf om						
RE/	ACTIONS	(size) 1=0-5-8, 7 Max Horiz 1=150 (LC Max Uplift 1=-93 (LC Max Grav 1=823 (LC (lb) - Maximum Com Tension	7= Mechanical 2 9) 8 8), 7=-116 (LC 8) 2 1), 7=809 (LC 1) pression/Maximum	9) 10) 11)	Provide mec bearing plate 7 and 93 lb u ) This truss is International R802.10.2 ar ) Graphical pu	nanical connection capable of withsta plift at joint 1. designed in accord Residential Code s nd referenced stand rlin representation	(by oth nding 1 ance w sections dard AN does no	ers) of truss t 16 lb uplift at ith the 2018 R502.11.1 a ISI/TPI 1. ot depict the s	o ; joint ind size						
ГОF 301	P CHORD	1-2=-299/59, 2-3=-30 5-6=-67/66, 6-7=-140 2-10=-591/2849, 9-1 7-9=-209/710	614/593, 3-5=-855/1 0/63 0=-502/2181,	68, LO	or the orienta bottom chorc AD CASE(S)	ation of the purlin al I. Standard	ong the	top and/or							
VE 10 1)	BS TES Unbalance this design Wind: ASC	3-10=0/310, 3-9=-15 5-7=-936/227 ed roof live loads have n. CF 7-16: Vult=115mph	49/312, 5-9=-67/634 been considered for (3-second gust)	ļ,								July Start	OLOFESS	BOLING	
-,	Vasd=91n	nph; TCDL=6.0psf; BC	DL=3.0psf; h=25ft; C	Cat.								C	and	u ci i i i	

II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-9-4 to 0-5-9, Interior (1) 0-5-9 to 12-8-0, Exterior(2R) 12-8-0 to 16-10-15, Interior (1) 16-10-15 to 17-4-4 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

3) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. SEAL 057887 May 8,2025

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	C4	Half Hip	1	1	Job Reference (optional)	173354168

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:49 ID:HF6RKpqsBgMQuGWIgEnII7zIaLE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

\_\_\_\_







-3-5-9	9-0-11	17-0-7
3-5-9	9-0-11	7-11-12

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

Scale = 1:56.3

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25		TC	0.86	Vert(LL)	-0.38	8-11	>636	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25		BC	0.76	Vert(CT)	-0.82	8-11	>296	180			
BCLL	0.0*	Rep Stress Incr	YES		WB	0.58	Horz(CT)	0.25	6	n/a	n/a			
BCDL	10.0	Code	IRC2018	/TPI2014	Matrix-MS							Weight: 102 lb	FT = 20%	
UMBER			6)	* This truss h	nas been designed	for a liv	e load of 20.	Opsf		-				
TOP CHORD	2x6 SP DSS *Except	t* 4-5:2x6 SP No.2	- /	on the bottor	n chord in all areas	where	a rectangle	-1 -						
BOT CHORD	2x4 SP No.1 *Except	t* 7-6:2x4 SP No.2		3-06-00 tall b	y 2-00-00 wide wil	l fit betv	veen the bott	tom						
NEBS	2x4 SP No.3 *Except	t* 8-5:2x4 SP No.2		chord and ar	y other members.									
BRACING			7)	Refer to gird	er(s) for truss to tru	iss conr	nections.							
TOP CHORD	Structural wood shea	athing directly applie	dor 8)	Bearing at jo	int(s) 1 considers p	barallel t	o grain value	Э						
	2-2-0 oc purlins exc	cent end verticals ar	nd	using ANSI/1	PI 1 angle to grair	n formula	a. Building							
	2-0-0 oc purlins (5-6-	-9 max.): 4-5.		designer sho	uld verify capacity	of bear	ng surface.							
BOT CHORD	Rigid ceiling directly	applied or 8-0-10 oc	9)	Provide mec	hanical connection	(by oth	ers) of truss	to						
	bracing.			bearing plate	capable of withsta	anding 9	6 lb uplift at	joint						
REACTIONS	(size) 1=0-5-8, 6	6= Mechanical	10)	1 and 113 lb	uplift at joint 6.									
	Max Horiz 1=119 (LC	C 9)	10)	I his truss is	designed in accord	ance w	Ith the 2018	and						
	Max Uplift 1=-96 (LC	8), 6=-113 (LC 8)		R802 10 2 a	d referenced stan	dard AN	191/TDI 1	anu						
	Max Grav 1=823 (LC	C 1), 6=809 (LC 1)	11)	Graphical pu	rlin representation	doos no	t denict the	cizo						
FORCES	(lb) - Maximum Com	pression/Maximum	,	or the orienta	ation of the purlin a	long the	top and/or	5120						
	Tension			bottom chore	l.	g								
TOP CHORD	1-2=-273/32, 2-3=-36 4-5=-1326/261, 5-6=	667/658, 3-4=-1467/2 -746/184	<sup>259,</sup> LO	AD CASE(S)	Standard									
BOT CHORD	2-8=-613/2846, 6-8=	-33/61												
NEBS	3-8=-1328/313, 4-8=	0/277, 5-8=-297/138	5											
NOTES														
1) Unbalance	ed roof live loads have	been considered for										, minin	1111	
this desig	n.											" LA CA	Dall	
2) Wind: AS	CE 7-16; Vult=115mph	(3-second gust)									-	211	OI !!	
Vasd=91n	nph; TCDL=6.0psf; BCI	DL=3.0psf; h=25ft; C	at.								2	O EESS	of M's	
II; Exp B;	Enclosed; MWFRS (en	velope) exterior zone	9								24		No. 7 .	
and C-C E	Exterior(2E) -2-9-4 to 0-	5-9, Interior (1) 0-5-9	9 to										Mr.	-
9-8-0, EXT	erior(2R) 9-8-0 to 13-10	U-15, Interior (1)										0541		-
13-10-15 oxposod :	ond vortical left and ric	her rent and right								=		SEAL		Ξ.
members	and forces & MW/ERS	for reactions shown:								-		05789	27	Ξ
Lumber D	OI = 1.60 plate grip $DOI$										9 8		· ·	5
3) Building D	esigner/Project engine	er responsible for									-	100 m		2
verifyina F	Rain Load = 5.0 (psf) co	overs rain loading									2	· EN	cR.	
requireme	ents specific to the use	of this truss compone	ent.								1	GINE	1. S	
<ol> <li>Provide ad</li> </ol>	dequate drainage to pre	event water ponding.									1	ADAN	ACEN	
5) This truss	has been designed for	a 10.0 psf bottom										MM F	· · · · · ·	
chord live	load nonconcurrent wit	th any other live load	s.										mu.	

May 8,2025

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	C5	Half Hip	1	1	Job Reference (optional)	173354169

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:49

Page: 1



Scale = 1:52		-3-5-9 3-5-9		<u>6-0-11</u> 6-0-11			<u>1-5-11</u> 5-5-0			<u>17-0-7</u> 5-6-12		—		
Loading FCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.25		CSI TC BC	0.86	DEFL Vert(LL)	in -0.43	(loc) 9-12	l/defl >568	L/d 240	PLATES MT20	<b>GRIP</b> 244/190	

TODL	10.0		1.20			0.70	ven(or)	-0.07	3-12	2211	100	1	
BCLL	0.0*	Rep Stress Incr	YES		WB	0.60	Horz(CT)	0.27	6	n/a	n/a		
BCDL	10.0	Code	IRC20	018/TPI2014	Matrix-MS							Weight: 99 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) LIphalance	2x6 SP DSS *Excep 2x4 SP DSS *Excep 2x4 SP No.3 Structural wood she 2-2-0 oc purlins, ex 2-0-0 oc purlins (5-5 Rigid ceiling directly bracing. (size) 1=0-5-8, 1 Max Horiz 1=87 (LC Max Uplift 1=-99 (LC Max Grav 1=823 (LI (lb) - Maximum Con Tension 1-2=-252/32, 2-3=-3 4-5=-1502/289, 5-6 2-9=-652/3094, 8-9 3-9=-6/325, 3-8=-63 5-8=-275/1566	ot* 3-5:2x6 SP No.2 ot* 7-6:2x4 SP No.2 ot* 7-6:2x4 SP No.2 eathing directly applie ccept end verticals, ar 3-14 max.): 3-5. / applied or 9-10-14 o 6= Mechanical : 9) C 8), 6=-110 (LC 8) C 1), 6=809 (LC 1) npression/Maximum 3622/674, 3-4=-1502/ =-746/157 =-444/2092, 6-8=-26/ 39/175, 4-8=-309/103,	d or nd 289, 55	<ul> <li>6) * This truss I on the botton 3-06-00 tall I chord and ar</li> <li>7) Refer to gird</li> <li>8) Bearing at jc using ANSI/ designer sho</li> <li>9) Provide mec bearing plate 1 and 110 lb</li> <li>10) This truss is International R802.10.2</li> <li>11) Graphical pu or the orient: bottom chord</li> <li>LOAD CASE(S)</li> </ul>	has been design m chord in all are by 2-00-00 wide ny other member er(s) for truss to int(s) 1 consider TPI 1 angle to gr puld verify capac chanical connect e capable of with uplift at joint 6. designed in acc Residential Coo nd referenced st rilin representati ation of the purlin d. Standard	ed for a liv as where will fit betv rs. truss conr s parallel t ain formul ity of bear on (by oth standing S ordance w le sections andard AN on does no a long the	e load of 20. a rectangle veen the bott nections. o grain value a. Building ng surface. ers) of truss 9 lb uplift at ith the 2018 i R502.11.1 a ISI/TPI 1. ot depict the top and/or	Opsf com to joint and size					

this design.

Wind: ASCE 7-16; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -2-9-4 to 0-5-9, Interior (1) 0-5-9 to 6-8-0, Exterior(2R) 6-8-0 to 10-10-15, Interior (1) 10-10-15 to 17-4-4 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

Building Designer/Project engineer responsible for 3) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

- 4) Provide adequate drainage to prevent water ponding. 5)
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	C6G	Half Hip Girder	1	2	Job Reference (optional)	173354170

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:49 ID:mcuE4fUoxmd\_qJUdBWkQp0zIaJ5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





	-3-5-9	3-0-11	7-8-0	12-3-5	17-0-7
	3-5-9	3-0-11	4-7-5	4-7-5	4-9-1
Scale = 1:47.8					

# Plate Offsets (X, Y): [2:0-1-4,Edge], [11:0-4-3,0-4-0]

Loading         (psf)         Spacing         2-0-0         CSI         DEFL         in         (loc)           TCLL (roof)         20.0         Plate Grip DOL         1.25         TC         0.92         Vert(LL)         -0.32         11-14           TCDL         10.0         Lumber DOL         1.25         BC         0.72         Vert(CT)         -0.64         11-14	l/defl L/d >746 240 >376 180 n/a n/a	c) I/de 4 >74 4 >37	/defl ⊳746	l/defl	l/def			) )	(loc)	(loc	1	n	in	n			(	(lo	(loc)	c)	l,	l/d	/de	lefl	efl			L	L	L/c	/d	ł	P	۲L،	. <b>A</b> 1	TE	ES	5				C	GR							
TCLL (roof)         20.0         Plate Grip DOL         1.25         TC         0.92         Vert(LL)         -0.32         11-14           TCDL         10.0         Lumber DOL         1.25         BC         0.72         Vert(CT)         -0.64         11-14	>746 240 >376 180 n/a n/a	4 >74 4 >3	>746	- 71C			)	<i>i</i> C)	()	· · ·							(.	· ·										0	-					477		~						-	21/	1/1	~ ~					
TCDL         10.0         Lumber DOL         1.25         BC         0.72         Vert(CT)         -0.64         11-14	>376 180 n/a n/a	4 >3		>140	>746	. :	4	14	1-14	11-14	2	2	32	2	2 1	1	11	11-1	1-14	4	>	>7	>74	'46	6		2	2	24	240	10		M	/11	20	0							244	4/1	90					
	n/a n/a	-	>376	>376	>376	. :	4	14	1-14	11-14	ŀ	4	64	4	1	1	11	11-1	1-14	4	>	>3	>37	376	6	;	1	1	18	80	30																			
BCLL         0.0*         Rep Stress Incr         NO         WB         0.61         Horz(CT)         0.24         7		/ n	n/a	n/a	n/a		7	7	7	7	ŀ	4	24	4	Ļ				7	7		r	n/a	n/a	a	l		r	n/	n/a	/a	a																		
BCDL 10.0 Code IRC2018/TPI2014 Matrix-MS																																	W	Ve	eig	ght	t: 2	22	24	4 II	lb	F	FT	= 2	209	%				
BCLL       0.0 <sup>+</sup> Rep Stress Incr       NO       WB       0.61       Horz(CT)       0.24       7         BCDL       10.0       Code       IRC2018/TP12014       Matrix-MS       Matrix-MS       Matrix-MS         LUMBER       2x6 SP DSS *Except* 3-6:2x6 SP No.2       2x4 SP No.3       Wind: ASCE 7-16; Vull=115mph (3-second gust)       Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25f; Cat.       I; Exp B; Enclosed; MWFRS (envelope) exterior zone;         BOT CHORD       Structural wood sheathing directly applied or 10-0-0 cc       Bigid ceiling directly applied or 10-0-0 cc       Structural wood sheathing directly applied or 10-0-0 cc       Structural wood sheathing directly applied or 10-0-0 cc       This truss has been designed for a live load of 20.0psf       This truss has been designed for a live load of 20.0psf         70 CHORD       (size)       1=0-5-8, 7= Mechanical       Nax Grav 1=1419 (LC 1), 7=1736 (LC 1)       This truss has been designed for a live load of 20.0psf         70 ChORD       1:2440/16, 2:3723/92/52, 3:47193/917, 4:57193/917, 5-6443/56, 67231/47       Structural wood sheat/66861       Structural wood sheat/966866       Structural wood sheat follows: 2x6 - 2 rows staggered at 0-9-0 oc.       Structural wood sheat follows: 2x6 - 2 rows staggered at 0-9-0 oc.       Structural wood sheat of 0-0 oc.       Structural wood sheat of 0-0	and the second s	/ n	n/a	n/a	n/a		7	7	7	7		4	24	4					7	7		r	n/a	n/a	a								N N	Ve		ght Contraction of the second s		222 5 5 5	24		A A				209	% V	1			_
<ol> <li>Unbalanced roof live loads have been considered for (F)</li> <li>this design.</li> </ol>																																	"	"	1	1			N	!	1	11		11	"					

May 8,2025

Page: 1

TRENGINEERING BY A MITOR Affiliate

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	CJ1	Jack-Open	7	1	Job Reference (optional)	173354171

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:49 ID:Y0\_q3uuR8cAkfCC9bP?x1IzIaUB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





1-6-8

5x12 u



Scale = 1:27.9

Plate Offsets (X, Y): [3:Edge,1-6-8]

		-												• • • • • • • • • • • • • • • • • • • •
Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.25		тс	0.02	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL		10.0	Lumber DOL	1.25		BC	0.03	Vert(CT)	0.00	5	>999	180		
BCLL		0.0*	Rep Stress Incr	YES		WB	0.03	Horz(CT)	0.00	1	n/a	n/a		
BCDL		10.0	Code	IRC201	8/TPI2014	Matrix-MP		- (- )					Weight: 18 lb	FT = 20%
								-					····g····	
LUMBER				6)	Bearing at joi	nt(s) 1 considers pa	arallel t	o grain value						
TOP CHORD	2x8 SP DS	S			using ANSI/T	PI 1 angle to grain	formula	a. Building						
BOT CHORD	2x4 SP No	.2			designer sho	uld verify capacity of	of bear	ng surface.						
WEBS	2x4 SP No	.3		7)	Provide mech	nanical connection	(by oth	ers) of truss to	)					
BRACING					bearing plate	capable of withsta	nding 1	8 lb uplift at jo	int					
TOP CHORD	Structural	wood shea	athing directly applied	l or	1 and 17 lb u	plift at joint 4.								
	3-1-3 oc pi	urlins.	• • • •	8)	This truss is	designed in accorda	ance w	ith the 2018						
BOT CHORD	Rigid ceilin	g directly	applied or 6-0-0 oc		International	Residential Code s	ections	R502.11.1 ar	nd					
	bracing.				R802.10.2 ar	d referenced stand	ard AN	ISI/TPL1.						
REACTIONS	(size)	1=0-5-8, 3	8= Mechanical, 4=	9)	Gap betweer	i inside of top chord	a bearir	ig and first						
		Mechanica	al		diagonal or v	ertical web shall no	t excee	ed 0.500in.						
	Max Horiz	3=207 (LC	C 1), 4=-207 (LC 1)	LC	JAD CASE(S)	Standard								
	Max Uplift	1=-18 (LC	12), 4=-17 (LC 12)											
	Max Grav	1=95 (LC	1), 4=209 (LC 1)											
FORCES	(lb) - Maxir	num Com	pression/Maximum											
	Tension													
TOP CHORD	1-2=-34/38	, 2-3=-54/	266											
BOT CHORD	2-4=-207/1	15												
WEBS	3-4=-187/6	1												
NOTES														
1) Wind: ASC	CE 7-16: Vult	=115mph	(3-second gust)											
Vasd=91n	nph; TCDL=6	.0psf; BC	DL=3.0psf; h=25ft; Ca	at.										11.
II; Exp B; I	Enclosed; M\	VFRS (en	velope) exterior zone	•									Mul CA	Dille
and C-C E	Exterior(2E) -	)-8-1 to 2-	-3-15, Interior (1) 2-3-	15								6	bin	TOM
to 2-11-7 2	zone; cantile	/er left and	d right exposed ; end									A	DV-FAS	A. A.
vertical lef	t and right ex	posed;C-	C for members and									F ÷	-OFL-T	N. T.
forces & N	IWFRS for re	actions sl	hown; Lumber										Stant.	Jukin .
DOL=1.60	) plate grip D	OL=1.60									-	$\sim$		
2) Building D	esigner/Proje	ect engine	er responsible for								=	:	SEA	
verifying F	Rain Load = 5	.0 (pst) co	overs rain loading								=	:	0579	27 : 2
requireme	nts specific to	o the use	of this truss compone	ent.							1		05760	≥/ <u>;</u> =
3) This truss	has been de	signed for	a 10.0 psi bollom								-			1 - E - E -
4) * This true	c has been d	locignod f	ar a live lead of 20 0p	s. of								-	·	ais
on the bot	tom chord in	all areas	where a rectangle	31								1	VGIN	EF. N
3-06-00 ta	II by 2-00-00	wide will f	fit between the botton	n								11	. 40	CEN
chord and	any other m	embers.											MAM F	ACIN
5) Refer to a	irder(s) for tr	uss to trus	ss connections.										1111111	ann.
., io g													Mo	V 9 2025

May 8,2025

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	CJ2	Half Hip	1	1	Job Reference (optional)	173354172



-2-5-4 2-5-4

°°,⊥\_

Page: 1

Scale = 1.54.4													
oading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
CLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.03	Vert(LL)	0.00	5	>999	240	MT20	244/190	
CDL	10.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	0.00	5	>999	180			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	1	n/a	n/a			
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 17 lb	FT = 20%	
UMBER OP CHORD	2x8 SP DSS		7) Bearing at ju using ANSI/	oint(s) 1 conside /TPI 1 angle to g	ers parallel t grain formula	o grain value a. Building	9						

1-6-8

1-6-8

BOT CHORD 2x4 SP No.2 2x4 SP No.3 WEBS BRACING TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. REACTIONS (size) 1=0-5-8, 3= Mechanical, 4= Mechanical Max Horiz 3=207 (LC 1), 4=-207 (LC 1) Max Uplift 1=-18 (LC 12), 4=-17 (LC 12) Max Grav 1=95 (LC 1), 4=209 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-34/38, 2-3=-55/266, 3-4=-187/61

BOT CHORD 2-4=-207/112

NOTES

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

Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. 2) II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-9-4 to 1-2-12, Interior (1) 1-2-12 to 1-10-4 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

3) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. 4) 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 5)

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.

6) Refer to girder(s) for truss to truss connections.

designer should verify capacity of bearing surface.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 1 and 17 lb uplift at joint 4.

- This truss is designed in accordance with the 2018 9) International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	D1	Common	1	1	Job Reference (optional)	173354173

3-2-7



-1-2-8 10-3-8 4-6-8 9-1-0 4-6-8 4-6-8 1-2-8 1-2-8 9-1-0 4x6 = 3 6<sup>12</sup> 14 15 5 6 2x4 II 2x4 = 2x4 =



### Scale = 1:43.6

DOL=1.60 plate grip DOL=1.60

chord live load nonconcurrent with any other live loads.

3)

4)

Loading	(psf)	Spacing	2-0-0		CSI	0.21		in 0.02	(loc)	l/defl	L/d	PLATES	GRIP
	20.0		1.25		RC	0.21	Vert(CT)	0.02	6 12	>999	100	101120	244/190
RCU	10.0	Ron Stross Incr	1.25 VES		W/P	0.21		-0.03	0-13	>999 n/o	n/o		
BCDI	10.0	Code	IRC2018/TE	PI2014	Matrix-MS	0.07	11012(01)	0.00	4	11/a	n/a	Weight: 36 lb	FT – 20%
DODL	10.0	Code	11(02010/11	12014	Matrix-ING							Weight. 50 lb	11 = 2078
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly	athing directly applie	5) * or 3- ct 6) P d or br 2, 7) T	This truss h n the botton -06-00 tall b hord and an rovide mecl earing plate , 48 lb uplift his truss is	as been designed n chord in all area y 2-00-00 wide wi y other members. nanical connectior capable of withst at joint 4 and 55 1 designed in accord	I for a liv s where II fit betw n (by oth anding 3 b uplift a dance w	e load of 20.0 a rectangle veen the botto ers) of truss t 4 lb uplift at ju t joint 7. ith the 2018	0psf om o oint					
201 0110112	bracing.		In	nternational	Residential Code	sections	R502.11.1 a	nd					
REACTIONS	(size) 2=1-0-0, 4 Max Horiz 2=-36 (LC Max Uplift 2=-34 (LC (LC 9) Max Grav 2=244 (LC (LC 25)	R LOAE 55 =236	802.10.2 ar	nd referenced star Standard	idard AN	151/1211.							
FORCES	(lb) - Maximum Com Tension	pression/Maximum											
TOP CHORD	1-2=0/32, 2-3=-437/ 4-5=0/32	260, 3-4=-430/242,											
BOT CHORD WEBS	2-7=-135/339, 6-7=- 3-6=-88/179	135/339, 4-6=-135/3	39										
NOTES													
<ol> <li>Unbalanc this desig</li> <li>Wind: AS Vasd=91r II; Exp B;</li> </ol>	Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone										- International States	OTH CA	ROLINI





Page: 1

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	D1SE	Common Structural Gable	1	1	Job Reference (optional)	173354174

2-8-12

1-9-12



Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:50 ID:21vw6HIIIHhVCSphH1\_3N4zIYba-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 4-6-8 9-1-0 4-6-8 4-6-8 9-1-0 4x6 =2 12 6 Г 12 13 11 14 0 3





2-8-12

Scale = 1:26.2

Loading TCLL (roof) TCDL BCLL BCDL		(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC201	8/TPI2014	<b>CSI</b> TC BC WB Matrix-MS	0.13 0.18 0.03	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.01 0.00	(loc) 5 5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 29 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD 3OT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N 2x4 SP N Structural 6-0-0 oc p Rigid ceili bracing.	0.2 0.2 0.3 wood she purlins. ing directly	athing directly appli applied or 10-0-0 o	4) 5) 6) ed or 7) c	Building Des verifying Rain requirements Gable studs This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and ar	igner/Project en h Load = 5.0 (ps s specific to the u spaced at 2-0-0 s been designer id nonconcurren has been designer n chord in all are y 2-00-00 wide yy other member	gineer resp f) covers ra use of this oc. d for a 10.0 t with any ed for a live as where will fit betw s.	consible for ain loading truss compo ) psf bottom other live loa e load of 20. a rectangle veen the bott	nent. ads. Opsf						
REACTIONS	(size) Max Horiz Max Uplift Max Grav	1=1-11-8, 6=0-3-8 1=-26 (LC 1=-2 (LC (LC 13), 6 1=97 (LC (LC 1), 6=	3=1-11-8, 4=0-3-8, 13), 3=-1 (LC 13), 4 =-42 (LC 12) 1), 3=97 (LC 1), 4= -266 (LC 1)	8) =-38 266 <sup>9)</sup>	<ul> <li>3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.</li> <li>8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 1, 1 lb uplift at joint 3, 42 lb uplift at joint 6 and 38 lb uplift at joint 4.</li> <li>9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and</li> </ul>										
FORCES	(lb) - Max Tension	imum Com	pression/Maximum	L	DAD CASE(S)	Standard	andard AN	ISI/TPLT.							
TOP CHORD BOT CHORD	1-2=-247/ 1-6=-8/17 3-4=-15/1 2-5=-8/81	80, 2-3=-2 6, 5-6=-7/1 76	47/79 176, 4-5=-7/176,												
NOTES	2-3=-0/01												20110		
<ol> <li>Unbalance</li> </ol>	ed roof live l	oads have	been considered fo	r											

1-9-12

this design

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 4-6-8, Exterior(2R) 4-6-8 to 7-6-8, Interior (1) 7-6-8 to 9-1-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.



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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	D2	Common	1	1	Job Reference (optional)	173354175



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Scale = 1:43.6

					_									_
Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MS	0.26 0.21 0.07	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.03 0.00	(loc) 6-13 6-13 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 36 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shee 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-0, 4 Max Horiz 2=-36 (LC Max Uplift 2=-51 (LC Max Gray. 2=459 (I	athing directly applie applied or 10-0-0 or I=0-5-8 : 9), 4=-47 (LC 13) 2.1), 4=-413 (I C 1)	5) ed or c 7) LC	* This truss I on the bottor 3-06-00 tall I chord and an Provide mec bearing plate 2 and 47 lb t This truss is International R802.10.2 a DAD CASE(S)	has been desig m chord in all a by 2-00-00 wide ny other membe chanical connec e capable of wit uplift at joint 4. designed in ac Residential Co nd referenced s Standard	ned for a live reas where a will fit betwars. (by othe hstanding 5 cordance wi ode sections standard AN	e load of 20.1 a rectangle reen the bott ers) of truss i 1 lb uplift at j th the 2018 R502.11.1 a SI/TPI 1.	Opsf om to joint and						_
FORCES	(lb) - Maximum Com Tension	pression/Maximum												
TOP CHORD BOT CHORD WEBS	1-2=0/32, 2-3=-433/2 4-5=0/32 2-6=-128/328, 4-6=- 3-6=-81/181	248, 3-4=-418/245, 128/328												
NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=91r II; Exp B; and C-C B	ed roof live loads have n. CE 7-16; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior(2E) -1-2-8 to 1-	been considered fo (3-second gust) DL=3.0psf; h=25ft; ( velope) exterior zor -9-8, Interior (1) 1-9-	r Cat. ne •8 to									TH CA	Rolling	

4-6-8, Exterior(2R) 4-6-8 to 7-6-8, Interior (1) 7-6-8 to 10-3-8 zone; cantilever left 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 Building Designer/Project engineer responsible for

3) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. May 8,202

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818 Soundside Road Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	D3	Common	1	1	Job Reference (optional)	173354176









L <b>oading</b> TCLL (roof) TCDL 3CLL 3CDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MS	0.20 0.23 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.03 0.00	(loc) 6-9 6-9 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 36 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-4, 4 Max Horiz 2=-36 (LC Max Uplift 2=-48 (LC Max Grav 2=436 (LC	athing directly applie applied or 10-0-0 o l=0-5-8 13) 9), 4=-48 (LC 8) 21), 4=436 (LC 1)	5) ed or c 7) LC	* This truss h on the botton 3-06-00 tall b chord and an Provide mect bearing plate 4 and 48 lb u This truss is of International R802.10.2 ar DAD CASE(S)	as been designed n chord in all area y 2-00-00 wide w y other members nanical connectio capable of withss plift at joint 2. designed in accor Residential Code d referenced star Standard	d for a liv s where ill fit betw n (by oth anding 4 dance wi sections ndard AN	e load of 20.0 a rectangle veen the botto ers) of truss t 8 lb uplift at j ith the 2018 R502.11.1 a ISI/TPI 1.	Dpsf om oont und						
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Maximum Com Tension 1-2=0/32, 2-3=-489/2 4-5=0/32 2-6=-162/392, 4-6=- 3-6=-104/207	pression/Maximum 285, 3-4=-489/282, 162/392												
NOTES 1) Unbalance this design 2) Wind: ASC Viaced Offer	ed roof live loads have n. CE 7-16; Vult=115mph	been considered fo (3-second gust)	r											

2) Wind: ASCE 7-10, Vull=113/hpl (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 4-6-8, Exterior(2R) 4-6-8 to 7-6-8, Interior (1) 7-6-8 to 10-3-8 zone; cantilever left 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

 Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

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



Page: 1

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	D4	Common	3	1	Job Reference (optional)	173354177

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:51 ID:Q9wDiV0k5bSUd75o2807bpzIYZN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

16.0



Scale = 1:30.8	
Plate Offsets (X, Y):	[1:Edge,0-0-4], [3:Edge,0-0-4]

TCLL (roof) TCDL BCLL BCDL	20.0 10.0 0.0* 10.0	Plate Grip DOL Lumber DOL Rep Stress Incr Code	1.25 1.25 YES IRC201	8/TPI2014	TC BC WB Matrix-MS	0.22 0.26 0.08	Vert(LL) Vert(CT) Horz(CT)	0.02 -0.03 0.00	4-7 4-7 3	>999 >999 n/a	240 180 n/a	MT20 Weight: 32 lb	244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=0-3-4, 3 Max Horiz 1=28 (LC Max Uplift 1=-47 (LC Max Grav 1=363 (LC (lb) - Maximum Com Tension 1-2=-506/307, 2-3=- 1-4=-216/419, 3-4=- 2-4=-116/212	athing directly applie applied or 10-0-0 o 3=0-5-0 12) 2 9), 3=-47 (LC 8) C 1), 3=363 (LC 1) apression/Maximum 506/307 216/419	5) ed or c 7) Lu	* This truss I on the botto 3-06-00 tall I chord and a Provide mee bearing plate 1 and 47 lb t This truss is International R802.10.2 a DAD CASE(S)	nas been desigr n chord in all ar by 2-00-00 wide hy other membe thanical connect e capable of with uplift at joint 3. designed in acc Residential Con nd referenced s Standard	ed for a liv eas where will fit betw rs. ion (by oth Istanding 4 ordance w de sections andard AN	e load of 20. a rectangle veen the bott ers) of truss 7 lb uplift at th the 2018 R502.11.1 a ISI/TPI 1.	Opsf om to joint and					

this design.
Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 4-6-8, Exterior(2R) 4-6-8 to 7-6-8, Interior (1) 7-6-8 to 9-1-0 zone; cantilever left 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

 Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

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



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A MiTek Affiliate 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	M1	Monopitch	5	1	Job Reference (optional)	173354178

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:51

0-1-8

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

2-8-11

# ID:XcBBBPWXQdAS?VKIFILUGbzIZDK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -1-2-8 6-0-8 6-0-8 1-2-8 6-0-8 2x4 🛛 12 4 Г 3 2-0-10 0-3-1 4 Ŕ 2x4 = 2x4 u 0-4-9 6-0-8 5-11-0 Η 5-6-7

Scale = 1:32.7

bracing.

Tension

2-4=-158/150

Max Horiz 2=72 (LC 8)

2=0-3-0, 4=0-1-8

Max Uplift 2=-104 (LC 8), 4=-71 (LC 8) Max Grav 2=338 (LC 1), 4=207 (LC 1)

(Ib) - Maximum Compression/Maximum

1-2=0/23, 2-3=-114/151, 3-4=-141/106

Unbalanced roof live loads have been considered for

Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 5-10-12 zone; cantilever left exposed ; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip

Building Designer/Project engineer responsible for

verifying Rain Load = 5.0 (psf) covers rain loading

This truss has been designed for a 10.0 psf bottom

chord and any other members.

requirements specific to the use of this truss component.

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

REACTIONS (size)

FORCES

NOTES

1)

2)

3)

4)

5)

TOP CHORD

BOT CHORD

this design

DOL=1.60

Scale = 1.52.7												-		
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25		тс	0.40	Vert(LL)	0.06	4-9	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25		BC	0.31	Vert(CT)	-0.09	4-9	>817	180			
BCLL	0.0*	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	2	n/a	n/a			
BCDL	10.0	Code	IRC201	8/TPI2014	Matrix-MP							Weight: 23 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3		6) 7)	Bearing at jo using ANSI/ designer sho Provide med bearing plat	bint(s) 4 consider TPI 1 angle to gr buld verify capac chanical connecti	s parallel t ain formula ity of bear on (by oth	to grain value a. Building ing surface. ers) of truss	e to						
BRACING TOP CHORD	Structural wood she 6-0-0 oc purlins, exe Rigid ceiling directly	athing directly applied cept end verticals.	or 8)	Provide med bearing plat 4 and 104 lb	chanical connecti e capable of with o uplift at joint 2.	on (by oth standing 7	ers) of truss '1 lb uplift at	to joint						

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

LOAD CASE(S) Standard

0-4-9

# SEAL 057887

May 8,2025

Page: 1

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	M1E	Monopitch	1	1	Job Reference (optional)	173354179

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:51

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

# ID:qmh6MEDvISTEyPmvfwO5dqzIZCQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -1-2-8 6-0-8 6-0-8 1-2-8 6-0-8 2x4 🛛 12 4 Г 3 2-0-10 2-8-11 0-3-1 4 Ŕ 2x4 = 2x4 II 0-4-9 6-0-8 5-11-0 Η 5-6-7 0-4-9 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	1.25	тс	0.40	Vert(LL)	0.06	4-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.31	Vert(CT)	-0.09	4-9	>817	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 23 lb	FT = 20%

### L CHORD 2x4 SP No.2 TOF

BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
BRACING		
TOP CHORD	Structural	wood sheathing directly applied or
	6-0-0 oc p	ourlins, except end verticals.
BOT CHORD	Rigid ceili	ng directly applied or 10-0-0 oc
	bracing.	
REACTIONS	(size)	2=0-3-0, 4=0-1-8
	Max Horiz	2=72 (LC 8)
	Max Uplift	2=-104 (LC 8), 4=-71 (LC 8)
	Max Grav	2=338 (LC 1), 4=207 (LC 1)

### FORCES (Ib) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/23, 2-3=-114/151, 3-4=-141/106 BOT CHORD 2-4=-158/150

## NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 5-10-12 zone; cantilever left 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
- 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.
- Building Designer/Project engineer responsible for 4) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

Gable studs spaced at 2-0-0 oc. 5)

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

- 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.
- 8) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to 9) bearing plate at joint(s) 4.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 4 and 104 lb uplift at joint 2.
- 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

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	MG	Flat Girder	1	2	Job Reference (optional)	173354180

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:51 ID:FrILL6AVqguUpQG8UOYkWDFzIYYI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





0-1-8

Scale = 1:24.3

Plate Offsets (X, Y): [3:Edge,0-6-8]

Loading         (psf)           TCLL (roof)         20.0           TCDL         10.0           BCLL         0.0*           BCDL         10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 NO IRC2018/TPI2	2014	CSI TC BC WB Matrix-MP	0.26 0.08 0.25	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.02 0.00	(loc) 5 5 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 52 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.3 *Excep BRACING TOP CHORD 2-0-0 oc purlins: 1-3 BOT CHORD Rigid ceiling directly bracing. REACTIONS (size) 4=0-1-8, 6 Max Horiz 6=-14 (LC Max Uplift 4=-149 (L Max Grav 4=988 (LC FORCES (lb) - Maximum Com Tension TOP CHORD 1-6=-723/104, 1-2=- 2-3=-1264/213, 3-4= BOT CHORD 5-6=-5/7, 4-5=0/0 WEBS 1-5=-220/1307, 2-5= NOTES 1) 2-ply truss to be connected toge (0.131*x3") nails as follows: Top chords connected as follows: oc, 2x6 - 2 rows staggered at 0-5 Bottom chords connected as follows: 2x4 - 2 All loads are considered equally except if noted as front (F) or ba CASE(S) section. Ply to ply com provided to distribute only loads unless otherwise indicated. 3) Unbalanced roof live loads have this design. 4) Wind: ASCE 7-16; Vult=115mph Vasd=91mph; TCDL=6.0psf; BC IL; Exp B; Enclosed; MWFRS (er end vertical left exposed; porch I Lumber DOL=1.60 plate grip DC	At* 3-4:2x6 SP No.2 applied or 10-0-0 oc S=0-3-0 C=0, S=0 C=0, S=0	<ul> <li>5) Build verifi requies</li> <li>6) Provide the second s</li></ul>	ding Desi, fying Rain irrements vide adeq it truss has di live loas is truss has di live loas is truss has di live loas is truss has he bottom 5-00 tall by di and any rring plate vide mech- ring plate vide should ger(s) or vided suffi pown and 3 t 2-6-11, 336 lb do design/se oonsibility <b>CASE(S)</b> ad + Roo te Increas iform Loas Vert: 1-3= ncentrate Vert: 3=-3	gner/Project engine Load = 5.0 (psf) c specific to the use uate drainage to pr s been designed fo d nonconcurrent wi as been designed fo d nonconcurrent wi as been designed fo of nord in all areas y 2-00-00 wide will y other members. nt(s) 4 considers pr Pl 1 angle to grain ald verify capacity of tanical connection at joint(s) 4. tranical connection capable of withstat uplif at joint 4. designed in accorda Residential Code s d referenced stand in representation of tion of the purlin all other connection do cient to support co 88 lb up at 0-6-11, and 307 lb down a wn and 40 lb up at election of such cor of others. Standard f Live (balanced): L se=1.25 ds (lb/ft) -60, 4-6=-20 d Loads (lb) i36, 2=-303, 7=-39:	eer resk overs ra of this v ra 10.0 or a live where fit betw arallel t formula of bearin (by othin ance wis ections land AN loes nc orighte evice(s ncentra 303 lb nnection 	onsible for ain loading truss compor- vater ponding o psf bottom other live load e load of 20.0 a rectangle een the botto o grain value t. Building ng surface. ers) of truss to 17 lb uplift at the 2018 R502.11.1 a St/TPI 1. t depict the s top and/or t shall be ted load(s) 33 down and 40 b up at 4-6-1 on top chord. n device(s) is Increase=1.2	ent. J. ds. ipsf om o joint nd ize 93 lb 1, the 25,				SEAL 05788	ROL N. 1. 1. 37 ACE	

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A MiTek At 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	P10	Common	3	1	Job Reference (optional)	173354181

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:52

ID:idK0HtOMRnPyifAdMwex3dzJYik-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

### -1-2-8 13-2-8 6-0-0 12-0-0 6-0-0 6-0-0 1-2-8 1-2-8 12-0-0 4x6 = 12 4 Г 3 Ŧ 14 15 2-3-15 2-8-8 13 16 4 • 5 Ø 6 3x6 = 3x6 = 2x4 u

Scale = 1:39.7				<u>6-0-0</u> 6-0-0			<u>1</u>	<u>2-0-0</u> 6-0-0			-		
Loading FCLL (roof) FCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MS	0.39 0.44 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.05 -0.09 0.01	(loc) 6-9 6-9 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 43 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2	<ul> <li>5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle</li> <li>3-06-00 tall by 2-00-00 wide will fit between the bottom</li> </ul>											

WEBS	2X4 SP N	0.3
BRACING		
TOP CHORD	Structural	l wood sheathing directly applied or
	5-7-13 oc	purlins.
BOT CHORD	Rigid ceili	ing directly applied or 9-4-8 oc
	bracing.	
REACTIONS	(size)	2=0-4-8, 4=0-4-8
	Max Horiz	2=30 (LC 12)
	Max I Inlift	2 - 164 (  C 8) 4 - 164 (  C 9)

	Max Grav	2=553 (LC 1), 4=552 (LC 1)
FORCES	(lb) - Max	imum Compression/Maximum
TOP CHORD	1-2=0/23,	2-3=-879/459, 3-4=-879/459,

4-5=0/23 BOT CHORD 2-6=-368/801, 4-6=-368/801 WFBS 3-6=-121/275

# NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior (1) 9-0-0 to 13-2-8 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
- Building Designer/Project engineer responsible for 3) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

chord and any other members.

- Provide mechanical connection (by others) of truss to 6) bearing plate capable of withstanding 164 lb uplift at joint 2 and 164 lb uplift at joint 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	PCJ02	Jack-Partial	2	1	Job Reference (optional)	173354182

# Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:52 ID:\_u8yT0e5p2kcuH?vHc2e5mzJYjh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f









0-0-6

Scolo	- 1	1.40	12
ouale	_		

Loading TCLL (roof) TCDL BCLL BCDL	(psf) 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.25 1.25 YES IRC20 <sup>7</sup>	8/TPI2014	CSI TC BC WB Matrix-MP	0.36 0.29 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.06 -0.08 0.00	(loc) 4-7 4-7 2	l/defl >999 >781 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 19 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 Structural wood she 5-6-6 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-10 Mechanie Max Horiz 2=52 (LC Max Uplift 2=-116 (I (LC 8) Max Grav 2=341 (L (LC 3)	eathing directly appli / applied or 10-0-0 o , 3= Mechanical, 4= cal .8) .C 8), 3=-41 (LC 8), C 1), 3=135 (LC 1),	6 ied or bc 8 4=-24 4=98	<ul> <li>Provide mec bearing plate</li> <li>3, 116 lb upli</li> <li>This truss is International R802.10.2 au</li> <li>"NAILED" ind (0.148"x3.25</li> <li>In the LOAD of the truss a</li> <li>OAD CASE(s)</li> <li>Dead + Roo Plate Increas Uniform Lo- Vert: 1-3</li> </ul>	hanical connection e capable of withst ift at joint 2 and 24 designed in accor Residential Code nd referenced star dicates 3-10d (0.1 ") toe-nails per NE CASE(S) section, are noted as front ( Standard of Live (balanced): ase=1.25 ads (lb/ft) =-60, 4-5=-20 od Load (lb)	n (by oth anding 4 I b uplift dance w sections ndard AN 48"x3") c DS guidlii loads ap (F) or ba Lumber	ers) of truss ( 1 lb uplift at j at joint 4. th the 2018 R502.11.1 a SI/TPI 1. r 2-12d nes. uplied to the f ck (B).	to joint and face 25,						
FORCES TOP CHORD BOT CHORD NOTES 1) Wind: AS( Vasd=91n	(lb) - Maximum Cor Tension 1-2=0/24, 2-3=-105 2-4=-68/92 CE 7-16; Vult=115mpi nph; TCDL=6.0psf; BC	npression/Maximum /42 n (3-second gust) CDL=3.0psf; h=25ft;	Cat.	Vert: 10=	-8 (F=-4, B=-4)									
II; Exp B; and C-C C 5-5-10 zor vertical let	Enclosed; MWFRS (e Corner (3) -1-8-8 to 2-6 ne; cantilever left and ft and right exposed; p	nvelope) exterior zoo 6-6, Exterior(2R) 2-6 right exposed ; end orch left and right	ne S-6 to									TH CA	Rollin	

- exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  2) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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.
- 5) Refer to girder(s) for truss to truss connections.

May 8,2025

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"International and the second second

Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	PG03	Hip Girder	1	2	Job Reference (optional)	173354183

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:52

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,



# Plate Offsets (X, Y): [2:0-10-6,0-1-13], [5:0-10-6,0-1-13]

Scale = 1:44.8

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	_
TCLL (roof)	20.0	Plate Grip DOL	1.25		тс	0.18	Vert(LL)	0.03	7-8	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25		BC	0.20	Vert(CT)	-0.05	7-8	>999	180			
BCLL	0.0*	Rep Stress Incr	NO		WB	0.05	Horz(CT)	0.01	5	n/a	n/a			
BCDL	10.0	Code	IRC2018	/TPI2014	Matrix-MS							Weight: 119 lb	FT = 20%	
BCDL LUMBER TOP CHORD 2x4 BOT CHORD 2x6 WEBS 2x4 BRACING TOP CHORD Stri 6-0 2-0 BOT CHORD Stri 6-0 2-0 BOT CHORD Rig bra REACTIONS (size Max Max FORCES (lb) Ter TOP CHORD 1-2 4-5 BOT CHORD 2-8 5-7 WEBS 3-8 NOTES 1) 2-ply truss to be (0.131"x3") nail: Top chords con oc. Bottom chords of staggered at 0-1 Web connected 2) All loads are co except if noted at CASE(S) sectio provided to dist unless otherwis 3) Unbalanced roc this design.	10.0 SP No.2 SP No.2 SP No.3 uctural wood she -0 oc purlins, exc -0 oc purlins, exc -0 oc purlins (6-0 id ceiling directly cing. ) 2=0-4-8, § Horiz 2=22 (LC Uplift 2=-245 (L Grav 2=745 (LC - Maximum Com Ision =0/23, 2-3=-1685 =-490/1584, 7-8= =-478/1577 =-72/274, 3-7=-5 e connected toget s as follows: nected as follows: connected as follows: connected as follows: as follows: 2x4 - nsidered equally as front (F) or baa s front (F) or baa n. Ply to ply conr ribute only loads e indicated. of live loads have	Code athing directly applied ept -0 max.): 3-4. applied or 10-0-0 oc 5=0-4-8 8) C 4), 5=-246 (LC 5) C 1), 5=748 (LC 1) pression/Maximum 5/542, 3-4=-1555/513 -0/23 -482/1561, 9/48, 4-7=-66/269 ther with 10d s: 2x4 - 1 row at 0-9-0 ows: 2x6 - 2 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), been considered for	IRC2018         4)         d or       5)         6)       7)         8)       9)         10)       11)         11)       12)         LO       1)         AD	/TPI2014 Wind: ASCE Vasd=91mph II; Exp B; End cantilever left right exposed DOL=1.60 pla Building Desi verifying Rair requirements Provide adeq This truss ha chord live loa * This truss ha chord and an Provide med bearing plate 2 and 246 lb This truss is of International R802.10.2 ar Graphical pui or the orienta bottom chord "NAILED" inc (0.148"x3.25 <b>AD CASE(S)</b> Dead + Roo Plate Increa Uniform Loa Vert: 1-3 Concentrate Vert: 1-3 Concentrate	Matrix-MS 7-16; Vult=115mph r; TCDL=6.0psf; BC closed; MWFRS (er and right exposed d; porch left and right ate grip DOL=1.60 gner/Project engine bad = 5.0 (psf) c specific to the use uate drainage to pr s been designed fo d nonconcurrent w as been designed fo d nonconcurrent w been designed fo d nonconcurrent w as been designed fo d nonconcurrent	(3-sec DL=3.0 Nvelope ; end v over resp overs r r a 10.0 ith any over a resp overs r r a 10.0 ith any over a resp event t r a 10.0 ith any where fit betw (by oth nding 2 ance w ections and AN does no cong the 3"x3") c 6 guidlii umber -60, 2-6 =-44 (E 36 (B),	ond gust) psf; h=25ft; ) exterior zo ertical left ar sed; Lumber bonsible for ain loading truss compo vater pondin b psf bottom other live loze e load of 20. a rectangle recen the bott eres) of truss 45 lb uplift a th the 2018 R502.11.1 a SI/TPI 1. t depict the top and/or r 2-12d hes. Increase=1. 5=-20 ), 3=-50 (B), 16=-30 (B),	Cat. ine; nd r ads. 0psf tom to tot and size .25,				Weight: 119 lb H CA SEAI 05788	FT = 20%	

May 8,2025

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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	PJ02	Jack-Open	2	1	Job Reference (optional)	173354184

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:52 ID:\_u8yT0e5p2kcuH?vHc2e5mzJYjh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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2-2-3

Scale = 1:24.4							I						
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	тс	0.09	Vert(LL)	0.00	4-7	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	0.00	4-7	>999	180			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 9 lb	FT = 20%	
LUMBER			6) Provide me	chanical connec	tion (by oth	ers) of truss	to						
TOP CHORD	2x4 SP No.2		bearing pla	te capable of wit	hstanding 1	3 lb uplift at j	joint						
BOT CHORD	2x4 SP No.2		3, 64 lb upl	ift at joint 2 and 8	3 lb uplift at	joint 4.							

01			
3, 64 lb u	plift at joint 2	and 8 lb uplift at	joint 4.

7) 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

BOT CHORD	Rigid ceili bracing.	ng directly applied or 10-0-0 oc
REACTIONS	(size)	2=0-4-8, 3= Mechanical, 4= Mechanical
	Max Horiz	2=36 (LC 8)
	Max Uplift	2=-64 (LC 8), 3=-13 (LC 8), 4=-8 (LC 9)
	Max Grav	2=178 (LC 1), 3=42 (LC 1), 4=34 (LC 3)
FORCES	(lb) - Max	imum Compression/Maximum

2-2-3 oc purlins.

Structural wood sheathing directly applied or

1-5-4

BRACING

TOP CHORD

Tension TOP CHORD 1-2=0/23, 2-3=-21/11 2-4=-8/22

# BOT CHORD

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 2-1-7 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
- Building Designer/Project engineer responsible for 2) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. 3) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 4) \* 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.
- 5) Refer to girder(s) for truss to truss connections.



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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	PJ03	Jack-Open	2	1	Job Reference (optional)	173354185

-1-2-8

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:52 ID:\_u8yT0e5p2kcuH?vHc2e5mzJYjh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



# 2x4 =

2-1-15

. . . . Sc

Scale = 1:24.4													
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.09	Vert(LL)	0.00	4-7	>999	240	MT20	244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	0.00	4-7	>999	180			
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 9 lb	FT = 20%	
LUMBER TOP CHORD	2x4 SP No.2		6) Provide me bearing pla	chanical connect te capable of with	tion (by oth	ers) of truss f 3 lb uplift at j	to joint						

BOT CHORD	2x4 SP N	0.2
BRACING		
TOP CHORD	Structural	wood sheathing directly applied or
	2-1-15 oc	purlins.
BOT CHORD	Rigid ceili	ing directly applied or 10-0-0 oc
	bracing.	
REACTIONS	(size)	2=0-3-0, 3= Mechanical, 4=
		Mechanical
	Max Horiz	2=35 (LC 8)
	Max Uplift	2=-64 (LC 8), 3=-13 (LC 8), 4=-8
		(LC 9)
	Max Grav	2=177 (LC 1), 3=42 (LC 1), 4=33

### (LC 3) FORCES (lb) - Maximum Compression/Maximum Tension

### TOP CHORD 1-2=0/23, 2-3=-21/11 BOT CHORD 2-4=-8/22

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 2-1-3 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
- Building Designer/Project engineer responsible for 2) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. 3) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 4) \* 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.
- 5) Refer to girder(s) for truss to truss connections.

# bearing plate capable of withstanding 13 lb uplift at joint 3, 64 lb uplift at joint 2 and 8 lb uplift at joint 4.

7) This truss is designed in accordance with the 2018

International Residential Code sections R502.11.1 and

R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	997 Serenity	
P02233-24936	PJ04	Jack-Open	3	1	Job Reference (optional)	173354186

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Thu May 08 14:00:52

ID:\_u8yT0e5p2kcuH?vHc2e5mzJYjh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

2-0-8

### -1-2-8 4 - 0 - 01-2-8 4 - 0 - 0 4 - 0 - 0 4 - 12 3 - 1 - 2 - 8 9 - 1 - 2 - 8 9 - 1 - 2 - 8 9 - 1 - 2 - 8 9 - 1 - 2 - 8 9 - 1 - 2 - 8 9 - 1 - 2 - 8 9 - 1 - 2 - 8 9 - 1 - 2 - 8 9 - 1 - 2 - 8 1 - 2 - 8 9 - 1 - 2 - 8 1 - 2 - 8 9 - 1 - 2 - 8 1 - 2 - 8 9 - 1 - 2 - 8 1 - 2 - 8 9 - 1 - 2 - 8 1 - 2 - 8 9 - 1 - 2 - 8 1 - 2 - 8 9 - 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 8 1 - 2 - 81 - 2

### Scale = 1:25.8

FORCES

NOTES

2)

3)

4)

TOP CHORD

BOT CHORD

DOL=1.60

Max Horiz 2=53 (LC 8)

1-2=0/23, 2-3=-56/31

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone

and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 3-11-4 zone; cantilever left and right exposed; end

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

Building Designer/Project engineer responsible for

verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

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

5) Refer to girder(s) for truss to truss connections.

\* 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

Max Grav

Tension

2-4=-62/50

chord and any other members.

(LC 8)

(LC 3)

Max Uplift 2=-79 (LC 8), 3=-32 (LC 8), 4=-17

(lb) - Maximum Compression/Maximum

2=241 (LC 1), 3=96 (LC 1), 4=70

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25		TC	0.17	Vert(LL)	0.02	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25		BC	0.14	Vert(CT)	-0.02	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2	018/TPI2014	Matrix-MP							Weight: 14 lb	FT = 20%
TOP CHORD BOT CHORD BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 Structural wood sheathing directly applied or 4-0-0 oc purlins.			<ul> <li>bearing plate at joint(s) 2.</li> <li>7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 3, 79 lb uplift at joint 2 and 17 lb uplift at joint 4.</li> <li>8) This truss is designed in accordance with the 2018 International Residential Code sections R502 11 1 and</li> </ul>									
BOT CHORD	D Rigid ceiling directly applied or 10-0-0 oc bracing.			R802.10.2 and referenced standard ANSI/TPI 1.									
REACTIONS	(size) 2=0-3-0, 3 Mechanica	3= Mechanical, 4= al		LOAD CASE(	S) Standard								

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4-0-0

