

Trenco 818 Soundside Rd Edenton, NC 27932

Re: P01985-24565 1033 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 1387 (Winter Haven, FL).

Pages or sheets covered by this seal: I72808488 thru I72808528

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

North Carolina COA: C-0844



April 16,2025

**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	1033 Serenity	
P01985-24565	H1	Hip Girder	1	1	Job Reference (optional)	172808488

1)

2)

3)

4)

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:23 ID:goRourC2ybVQiUBjs9sEE\_zQTU6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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



818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	H2	Нір	1	1	Job Reference (optional)	172808489

#### Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:24 ID:V8DnRSfpYmqpoZF4jDYhvUzQTUp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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			6-1	0-4	9-1	-12		16-0	0-0			
Scale = 1:46.5			6-1	0-4	2-	3-8		6-10	)-4		I	
Plate Offsets	(X, Y): [3:0-3-0,0-2-0],	[4:0-3-0,0-2-0]										
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MS	0.71 0.64 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.08 -0.17 0.02	(loc) 8-11 8-11 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 69 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 she 4-1-9 oc purlins, exc 2-0-0 oc purlins, exc 2-0-0 oc purlins (6-0 Rigid ceiling directly bracing. (size) 2=0-8-0, § Max Horiz 2=-64 (LC Max Uplift 2=-123 (L Max Grav 2=700 (LC	athing directly applied rept -0 max.): 3-4. applied or 10-0-0 oc 5=0-8-0 2 21) C 16), 5=-123 (LC 17 C 2), 5=700 (LC 2)	<ul> <li>4) Unbalance design.</li> <li>5) This truss h load of 12.0 overhangs</li> <li>d or</li> <li>6) Building De verifying Ra requiremen</li> <li>7) Provide adi</li> <li>8) This truss h chord live h</li> <li>9) * This truss h chord live h</li> <li>9) * This truss h chord live h</li> <li>9) * This truss h chord of the botto 3-06-00 tall chord and a</li> </ul>	d snow loads have that be as been designed for 1.00 times fil non-concurrent with signer/Project enginain Load = 5.0 (psf) its specific to the us equate drainage to phas been designed for an onconcurrent to that been designed for chord in all areas by 2-00-00 wide with any other members.	been cor for great lat roof la other li heer res covers r e of this prevent for a 10. with any l for a liv s where Il fit betw	nsidered for the er of min roof bad of 7.7 psi ve loads. consible for ain loading truss compor- water pondin, 0 psf bottom other live loa e load of 20.1 a rectangle veen the bott	his f live f on nent. g. ds. 0psf om					
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Maximum Com Tension 1-2=0/28, 2-3=-948/ 4-5=-948/237, 5-6=0 2-8=-113/771, 7-8=- 3-8=-7/195, 3-7=-14	pression/Maximum 237, 3-4=-767/264, //28 113/766, 5-7=-117/7 5/146, 4-7=-31/203	10) Provide me bearing pla 2 and 123 I 11) This truss i 72 Internationa R802.10.2	chanical connectior te capable of withsta b uplift at joint 5. s designed in accord al Residential Code and referenced star	n (by oth anding 1 dance w sections ndard AN	ers) of truss t 23 lb uplift at ith the 2018 5 R502.11.1 a ISI/TPI 1.	to t joint and					
NOTES 1) Unbalance this design 2) Wind: ASG Vasd=103 II; Exp B; and C-C E 7-0-0, Ext 13-2-15, I left and rig exposed;( reactions DOL=1.6C 3) TCLL: AS Plate DOU 1.15 Plate Evp : Cas	ed roof live loads have n. CE 7-16; Vult=130mph mph; TCDL=6.0psf; Bi Enclosed; MWFRS (er Exterior(2E) -1-0-0 to 2- erior(2E) 7-0-0 to 9-0-0 terior(2E) 7-0-0 to 9-0-0 netrior (1) 13-2-15 to 1 ght exposed ; end verti C-C for members and f shown; Lumber DOL=' ) CE 7-16; Pr=20.0 psf ( _=1.15); Pg=10.0 psf; F 2 DOL = 1.15); Is=1.0; 1 10: Cc=1 00: Ct=1 10	been considered for (3-second gust) CDL=3.0psf; h=25ft; ivelope) exterior zone 0-0, Interior (1) 2-0-0 0, Exterior(2R) 9-0-0 7-0-0 zone; cantileve cal left and right orces & MWFRS for 1.60 plate grip roof LL: Lum DOL=1. Pf=12.7 psf (Lum DOI Rough Cat B; Partially Lu=50-0-0	12) Graphical p or the orien bottom cho LOAD CASE(S Cat. 0 to r	ourlin representation tation of the purlin a rd. ) Standard	does no	ot depict the s	size			tin munit	SEA 0578	L PACE-



April 16,2025

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 collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and PCB Building Component Science Michael Component Advancement description (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J1	Jack-Open Girder	2	1	Job Reference (optional)	172808490

1-6-0

1-6-0

-1-0-0

1-0-0

84 Lumber-1387 (Winter Haven, FL), Winter Haven, FL - 33880,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:28 ID:zsq0nQ4mJXErVyQoG3huqtzQTUG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

<u>5-0-0</u> 3-6-0 Page: 1



Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J2	Jack-Open	2	1	Job Reference (optional)	172808491

#### ID:Ggip7BlqgEqgmoscBuiZEAzQTUh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?ff-1-0-0 3-6-0 5-0-0 3-6-0 1-6-0 1-0-0

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:28

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Scale = 1:29.3

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.22 0.41 0.04	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.05 -0.08 0.03	(loc) 6-9 6-9 4	l/defl >999 >759 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 22 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 she 5-0-0 oc purlins; s-4 Rigid ceiling directly bracing. (size) 2=0-8-0, 4 Mechanic Max Horiz 2=81 (LC Max Uplift 2=-52 (LC Max Grav 2=266 (LC 5=147 (LC	athing directly applied pept applied or 10-0-0 oc 4= Mechanical, 5= al 16) 2 16), 4=-17 (LC 12), 2 16), 2 38), 4=43 (LC 37), 2 2)	4) 5) d or 6) 7) 8) 9) 10) 11]	Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements Provide adee This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar ) Refer to gird ) Provide mec	snow loads have as been designed psf or 1.00 times on-concurrent wii igner/Project eng n Load = 5.0 (psf s specific to the u quate drainage to is been designed ad nonconcurrent has been designed m chord in all are: by 2-00-00 wide v ny other members er(s) for truss to the hanical connection	been cor for great flat roof ld th other lin jineer res prevent for a 10.0 with any d for a liv as where vill fit betw s. rus conr n (by oth	er of min rool bad of 7.7 ps re loads. bonsible for ain loading truss compo water pondin. 0 psf bottom other live loa e load of 20.1 a rectangle reen the bott hections. ers) of truss i	his f live f on nent. g. ads. 0psf om to					
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASO	(lb) - Maximum Corr Tension 1-2=0/28, 2-3=-70/3 2-6=-33/69, 5-6=0/0 4-5=0/0, 3-6=-140/1 ed roof live loads have n. CE 7-16; Vult=130mph	pression/Maximum 0, 3-4=0/0 34 been considered for (3-second gust)	12) 13) 14)	<ul> <li>4, 52 lb upliff</li> <li>52 lb upliff</li> <li>53 lb truss is International R802.10.2 a</li> <li>54 Graphical pu or the orienta bottom chord</li> <li>54 Gap betweet diagonal or v</li> </ul>	a tajoint 2 and 31 designed in acco Residential Code nd referenced sta Irlin representatio ation of the purlin J. n inside of top chu- vertical web shall	Ib uplift a ordance w e sections andard AN in does no along the ord bearir not excee	t joint 5. ith the 2018 R502.11.1 a ISI/TPI 1. ot depict the s top and/or ag and first ed 0.500in.	and			and the second		ROLIN

- /vina: . Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 3-6-0, Exterior(2E) 3-6-0 to 4-10-4 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 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, Lu=50-0-0

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J3	Jack-Open	4	1	Job Reference (optional)	172808492

#### Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:29 ID:ksFBKXmSRXyXNyRolcDonOzQTUg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



#### S

BOT CHORD

NOTES

2)

3)

4)

design.

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	l /d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	0.04	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	4-7	>988	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 18 lb	FT = 20%

5-0-0

IOP CHORD	2X4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
BRACING		
TOP CHORD	Structura	wood sheathing directly applied or
	5-0-0 oc p	ourlins.
BOT CHORD	Rigid ceil	ing directly applied or 10-0-0 oc
	bracing.	
REACTIONS	(size)	2=0-8-0, 3= Mechanical, 4=
		Mechanical
	Max Horiz	2=106 (LC 16)
	Max Uplift	2=-45 (LC 16), 3=-66 (LC 16), 4=-1
		(LC 16)
	Max Grav	2=264 (LC 2), 3=127 (LC 2), 4=91
		(LC 7)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	1-2=0/27.	2-3=-84/47

2-4=-58/78

DOL=1.60 plate grip DOL=1.60

Exp.; Ce=1.0; Cs=1.00; Ct=1.10

1) Wind: ASCE 7-16; Vult=130mph (3-second gust)

Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat.

II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 4-11-4 zone; cantilever left and right exposed ; end

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

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

Unbalanced snow loads have been considered for this

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.

requirements specific to the use of this truss component. 6) This truss has been designed for a 10.0 psf bottom

chord live load nonconcurrent with any other live loads.

- 7) \* 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.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 3, 45 lb uplift at joint 2 and 1 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



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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J4	Jack-Open	4	1	Job Reference (optional)	172808493

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:29 ID:ksFBKXmSRXyXNyRolcDonOzQTUg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-6-0





1-6-0

Scale = 1:30.5

-

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	/TPI2014	CSI TC BC WB Matrix-MP	0.07 0.02 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 7 7 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 7 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 Structural wood sl 1-6-0 oc purlins.	neathing directly appli	6) 7) ed or	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar	is been designe ad nonconcurren has been design n chord in all ar by 2-00-00 wide hy other membe	ed for a 10.0 nt with any ned for a live eas where will fit betw ers.	) psf bottom other live loa e load of 20.0 a rectangle reen the botto	ads. Opsf om					
BOT CHORD	Rigid ceiling direct bracing. (size) 2=0-8-0 Mechan Max Horiz 2=43 (L Max Uplift 2=-35 (	tly applied or 10-0-0 o 0, 3= Mechanical, 4= nical C 16) LC 16), 3=-14 (LC 16)	c 8) 9) 10)	Reter to gird Provide mec bearing plate 2 and 14 lb u This truss is International R802 10 2 au	er(s) for truss to hanical connect capable of with uplift at joint 3. designed in acc Residential Co od referenced s	o truss con tion (by othe nstanding 3 cordance wi de sections tandard AN	nections. ers) of truss t 5 lb uplift at j th the 2018 R502.11.1 a SI/TPL 1	to joint and					

#### 2=140 (LC 2), 3=27 (LC 2), 4=23 Max Grav (LC 7) FORCES (lb) - Maximum Compression/Maximum

#### Tension TOP CHORD

1-2=0/27, 2-3=-38/15 BOT CHORD 2-4=-15/21

### NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) 1) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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
- Unbalanced snow loads have been considered for this 3) design.
- This truss has been designed for greater of min roof live 4) load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

# HIN ..... THINK THE PARTY OF SEAL 057887 PAC minim April 16,2025

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LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A1	Common	2	1	Job Reference (optional)	172808494

#### Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:18 ID:YUZbSyQu1xRV0eIQ6jjEeUzQTV6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



					8-0-0		1	1	6-0-0				
			I		8-0-0		I	8	3-0-0			I	
Scale = 1:48.6													
Loading	(nsf)	Spacing	2-0-0		CSI		DEEL	in	(loc)	l/defl	I /d		GRIP
TCLL (roof)	(p3i)	Plate Grin DOI	1 15		TC	0.93	Vert(LL)	-0 14	6-9	>999	240	MT20	244/190
Snow (Pf/Pa)	7 7/10 0	Lumber DOI	1.10		BC	0.00	Vert(CT)	-0.26	6-9	>744	180	11120	211/100
	10.0	Ren Stress Incr	VES		WB	0.70	Horz(CT)	0.20	4	n/a	n/a		
BCU	0.0*	Code	IRC201	R/TPI2014	Matrix-MS	0.10	11012(01)	0.01	-	n/a	n/a		
BCDL	10.0		11(0201)	J/1112014								Weight: 60 lb	FT = 20%
		ļ			ļ		I			-			
LUMBER			5)	This truss h	as been designed	d for great	er of min roo	flive					
TOP CHORD	2x4 SP No.2			load of 12.0	) pst or 1.00 times	s flat roof le	oad of 7.7 ps	ston					
BOT CHORD	2x4 SP No.2		6)	overnangs	non-concurrent wi	ith other liv	ve loads.						
WEBS	2x4 SP No.3		6)	Building De	signer/Project eng	f) covors r							
BRACING	<b>.</b>			requiremen	ts specific to the i	ise of this	truss compo	nent					
TOP CHORD	Structural wood she	athing directly applied	l. 7)	This truss h	as been designed	d for a 10 (	0 nsf bottom	morn.					
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	.,	chord live lo	bad nonconcurren	t with any	other live loa	ads.					
REACTIONS	(size) 2-0-8-0 4	4-0-8-0	8)	* This truss	has been designe	ed for a liv	e load of 20.	0psf					
REAGNONG	(3120) 2=000, - Max Horiz 2-71 (LC	16)		on the botto	om chord in all are	eas where	a rectangle						
	Max 1 Inlift 2=-130 (I	C 16) 4=-130 (I C 17)	)	3-06-00 tall	by 2-00-00 wide	will fit betv	veen the both	tom					
	Max Grav 2=700 (L	(10), 12, 100, (10, 2)	, 	chord and a	any other member	'S.		4					
FORCES	(lb) - Maximum Com	pression/Maximum	9)	bearing pla	cnanical connection	on (by oth standing 1	ers) of truss	to tioint					
	Tension			2 and 130 l	b uplift at joint 4.	standing		it joint					
TOP CHORD	1-2=0/27, 2-3=-920/2	279, 3-4=-920/279,	10	) This truss is	s designed in acco	ordance w	ith the 2018						
	4-5=0/27			Internationa	al Residential Cod	le sections	s R502.11.1 a	and					
BOICHORD	2-6=-119/738, 4-6=-	119/738		R802.10.2	and referenced sta	andard AN	ISI/TPI 1.						
WEBS	3-0=-3/302		LC	DAD CASE(S	) Standard								
NOIES	<b></b>	have a second dama of dama											
1) Unbalance	ed roof live loads have	been considered for											
2) Wind: ASC	1. CE 7 16: \/ult_120mph	(2 cocond quet)											
2) Wind. ASC	mph: TCDI -6 0psf: B(	CDI -3 Onef: h-25ft: (	at									, minin	11111
II: Exp B·	Enclosed: MWERS (en	velope) exterior zone	<i>J</i> ul.									"TH CA	BOUL
and C-C E	xterior(2E) -1-0-0 to 2-	-0-0. Interior (1) 2-0-0	to								1	2	. Line
8-0-0, Exte	erior(2R) 8-0-0 to 11-0	-0, Interior (1) 11-0-0	to								55	0 4150	O: Vi
17-0-0 zor	ne; cantilever left and r	ight exposed ; end									57		A. Y
vertical lef	t and right exposed;C-	C for members and								-	: \	200	jace -
forces & N	IWFRS for reactions s	hown; Lumber								-		SEA	
DOL=1.60	plate grip DOL=1.60									=		OLA	
3) TCLL: ASCE 7-16; Pr=20.0 pst (root LL: Lum DOL=1.15 05/88/								8/					
Plate DOL	Plate DOL=1.15; P( $=$ 10.0 psi, Pl=7.7 psi (Lufit DOL = 1.15) (Lufit DOL = 1.15) (Plate DOL = 1.15); P( $=$ 10.1 psi, Pl=7.7 psi (Lufit DOL = 1.15))								1 2				
Evolution and Doc = 1.00, res-1.00, result data b, Faltually								01 5					
4) Unbalance	n.o, CS=1.00, Ct=1.10	en considered for this									-	NGIN	EEN. S
design.			-								11,	An	CEN
												AM I	PAULIN
												111111	unu.
												A musi	140,0005

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April 16,2025

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	H4	Half Hip Girder	1	1	Job Reference (optional)	172808495

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:24 ID:z8MRMEHRJINQ1ZD3m7Ut0SzQTU?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



			3-10-4		8-11-8	_	14-0-12	2		19	-3-12		
Scale - 1:49 7		I	3-10-4	ļ	5-1-4	I	5-1-4		I	5	-3-0	I	
Plate Offsets	(X, Y): [2:0-5-6,0-1-1],	[7:Edge,0-3-4]											
Loading TCLL (roof) Snow (Pf/Pg) TCDL	(psf) 20.0 12.7/10.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 NO		CSI TC BC WB	0.83 0.88 0.74	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.23 -0.46 0.06	(loc) 9-10 9-10 7	l/defl >999 >502 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0* 10.0	Code	IRC201	8/TPI2014	Matrix-MS							Weight: 103 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES	2x4 SP No.2 *Excep 2x6 SP No.2 2x4 SP No.3 Structural wood she 3-3-6 oc purlins, ex 2-0-0 oc purlins (2-5 Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 7 Max Horiz 2=59 (LC Max Uplift 2=-314 (L Max Grav 2=1132 (L (lb) - Maximum Com Tension	t* 3-6:2x4 SP No.1 athing directly appli cept end verticals, a -6 max.): 3-6. applied or 7-10-8 o 5-7 7=0-5-8 52) C 8), 7=-293 (LC 8) .C 2), 7=1102 (LC 2 pression/Maximum	4) 5) and 7) and 7) (0 2) 1( 0 27 4)	Unbalanced design. This truss h load of 12.0 overhangs r Building De verifying Ra requirement Provide ade This truss h chord live lo * This truss on the botto 3-06-00 tall chord and a D) Provide mee bearing plat 7 and 314 IL	snow loads have l as been designed f por-concurrent with signer/Project engin in Load = 5.0 (psf) is specific to the us quate drainage to as been designed f has been designed f has been designed m chord in all area by 2-00-00 wide win ny other members. chanical connection e capable of withsto o uplift at joint 2.	been con for great lat roof I n other I li neer res covers I e of this prevent for a 10. with any d for a liv s where ill fit betv. n (by oth anding 2	Insidered for t er of min rool pad of 7.7 ps ve loads. ponsible for ain loading truss compo water pondin. 0 psf bottom o ther live load ve load of 20. a rectangle veen the bott ers) of truss i 293 lb uplift a	his f live f on nent. g. ads. 0psf om to t joint		Vert: 8= 9=-30 (t 17=-40 21=-60 25=-30	-30 (B) 3), 14= (B), 18 (B), 22 (B), 26	), 11=-30 (B), 3=- -22 (B), 15=-40 (i =-40 (B), 19=-40 (B), 23=-30 (B), 23=-30 =-32 (B)	45 (B), 5=-40 (B), 3), 16=-40 (B), (B), 20=-40 (B), (B), 24=-30 (B),
BOT CHORD WEBS	TOP CHORD       1-2=0/19, 2-3=-2951/762, 3-4=-4028/1077, 4-5=-4028/1077, 5-6=-192/67, 6-7=-199/80       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.         BOT CHORD       2-11=-724/2782, 10-11=-722/2750, 9-10=-866/3245, 7-9=-866/3245       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.         WEBS       3-11=-25/332, 3-10=-361/1359, 4-10=-402/171, 5-10=-212/807, 5-9=0/275,       12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.									Routin			
NOTES 1) Unbalanci this desig 2) Wind: ASt Vasd=103 II; Exp B; cantilever right expo 3) TCLL: AS Plate DOI 1.15 Plate Exp.; Ce=	ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B/ Enclosed; MWFRS (en left and right exposed used; Lumber DOL=1.6 CE 7-16; Pr=20.0 psf ( L=1.15); Pg=10.0 psf; F 9 DOL = 1.15); Is=1.0; f 4.10; Cs=1.00; Ct=1.10;	been considered for (3-second gust) CDL=3.0psf; h=25ft ivelope) exterior zor ; end vertical left ar 0 plate grip DOL=1. roof LL: Lum DOL= 2f=12.7 psf (Lum DC Rough Cat B; Partia , Lu=50-0-0	or 14 ;; Cat. 1) ne; nd .60 :1.15 OL = ally	(0.148"x3.24 In the LOAE of the truss <b>DAD CASE(S)</b> Dead + Sn Increase=' Uniform Lo Vert: 1-5 Concentra	<ul> <li>CASE(S) section, are noted as front ()</li> <li>CASE(S) section, are noted as front ()</li> <li>Standard ow (balanced): Lur ()</li> <li>L15</li> <li>ads (lb/ft)</li> <li>3=-35, 3-6=-45, 2-7</li> <li>ted Loads (lb)</li> </ul>	(F) or ba	nes. pplied to the ck (B). rease=1.15,	face Plate			A Community	SEAL 05788	B7

 $\label{eq:plate_delta} \begin{array}{l} \mbox{Plate_DOL=1.15}; \mbox{ Pg=10.0 psf}; \mbox{Pf=12.7 psf} (\mbox{Lum_DOL} = 1.15); \mbox{Ps=1.0}; \mbox{Rough Cat B}; \mbox{Partially} \end{array}$ Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0

April 16,2025

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	H5	Half Hip	1	1	Job Reference (optional)	172808496

2-7-11

Loading

TCDL

BCLL

BCDL

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:25 ID:RWKXs8g34O4W2tOSqdb9?vzQTUn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

8

 $4 \times 10 =$ 

7

3x6 =



Page: 1

6 X

2x4 II



9

2x4 II



LUMBER		4)	Unbalanced snow loads have
TOP CHORD	2x4 SP No.2		design.
BOT CHORD	2x4 SP No.2	5)	This truss has been designed
WEBS	2x4 SP No.3 *Except* 8-3,8-5:2x4 SP No.2		load of 12.0 psf or 1.00 times
BRACING			overhangs non-concurrent with
TOP CHORD	Structural wood sheathing directly applied or 3-8-14 oc purlins, except end verticals, and 2-0.0 oc purlins (3-7-1 max): 3-5	6)	Building Designer/Project eng verifying Rain Load = 5.0 (psf requirements specific to the u
	Rigid ceiling directly applied or 8-1-1 oc	7)	Provide adequate drainage to
Bol offortb	bracing.	8)	This truss has been designed
REACTIONS	(size) 2=0-5-8, 6=0-5-8	0)	chord live load nonconcurrent
	Max Horiz 2=88 (LC 15)	9)	I his truss has been designed
	Max Uplift 2=-215 (LC 12), 6=-180 (LC 12) Max Grav 2=828 (LC 2), 6=765 (LC 2)		3-06-00 tall by 2-00-00 wide v
FORCES	(lb) - Maximum Compression/Maximum	10)	Provide mechanical connection
	Tension	,	bearing plate capable of with
TOP CHORD	1-2=0/19, 2-3=-1762/479, 3-4=-1773/496,		6 and 215 lb uplift at joint 2.
	4-5=-1773/496, 5-6=-698/215	11)	This truss is designed in acco
BOT CHORD	2-9=-498/1638, 8-9=-499/1627, 6-8=-46/79		International Residential Code
WEBS	3-9=0/263, 3-8=-86/312, 4-8=-446/190,		R802.10.2 and referenced sta
	5-8=-464/1774	12)	Graphical purlin representation
NOTES			or the orientation of the purlin
1) Unhalance	ad roof live loads have been considered for		bottom chord.

2 13

3x6=

- of live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 6-0-0, Exterior(2R) 6-0-0 to 10-2-15, Interior (1) 10-2-15 to 19-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 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, Lu=50-0-0

- been considered for this
- for greater of min roof live flat roof load of 7.7 psf on th other live loads.
- gineer responsible for f) covers rain loading se of this truss component.
- prevent water ponding.
- for a 10.0 psf bottom
- with any other live loads. ed for a live load of 20.0psf as where a rectangle will fit between the bottom
- on (by others) of truss to standing 180 lb uplift at joint
- ordance with the 2018 e sections R502.11.1 and andard ANSI/TPI 1.
- on does not depict the size along the top and/or
- LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	H6	Half Hip	1	1	Job Reference (optional)	172808497

Run: 8.83 E Dec 4 2024 Print: 8.830 E Dec 4 2024 MiTek Industries, Inc. Wed Apr 16 11:56:29 ID:viuw4UhirhCNf1zfOL6OX7zQTUm-idSdhNwt4f4LpVbCaHGU1xJDvkqDLYjV0Agig\_zQ8z1 Page: 1



			1	7-10-4	1		13-6-2	1		19-0-4			
Scale = 1:48.5		I		7-10-4			5-7-14			5-6-2			
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	/TPI2014	CSI TC BC WB Matrix-MS	0.80 0.89 0.51	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.13 -0.29 0.03	(loc) 9-12 9-12 6	l/defl >999 >774 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 87 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II: Exp B:	2x4 SP No.1 *Excep 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 2-2-0 oc purlins, exi 2-0-0 oc purlins (5-1 Rigid ceiling directly bracing. (Ib/size) 2=591/0-5 Max Horiz 2=114 (LC Max Uplift 2=-211 (L Max Grav 2=817 (LC (Ib) - Max Comp./Mi. (Ib) or I.ess except w 2-13=-1525/391, 13- 14-15=-1483/399, 3- 3-16=-1132/355, 5-6 2-9=-467/1398, 8-9= 3-9=0/305, 3-8=-346 5-8=-334/1228 ed roof live loads have n. CE 7-16; Vult=130mph mph; TCDL=6.0psf; BI	t* 3-5:2x4 SP No.2 athing directly appli cept end verticals, a -3 max.): 3-5. applied or 8-0-4 oc 5-8, 6=599/0-2-0 C 15) C 12), 6=-179 (LC 2) ax. Ten All forces hen shown. -14=-1516/392, -15=-1475/415, 6=-1132/355, -18=-1132/355, -18=-1132/355, -18=-1132/355, -18=-1132/355, -18=-1132/355, -18=-1132/355, -18=-1132/355, -14=-68/1388 5/142, 4-8=-366/159 been considered for (3-second gust) CDL=3.0psf; h=25ft	3) ied or and 4) 5 5) 12) 6) 5 250 7) 8) 9) 9, 10] 9) 9, 10] 11] or 12] 0, 11] 12] 12] 12] 13]	TCLL: ASCE Plate DOL=1 1.15 Plate DO Exp:; Ce=1.0 roof snow loa exposed surf accordance U Unbalanced design. This truss ha load of 12.0 overhangs ni Building Des verifying Rai requirements Provide adec This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar All bearings a Provide mect bearing plate 6 and 211 lb This truss is International	F7-16; Pr=20.0 p .15); Pg=10.0 p .15); Pg=10.0 p OL = 1.15); Is=1 ); Cs=1.00; Ct=1 ad governs. Rai faces with slopes with IBC 1608.3. snow loads have sbeen designed psf or 1.00 times on-concurrent w igner/Project en n Load = 5.0 (ps s specific to the u quate drainage tu sbeen designed ad nonconcurren has been designed to hanical connecti e at joint(s) 6. hanical connecti e capable of with uplift at joint 2. designed in acco Residential Cool do referenced st	sist (roof LI sist; Pf=12.7. 0; Rough. 1.0, Lu=50 n surcharg; s less thar 4. e been cor d for great flat roof l ith other lin gineer res f) covers r use of this o prevent t d for a 10. t with any ed for a liv as where will fit betw s. be SP No. on (by oth standing 1 ordance w le sections andard AD	L: Lum DOL= r psf (Lum DC Cat B; Partia po-0-0; Min. fla te applied to 10.500/12 in insidered for tr er of min rool pad of 7.7 ps ve loads. ponsible for ain loading truss compo water pondin o psf bottom other live loa e load of 20.1 a rectangle veen the bott 2. ers) of truss i 79 lb uplift ar ith the 2018 R 502.11.1 a SI/TPI 1.	1.15 DL = ally at all his f live f on nent. g. ads. 0psf om to to to to to				VVergni: 87 ID	
II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior (1) 12-2-15 to 18-10-8 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 R802.10.2 and referenced standard ANSI/TPI 1. 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. LOAD CASE(S) Standard								87 EEF.R PACE IIIIIIII					

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April 16,2025

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	H7	Half Hip	1	1	Job Reference (optional)	172808498

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:25 ID:r50gUAjyNJS5vL71Wm8scYzQTUk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	9-10-4	19-3-12
Scale = 1:57.6	9-10-4	9-5-8

- Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 10-0-0, Exterior(2R) 10-0-0 to 14-6-2, Interior (1) 14-6-2 to 19-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 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, Lu=50-0-0

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



Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	H8	Half Hip	1	1	Job Reference (optional)	172808499

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:26 ID:JHa2iWja8cayWUiE3Tf59lzQTUj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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		1		6-4-14	1	11-10-4	1	19-3	3-12		1		
Scale = 1:60.4		F		6-4-14	1	5-5-6	1	7-	5-8				
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MS	0.78 0.67 0.51	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.19 0.04	(loc) 6-8 6-8 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 94 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep Structural wood shea 3-10-14 oc purlins, o 2-0-0 oc purlins (6-0 Rigid ceiling directly	t* 6-4:2x4 SP No.2 athing directly applie except end verticals -0 max.): 4-5. applied or 7-8-11 oc	4) 5) ed or 6) , and <sub>C</sub> 7)	Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Rai requirement Provide ade	snow loads as been desi psf or 1.00 t on-concurre igner/Projec n Load = 5.0 s specific to quate draina	have been cor igned for great imes flat roof li- int with other li- t engineer res 0 (psf) covers r the use of this ige to prevent	hsidered for the of min roo bad of 7.7 ps ve loads. ponsible for ain loading truss compo water pondin	this of live of on onent. ng.				<u>.</u>	
WEBS REACTIONS	bracing. 1 Row at midpt (size) 2=0-5-8, 6 Max Horiz 2=168 (LC Max Uplift 2=-210 (L Max Grav 2=828 (LC	4-6 5=0-5-8 C 15) C 12), 6=-185 (LC 1 C 2), 6=765 (LC 2)	8) 9) 2)	This truss ha chord live lo * This truss l on the bottoo 3-06-00 tall l chord and an	as been desi ad nonconcu nas been de m chord in a by 2-00-00 v ny other men banical con	igned for a 10. urrent with any signed for a liv II areas where vide will fit betw mbers.	0 psf bottom other live loa re load of 20. a rectangle veen the bot	ads. .0psf tom					
FORCES	(lb) - Maximum Com Tension 1-2=0/19, 2-3=-1733	pression/Maximum 3/426, 3-4=-1019/302	2, 11	bearing plate 2 and 185 lb ) This truss is	e capable of uplift at join designed in	withstanding 2 t 6. accordance w	210 lb uplift a ith the 2018	at joint					
BOT CHORD WEBS	4-5=-98/89, 5-6=-210 2-9=-577/1613, 8-9= 3-9=0/227, 3-8=-766 4-6=-983/327	6/99 577/1613, 6-8=-34 5/248, 4-8=-45/483,	5/899 12	International R802.10.2 a Graphical pu or the orient	Residential nd reference Irlin represe ation of the I	Code sections ed standard AN ntation does no ourlin along the	SR502.11.1 NSI/TPI 1. ot depict the e top and/or	and size					
NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=102 II; Exp B; and C-C B 12-0-0, E; 16-2-15 tt exposed ; members Lumber D 3) TCLL: AS Plate DOI 1.15 Plate Exp; Ce=	ed roof live loads have n. CE 7-16; Vult=130mph Smph; TCDL=6.0psf; BG Enclosed; MWFRS (en Exterior(2E) -1-0-0 to 2- xterior(2R) 12-0-0 to 16 b 19-2-0 zone; cantilevé end vertical left and riç and forces & MWFRS IOL=1.60 plate grip DO CE 7-16; Pr=20.0 psf ( =1.15); Pg=10.0 psf; f b DOL = 1.15); IS=1.0; f 1.0; CS=1.00; Ct=1.10.	been considered for (3-second gust) CDL=3.0psf; h=25ft; ivelope) exterior zon 0-0, Interior (1) 2-0- i-2-15, Interior (1) er left and right ght exposed;C-C for for reactions shown; L=1.60 roof LL: Lum DOL=1 Pf=12.7 psf (Lum DO Rough Cat B; Partial Lu=50-0-0	r <b>LC</b> le 0 to ; 1.15 )L =  ly	bottom chord	d. Standard	-					in the second	SEA 0578	EER. PACE

- Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior (1) 16-2-15 to 19-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 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, Lu=50-0-0

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J5	Jack-Open	7	1	Job Reference (optional)	172808500

#### Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:29 ID:ksFBKXmSRXyXNyRolcDonOzQTUg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scolo	- 1.4	
Scale	= 1.4	20.0

BOT CHORD

NOTES

2)

3)

4)

design.

Scale = 1:25.5													
Loading	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.02	4-7	>999	240	MT20	244/190	
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	4-7	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 14 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2		5) Building De verifying Ra requiremen	signer/Project en ain Load = 5.0 (ps ts specific to the	ngineer res sf) covers r use of this	ponsible for ain loading truss compo	nent.						

4-0-0

BOT CHORD	2x4 SP N	0.2
BRACING		
TOP CHORD	Structura	wood sheathing directly applied or
	4-0-0 oc p	ourlins.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 10-0-0 oc
REACTIONS	(size)	2=0-5-8, 3= Mechanical, 4=
		Mechanical
	Max Horiz	2=64 (LC 12)
	Max Uplift	2=-71 (LC 12), 3=-42 (LC 16), 4=-1 (LC 16)
	Max Grav	2=225 (LC 2), 3=98 (LC 2), 4=70 (LC 7)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	·
TOP CHORD	1-2=0/19.	2-3=-68/25

2-4=-61/77

DOL=1.60 plate grip DOL=1.60

Exp.; Ce=1.0; Cs=1.00; Ct=1.10

1) Wind: ASCE 7-16; Vult=130mph (3-second gust)

Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to

3-11-4 zone; cantilever left and right exposed ; end

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

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

Unbalanced snow loads have been considered for this

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.

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

- 7) \* 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.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to
- bearing plate capable of withstanding 42 lb uplift at joint 3, 71 lb uplift at joint 2 and 1 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



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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J6	Jack-Open	1	1	Job Reference (optional)	172808501

4-0-0

84 Lumber-1387 (Winter Haven, FL), Winter Haven, FL - 33880.

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:29 ID:C3pZYtn5Cr4O?60?IJk1JbzQTUf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:26.8

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.21 0.19 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.03 0.00	(loc) 3-6 3-6 1	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 12 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 4-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=0-5-8, 7 Mechanic Max Horiz 1=48 (LC Max Uplift 1=-28 (LC (LC 12) Max Grav 1=158 (LC (LC 7)	athing directly applied applied or 10-0-0 oc 2= Mechanical, 3= al 12) 2 12), 2=-43 (LC 12), 3 C 2), 2=102 (LC 2), 3=	<ul> <li>5) This truss f chord live la 6) * This truss on the botta 3-06-00 tall chord and a 7) Refer to gir 8) Provide me bearing pla 1, 43 lb upl 9) This truss is Internationa R802.10.2</li> <li>2-2</li> <li>LOAD CASE(S</li> </ul>	as been designed aad nonconcurrent has been designe om chord in all area by 2-00-00 wide w any other members der(s) for truss to 1 chanical connectio te capable of withs ft at joint 2 and 2 ll s designed in accor al Residential Code and referenced sta ) Standard	for a 10.1 with any d for a liv as where vill fit betv truss con on (by oth tanding 2 b uplift at rdance w e sections indard AN	D psf bottom other live loa e load of 20.0 a rectangle veen the botto nections. ers) of truss t 8 lb uplift at j joint 3. ith the 2018 R FS02.11.1 a ISI/TPI 1.	ids. Opsf om ion oint					
FORCES TOP CHORD BOT CHORD NOTES 1) Wind: ASC	(lb) - Maximum Com Tension 1-2=-95/36 1-3=-83/83 CE 7-16; Vult=130mph	(3-second gust)	~									

- 3mph; TCDL=6.0 sf; 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 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 2) 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
- Unbalanced snow loads have been considered for this 3) design.
- 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.



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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J7	Jack-Open Girder	1	1	Job Reference (optional)	172808502

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:30 ID:zsq0nQ4mJXErVyQoG3huqtzQTUG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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NAILED

Scale = 1:31.1	
Plate Offsets (X, Y): [3:0-3-0,0-2-8]	

Loading (psf) Spacing	2-0-0	CSI		DEEL	in	(100)	l/alafi			
Snow (Pf/Pg)         12.7/10.0         Lumber DOL           TCDL         10.0         Rep Stress Incr           BCLL         0.0*         Code           BCDL         10.0         Key Stress Incr	1.15 1.15 NO IRC2018/TPI2014	TC ( BC ( WB ( Matrix-MP	0.27 V 0.53 V 0.00 H	/ert(LL) /ert(CT) Horz(CT)	-0.03 -0.06 0.04	5-8 5-8 4	>999 >843 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 14 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING TOP CHORD Structural wood sheathing directly app 4-0-0 oc purlins; except 2-0-0 oc purlins; 3-4. BOT CHORD Rigid ceiling directly applied or 10-00 bracing. REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical Max Horiz 2=41 (LC 8) Max Uplift 2=-80 (LC 8), 4=-24 (LC 8), (LC 8) Max Grav 2=228 (LC 2), 4=58 (LC 2), (LC 7) FORCES (lb) - Maximum Compression/Maximu Tension TOP CHORD 1-2=0/19, 2-3=-49/7, 3-4=0/0 BOT CHORD 2-5=-12/52 NOTES 1) Unbalanced roof live loads have been considered this design. 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25 I; Exp B; Enclosed; MWFRS (envelope) exterior z cantilever left and right exposed; end vertical left. right exposed; Lumber DOL=1.60 plate grip DOL= 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum I 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Par Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 4) Unbalanced snow loads have been considered for design.	<ul> <li>5) This truss I load of 12.( overhangs</li> <li>6) Building De verifying Re requiremer</li> <li>7) Provide ad</li> <li>oc</li> <li>8) This truss I chord live I</li> <li>9) * This truss on the botting the second second</li></ul>	has been designed for g opsf or 1.00 times flat r non-concurrent with off usigner/Project enginee in Load = 5.0 (psf) cou- ts specific to the use o equate drainage to pre- has been designed for a boad nonconcurrent with has been designed for a boad nonconcurrent with has been designed for ow chord in all areas w by 2-00-00 wide will fit any other members. der(s) for truss to truss chanical connection (b te capable of withstance iff at joint 2 and 13 lb u is designed in accordam al Residential Code sed and referenced standa urlin representation do tation of the purlin alor rd. micicates 3-10d (0.148": 5") toe-nails per NDS ( D CASE(S) section, loa are noted as front (F) - ) Standard now (balanced): Lumbet 1.15 oads (lb/ft) 3=-35, 3-4=-45, 5-6=-2 tted Loads (lb) s-4 (F)	greater of roof load her live I er respon vers rain a fithis true vers rain a any oth a any oth a any oth a a live Ib there a ra there a ra the	of min roof d of 7.7 psf loads. nsible for n loading uss compor- ter ponding ssf bottom her live load olad of 20.0 rectangle en the botto sctions. s) of truss to lb uplift at jo oint 5. the 2018 t502.11.1 a I/TPI 1. depict the s op and/or 3-12d s. lied to the fr (B). ase=1.15, F	live on hent. J. ds. Jpsf om obint nd ize ace Plate				SEA O578	RO NRO L 87 EEF. PACE L 16,2025

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J8	Jack-Open	1	1	Job Reference (optional)	172808503

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:30 ID:C3pZYtn5Cr4O?60?IJk1JbzQTUf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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2x4 =

2-0-0

. . . . Sc

Scale = 1:23.9													
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	тс	0.07	Vert(LL)	0.00	7	>999	240	MT20	244/190	
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	4-7	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 8 lb	FT = 20%	
LUMBER TOP CHORD	2x4 SP No.2		5) Building De verifying Ra	signer/Project en ain Load = 5.0 (ps	gineer resp sf) covers r	oonsible for ain loading					-		

	2/10/11	0.2
BOT CHORD	2x4 SP N	0.2
BRACING		
TOP CHORD	Structura	wood sheathing directly applied or
	2-0-0 oc p	ourlins.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 10-0-0 oc
REACTIONS	(size)	2=0-5-8, 3= Mechanical, 4=
		Mechanical
	Max Horiz	2=41 (LC 12)
	Max Uplift	2=-61 (LC 12), 3=-17 (LC 16), 4=-1 (LC 16)
	Max Grav	2=155 (LC 2), 3=41 (LC 2), 4=32
		(LC 7)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	1-2=0/19,	2-3=-31/12
BOT CHORD	2-4=-2/33	6

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.

- requirements specific to the use of this truss component.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* 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. 8)
- Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 2, 1 lb uplift at joint 4 and 17 lb uplift at joint 3.
- 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



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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A2	Common Supported Gable	1	1	Job Reference (optional)	172808504

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:20 ID:YUZbSyQu1xRV0eIQ6jjEeUzQTV6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-1-0-0 8-6-0 3-9-6 7-6-0 3-9-6 3-8-10 1-0-0 1-0-0 7-6-0 4x6 = 12 10 Г 4 2x4 II 2x4 II 3 5 Þ 3-11-2 4-4-6 13 14 2 6 0-9-15 0-9-4 12 11 10 9 3x8 II 3x8 II 2x4 II 2x4 II 2x4 II 7-6-0

Scale = 1:36.5

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MR	0.11 0.04 0.05	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 8	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 43 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exa Rigid ceiling directly bracing. (size) 8=7-6-0, S 11=7-6-0, Max Horiz 12=113 (L Max Uplift 8=-48 (LC 11=-101 (L Max Grav 8=165 (LC 10=117 (L 12=168 (L	athing directly applied cept end verticals. applied or 6-0-0 oc )=7-6-0, 10=7-6-0, 12=7-6-0 .C 13) 15), 9=-96 (LC 15), LC 14), 12=-52 (LC 1 2 33), 9=182 (LC 27), C 15), 11=192 (LC 2 .C 32)	2) d or 3) (5) (6), 5)	Wind: ASCE Vasd=103mp II; Exp B; End and C-C Exte 3-9-6, Exteric 8-6-0 zone; c vertical left an forces & MW DOL=1.60 pla Truss design only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1 1.15 Plate DO Exp.; Ce=1.0 This truss ha load of 12.0 pt	7-16; Vult=130mpł h; TCDL=6.0psf; B closed; MWFRS (ei rior(2E) -1-0-0 to 2 vr(2R) 3-9-6 to 6-9- antilever left and ri nd right exposed; C FRS for reactions s ate grip DOL=1.60 ded for wind loads ir ds exposed to wind l Industry Gable Er alified building desi 7-16; Pr=20.0 psf; 15); Pg=10.0 psf; 15); Pg=10.0 psf; 15]; Pg=10.0; ct=1.10; s b=en designed fo ss for 1.00 times fil	n (3-sec GCDL=3 nvelope 2-0-0, Ir 6, Inter ght exp -C for n shown; n the pla d (norm nd Deta gigner as (roof LL Pf=7.7   Rough) or greated at roof k	ond gust) .0psf; h=25ft; ) exterior zor terior (1) 6-9-6 t osed ; end nembers and Lumber ane of the tru al to the face Is as applical s per ANSI/TF s f (Lum DOL=: DSF (Lum DOL Cat B; Partia er of min roof pad of 7.7 psf	; Cat. ne -0 to io sss .), ble, PI 1. 1.15 L = illy	13) This Inte R80 LOAD (	s truss is rnationa 22.10.2 a CASE(S)	desig I Resid Ind ref Star	ned in accordanc Jential Code sect erenced standard ndard	with the 2018 ons R502.11.1 a ANSI/TPI 1.	Ind
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	(lb) - Maximum Com Tension 2-12=-146/167, 1-2= 3-4=-123/179, 4-5=- 6-7=0/44, 6-8=-144/ 11-12=-45/69, 10-11 8-9=-45/69 4-10=-177/92, 3-11= ed roof live loads have h.	pression/Maximum :0/44, 2-3=-78/89, 122/179, 5-6=-68/85, 163 =-45/69, 9-10=-45/69 149/162, 5-9=-145/1 been considered for	6) 9, 7) 8) 157 9) 10 11 12	overhangs no Building Desis verifying Rair requirements Gable require Truss to be fr braced again Gable studs s ) This truss ha chord live loa chord live loa ) This truss ha on the botton 3-06-00 tall b chord and an ) Provide mect bearing plate 12, 48 lb uplif uplift at joint s	on-concurrent with gner/Project engine a Load = 5.0 (psf) of specific to the use so continuous botto illy sheathed from st lateral movemer spaced at 1-4-0 oc. s been designed for d nonconcurrent w as been designed for d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. nanical connection capable of withsta t at joint 8, 101 lb of b.	other liveer responsers responsers responsers responsers response factors on a factor on a factor on a factor on a factor of a	ve loads. consible for ain loading truss compor d bearing. e or securely iagonal web) D psf bottom other live loa e load of 20.0 a rectangle veen the bottc ers) of truss t 2 lb uplift at j joint 11 and 9	nent. , , dds. Opsf om to joint 96 lb		Thumper .	HILL THE MANNER	SEA 0578	37 54 54 57	AMMUNITITY,

April 16,2025

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A3	Common	1	1	Job Reference (optional)	172808505

4-3-12

ч<u>-</u>

0-9-4

#### Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:21 ID:RKwpZal333VHfjoGKr?6ZgzQTU\_-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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9 3

8x12 =

in

-0.01

-0.01

0.00

(loc)

6-7

6-7

5

7-6-0

3-8-10

DEFL

Vert(LL)

Vert(CT)

Horz(CT)

0-9-15

L/d

240

180

l/defl

>999

>999

n/a n/a PLATES

Weight: 44 lb

MT20

GRIP

244/190

FT = 20%



8

7x10 =

Scale = 1:36.3	
Plate Offsets (X,	Y):

Loading

TCDL

TCLL (roof)

Snow (Pf/Pg)

BCLL		0.0*	Code	IRC20
BCDL		10.0		_
LUMBER				4
TOP CHORD	2x4 SP No	o.2		
BOT CHORD	2x4 SP No	o.2		
WEBS	2x4 SP No	o.3		5
BRACING				
TOP CHORD	Structural 6-0-0 oc r	wood shea	athing directly applied cept end verticals.	or 6
BOT CHORD	Rigid ceili	ng directly	applied or 10-0-0 oc	7
	bracing.			
REACTIONS	(size)	5=0-8-0, 7	(=0-8-0	
	Max Horiz	7=-105 (L	C 12)	
	Max Uplift	5=-63 (LC	15), 7=-40 (LC 14)	8
	Max Grav	5=363 (LC	52), 7=283 (LC 2)	
FORCES	(lb) - Maxi	imum Com	pression/Maximum	
	Tension			ç
TOP CHORD	1-2=-248/	108, 2-3=-2	267/119, 3-4=0/44,	
	1-7=-254/	132, 3-5=-	335/203	
BOLCHORD	6-7=-96/10	01, 5-6=-1	1/12	L
WEBS	2-6=0/138	3, 1-6=-10/	161, 3-6=-1/174	
NOTES				

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 3-9-6, Exterior(2R) 3-9-6 to 6-9-6, Interior (1) 6-9-6 to 8-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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

4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads. Building Designer/Project engineer responsible for 5)

6

4x8 =

0.26

0.12

0.06

- 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. \* This truss has been designed for a live load of 20.0psf 7) 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.
- Provide mechanical connection (by others) of truss to 3) bearing plate capable of withstanding 40 lb uplift at joint 7 and 63 lb uplift at joint 5.
- 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.





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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A4	Common	4	1	Job Reference (optional)	172808506

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:22 ID:RFp6IKTP49xxVGbBLZnAoKzQTV2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:32.5

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	<b>CSI</b> TC BC WB Matrix-MP	0.27 0.12 0.06	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.02 0.00	(loc) 5-6 5-6 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 40 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD 3OT CHORD WEBS BRACING TOP CHORD 3OT CHORD REACTIONS FORCES TOP CHORD 3OT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II; Exp B; f and C-C E to 3-9-6, E and right e C for mem shown; Lu 3) TCLL: ASC Plate DOL 1.15 Plate Exp.; Ce=	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exx Rigid ceiling directly bracing. (size) $4=0-5-8$ , 6 Max Horiz $6=96$ (LC Max Uplift $4=-40$ (LC Max Uplift $4=-40$ (LC (lb) - Maximum Com Tension 1-2=-224/92, $2-3=-23-4=-249/1345-6=-94/85$ , $4-5=-18/2$ , 2-5=0/113, $1-5=-13/2ed roof live loads have5-6=-94/85$ , $4-5=-18/2ed roof live loads have5-6=-94/85ed roof live loads$	athing directly applied cept end verticals. applied or 10-0-0 oc 3=0-8-0 11) 14), 6=-37 (LC 14) 22), 6=267 (LC 2) pression/Maximum 17/110, 1-6=-236/123 /20 145, 3-5=-25/151 been considered for (3-second gust) CDL=3.0psf; h=25ft; ivelope) exterior zone -1-12, Interior (1) 3-1 10-0 zone; cantilever eft and right exposed /FRS for reactions grip DOL=1.60 roof LL: Lum DOL=1. Y=7.7 psf (Lum DOL Rough Cat B; Partiall	4) 5) d or 6) 7) 8) 3, LC 3, LC 1-12 left t;C- .15 = y	Building Des verifying Rain requirements This truss he on the botton 3-06-00 tall b chord and an Provide mecl bearing plate 6 and 40 lb u This truss is International R802.10.2 ar	igner/Project engin in Load = 5.0 (psf) c specific to the use s been designed for di nonconcurrent w has been designed in chord in all areas y 2-00-00 wide will yo other members. hanical connection capable of withsta plift at joint 4. designed in accord Residential Code s and referenced stand Standard	eer responses re	consible for ain loading truss compoo ) psf bottom other live loa e load of 20.0 a rectangle veen the bottu ers) of truss t 7 lb uplift at j ith the 2018 R502.11.1 a ISI/TPI 1.	nent. ds. 0psf to joint and				SEA O578	ROLINE B7 EER.	and an

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

April 16,2025

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A1E	Roof Special Supported Gable	1	1	Job Reference (optional)	172808507

Run: 8.83 E Dec 4 2024 Print: 8.830 E Dec 4 2024 MiTek Industries, Inc. Wed Apr 16 11:59:38 ID:YUZbSyQu1xRV0eIQ6jjEeUzQTV6-8BwSZLD3K10Oci7jiBg1k?ApvKqksa0TijhmLzzQ8w3

Page: 1



Scale = 1:27.4

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI20	14	CSI TC BC WB Matrix-MP	0.29 0.25 0.11	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.04 0.00	(loc) 6-11 6-11 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 32 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ep Rigid ceiling directly bracing. (lb/size) 2=198/0- 6=292/0- Max Horiz 6=111 (L Max Uplift 2=-89 (L 6=-122 (I Max Grav 2=299 (L (LC 2)) (lb) - Max. Comp./N (lb) or less except v 2-6=-163/294 3-6=-289/361	eathing directly applied cept end verticals. r applied or 10-0-0 oc 3-8, 5=-23/0-3-8, 3-8 C 15) C 12), 5=-32 (LC 33), C 16) C 2), 5=-32 (LC 33), C 16) C 2), 5=18 (LC 16), 6 lax. Ten All forces 2 then shown.	5) This ti load c overh 6) Buildi verifyi requir d or 7) This ti chord 8) * This on the 3-06-( chord 9) All be 10) Provic bearir 11) This ti Intern R802. LOAD CA	uss has f 12.0 p angs no ng Desin g Rain ements uss has bottom 0 tall b 0 tall b 0 tall b 0 tall b 10 tall	s been designed fo sf or 1.00 times fla in-concurrent with gner/Project engine Load = 5.0 (psf) c specific to the use is been designed fo d nonconcurrent w as been d nonconcurrent w as	or greated at roof lo other live eer responsers r of this or a 10.0 rith any for a live where fit betw SP No. (by oth nding 3 lo uplift ance w sections dard AN	er of min rool aad of 7.7 ps re loads. ponsible for ain loading truss compo p psf bottom other live loa e load of 20. a rectangle reen the bott 2. ers) of truss i at joint 2. th the 2018 R502.11.1 a SI/TPI 1.	live f on nent. ids. Dpsf om ioint					
NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II; Exp B; I and C-C C 1-10-0 to end vertice forces & M DOL=1.60 3) TCLL: ASC Plate DOL 1.15 Plate Exp.; Ce= 4) Unbalance design.	Cat. e 1; and .15 = y s								in the second second	SEA 0578	ROL N. HILL 87 PACE IIIIIII		

April 16,2025



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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A5	Monopitch	4	1	Job Reference (optional)	172808508

## Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:22 ID:RFp6IKTP49xxVGbBLZnAoKzQTV2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:31.2

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MP	0.94 0.72 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.19 -0.36 0.00	(loc) 4-7 4-7 2	l/defl >483 >258 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 29 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD FORCES TOP CHORD BOT CHORD BOT CHORD	<ul> <li>2x4 SP No.2</li> <li>2x4 SP No.2</li> <li>2x4 SP No.2</li> <li>2x4 SP No.3</li> <li>Structural wood she</li> <li>2-2-0 oc purlins, ex</li> <li>Rigid ceiling directly bracing.</li> <li>(size) 2=0-8-0, 3</li> <li>(max Horiz 2=111 (LC Max Uplift 2=-111 (LC Max Grav 2=383 (LC (Ib) - Maximum Com Tension</li> <li>1-2=0/22, 2-3=-140/</li> <li>2-4=-113/168</li> </ul>	athing directly applie cept end verticals. applied or 10-0-0 or 3= Mechanical C 12), 3=-78 (LC 16 C 2), 3=302 (LC 2) pression/Maximum 82, 3-4=-16/141	ed or 8 c 5 1 ) 1	<ul> <li>Building Des verifying Rai 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>Refer to gird</li> <li>Provide mec bearing plate 3 and 111 lb</li> <li>This truss is International R802.10.2 a</li> <li>Gap between diagonal or u</li> </ul>	igner/Project engin n Load = 5.0 (psf) s specific to the us is been designed ad nonconcurrent nas been designed n chord in all area: by 2-00-00 wide wi ny other members. er(s) for truss to tru hanical connection e capable of withst uplift at joint 2. designed in accorr Residential Code nd referenced star n inside of top choi vertical web shall n	neer resp covers r e of this or a 10. with any i for a liv s where II fit betw uss conr n (by oth anding 7 dance w sections odard AN rd bearir ot excee	ponsible for ain loading truss compo 0 ps bottom other live load e load of 20.1 a rectangle veen the bott nections. ers) of truss i '8 lb uplift at j ith the 2018 is R502.11.1 at SI/TPI 1. ng and first ad 0.500in.	nent. Ids. Opsf om to joint					
NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=100 II; Exp B; and C-C I to 7-8-4 z vertical le	eed roof live loads have in. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Bi Enclosed; MWFRS (er Exterior(2E) -1-2-0 to 1 cone; cantilever left and frand right exposed C-	been considered for (3-second gust) CDL=3.0psf; h=25ft; velope) exterior zon 10-0, Interior (1) 1-7 right exposed; end C for members and	r Cat. ne 10-0	OAD CASE(S)	Standard						111	NTH CA	ROLIN

7-10-0

vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL=1.15); Pg=10.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Pg=10.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Pg=10.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Pg=10.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Pg=10.0 psf (Lum DOL = 1.15); Pg=10.0 psf (Lum DOL = 1.15 Plate DOL = 1.15); Pg=10.0 psf (Lum DOL = 1.15)

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

- design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.

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



818 Soundside Road Edenton, NC 27932

Common and the

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A2E	Common Supported Gable	1	1	Job Reference (optional)	172808509

5-6-5

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:20 ID:0g7zgIRWoEZMeotcfRETBizQTV5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



10-4-4

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDI	(psf) 20.0 7.7/10.0 10.0 0.0*	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MR	0.17 0.05 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 12	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	<b>GRIP</b> 244/190 ET = 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.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 12=10-4 15=10-4 15=10-4 Max Horiz 20=-148 ( 17=-51 (L 19=-97 (L Max Grav 12=144 (I 14=150 (I 18=113 (I 19=150 (I 18=113 (I)))	eathing directly applie ccept end verticals. <sup>7</sup> applied or 6-0-0 oc 4, 13=10-4-4, 14=10 4, 16=10-4-4, 17=10 4, 19=10-4-4, 20=10 (LC 12) .C 11), 13=-92 (LC 1 .C 14), 13=-57 (LC 1 .C 14), 13=-57 (LC 1 .C 14), 13=-57 (LC 1 .C 14), 20=-83 (LC 1 .C 26), 13=120 (LC LC 27), 15=121 (LC 2 LC 29), 17=123 (LC 3 .C 32), 19=133 (LC 4) 	2) d or 3) -4-4, -4-4, -4-4, -4-4, -5), 5), 5), 5), 5), 5), 5), 5), 5), 6), 13), 27), 6), 12), 6)	Wind: ASCE Vasd=103mp II; Exp B; En and C-C Cor to 5-2-2, Cor 11-4-4 zone; vertical left a forces & MW DOL=1.60 pl Truss design only. For stu see Standarr or consult qu TCLL: ASCE Plate DOL=1 1.15 Plate D Exp.; Ce=1.0 This truss ha load of 12.0 overhangs n Building Dess verifying Rai requirements	7-16; Vult=1300 bh; TCDL=6.0ps closed; MWFRS ner(3E) -1-0-0 t ner(3R) 5-2-2 tc cantilever left a nd right expose FRS for reaction ate grip DOL=1 ted for wind load dis exposed to vid d Industry Gable alified building of 7-16; Pr=20.0 [ .15); Pg=10.0 p DL = 1.15); Is=1 b; Cs=1.00; Cts=1 on-concurrent wigner/Project en n Load = 5.0 (ps s specific to the	mph (3-sec f; BCDL=3 (envelope o 2-0-0, E> 8-2-2, Exi nd right ex d;C-C for n ns shown; 60 ds in the pl wind (norm End Deta designer a: sof (roof LL sof; Pf=7.7 .0; Rough 1.10 d for great is flat roof la ith other ing gineer ress sf) covers r use of this	cond gust) .0psf; h=25ft .0psf; h=25ft .0psf; h=25ft .0psf; h=25ft .0psf; h=25ft .0psf; h=25ft .0psf; h=100 .0psf; h=1000 .0psf; h=1000 .0psf; h=1000 .0psf; h=1000 .0psf; h=1000 .0psf; h=1000 .0psf; h=1000 .0psf	r; Cat. ne 0-0 2-2 to 1 uss a), bble, PI 1. 1.15 L = ally f live f on	14) Thi Inte R8 LOAD	s truss is mationa 22.10.2 đ CASE(S	s desig al Resi and ref ) Sta	veignt: /1 ib ned in accordand dential Code sec erenced standar ndard	FT = 20% ce with the 2018 tions R502.11.1 and d ANSI/TPI 1.
FORCES	20=160 (I (Ib) - Maximum Com	LC 27) npression/Maximum	7) 8)	All plates are Gable requir	2x4 (  ) MT20 es continuous b	unless oth ottom chor	herwise indica ord bearing.	ated.				WITH C	Rout
TOP CHORD	2-20=-127/125, 1-2= 3-4=-56/84, 4-5=-70 6-7=-102/228, 7-8=- 9-10=-69/73, 10-11=	=0/44, 2-3=-88/90, )/167, 5-6=-102/228, -70/166, 8-9=-41/85, =0/44, 10-12=-120/12	9) 10 25	<ol> <li>9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).</li> <li>10) Gable studs spaced at 1-4-0 oc.</li> <li>11) This truss has been designed for a 10.0 psf bottom</li> </ol>							Ċ	Jor FES	DN NY
BOT CHORD	19-20=-73/90, 18-19 16-17=-73/90, 15-16 13-14=-73/90, 12-13	9=-73/90, 17-18=-73/ 6=-73/90, 14-15=-73/ 3=-73/90	90, 12 90,	) * This truss h on the bottor	nas been design n chord in all ar	ed for a liv eas where will fit betw	e load of 20. a rectangle	Opsf				SEA 0578	L 87
WEBS	6-16=-218/55, 5-17= 3-19=-96/87, 7-15=- 9-13=-95/86	=-95/80, 4-18=-92/12 -94/80, 8-14=-91/120	0, , 13	chord and ar Provide mec	y other membe hanical connect	ion (by oth	ers) of truss	to					ER.
NOTES 1) Unbalance this design	d roof live loads have	been considered for		20, 64 lb upli uplift at joint 15, 58 lb upli	ft at joint 12, 51 18, 97 lb uplift a ft at joint 14 and	lb uplift at t joint 19, s 92 lb upli	joint 17, 57 I 51 lb uplift at ft at joint 13.	b joint			111	ADAM	PACE

#### NOTES

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

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A6	Common Structural Gable	1	1	Job Reference (optional)	172808510

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:22 ID:Ndwsj0VfcnBfkalaS\_peulzQTV0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:62.9

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MS	0.23 0.21 0.17	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.03 0.01	(loc) 14-15 14-15 11	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 111 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS DTHERS BRACING TOP CHORD BOT CHORD JOINTS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exa Rigid ceiling directly bracing. 1 Brace at Jt(s): 17 (size) 11=5-9-0, 14=5-9-0, Max Horiz 16=-200 ( Max Uplift 11=-10 (L 13=-88 (L 16=-49 (L) Max Grav 11=243 (L 13=148 (L 16=479 (L)	t* 3-14:2x4 SP No.2 athing directly applie cept end verticals. applied or 10-0-0 oc 12=5-9-0, 13=5-9-0 16=0-5-8 LC 12) C 11), 12=-194 (LC C 15), 14=-112 (LC C 14) LC 29), 12=169 (LC 2 C 27), 14=430 (LC 2 LC 2)	2) d or : 3) , 4) 15), 14), 5) 27), 5) 22), 6)	Wind: ASCE Vasd=103mp II; Exp B; End and C-C Exte 7-9-14, Exter 10-9-14 to 16 exposed ; en members and Lumber DOL: Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 1.15 Plate DOL Exp.; Ce=1.0 This truss hai load of 12.0 p overhangs no	7-16; Vult=130mpf h; TCDL=6.0psf; B closed; MWFRS (er irior(2E) -1-0-0 to 2 ior(2R) 7-9-14 to 11 -7-12 zone; cantiled d vertical left and ri d forces & MWFRS =1.60 plate grip DC ed for wind loads ir ds exposed to wind laddstry Gable Er alified building desi 7-16; Pr=20.0 psf; DL = 1.15); Is=1.0; ; Cs=1.00; Ct=1.10; s been designed fo sof or 1.00 times fla on-concurrent with gner/Prior to the soft of the soft of the soft of the soft of the mercer the soft of the soft of the soft of the soft of the soft of the soft of the soft of the soft of the soft of the soft of the soft of the soft of the soft of the soft of the soft of the soft of	n (3-sec 3CDL=3 nvelope 2-0-0, In 0-9-14, aver left ight exp 5 for rea DL=1.60 n the pla d (norm nd Detai igner as (roof LL Pf=7.7   Rough ) or greate at roof lo other lix oer reas	ond gust) .0psf; h=25ft ) exterior zo terior (1) 2-0 Interior (1) and right ossed;C-C fo ctions showr ) ane of the tru, al to the face Is as applica is per ANSI/T : Lum DOL= osf (Lum DO Cat B; Partia er of min rool oad of 7.7 ps re loads. opnsible for	; Cat. ne I-0 to r n; sss e), bble, PI 1. 1.15 L = ally f live f on	13) This Inte R80 LOAD (	s truss is rnationa )2.10.2 a (CASE(S)	desig I Resic Ind ref Star	ned in accordanc lential Code sect erenced standarc ndard	e with the 2018 ions R502.11.1 and I ANSI/TPI 1.
FORCES	16=479 (LC 2) (lb) - Maximum Compression/Maximum Tension 1-2=0/44, 2-3=-235/176, 3-4=-127/41, 4-5=-95/67, 5-6=-107/64, 6-7=-96/21, 7-8=-128/50, 8-9=-224/105, 9-10=0/44, 2-16=-301/178, 9-11=-193/41 15 16= 90/220 14 15= 70/222			<ul> <li>billioting Designet/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.</li> <li>All plates are 2x4 (  ) MT20 unless otherwise indicated.</li> <li>Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).</li> <li>Gable studs spaced at 2-0-0 oc.</li> </ul>								OF ESS	ROLIN
WEBS NOTES 1) Unbalance this design	13-14=-86/193, 12-1 13-14=-86/193 5-17=-40/7, 3-15=0/2 6-14=-143/77, 7-13= 8-12=-138/149, 3-18 17-18=-303/162, 14- 3-16=-250/8 ed roof live loads have n.	3=-86/193, 210, 4-18=-41/35, -134/105, i=-279/144, 17=-329/162, been considered for	10 11 12	<ul> <li>) This truss has chord live loa</li> <li>) * This truss h on the botton</li> <li>3-06-00 tall b</li> <li>chord and an</li> <li>) Provide mect</li> <li>bearing plate</li> <li>11, 88 lb uplii</li> <li>uplift at joint 4</li> </ul>	s been designed fo d nonconcurrent w as been designed o chord in all areas y 2-00-00 wide will y other members. nanical connection capable of withsta t at joint 13, 194 lb 14 and 49 lb uplift a	or a 10.0 vith any for a liv where fit betw (by oth unding 1 o uplift a at joint 1	pst bottom other live loa e load of 20. a rectangle veen the bott ers) of truss 0 lb uplift at t joint 12, 11 6.	ads. Opsf om to joint 2 Ib		THURSE.		SEA 0578 NGIN	EFR.

#### NOT

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818 Soundside Road Edenton, NC 27932

April 16,2025

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A7	Common	1	1	Job Reference (optional)	172808511

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:22 ID:FPANYNYAg?h4DB3Lhqua2bzQTUy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:60.8				7-9-14 7-9-14			<u>15-7-12</u> 7-9-14					
Loading TCLL (roof) Snow (Pf/Pg) TCDL	(psf) 20.0 7.7/10.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI TC BC WB	0.30 0.55 0.28	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.14 0.01	(loc) 8-9 8-9 8	l/defl >999 >999 n/a	L/d 240 180 n/a	<b>PLATES</b> MT20	<b>GRIP</b> 244/190
BCLL BCDL	0.0*	Code	IRC2018/TPI2014	Matrix-MS				-			Weight: 101 lb	FT = 20%
	2x4 SP No 2		4) This truss h	has been designe	d for greate	er of min roo	of live					

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 9-4:2x4 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or
	6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc
	bracing.
REACTIONS	(size) 8=0-5-8, 10=0-5-8
	Max Horiz 10=-200 (LC 12)
	Max Uplift 8=-110 (LC 15), 10=-110 (LC 14)
	Max Grav 8=683 (LC 2), 10=683 (LC 2)
FORCES	(lb) - Maximum Compression/Maximum
	Tension
TOP CHORD	1-2=0/44, 2-3=-238/122, 3-4=-529/185,
	4-5=-529/185, 5-6=-238/122, 6-7=0/44,
	2-10=-289/133, 6-8=-289/133
BOT CHORD	9-10=-98/498, 8-9=-34/437
WEBS	4-9=-133/393, 3-9=-170/165, 5-9=-170/165,
	3-10=-467/65, 5-8=-467/65

## NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 7-9-14, Exterior(2R) 7-9-14 to 10-9-14, Interior (1) 10-9-14 to 16-7-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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

- overhangs non-concurrent with other live loads.
- 5) 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 6) chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 7) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 10 and 110 lb uplift at joint 8.
- 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



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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A1G	Common Girder	1	2	Job Reference (optional)	172808512

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:20 ID:re3Xdo7HMlkG\_ZjZVvlq?jzQTUC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:60.8 5-3-12 5-0-4 5-3-12	L	5-3-12	10-4-0	15-7-12	
	Scale = 1:60.8	5-3-12	5-0-4	5-3-12	

Plate Offsets (X, Y	<u>():</u>	[2:Edge.0-3-8], [8:0-5-0.0-4-12], [9:0-5-0.0-4-12]
		[2:2:496,6 6 6], [6:6 6 6,6 : 12], [6:6 6 6,6 : 12]

															-		
Loadi	ng	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP			
TCLL	(roof)	20.0	Plate Grip DOL	1.15		TC	0.78	Vert(LL)	0.05	9-10	>999	240	MT20	244/190			
Snow	(Pf/Pg)	7.7/10.0	Lumber DOL	1.15		BC	0.40	Vert(CT)	-0.10	8-9	>999	180	M18AHS	186/179			
TCDL		10.0	Rep Stress Incr	NO		WB	0.51	Horz(CT)	0.02	7	n/a	n/a					
BCLL		0.0*	Code	IRC20	18/TPI2014	Matrix-MS											
BCDL		10.0										Weight: 236 lb	FT = 20%				
	FR				Unbalanced roof live loads have been considered for 14) Use Simpson Strong-Tie LUS26 (4-SD9112 Gird												
TOP		2x4 SP No 2			, this design.					SD	9212 Tri	iss. Si	nale Ply Girder)	or equivalent spaced			
BOT	HORD	2x6 SP DSS		4	) Wind: ASCE	7-16: Vult=130mph	n (3-seo	ond aust)		at 2	-0-0 oc	max. s	starting at 4-5-4 f	rom the left end to			
WERS	1 OILD	2x4 SP No 2 *Except	t* 8-5 9-3 10-3 7-5·2	×4	Vasd=103m	oh: TCDL=6.0psf: B	CDL=3	.0psf: h=25ft:	Cat.	12-	5-4 to co	onnect	truss(es) to bac	k face of bottom chord.			
		SP No.3			II; Exp B; En	closed; MWFRS (er	nvelope	e) exterior zon	ne;								
BDVC	INC				cantilever lef	t and right exposed	; end v	vertical left and	d	15) Use	Simpso	on Stro	ong-Tie HUS26 (	14-10d Girder, 4-10d			
TOP		Structural wood shee	athing directly applie	ad or	right exposed	d; Lumber DOL=1.6	60 plate	grip DOL=1.6	60	Tru	ss) or ea	quivale	ent at 14-5-4 from	n the left end to			
	5-6-13 oc purlins except end verticals						-			con	nect trus	ss(es)	to back face of b	oottom chord.			
BOT	CHORD Rigid ceiling directly applied or 10-0-0 oc				) TCLL: ASCE	7-16; Pr=20.0 psf	(roof Ll	.: Lum DOL=1	1.15	16) Fill	all nail h	oles w	/here hanger is i	n contact with lumber.			
0010	mone	bracing		,	Plate DOL=1	.15); Pg=10.0 psf; I	Pf=7.7	psf (Lum DOL	. =	LOAD	CASE(S	) Sta	ndard				
REAC	TIONS	(size) 7-0-5-8 1	0-0-5-8		1.15 Plate D	OL = 1.15); Is=1.0;	Rough	Cat B; Partial	lly	1) De	ead + Sr	ow (bi	alanced): Lumbe	er Increase=1.15, Plate			
NEA0	nono	Max Horiz 10-189 (I	C 9)		Exp.; Ce=1.0	; Cs=1.00; Ct=1.10	)			Í	crease=	1.15					
		Max 1 Inlift 7959 (1 (	C 11) 10–-1158 (I C	(10) <sup>6</sup>	) This truss ha	s been designed fo	r great	er of min roof	live	Ur	hiform Lo	oads (l	b/ft)				
		Max Grav 7-4914 (I	C 2) 10-4367 (LC 3	2)	load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on Vert: 1-2=-35, 2-4=-35, 4-6=-35, 7-10									5, 7-10=-20			
			.0 2), 10=4007 (LO 2		overhangs n	on-concurrent with	other li	/e loads.		Co	oncentra	ted Lo	ads (lb)				
FURG	E9	(ID) - Maximum Com	pression/waximum	1	Building Designer/Project engineer responsible for Vert: 8=-790 (B), 11=-1128 (B), 12=-1122 (B)								), 12=-1122 (B),				
	NUDD	1_2_0/11 2_3_1/70	/520 3-1-1736/123	22	verifying Rail	1  Load = 5.0  (psr) c	overs	ain loading			13=-110	01 (B),	15=-790 (B), 17	=-790 (B), 18=-790 (B)			
	nond	1-2=0/44, 2-3=-1473	-1515/361	J <u>Z</u> ,	requirements	Specific to the use		truss compor	ient.								
		2-10=-1119/401 6-7	= 1040/004, =-1075/266	c c	) All plates are	a been designed for		wise indicated	u.								
BOT	HORD	9-10=-877/3513 8-9	=-546/2607	8	) This truss ha	s been designed to	ith onv	other live leav	de								
0010	mone	7-8=-690/3566	- 010/2001,	1		as been designed	for a liv	e load of 20 0	us. Inef	f Michael and							
WEBS	5	4-8=-606/3133.5-8=	-141/356.	'	on the bottor	n chord in all areas	where	a rectandle	/poi								
		4-9=-964/3006, 3-9=	-147/380,		3-06-00 tall b	v 2-00-00 wide will	fit bety	veen the botto	m				"THE	ARO			
		3-10=-3521/695, 5-7	=-3503/697		chord and ar	v other members.	with BC	DL = 10.0 psf					A	Art. Kinte			
NOTE	s			1	1) Provide mec	hanical connection	(by oth	ers) of truss to	0			31	O. FEP	ONIC			
1) 2-	plv truss	to be connected toget	her with 10d		bearing plate	capable of withsta	nding 1	158 lb uplift a	ıt			5 1	31,21	andi: 1			
<i>(</i> 0	131"x3"	) nails as follows:			joint 10 and 9	959 lb uplift at joint	7.	-			-						
Ťc	p chord	s connected as follows	: 2x4 - 1 row at 0-9-	0 1	2) This truss is	designed in accord	ance w	ith the 2018			-		SE/	=			
00					International	Residential Code s	ections	R502.11.1 a	nd		=		JLA	<u>··</u> : =			
Bo	ottom cho	ords connected as follo	ows: 2x6 - 2 rows		R802.10.2 a	nd referenced stand	dard AN	ISI/TPI 1.			-		0578	387 : =			
sta	aggered	at 0-7-0 oc.		1	<ol><li>Use Simpsor</li></ol>	N Strong-Tie HHUS	26-2 (1	4-10d Girder,			-	2					
W	eb conne	ected as follows: 2x4 -	1 row at 0-9-0 oc.		4-10d Truss)	or equivalent at 2-	6-2 fror	n the left end	to								
2) Al	<ol> <li>All loads are considered equally applied to all plies,</li> </ol>				connect truss	s(es) to back face o	f botto	n chord.				2	· SNOW	FER. S			
ex	cept if n	oted as front (F) or bac	ck (B) face in the LO	DAD								11,	GIN	5. C . S			
C	ASE(S) s	section. Ply to ply conn	ections have been										1, DANA	DACEN			
pr	ovided to	o distribute only loads r	noted as (F) or (B),										11, WI	The second se			
ur	liess oth	erwise indicated.												UTT			

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818 Soundside Road Edenton, NC 27932

April 16,2025

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A3E	Common Supported Gable	1	1	Job Reference (optional)	172808513

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#### Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:21 ID:z3Fk4\_SnJsp4t60?nrGxG7zQTV3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:73.1

29-0-0

Plate Offsets (	(X, Y): [2:0	-3-8,Edge],	[11:0-3-0,0-3-0], [15	:0-3-0,0-3-0], [24:0-4	-1,Edg	ge], [34:0-3-0,0-3	8-0]								
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL		(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	C T B V M	CSI FC 3C WB Matrix-MS	0.07 0.05 0.15	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc) - - 24	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 218	<b>GRIP</b> 244/190	6
LUMBER TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N 2x4 SP N 35-13,36- Left 2x4 S 1-6-0 Structura 6-0-0 oc   Rigid ceil bracing.	lo.2 lo.3 *Excep 12,37-11,3 SP No.3 - 1 I wood shea purlins. ing directly	t* 4-14,33-15:2x4 SP N I-6-0, Right 2x4 SP N athing directly applie applied or 10-0-0 oc	lo.2 lo.3 d or <b>FORCES</b>	Max (lb) Ter	Grav 2=170 (L 26=174 ( 28=112 ( 30=107 ( 32=105 ( 34=110 ( 38=105 ( 40=107 ( 42=112 ( 44=174 ( - Maximum Cor nsion	C 2), 24 [LC 37), [LC 37), [LC 37), [LC 2), 3 [LC 37), [LC 36), [LC 36), [LC 36), [LC 36), [LC 36), [LC 36) [LC 36)]	4=169 (LC 2), 27=81 (LC 2) 29=105 (LC 2) 31=107 (LC 3) 35=133 (LC 3) 35=133 (LC 3) 37=108 (LC 3) 41=105 (LC 2) 43=82 (LC 2) on/Maximum	), 2), 37), 33), 33), 36), 6), 2),	<ol> <li>Un this</li> <li>Wi</li> <li>Va Ua</li> <li>Ul; an</li> <li>to</li> <li>17</li> <li>en</li> <li>for</li> <li>DC</li> <li>3) Tru</li> </ol>	balancec s design. nd: ASCI sd=103m Exp B; Ei d C-C Cc 14-6-0, C -6-0 to 3( d vertical ces & MV DL=1.60 p uss desig ly. For st	I roof li 2 7-16; ph; TC nclose rner(3 orner( )-0-0 z left an VFRS plate gi ned fo uds ex	ive loads have ; Vult=130mpl CDL=6.0psf; E d; MWFRS (e E) -1-0-0 to 2 3R) 14-6-0 to one; cantileve dd right expos for reactions : rip DOL=1.60 r wind loads i xposed to win	been conside n (3-second gu iCDL=3.0psf; h nvelope) exterior(2 17-6-0, Exterior(2 17-6-0, Exterior) er left and right ed;C-C for me shown; Lumbe n the plane of d (normal to th)	ered for ist) n=25ft; Cat. ior zone 2N) 2-0-0 or(2N) exposed ; mbers and if the truss le face),
REACTIONS	(size) Max Horiz Max Uplift	2=29-0-0, 27=29-0-0 30=29-0-0 33=29-0-0 39=29-0-0 42=29-0-0 2=123 (LC 2=-27 (LC 26=-89 (L1 28=-41 (L1 30=-37 (L1 32=-35 (L1 34=-22 (L1 37=-42 (L1 37=-42 (L1 41=-36 (L1 43=-12 (L1	24=29-0-0, 26=29-0 , 28=29-0-0, 29=29- 0, 31=29-0-0, 32=29- 0, 31=29-0-0, 35=29- 0, 37=29-0-0, 38=29- 0, 40=29-0-0, 41=29- 0, 40=29-0-0, 41=29- 0, 40=29-0-0, 41=29- 0, 40=29-0-0, 41=29- 0, 40=29-0-0, 41=29- 0, 40=29-0-0, 41=29- 17), 24=-3 (LC 13), C 17), 27=-17 (LC 17), C 17), 31=-37 (LC 11), C 17), 33=-44 (LC 17), C 17), 33=-36 (LC 11), C 17), 33=-36 (LC 11), C 17), 33=-36 (LC 11), C 16), 40=-37 (LC 10), C 16), 42=-42 (LC 11), C 16), 44=-101 (LC 10), C 16), 45=-20, C 16), C 16), C 16), 45=-20, C 16), C 1	-0, 0	left           1 - 22           5-66           8-9-9           12-           14-           17-           20-           24-           17-           20-           24-           33-           33-           32-           30-           32-           30- <td>nsion 1=0/27, 2-4=-135 1=-78/79, 6-7=-6; 1=-52/126, 9-10= 1:3=-99/236, 13- 1:8=-52/121, 18- 1:8=-52/121, 18- 2:1=-40/29, 21-2; 2:5=0/27 4:=-34/118, 43-4 4:2=-34/118, 43-4 4:2=-34/118, 38- 3:8=-34/118, 38- 3:8=-34/118, 38- 3:8=-34/119, 33- 3:3=-34/119, 31- 3:3=-34/119, 31- 3:3=-34/119, 31- 3:3=-34/119, 29- 2:9=-34/119, 29- 2:9=-34/119, 29- 1:=80/51, 6-42= 1:=80/51, 20-2; 2:9=-80/51, 20-2; 2:9=-80/51, 20-2; 2:9=-80/51, 20-2; 2:9=-119/104</td> <td>/65, 4-5 3/95, 7- -65/151 14=-99, 17=-64, 19=-41, 19=-41, 2=-56/1 4=-34/1, 39=-34, 37=-34, 32=-34, 32=-34, 30=-34, 26=-34, 26=-34, 26=-34, 26=-34, 26=-34, 26=-34, 26=-34, 26=-80/5 8=-82/55, 34=-80/5 8=-82/5</td> <td>=-93/64, 8=-54/110, , 10-12=-90/2 (236, (151, 91, 19-20=-3; 6, 22-24=-83/ (118, (119, (120,))))))))))))))))))))))))))))))))))))</td> <td>1/61, /29, 4/118, 1/60, 52, /39,</td> <td>on see or Pili 1.1 Ex 5) Un de</td> <td>e Standa consult q :LL: ASC ate DOL= 5 Plate I p; Ce=1. balancec sign.</td> <td>uds est d Indu ualifier E 7-16 1.15); DOL = 0; Cs= 0; Cs=</td> <td>obsection with stry Gable Er d building des ; Pr=20.0 psf; 1.15); Is=1.0; f=1.00; Ct=1.1( loads have b SI 057</td> <td>A normal to in di Details as a igner as per A (roof LL: Lum Pf=7.7 psf (Lu Rough Cat B; ) een considere ARO SO SO ARO SO SO ARO SO SO SO SO SO SO SO SO SO SO SO SO SO</td> <td>NSI/TPI 1. DOL=1.15 m DOL = Partially d for this</td>	nsion 1=0/27, 2-4=-135 1=-78/79, 6-7=-6; 1=-52/126, 9-10= 1:3=-99/236, 13- 1:8=-52/121, 18- 1:8=-52/121, 18- 2:1=-40/29, 21-2; 2:5=0/27 4:=-34/118, 43-4 4:2=-34/118, 43-4 4:2=-34/118, 38- 3:8=-34/118, 38- 3:8=-34/118, 38- 3:8=-34/119, 33- 3:3=-34/119, 31- 3:3=-34/119, 31- 3:3=-34/119, 31- 3:3=-34/119, 29- 2:9=-34/119, 29- 2:9=-34/119, 29- 1:=80/51, 6-42= 1:=80/51, 20-2; 2:9=-80/51, 20-2; 2:9=-80/51, 20-2; 2:9=-80/51, 20-2; 2:9=-119/104	/65, 4-5 3/95, 7- -65/151 14=-99, 17=-64, 19=-41, 19=-41, 2=-56/1 4=-34/1, 39=-34, 37=-34, 32=-34, 32=-34, 30=-34, 26=-34, 26=-34, 26=-34, 26=-34, 26=-34, 26=-34, 26=-34, 26=-80/5 8=-82/55, 34=-80/5 8=-82/5	=-93/64, 8=-54/110, , 10-12=-90/2 (236, (151, 91, 19-20=-3; 6, 22-24=-83/ (118, (119, (120,))))))))))))))))))))))))))))))))))))	1/61, /29, 4/118, 1/60, 52, /39,	on see or Pili 1.1 Ex 5) Un de	e Standa consult q :LL: ASC ate DOL= 5 Plate I p; Ce=1. balancec sign.	uds est d Indu ualifier E 7-16 1.15); DOL = 0; Cs= 0; Cs=	obsection with stry Gable Er d building des ; Pr=20.0 psf; 1.15); Is=1.0; f=1.00; Ct=1.1( loads have b SI 057	A normal to in di Details as a igner as per A (roof LL: Lum Pf=7.7 psf (Lu Rough Cat B; ) een considere ARO SO SO ARO SO SO ARO SO SO SO SO SO SO SO SO SO SO SO SO SO	NSI/TPI 1. DOL=1.15 m DOL = Partially d for this

April 16,2025

Continued on page 2 Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTER REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTeR% 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 **ANSUTPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) with the Section of the prevent collapse contervent for the Section of the prevent of the prevent of the prevent of the prevent for the term between the prevent of the prevent and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	1033 Serenity	170000510
P01985-24565	A3E	Common Supported Gable	1	1	Job Reference (optional)	172808513

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
   Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 2, 3 lb uplift at joint 24, 27 lb uplift at joint 36, 42 lb uplift at joint 37, 36 lb uplift at joint 38, 37 lb uplift at joint 39, 37 lb uplift at joint 40, 36 lb uplift at joint 41, 42 lb uplift at joint 42, 12 lb uplift at joint 43, 101 lb uplift at joint 44, 22 lb uplift at joint 34, 44 lb uplift at joint 33, 35 lb uplift at joint 32, 37 lb uplift at joint 31, 37 lb uplift at joint 30, 36 lb uplift at joint 29, 41 lb uplift at joint 28, 17 lb uplift at joint 27, 89 lb uplift at joint 26, 27 lb uplift at joint 2 and 3 lb uplift at joint 24.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:21 ID:z3Fk4\_SnJsp4t60?nrGxG7zQTV3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A8	Common	9	1	Job Reference (optional)	172808514

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:22 ID:Cnl8z3ZQCdxoSVCkpEw270zQTUw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





			9-1	0-3	1	19-1-13	3	1		29-0-0			
Scale = 1.74 9	1	I	9-1	0-3	I	9-3-11		1		9-10-3		Ι	
Plate Offsets	(X, Y): [2:0-2-12,0-0-5	], [10:0-3-5,0-0-5]											
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MS	0.69 0.73 0.25	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.28 -0.43 0.06	(loc) 12-14 12-14 10	l/defl >999 >811 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 139 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.1 2x4 SP No.3 *Excep Left 2x4 SP No.3 - 1 1-6-0 Structural wood shea 3-1-11 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 1 Max Horiz 2=-123 (L Max Uplift 2=-217 (L Max Grav 2=1316 (L (lb) - Maximum Com Tension 1-2=0/27, 2-4=-2048 6-8=-1885/371, 8-10 2-14=-319/1772, 12- 10-12=-217/1772	t* 14-6,12-6:2x4 SP I-6-0, Right 2x4 SP I athing directly applie applied or 10-0-0 oc 10=0-5-8 C 21) C 16), 10=-217 (LC C 3), 10=1316 (LC 3 pression/Maximum i/344, 4-6=-1885/371 I=-2048/344, 10-11= 14=-108/1219, I=-176/771	3) No.2 No.3 4) 5) d or (17) (17) (17) (17) (17) (10) (10) (10) (10) (10) (10) (10) (10	TCLL: ASCE Plate DOL=1 1.15 Plate D Exp.; Ce=1.0 Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha chord dive loa * This truss ha chord dive loa * This truss ha chord and ar Provide mec bearing plate 2 and 217 lb ) This truss is	7-16; Pr=20.0 g .15); Pg=10.0 p OL = 1.15); Is=1 ; Cs=1.00; Ct=1 snow loads hav us been designe psf or 1.00 times on-concurrent w igner/Project en n Load = 5.0 (ps s specific to the s been designe ad nonconcurrer as been designe n chord in all arr oy 2-00-00 wide y other membe hanical connect e capable of witt uplift at joint 10 designed in acc	best (roof LL sf; Pf=7.7 .0; Rough .10 e been cor d for greatu s flat roof la ith other lin gineer res <sub>l</sub> jf covers r use of this d for a 10.0 tt with any ed for a liv ed for a liv ed for a liv sas where will fit betw rs, with BC ion (by oth standing 2 - ordance w	.: Lum DOL= osf (Lum DO Cat B; Partia sidered for the er of min roof bad of 7.7 psi re loads. oonsible for ain loading truss compoid obser live load of 20.0 a rectangle veen the bott DL = 10.0psi ers) of truss to 17 lb uplift at the 2018	1.15 L = ally his f live f on nent. ads. Opsf om f. to t joint					1110.
NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=10; II; Exp B; and C-C I 14-6-0, E; to 30-0-0 vertical le forces & N DOL=1.60	6-12=-176/771, 8-12 ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B0 Enclosed; MWFRS (en Exterior(2E) -1-0-0 to 2- xterior(2E) 14-6-0 to 17 zone; cantilever left and ft and right exposed;C- WWFRS for reactions sl 0 plate grip DOL=1.60	=-404/234 been considered for (3-second gust) CDL=3.0psf; h=25ft; (velope) exterior zon :0-0, Interior (1) 27-1 d right exposed ; enc C for members and hown; Lumber	LC Cat. e 0 to 5-0 d	R802.10.2 a	nd referenced st Standard	andard AN	ISI/TPI 1.			1000	and the second	O FESS SEA 0578	B7 B7 B7



April 16,2025

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 collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BC2E Building Component Schut beformation, available from the Structure Building Component Advanciation (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	A9	Common	1	1	Job Reference (optional)	172808515

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:23 ID:g\_rWBPa2zw3f4enwMyRHgDzQTUv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1





		L	9-	10-3		19-1-	13			29-0-	0		
Scale = 1:74.9	1	I.	9-	10-3	I	9-3-1	1	1		9-10-	3	1	
Plate Offsets	(X, Y): [2:0-2-12,0-0-5	], [10:0-3-5,0-0-5]											
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	/TPI2014	CSI TC BC WB Matrix-MS	0.69 0.74 0.25	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.28 -0.43 0.06	(loc) 11-13 11-13 10	l/defl >999 >819 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 137 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.1 2x4 SP No.3 *Excep Left 2x4 SP No.2 1 1-6-0 Structural wood she 3-1-9 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 1 Max Horiz 2=131 (LC Max Uplift 2=-217 (L Max Grav 2=1317 (L	t* 11-6,13-6:2x4 SP I-6-0, Right 2x4 SP I athing directly applie applied or 10-0-0 oc I0= Mechanical C 16) C 16), 10=-198 (LC .C 3), 10=1265 (LC :	3) No.2 4) 5) d or ; 6) 7) 17) 8)	TCLL: ASCE Plate DOL=1 1.15 Plate D Exp.; Ce=1.0 Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Raii requirements This truss ha chord live loa * This truss ha	7-16; Pr=20.0 ps .15); Pg=10.0 ps OL = 1.15); Is=1.1 ); Cs=1.00; Ct=1. snow loads have s been designed psf or 1.00 times on-concurrent wit igner/Project eng n Load = 5.0 (psf s specific to the u s been designed ad nonconcurrent has been designed n chord in all area	sf (roof Ll f; Pf=7.7 0; Rough 10 been con for great flat roof lit h other lin inteer res ) covers r se of this for a 10. with any ed for a liv as where	: Lum DOL= psf (Lum DO Cat B; Partia asidered for the er of min roof pad of 7.7 psl ve loads. ponsible for ain loading truss compon 0 psf bottom other live loa e load of 20.0.	1.15 L = his f live f on nent. dds. 0psf					
FORCES	(lb) - Maximum Com Tension 1-2=0/27, 2-4=-2049 6-8=-1889/378, 8-10	pression/Maximum //344, 4-6=-1886/37 <sup>-</sup> /=-2053/351	l, 9) 10)	3-06-00 tall to chord and an Refer to gird Provide med	by 2-00-00 wide w by other members er(s) for truss to t hanical connection	vill fit betw s, with BC truss conr on (by oth	veen the botto DL = 10.0pst nections. ers) of truss t	om f. to					
WEBS	2-13=-327/1773, 11- 10-11=-233/1777 4-13=-404/234, 6-11 6-13=-176/770, 8-11	=-178/775, =-407/235	11)	bearing plate 2 and 198 lb This truss is International	capable of withs uplift at joint 10. designed in acco Residential Code	standing 2 ordance w e sections	17 lb uplift at ith the 2018 R502.11.1 a	t joint and				WITH CA	Route
NOTES 1) Unbalanc this design 2) Wind: AS Vasd=100 II; Exp B; and C-C I 14-6-0, E: to 29-0-0 vertical le forces & I DOL=1.60	ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Br Enclosed; MWFRS (er Exterior(2E) -1-0-0 to 2: xterior(2R) 14-6-0 to 17 zone; cantilever left an ft and right exposed;C- WWFRS for reactions s 0 plate grip DOL=1.60	been considered for (3-second gust) CDL=3.0psf; h=25ft; ivelope) exterior zon 0-0, Interior (1) 2-0- '-6-0, Interior (1) 17- d right exposed ; end C for members and hown; Lumber	Cat. e 0 to 6-0 d	R802.10.2 aı AD CASE(S)	nd referenced sta Standard	andard AN	ISI/TPI 1.			. 61111165	in the second second	SEAL 0578	L 87 PACEnum

April 16,2025

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	T1	Roof Special	3	1	Job Reference (optional)	172808516

12-4-8

14-6-0

84 Lumber-1387 (Winter Haven, FL), Winter Haven, FL - 33880,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:31 ID:8RxJyZoLjSL6EP9NQkmVO0zQTUd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

21-7-4

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2-1-8 4-10-12 7-4-12 7-1-4 29-0-0 4x6= 2x4 II 7 3x6 🞜 3x6👟 6<sup>12</sup> 6 285 29 8 4x8 🚽 2x4 🛛 4 9 30 3x6**≈** 10 45 11 16 14 2x4 II 12 6x8= 13 4x6 II 4x10= 3x6= 3x6 II

29-0-0



Scale = 1:91.7

## Plate Offsets (X, Y): [3:0-5-5,0-2-5], [4:0-3-9,0-1-8], [11:0-3-9,0-1-5], [15:0-2-12,0-2-8]

7-11-0 8-0-15

0-0-

1-0-0 1-0-0 ∏-8-0

1-7-5 -1-0-0

1-0-0 1-7-5

 $\mapsto$ 

7-5-12

5-10-7

18<sup>.</sup>

19

4x8= 8x16 II

4x6= 4x6=

Loading TCLL (roof) Snow (Pf/Pg)	(psf) 20.0 7.7/10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15		CSI TC BC	0.89 0.93	<b>DEFL</b> Vert(LL) Vert(CT)	in -0.19 -0.40	(loc) 16-17 12-14	l/defl >999 >873	L/d 240 180	PLATES MT20	<b>GRIP</b> 244/190	
TCDL	10.0	Rep Stress Incr	YES		WB	0.64	Horz(CT)	0.17	11	n/a	n/a			
BCLL	0.0*	Code	IRC2018	3/TPI2014	Matrix-MS									
BCDL	10.0											Weight: 177 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING	2x4 SP No.2 2x4 SP No.2 *Excep 18-17:2x4 SP No.3, 3 2x4 SP No.3 *Excep SP No.2 Right 2x4 SP No.3	t* 2-18:2x8 SP DSS, 3-15:2x4 SP No.1 t* 12-15,15-7,12-7:2› 1-6-0	2)	Wind: ASCE Vasd=103mp II; Exp B; Ena and C-C Exter 14-6-0, Exter to 29-0-0 zon vertical left at forces & MW	7-16; Vult=130mph h; TCDL=6.0psf; B closed; MWFRS (ex rior(2E) -1-0-0 to 2 ior(2R) 14-6-0 to 1 e; cantilever left ar nd right exposed;C FRS for reactions s toto arin DOL = 1.60	n (3-sec CDL=3 nvelope 2-0-0, Ir 7-6-0, I nd right -C for n shown;	ond gust) .0psf; h=25ft exterior zo terior (1) 2-0 hterior (1) 17 exposed ; er hembers and Lumber	t; Cat. ne 0-0 to 7-6-0 nd 1						
TOP CHORD	Structural wood sheat 1-11-1 oc purlins.	athing directly applied	d or 3)	TCLL: ASCE	7-16; Pr=20.0 psf	(roof LL	: Lum DOL=	1.15						
BOT CHORD	Rigid ceiling directly bracing.	applied or 2-2-0 oc		Plate DOL=1 1.15 Plate D0	.15); Pg=10.0 psf;   DL = 1.15); ls=1.0;	Pf=7.7 Rough	osf (Lum DO Cat B; Partia	L = ally						
REACTIONS	(size) 2=0-5-8, 1 Max Horiz 2=131 (LC Max Uplift 2=-218 (L1 Max Grav 2=1221 (L	1= Mechanical C 16) C 16), 11=-198 (LC 1 .C 2), 11=1159 (LC 2	4) 7) 5)	Exp.; Ce=1.0 Unbalanced s design. This truss ha	; Cs=1.00; Ct=1.10 snow loads have be s been designed fo	) een cor er great	isidered for t	his f live						
FORCES	(lb) - Maximum Com	pression/Maximum	,	overhangs no	on-concurrent with	other liv	ve loads.	i on						
TOP CHORD	1-2=0/27, 2-3=-1561 4-6=-1739/347, 6-7= 7-9=-1826/421, 9-11	/256, 3-4=-3936/787 -1648/394, =-1916/349	, , 7)	Building Desi verifying Rair requirements This truss ha	gner/Project engine Load = 5.0 (psf) c specific to the use s been designed fo	eer res overs r of this or a 10.0	oonsible for ain loading truss compo ) psf bottom	nent.					<b>1</b> 1.	
BOT CHORD	2-19=-345/1363, 18- 17-18=-67/276, 3-17 16-17=-404/2176, 15 14-15=0/149, 6-15=- 11-12=-233/1643	19=-85/298, =-394/2162, 5-16=-404/2176, 164/100, 12-14=-6/1	8) 56,	chord live loa * This truss h on the botton 3-06-00 tall b chord and an	d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members.	ith any for a liv where fit betv	other live loa e load of 20. a rectangle veen the bott	ads. Opsf com			in the second se	PRICE SO	ROLIN	
WEBS	4-15=-819/249, 12-1 7-15=-220/821, 7-12 9-12=-404/240, 4-16 3-19=-1268/350, 17-	5=-118/1076, =-234/588, =0/302, 4-17=-380/1 19=-296/1219	9) 10 534,	Refer to girde ) Provide mech bearing plate 2 and 198 lb	er(s) for truss to tru nanical connection capable of withsta uplift at joint 11.	ss conr (by oth nding 2	ections. ers) of truss 18 lb uplift a	to t joint				SEA 0578	37	
NOTES 1) Unbalance this desigr	ed roof live loads have h.	been considered for	11 LC	) This truss is ( International R802.10.2 ar DAD CASE(S)	designed in accord Residential Code s Id referenced stand Standard	ance w ections dard AN	th the 2018 R502.11.1 a ISI/TPI 1.	and			unin in	ADAM F	E.R.	

April 16,2025

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	Н9	Half Hip Girder	1	2	Job Reference (optional)	172808517

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:27 ID:VgGea438YD6\_torciM9flfzQTUH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	4-5-12	9-4-4	14-2-12	19-1-4	23-11-12	29-0-0
	4-5-12	4-10-8	4-10-8	4-10-8	4-10-8	5-0-4
Scale = 1:55.3						

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 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 IRC2018	3/TPI2014	CSI TC BC WB Matrix-MS	0.21 0.34 0.32	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.13 -0.18 0.03	(loc) 13-15 13-15 11	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 350 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 2x6 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 2 Structural wood shee 6-0-0 oc purlins, exc 2-0-0 oc purlins (6-0 Rigid ceiling directly bracing. (size) 2=0-5-8, 1 Max Horiz 2=103 (LC Max Uplift 2=-476 (LT	-6-0 athing directly applied cept end verticals, an -0 max.): 4-10. applied or 10-0-0 oc 1= Mechanical : 11) C 9), 11=-557 (LC 9)	2) 3) d or d 4) 5)	All loads are except if note CASE(S) sec provided to d unless otherw Unbalanced n this design. Wind: ASCE Vasd=103mp II; Exp B; Enc cantilever left right exposed TCLL: ASCE Plate DOL=1	considered equally d as front (F) or ba tion. Ply to ply con istribute only loads vise indicated. 'oof live loads have 7-16; Vult=130mpl h; TCDL=6.0psf; E losed; MWFRS (e and right exposed ; Lumber DOL=1.6 7-16; Pr=20.0 psf; 15); Pg=10.0 psf;	/ applied ack (B) intection is noted is noted is been of h (3-sec 3CDL=3 inveloped i; end v 60 plate (roof LL Pf=12.7	d to all plies, face in the LC s have been as (F) or (B), considered for cond gust) Opsf; h=25ft; exterior zon vertical left an grip DOL=1.f Lum DOL=2	DAD r c Cat. ne; d 60 1.15 DL =	14) This Inte R8( 15) Gra or t bott 16) "NA (0.1 LOAD ( 1) De Ini Ur Co	s truss is rnationa b2.10.2 a phical p ne orient om chor ILED" ir 48"x3.2 <b>CASE(S</b> ) ad + Sr prease = iform Lo Vert: 1-4 Vort: 1-4	designation of the set of the se	ned in accordar dential Code sec erenced standa presentation do of the purlin alor is 3-10d (0.148", -nails per NDS en ndard alanced): Lumbe b/ft) 4-10=-45, 11-18 ads (Ib) 126 (E) 22-	ce with the 2018 ctions R502.11.1 and rd ANSI/TPI 1. les not depict the size ig the top and/or x3") or 3-12d guidlines. er Increase=1.15, Plate B=-20 34 (E) 237 (E)
FORCES	(lb) - Maximum Com	pression/Maximum	9)	1.15 Plate DC Exp.; Ce=1.0	DL = 1.15); ls=1.0; ; Cs=1.00; Ct=1.10; snow loads have b	Rough ), Lu=50	Cat B; Partial 0-0-0 sidered for th	lly		35=-4 (F 40=-6 (F	=), 36= =), 41=	-4 (F), 37=-6 (F -6 (F), 42=-6 (F	), 38=-6 (F), 39=-6 (F), ), 43=-6 (F), 44=-6 (F),
TOP CHORD BOT CHORD	1-2=0/35, 2-4=-1902 5-6=-2882/1321, 6-7 7-9=-2996/1382, 9-1 2-17=-795/1661, 16-	/839, 4-5=-2882/132 =-2996/1382, 0=-58/42, 10-11=-13 17=-796/1660, 2, 15= 1567/2212	1, 7) 7/69	design. This truss has load of 12.0 p overhangs no	s been designed for osf or 1.00 times fla on-concurrent with	or great at roof lo other liv	er of min roof bad of 7.7 psf ve loads.	live on		45=-6 (F	-), 46=	6 (F)	
WEBS NOTES 1) 2-ply truss (0.131"x3" Top chord oc. Bottom ch staggered Web conn	12-13=-912/1923, 11 12-13=-912/1923, 11 4-17=-8/120, 4-16=-1 5-16=-339/165, 6-16 6-15=-41/230, 6-13= 7-13=-282/150, 9-13 9-12=-39/241, 9-11= to be connected toget ) nails as follows: s connected as follows: s connected as follows: ords connected as follows: ords connected as follows: at 0-9-0 oc.	1-12=-912/1923 564/1413, =-520/250, -394/183, =-559/1195, -2137/991 her with 10d : 2x4 - 1 row at 0-9-0 pws: 2x6 - 2 rows 1 row at 0-9-0 oc.	9) 10) 11) 11) 12) 13)	verifying Desi verifying Rair requirements Provide adeq This truss has chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Refer to girde Provide mect bearing plate 11 and 476 lb	gner/Project engin a Load = 5.0 (psf) of specific to the use uate drainage to p s been designed for d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. er(s) for truss to tru- nanical connection capable of withsta o uplift at joint 2.	eer res covers r e of this vrevent or a 10.0 vith any for a liv s where l fit betv uss conr (by oth anding 5	ain loading truss compor water ponding 0 psf bottom other live loar e load of 20.0 a rectangle veen the botto nections. ers) of truss to 57 lb uplift at	nent. g. ds. )psf om joint				SEA 0578	AROLA IL 1887 PACE IIIIIII

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



818 Soundside Road Edenton, NC 27932

April 16,2025

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	H10	Half Hip	1	1	Job Reference (optional)	172808518

TCDL

BCLL

BCDL

WEBS

WEBS

WEBS

1)

Run: 8.83 S. Apr 11 2025 Print: 8.830 S. Apr 11 2025 MiTek Industries. Inc. Wed Apr 16 10:58:27 ID:4ZXepRdxGrSEx6WV24?\_IszQTUs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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818 Soundside Road

Edenton, NC 27932

1-7-5 -1-0-0 7-11-8 12-4-8 17-8-11 23-2-9 29-0-0 6-4-3 4-5-0 5-4-3 5-5-15 5-9-7 1-0-0 1-7-5 29-0-0 3x6= 5x10 -2x4 u 3x6 =3x6 =2x4 II 5 26<sub>r</sub> 28 4 27 6<sup>12</sup> 4-9-11 4-7-12 15 ģ 13 10 2x4 I 18 12 11 4x10 6x8= 3x6= 3x6 II 4x8= 3x6= 3x6 II 5x12 u 3x8= 2x4 u 2-8-12 1-7-5 -3-13 12-2-12 7-9-12 20-5-10 25-11-0 29-0-0 5 - 1 - 04 - 5 - 08-2-14 5-5-6 3-1-0 1-3-13 0-3-8 1-1-7 Scale = 1:73.6 Plate Offsets (X, Y): [2:0-3-8,Edge], [4:0-7-4,0-2-8], [12:0-0-10,0-1-12], [14:0-2-12,0-2-8], [18:0-3-8,0-1-8] Loading Spacing 2-0-0 CSI DEFL in l/defl L/d PLATES GRIP (psf) (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 тс 0.68 Vert(LL) -0.18 15-16 >999 240 MT20 244/190 Snow (Pf/Pg) 12.7/10.0 Lumber DOL 1.15 BC 0.81 Vert(CT) -0.37 15-16 >938 180 Rep Stress Incr WB Horz(CT) 10.0 YES 0.76 0.20 10 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 176 lb FT = 20% 10.0 LUMBER 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) LOAD CASE(S) Standard Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. TOP CHORD 2x4 SP No.2 \*Except\* 1-4:2x4 SP DSS II; Exp B; Enclosed; MWFRS (envelope) exterior zone 2x4 SP No.2 \*Except\* 17-16,5-13:2x4 SP BOT CHORD and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to No.3, 3-14:2x4 SP No.1 7-11-8, Exterior(2R) 7-11-8 to 12-4-8, Interior (1) 12-4-8 2x4 SP No.3 \*Except\* 16-4,12-14,10-8:2x4 to 28-10-4 zone; cantilever left and right exposed ; end SP No 2 vertical left and right exposed;C-C for members and SLIDER Left 2x4 SP No.1 -- 1-4-0 forces & MWFRS for reactions shown; Lumber BRACING DOL=1.60 plate grip DOL=1.60 TOP CHORD Structural wood sheathing directly applied or 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 2-7-9 oc purlins, except end verticals, and Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum DOL = 2-0-0 oc purlins (3-6-0 max.): 4-9. 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially BOT CHORD Rigid ceiling directly applied or 8-8-2 oc Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 bracing. 4) Unbalanced snow loads have been considered for this 1 Row at midpt 8-10 design. 2=0-5-8 10= Mechanical **REACTIONS** (size) This truss has been designed for greater of min roof live 5) Max Horiz 2=167 (LC 15) load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on Max Uplift 2=-165 (LC 13), 10=-266 (LC 13) overhangs non-concurrent with other live loads. Max Grav 2=1215 (LC 2), 10=1153 (LC 2) 6) Building Designer/Project engineer responsible for FORCES (lb) - Maximum Compression/Maximum verifying Rain Load = 5.0 (psf) covers rain loading Tension requirements specific to the use of this truss component. TOP CHORD 1-2=0/28, 2-3=-778/118, 3-4=-4042/915, Provide adequate drainage to prevent water ponding. 7) 4-5=-2438/536, 5-6=-2412/531, This truss has been designed for a 10.0 psf bottom 8) 6-8=-1580/331, 8-9=-94/84, 9-10=-158/62 chord live load nonconcurrent with any other live loads. NEFR. M PACE April 16,20° BOT CHORD 2-18=-424/1375, 17-18=-66/194, 9) \* This truss has been designed for a live load of 20.0psf 16-17=-20/89, 3-16=-460/1942, on the bottom chord in all areas where a rectangle 15-16=-499/2056, 14-15=-499/2046, 3-06-00 tall by 2-00-00 wide will fit between the bottom 13-14=0/142, 5-14=-320/129, 12-13=-34/222, chord and any other members. 10-12=-329/1231 10) Refer to girder(s) for truss to truss connections. 4-16=-544/1761, 4-15=0/298, 4-14=-194/597, 11) Provide mechanical connection (by others) of truss to 12-14=-469/1764, 6-14=-133/519, bearing plate capable of withstanding 266 lb uplift at joint 6-12=-720/229, 8-12=-87/669 10 and 165 lb uplift at joint 2. 8-10=-1525/372, 3-18=-1316/411, 12) This truss is designed in accordance with the 2018 16-18=-557/1826 International Residential Code sections R502.11.1 and NOTES R802.10.2 and referenced standard ANSI/TPI 1. 13) Graphical purlin representation does not depict the size Unbalanced roof live loads have been considered for or the orientation of the purlin along the top and/or this design. bottom chord. 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

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	H11	Half Hip	1	1	Job Reference (optional)	172808519

6-5-11

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:28 ID:0xfPE6eBnTiyAQgt9V1SNHzQTUq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:82.2

## Plate Offsets (X, Y): [2:0-3-8,Edge], [5:0-5-8,0-2-0], [16:0-2-12,0-2-4], [21:0-3-8,0-1-8]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	<b>CSI</b> TC BC WB Matrix-MS	0.84 0.91 0.74	<b>DEFL</b> Vert(LL) Vert(CT) Horz(CT)	in -0.17 -0.35 0.19	(loc) 18-19 18-19 11	l/defl >999 >991 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 207 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 *Except No.3, 3-16:2x4 SP N 2x4 SP No.3 *Except No.2 Left 2x4 SP No.3 1 Structural wood shea 2-1-2 oc purlins, exc	t* 20-19,6-15:2x4 SF lo.1 t* 11-9,16-7,13-7:2x4 I-4-0 athing directly applie cept end verticals, ar	NC 1) 2) 4 SP d or nd	Unbalanced this design. Wind: ASCE Vasd=103mp II; Exp B; End and C-C Exte 11-3-8, Exter to 28-10-4 zc vertical left a	roof live loads have 7-16; Vult=130mph h; TCDL=6.0psf; B closed; MWFRS (er rior(2E) -1-0-0 to 2 ior(2R) 11-3-8 to 1 ne; cantilever left a ner right exposed;C	been of CDL=3 nvelope -0-0, Ir 5-6-7, Ii nd righ	considered for cond gust) .0psf; h=25ft; e) exterior zon tterior (1) 2-0- nterior (1) 15- tt exposed ; en nembers and	Cat. ie 0 to 6-7 nd	13) Gra or ti bott LOAD (	phical p ne orient om chor CASE(S)	urlin re ation ( d. ) Sta	presentation doe of the purlin along ndard	s not depict the si the top and/or	ze
BOT CHORD WEBS REACTIONS FORCES	2-0-0 oc purlins (4-4 Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 1 Max Horiz 2=230 (LC Max Uplift 2=-193 (LC Max Grav 2=1215 (L (lb) - Maximum Com Tension 1-2=0/27, 2-3=-788/1	-1 max.): 5-10. applied or 7-8-0 oc 9-11 [1= Mechanical C 15) C 16), 11=-262 (LC 1 .C 2), 11=1153 (LC 2 pression/Maximum 111, 3-4=-3924/907,	3) 13) 4) 2) 5) 6)	forces & MW DOL=1.60 pl TCLL: ASCE Plate DOL=1 1.15 Plate DO Exp.; Ce=1.0 Unbalanced design. This truss ha load of 12.0 p overhangs no Building Desi	FRS for reactions s ate grip DOL=1.60 7-16; $Pr=20.0 \text{ psf}$ ( 1.5); $Pg=10.0 \text{ psf}$ ( 1.5); $Pg=10.0 \text{ psf}$ ( DL = 1.15); $Is=1.0$ ; ; Cs=1.00; $Ct=1.10snow loads have bes been designed fossf or 1.00 times flaon-concurrent with orgner/Project engine$	hown; roof LL Pf=12.7 Rough , Lu=5( een cor r greate t roof lo other lin eer resi	Lumber .: Lum DOL=1 7 psf (Lum DC Cat B; Partial )-0-0 isidered for th er of min roof pad of 7.7 psf //e loads. ponsible for	l.15 )L = ly iis live on						
BOT CHORD	4-5=-1826/330, 5-6= 6-7=-1625/329, 7-9= 10-11=-154/64 2-21=-464/1359, 20- 19-20=-18/90, 3-19= 18-19=-639/2226, 17 16-17=-449/1581, 15 6-16=-277/109, 14-1 13-14=-343/1340, 11 9-11=-1311/296, 4-1 5-16=-133/310, 3-21 19-21=-613/1792, 4- 4-17=-786/236, 5-17 7-16=-160/391, 7-14	1626/327, 908/240, 9-10=-111 -520/1893, 520/1893, 18=-639/2225, 16=-0/99, -5=-20/124, 1-13=-250/908 9=-500/1480, =-1289/430, -18=-3/278, '=-97/510, =-120/94,	(/113, 7) 8) 9) 10) 11)	verifying Rair requirements Provide adec This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an 0 Refer to girdd Provide mect bearing plate 11 and 193 II	I Load = 5.0 (psf) c specific to the use uate drainage to pu s been designed fo d nonconcurrent w as been designed fo n chord in all areas y 2-00-00 wide will y other members. er(s) for truss to trus nanical connection capable of withstat o uplift at joint 2.	overs r of this revent v r a 10.0 ith any for a liv where fit betw ss conr (by oth nding 2	ain loading truss compon water ponding 0 psf bottom other live load e load of 20.0 a rectangle veen the botto nections. ers) of truss to 62 lb uplift at	nent. J. ds. Ipsf om joint			and the second s	SEAL 0578	ROUNT AND	
	14-16=-329/1237, 9- 7-13=-641/141	13=-59/597,	12)	International R802.10.2 ar	Residential Code s	ance w ections lard AN	In the 2018 R502.11.1 a ISI/TPI 1.	nd				DAM 1	ACLIN	

April 16,2025

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 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.sbcaccomponents.com)

A MiTek Affiliate 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J10	Jack-Open	12	1	Job Reference (optional)	172808520

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:30 ID:JHa2iWja8cayWUiE3Tf59lzQTUj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-2-0

Page: 1



## Scale = 1:36

Loading	(psf)	Spacing	2-0-0		CSI	0.40	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
Spow (Pf/Pg)	20.0 7 7/10 0	Lumber DOI	1.15		BC	0.13	Vert(LL)	-0.00	4-5 4-5	>999	240	101120	244/190
TCDL	10.0	Rep Stress Incr	YES		WB	0.06	Horz(CT)	0.00	- 3	_000 n/a	n/a		
BCLL	0.0*	Code	IRC2018/1	TPI2014	Matrix-MP	0.00		0.00	0			1	
BCDL	10.0											Weight: 15 lb	FT = 20%
LUMBER			5) I	Building Desi	gner/Project eng	gineer res	ponsible for						
TOP CHORD	2x4 SP No.2		N.	verifying Rair	Load = 5.0 (psi	f) covers i	ain loading						
	2x4 SP No.2		6)	requirements This truss ha	specific to the use the specific to the use of the specific to the specific to the second sec	ise of this	truss compo	nent.					
	2X4 SP N0.5		0)	chord live loa	d nonconcurren	t with anv	other live loa	ads.					
TOP CHORD	Structural wood sh	eathing directly applie	ed or 7) *	* This truss h	as been designe	ed for a liv	e load of 20.	0psf					
	2-4-8 oc purlins, e	except end verticals.	(	on the botton	n chord in all are	as where	a rectangle						
BOT CHORD	Rigid ceiling direct	ly applied or 10-0-0 o	;	3-06-00 tall b chord and an	y 2-00-00 wide v	will fit betv s.	veen the bott	om					
REACTIONS	bracing.	anical 4- Mechanica	, 8) I	Refer to girde	er(s) for truss to	truss con	nections.						
REACTIONS	(size) 5= Weck 5=0-5-8		", 9) I	Provide mecl	nanical connection	on (by oth	ers) of truss	to					
	Max Horiz 5=86 (L	C 14)	1	bearing plate	capable of withs	standing 4	12 Ib uplift at	joint					
	Max Uplift 3=-42 (L	C 14), 4=-20 (LC 14)	10)	This truss is (	designed in acco	ordance w	ith the 2018						
	Max Grav 3=54 (L	C 26), 4=51 (LC 5), 5=	=177 <sup>•••</sup> ,	International	Residential Cod	e sections	R502.11.1 a	and					
FORCES	(LU Z)	marcasion/Movimum	I	R802.10.2 ar	nd referenced sta	andard Al	ISI/TPI 1.						
FURCES	(ib) - Maximum Co Tension	mpression/maximum	LOA	D CASE(S)	Standard								
TOP CHORD	2-5=-152/78, 1-2=0	0/44, 2-3=-73/47											
BOT CHORD	4-5=-208/61												
WEBS	2-4=-64/217												
NOTES													
1) Unbalance	ed roof live loads hav	e been considered fo	•									mini	1111.
2) Wind ASC	1. CE 7-16: \/ult–130mr	b (3-second qust)										"H C	AROUN
Vasd=103	mph; TCDL=6.0psf;	BCDL=3.0psf; h=25ft;	Cat.								1	2	S. Line
II; Exp B; E	Enclosed; MWFRS (	envelope) exterior zor	е								SA	O.KF#SS	ON KAY
and C-C E	xterior(2E) -1-0-0 to	2-0-0, Interior (1) 2-0-	0 to								-	110	1
2-3-12 ZOF	t and right exposed:	right exposed ; end											
forces & M	WFRS for reactions	shown; Lumber								-		SEA	L : =
DOL=1.60	plate grip DOL=1.60	)								-	0	0578	87
3) TCLL: AS(	CE 7-16; Pr=20.0 pst	(roof LL: Lum DOL=	.15								2		
Plate DOL	=1.15); Pg=10.0 pst;	Pt=7.7 pst (Lum DOL · Rough Cat B: Partia	. = by								-	1.	
Exp.: Ce=	1.0: Cs=1.00: Ct=1.1	0	iy								1	NGIN	FER
4) This truss	has been designed f	or greater of min roof	live								11	AD	CENT
load of 12.	0 psf or 1.00 times fl	at roof load of 7.7 psf	on									AM	PAULIN
overhangs	non-concurrent with	other live loads.										in the second se	mm
												Apri	il 16,2025
	IING - Verify design parame	eters and READ NOTES ON	THIS AND INCU		FERENCE PAGE M	II-7473 rev 1	/2/2023 BEFOR	USE				ENGINEER	NG BY
Design v	alid for use only with MiTe	k® connectors. This design	is based only up	pon parameters	shown, and is for an	individual b	uilding compone	nt, not					
a truss s	ystem. Before use, the bui	ilding designer must verify t	ne applicability o	f design parame	ters and properly inc	corporate this	design into the	overall					<b>TLLIU</b>

- DOL=1.60 plate grip DOL=1.60 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.

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

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J11	Jack-Open	1	1	Job Reference (optional)	172808521

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:30 ID:nU8QvrkCvwip8eHQdBAKizzQTUi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:43.1

## Plate Offsets (X, Y): [3:0-4-6,0-1-6]

Loading (pf) 240 Plate Grip DOL 1.15 TC 0.01 BV er(LL) 0.00 6-7 >999 240 MZ 244/190 Ver(CT) 0.00 6-7 >90 Pr(CT) 0.00 6-7 >90 Ver(CT) 0.00 Ver(CT) 0.00 6-7 >90 Ver(CT) 0.00 Ver(CT) 0.00 6-7 >90 Ver(CT) 0.00 FT Ver(CT) 0.00 6-7 >90 Ver(CT) 0.00 FT Ver	-												-	
<ul> <li>TCLL (rod) 20.0 Plate Grip DOL 1.15 Code (under Grip Additional construction) (and the construction) (box of the code (code (code</li></ul>	Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
Snow (PI/Pg)       12.7/10.0       Iumber DOL       1.15       BC       0.05       Hert(CT)       0.00       6-7       999       180         BCLL       0.0°       Code       IRC2018/TPI2014       Watrix-MP       Hert(CT)       0.00       4       n/a       n/a         LUMBER       10.0       Code       IRC2018/TPI2014       Watrix-MP       Hert(CT)       0.00       4       n/a	TCLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.13	Vert(LL)	0.00	6-7	>999	240	MT20	244/190
TCDL       0.0       Rep Stress incr       YES       WB       0.0       Horz(CT)       0.00       4       n/a       n/a         BCDL       10.0       Code       IRC2018/TPI2014       Marix-MP       Marix-MP       Weight: 17 lb       FT = 20%         LUMBER       TOP CHORD       2x4 SP No.2       Structural wood sheathing directly applied or 6-0-0 cparting.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       Structural wood sheathing directly applied or 6-0-0 cparting.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       This truss has been designed for a 10.0 geb forto.       This truss has been designed fora 10.0 geb forto.       This truss ha	Snow (Pf/Pg)	12.7/10.0	Lumber DOL	1.15		BC	0.03	Vert(CT)	0.00	6-7	>999	180		
BCLL       0.0°       Code       IRC2018/TFI2014       Matrix-MP       Weight: 17 /b       FT = 20%         LUMBER       10.0       Code       IRC2018/TFI2014       Matrix-MP       Weight: 17 /b       FT = 20%         LUMBER       COP CHORD       2x4 SP No.2       Weight: 17 /b       FT = 20%         BACLING       Structural wood sheathing directly applied or 60-00 cbracing.       Structural wood sheathing directly applied or 60-00 cbracing.       Colo purine: 3-4.       Unbalanced snow loads have been considered for thus designed for a load or 20.0 ps for overs rain loading requirements specific to the use of this russ component.       Provide adequate drainage to prevent water ponding.         7-07-5-8       Max Horiz 7-72 (LC 16), G=20 (LC 16), 7-7-7 (LC 16)       FT is truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.       This truss has been designed for a load part or bracing.	TCDL	10.0	Rep Stress Incr	YES		WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL       10.0       Weight: 17 lb       FT = 20%         LUMBER TOP CHORD       2x4 SP No.2       Weight: 17 lb       FT = 20%         UNDELS       2x4 SP No.2       Weight: 17 lb       FT = 20%         BRACINOS       Structural wood sheathing directly applied or 2-4-8 oc purlins: 3:4.       4       Unbalanced snow loads have been considered for this design.       5         BOT CHORD       Structural wood sheathing directly applied or 6-0- oc bracing.       5       0 (2) ppl of 1.00 times flat roof load of 7.7 psl on overhangs non-concurrent with nor live loads.       6         BOT CHORD       Structural wood sheathing directly applied or 6-0- oc bracing.       6       Building Designer/Project engineer responsible for vertifying Rain Load = 5.0 (psl) overser sina loading requirements specific to the use of this truss component.       7         Provide adequate drainage to prevent water ponding.       9       This truss has been designed for a 10.0 pst botom chord live load onconcurrent with nore live loads.       9         OF CHORD       2-7=-17490, 1-2=0/53, 2-3==-0/19, 3-4=00       9       0       10       10         DOT CHORD       2-7=-17490, 1-2=0/53, 2-3==-0/19, 3-4=00       10       10       10       10       2-26-20 and referenced shandrd ANS/TPI 1.       13       13       14       14       20       14       14       14       14       14       14 <t< td=""><td>BCLL</td><td>0.0*</td><td>Code</td><td>IRC2018</td><td>TPI2014</td><td>Matrix-MP</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	BCLL	0.0*	Code	IRC2018	TPI2014	Matrix-MP								
LUMBER TOP CHORD DOT CHORD BATCHORD SCT CHORD ENACING ENACING ENACING TOP CHORD SCT	BCDL	10.0											Weight: 17 lb	FT = 20%
<ul> <li>FORCES (b) - Maximum Compression/Maximum Tension</li> <li>TOP CHORD 2-7=-174/90, 1-2=0/53, 2-3=-60/19, 3-4=0/0</li> <li>BOT CHORD 6-7=-150/86, 5-6=0/0</li> <li>WEBS 4-6=0/0, 2-6=-92/160</li> <li>NOTES</li> <li>1) Unbalanced roof live loads have been considered for this design.</li> <li>2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; c-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60</li> <li>3) TCLL: ASCE 7-16; Pr=20.0 psf; (roof LL: Lum DOL=1.15 Plate DDL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum DDL =</li> </ul>	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 sh 2-4-8 oc purlins, e 2-0-0 oc purlins: 3- Rigid ceiling direct bracing. (size) 4= Mech 7=0-5-8 Max Horiz 7=72 (L0 Max Uplift 4=-27 (L (LC 16)) Max Grav 4=45 (L0 (LC 38)	eathing directly applied xcept end verticals, an 4. y applied or 6-0-0 oc anical, 6= Mechanical C 16) C 16), 6=-20 (LC 16), C 2), 6=48 (LC 7), 7=19	4) 5) dor d 7) 8) 7=-7 98 10) 11)	Unbalanced a design. This truss ha load of 12.0 tg overhangs no Building Desi verifying Rair requirements Provide adeo: This truss ha onthe bottom 3-06-00 tall b chord and an Refer to girde Provide medo	snow loads have be solve be a solve of the signed for our of the signed for on-concurrent with or gner/Project engine to Load = 5.0 (psf) or specific to the use uate drainage to pris solve of the signed for d nonconcurrent with as been designed for chord in all areas y 2-00-00 wide will y other members. er(s) for truss to tru- nanical connection	een cor r greate t roof lo other liveer resp overs r of this revent v r a 10.0 th any for a live where fit betw ss con (by oth	asidered for the er of min roof pad of 7.7 psf ve loads. consible for ain loading truss compor vater ponding truss compor other live loa e load of 20.0 a rectangle veen the botto nections. ers) of truss t	his on hent. J. ds. Dpsf om					
<ul> <li>TOP CHORD 2-7=-174/90, 1-2=0/53, 2-3=-60/19, 3-4=0/0</li> <li>BOT CHORD 6-7=-150/86, 5-6=0/0</li> <li>WEBS 4-6=0/0, 2-6=-92/160</li> <li>NOTES</li> <li>1) Unbalanced roof live loads have been considered for this design.</li> <li>2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; c-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60</li> <li>3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 40 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf; Pf=12.7 psf (Lum DOL=</li> <li>4) 41 (Fibre DOL=1.16); Pg=10.0 psf;</li></ul>	FORCES	(lb) - Maximum Co Tension	mpression/Maximum	12)	27 lb uplift at	joint 4 and 20 lb up	olift at jo	bint 6.	inc 7 ,					
Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0	TOP CHORD BOT CHORD WEBS <b>NOTES</b> 1) Unbalanc this desig 2) Wind: AS Vasd=10: II; Exp B; and C-C1 exposed members Lumber D 3) TCLL: AS Plate DO 1.15 Plate	2-7=-174/90, 1-2=( 6-7=-150/86, 5-6=( 4-6=0/0, 2-6=-92/1 ed roof live loads hav n. CE 7-16; Vult=130mp 3mph; TCDL=6.0psf; I Enclosed; MWFRS (e Exterior(2E) zone; car end vertical left and I and forces & MWFRS DCL=1.60 plate grip D CCE 7-16; Pr=20.0 psf = DCL = 1.15); Is=1.0; e1.0; Cs=1.00; Ct=1.1	/53, 2-3=-60/19, 3-4=( /0 50 e been considered for h (3-second gust) 3CDL=3.0psf; h=25ft; ( invelope) exterior zone tillever left and right ight exposed; C-C for 6 for reactions shown; DL=1.60 (roof LL: Lum DOL=1. Pf=12.7 psf (Lum DOL F=12.7 psf (Lum DOL Rough Cat B; Partiall; 0, Lu=50-0-0	0/0 12) 13) 14) Cat. LO. 2 15 y	International R802.10.2 ar Graphical pu or the orienta bottom chord Gap betweer diagonal or v AD CASE(S)	Residential Code s Residential Code s di referenced stand rlin representation of tion of the purlin alo inside of top choro ertical web shall no Standard	ance w ections lard AN does no ong the I bearir t excee	ISI The 2018 R502.11.1 a ISI/TPI 1. ot depict the s top and/or g and first d 0.500in.	nd			and the second s	SEAL OSTESS SEAL OSTR	BOX NATION

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818 Soundside Road Edenton, NC 27932

April 16,2025

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J12	Jack-Open Girder	1	1	Job Reference (optional)	172808522

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:31 ID:NA\_jrev\_cDTqpoL6S7QcGwzQTUU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1







Scale = 1:41.9

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

							-						
Loading	(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.13	Vert(LL)	0.00	5-6	>999	240	MT20	244/190
Snow (Pf/Pg)	12.7/10.0	Lumber DOL	1.15		BC	0.05	Vert(CT)	0.00	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO		WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018	3/TPI2014	Matrix-MR								
BCDL	10.0											Weight: 10 lb	FT = 20%
LUMBER			5)	This truss ha	s been designed fo	or great	er of min roof	live					
TOP CHORD	2x4 SP No.2			load of 12.0	psf or 1.00 times fla	at roof le	oad of 7.7 psf	on					
BOT CHORD	2x4 SP No.2			overhangs n	on-concurrent with	other liv	ve loads.						
WEBS	2x4 SP No.3		6)	Building Des	igner/Project engin	eer res	ponsible for						
BRACING				verifying Rai	n Load = 5.0 (psf) o	covers r	ain loading						
TOP CHORD	Structural wood shea	athing directly applie	dor_	requirements	s specific to the use	e of this	truss compor	nent.					
	2-4-8 oc purlins, exe	cept end verticals, a	nd ()	Provide adec	quate drainage to p	revent	water ponding	J.					
	2-0-0 oc purlins: 3-4		8)	chord live loc	s been designed it	vith any	other live leave	de					
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	; a)	* This truss h	as been designed	for a liv	e load of 20 0	us. Inef					
	bracing.		3)	on the bottor	n chord in all areas	where	a rectangle	/poi					
REACTIONS	(size) 4= Mecha	inical, 5= Mechanica	l,	3-06-00 tall b	v 2-00-00 wide will	l fit betv	veen the botto	om					
	6=0-5-8	0)		chord and ar	y other members.								
	Max Horiz 6=39 (LC	9)	10	Refer to gird	er(s) for truss to tru	uss con	nections.						
	(1 C 12)	, 9), 5=-3 (LC 9), 6=-	<sup>34</sup> 11	) Provide mec	hanical connection	(by oth	ers) of truss to	0					
	(LC 12) Max Grav 4-67 (LC	33) 5-40 (I C 7) 6-	175	bearing plate	capable of withsta	anding 3	84 lb uplift at jo	oint					
	(LC 2)	00), 0=+0 (LO 7), 0=		6, 27 lb uplift	at joint 4 and 3 lb	uplift at	joint 5.						
FORCES	(lb) - Maximum Com	nression/Maximum	12	) This truss is	designed in accord	lance w	ith the 2018						
1011020	Tension			International	Residential Code s		8 R502.11.1 a	nd					
TOP CHORD	2-6=-149/42, 1-2=0/5	53, 2-3=-55/15, 3-4=	0/0 12	R802.10.2 ai	run referenced stand	dana An	NGI/TPTT.	izo					
BOT CHORD	5-6=0/0		15	or the orients	ation of the purlin al	long the	top and/or	IZE					
NOTES				bottom chord	l.	iong inc							
1) Unbalance	ed roof live loads have	been considered for	14	"NAILED" ind	dicates 3-10d (0.14	8"x3") o	or 3-12d					H LA	ROUL
, this desig	n.			(0.148"x3.25	") toe-nails per ND	S guidli	nes.				5	A DEESS	in VIA 12
2) Wind: AS	CE 7-16; Vult=130mph	(3-second gust)	15	In the LOAD	CASE(S) section,	loads a	pplied to the f	ace			22	A SELON	N. S.
Vasd=103	mph; TCDL=6.0psf; B	CDL=3.0psf; h=25ft;	Cat.	of the truss a	re noted as front (F	F) or ba	ck (B).					· Aluin	Nº 2
II; Exp B;	Enclosed; MWFRS (en	velope) exterior zon	e; LC	AD CASE(S)	Standard					-			
cantilever	left and right exposed	; end vertical left and	d 1)	Dead + Sno	w (balanced): Lum	nber Inc	rease=1.15, F	Plate		=		SEA	L 1 1
right expo	sed; Lumber DOL=1.6	0 plate grip DOL=1.6	50	Increase=1	.15					=	:	0570	07 : =
	CE 7 16: Dr 20.0 pof /		15	Uniform Loa	ads (lb/ft)					=		0576	0/
3) TOLL AS	-1.15: Pa-10.0 psi (i	Di LL. Luii DULEI	.15	Vert: 1-2	=-35, 2-3=-35, 3-4=	=-45, 5-1	6=-20			-			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
1 15 Plate	DOI = 1.15, $1 g = 10.0 psi$ , $1 g = 100 psi$	Rough Cat B: Partial	L – Iv	Concentrate	ed Loads (Ib)						-	·	al S
Exp.: Ce=	1.0; Cs=1.00; Ct=1.10.	. Lu=50-0-0	.,	ven: 8=-	2 (D)						1	GIN	EF
4) Unbalance	ed snow loads have be	en considered for th	is								11	AD	CEN
design.												AM	PACIN
												· · · · · · · · · · · · · · · · · · ·	nn.

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April 16,2025

Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	J13	Jack-Open	1	1	Job Reference (optional)	172808523

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:31 ID:nU8QvrkCvwip8eHQdBAKizzQTUi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



1-8-0

Scale = 1:27.7

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/	TPI2014	<b>CSI</b> TC BC WB Matrix-MP	0.07 0.02 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 8 8 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 9 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD SLIDER BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD NOTES 1) Wind: AS( Vasd=103 II; Exp B; and C-C E exposed ; members Lumber D 2) TCLL: AS Plate DOL 1.15 Plate Exp.; Ce= 3) Unbalance design. 4) This truss load of 12 overhangs	2x4 SP No.2 2x4 SP No.2 Left 2x4 SP No.3 1 Structural wood shea 1-8-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8,4 Mechanic Max Horiz 2=46 (LC Max Uplift 2=-26 (LC (LC 16) Max Grav 2=144 (LC (LC 7)) (lb) - Maximum Com Tension 1-2=0/27, 2-4=-42/18 2-5=-25/25 CE 7-16; Vult=130mph imph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior(2E) zone; canti end vertical left and rig and forces & MWFRS OL=1.60 plate grip DO CE 7-16; Pr=20.0 psf (F 1.0; Cs=1.00; Ct=1.10 ed snow loads have be has been designed for .0 psf or 1.00 times flat s non-concurrent with C	I-6-0 athing directly applie applied or 10-0-0 oc I= Mechanical, 5= al 16) : 16), 4=-23 (LC 16), C 2), 4=33 (LC 2), 5= pression/Maximum 8 (3-second gust) CDL=3.0psf; h=25ft; ivelope) exterior zon lever left and right pht exposed;C-C for for reactions shown; L=1.60 roof LL: Lum DOL=1 2f=7.7 psf (Lum DOL=1 2f	5) 6) 7) 5 8) 9) 5=-2 10) 25 LOA Cat. e .15 .15 .15 .15 .15 .15 .15 .15	Building Desi verifying Rair requirements This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Refer to girde Provide mect bearing plate 2, 2 lb uplift a This truss is of International R802.10.2 ar <b>AD CASE(S)</b>	gner/Project engine a Load = 5.0 (psf) of specific to the uses is been designed for d nonconcurrent w as been designed in a chord in all areas y 2-00-00 wide will y other members. er(s) for truss to tru- nanical connection capable of withsta ti joint 5 and 23 lb of designed in accord. Residential Code s id referenced stance Standard	eer responsers r of this r a 10.1 for a liv where fit betw uss con (by oth nding 2 uplift at ance w ections lard AN	bonsible for ain loading truss compon 0 psf bottom 0 psf bottom other live load e load of 20.0 a rectangle veen the botto nections. ers) of truss to 6 lb uplift at jo joint 4. R502.11.1 ar ISI/TPI 1.	ent. ds. psf m bint nd			A A A A A A A A A A A A A A A A A A A	SEA 0578	AROLAN BAROLAN BACE	

April 16,2025

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity	
P01985-24565	V1A	Valley	1	1	Job Reference (optional)	172808524

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:32 ID:9TFV1zcbegV82j5N6nqIIjzQAKJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

7-1-15 7-2-4 2x4 II 3 2x4 II 5-11-14 5-11-14 2 8 12 10 ⊏ 4 -0-0 5 2x4 II 2x4 🍫 2x4 u 7-1-15

Scale = 1:45.2

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI20	4 CSI TC BC WB Matrix-MP	0.53 0.12 0.09	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 35 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II; Exp B; and C-C E 7-0-8 zon vertical lef forces & M DOL=1.6C 3) Truss dess only. For see Stand or consult	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, exi Rigid ceiling directly bracing. (size) 1=7-2-4, 4 Max Horiz 1=201 (LC Max Uplift 1=-31 (LC 5=-178 (L Max Grav 1=140 (LC 5=379 (LC (lb) - Maximum Com Tension 1-2=-421/257, 2-3=- 1-5=-126/153, 4-5=- 2-5=-282/316 ed roof live loads have n. CE 7-16; Vult=130mph mph; TCDL=6.0psf; Bf Enclosed; MWFRS (er Exterior(2E) 0-0-0 to 3- e; cantilever left and rig t and right exposed; C- MWFRS for reactions s 0 plate grip DOL=1.60 igned for wind loads in studs exposed to wind lard Industry Gable En- qualified building design	athing directly applied cept end verticals. applied or 10-0-0 oc 4=7-2-4, 5=7-2-4 C 11) C 14) C 26), 4=-62 (LC 11), C 14) C 26), 4=148 (LC 25), C 25) pression/Maximum 201/148, 3-4=-151/18 95/103 been considered for (3-second gust) CDL=3.0psf; h=25ft; ( invelope) exterior zone 2-4, Interior (1) 3-2-4 pht exposed ; end C for members and hown; Lumber the plane of the truss (normal to the face), d Details as applicabl gner as per ANSI/TPI	4) TCLL: Plate   1.15 F Exp.; 5) Buildin verifyi verifyi dor requir 6) Gable 7) Gable 8) This tr chord 9) * This 0 n the 3-06- chord 10) Provic bearin 4, 31 I 11) Bevel surfac 12) This tr Intern R802. LOAD CA Cat. 5 to	ASCE 7-16; Pr=20.0 DOL=1.15); Pg=10.0 DOL=1.15); Is= Ce=1.0; Cs=1.00; Ct= g Designer/Project end g Rain Load = 5.0 (pre- ments specific to the requires continuous studs spaced at 4-0- uss has been design tive load nonconcurred truss has been design bottom chord in all a 0 tall by 2-00-00 widd and any other membe e mechanical connect g plate capable of widd the truss chord at uss is designed in act totomal Residential Co 10.2 and referenced <b>SE(S)</b> Standard	) psf (roof LI psf; Pf=7.7 =1.0; Rough =1.10 engineer resposf) covers r e use of this bottom chor- 0 oc. end for a 10.1 ent with any gned for a 10.1 ent with any	: Lum DOL= psf (Lum DO Cat B; Partia consible for in loading truss compoid d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the bott ers) of truss 1 21 b uplift at j at joint 5. de full bearin ith the 2018 i R502.11.1 a ISI/TPI 1.	1.15 L = Ily nent. ds. Opsf om oont g				O DEESS SEA 0578 ADAM April	AROV L 87 PACE 16,2025

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Job	Truss	Truss Type	Qty	Ply	1033 Serenity		
P01985-24565	V2A	Valley	1	1	Job Reference (optional)	172808525	

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:32 ID:9TFV1zcbegV82j5N6nqIIjzQAKJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

5-11-8



#### Scale = 1:39.7

		-												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	<b>CSI</b> TC BC WB Matrix-MP	0.51 0.47 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 26 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 she 5-11-8 oc purlins, e Rigid ceiling directly bracing. (size) 1=5-11-13 Max Horiz 1=165 (LC Max Uplift 1=-19 (LC Max Grav 1=234 (LC	athing directly appli xcept end verticals. applied or 10-0-0 c 3, 3=5-11-13 C 11) C 14), 3=-90 (LC 14) C 2), 3=264 (LC 25)	5) 6) 7) ied or 8) oc 9) .) 1( .)	Building Des verifying Rai requirements Gable requir Gable studs This truss ha chord live loa * This truss f on the bottor 3-06-00 tall t chord and ar Provide mec bearing plate 3 and 19 lb u	igner/Project eng n Load = 5.0 (psf s specific to the uses continuous boi spaced at 4-0-0 c is been designed ad nonconcurrent has been designed n chord in all area by 2-00-00 wide w hanical connectio c capable of withs uplift at joint 1.	ineer res ) covers r se of this ttom chor oc. for a 10. with any d for a liv as where vill fit betv s. nn (by oth tanding §	consible for ain loading truss compoid bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 10 lb uplift at j	nent. Ids. Dpsf om to oint						
FORCES TOP CHORD BOT CHORD NOTES 1) Unbalance this design 2) Wind: AS0 Vasd=103	(lb) - Maximum Com Tension 1-2=-305/168, 2-3=- 1-3=-265/291 ed roof live loads have n. CE 7-16; Vult=130mph Imph; TCDL=6.0psf; Bi	pression/Maximum 199/251 been considered fo (3-second gust) CDL=3.0psf; h=25ft	י 1 12 or <b>ב</b> נ t; Cat.	<ol> <li>Beveled plats surface with</li> <li>This truss is International R802.10.2 at</li> <li>DAD CASE(S)</li> </ol>	e or shim required truss chord at joir designed in acco Residential Code nd referenced sta Standard	d to provi nt(s) 1. rdance w e sections indard AN	de full bearin th the 2018 5 R502.11.1 a ISI/TPI 1.	g Ind					11	
this design 2) Wind: ASC Vasd=103	n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B(	(3-second gust) CDL=3.0psf; h=25ft	t; Cat.										910. 	

II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-10-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) Plate DOL=1.15); 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



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Job	Truss	Truss Type	Qty	Ply	1033 Serenity		
P01985-24565	V3A	Valley	1	1	Job Reference (optional)	172808526	

4-9-2

84 Lumber-1387 (Winter Haven, FL), Winter Haven, FL - 33880,

Scale = 1:35.8 Loading

TCLL (roof)

TCDL

BCLL

BCDL

WFBS

LUMBER

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

NOTES

1)

2)

3)

4)

TOP CHORD

BOT CHORD

this design

BRACING

Snow (Pf/Pg)

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:32 ID:dgpuEIdDO\_d?ftgZgULXrwzQAKI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

Edenton, NC 27932

4-9-7 2x4 🛛 2 7 3-11-14 3-11-14 12 10 Г 6 3 3x6 🖌 2x4 II 4-9-2 2-0-0 CSI DEFL l/defl L/d PLATES GRIP (psf) Spacing in (loc) 20.0 Plate Grip DOL 1.15 TC 0.30 Vert(LL) n/a 999 MT20 244/190 n/a BC 7 7/10 0 Lumber DOL 1 15 0.30 Vert(TL) n/a n/a 999 10.0 Rep Stress Incr YES WB 0.00 Horiz(TL) 0.01 3 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MP 10.0 Weight: 21 lb FT = 20%5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading 2x4 SP No.2 2x4 SP No.2 requirements specific to the use of this truss component. 2x4 SP No.3 Gable requires continuous bottom chord bearing. 6) Gable studs spaced at 4-0-0 oc. 7) This truss has been designed for a 10.0 psf bottom 8) Structural wood sheathing directly applied or chord live load nonconcurrent with any other live loads. 4-9-2 oc purlins, except end verticals. 9) \* This truss has been designed for a live load of 20.0psf Rigid ceiling directly applied or 10-0-0 oc on the bottom chord in all areas where a rectangle bracing. 3-06-00 tall by 2-00-00 wide will fit between the bottom **REACTIONS** (size) 1=4-9-7, 3=4-9-7 chord and any other members. Max Horiz 1=129 (LC 11) 10) Provide mechanical connection (by others) of truss to Max Uplift 1=-16 (LC 14), 3=-71 (LC 14) bearing plate capable of withstanding 71 lb uplift at joint Max Grav 1=186 (LC 2), 3=209 (LC 25) 3 and 16 lb uplift at joint 1. (Ib) - Maximum Compression/Maximum 11) Beveled plate or shim required to provide full bearing Tension surface with truss chord at joint(s) 1. 1-2=-239/133, 2-3=-159/205 12) This truss is designed in accordance with the 2018 1-3=-238/231 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. Unbalanced roof live loads have been considered for LOAD CASE(S) Standard Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. in the second second 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 4-7-11 zone; cantilever left and right exposed ; end and the second s vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, 057887 or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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 PAC munn April 16,2025 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 bilding design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) 818 Soundside Road and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	1033 Serenity		
P01985-24565	V4A	Valley	1	1	Job Reference (optional)	172808527	

3-6-12

84 Lumber-1387 (Winter Haven, FL), Winter Haven, FL - 33880.

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:32 ID:dgpuEIdDO\_d?ftgZgULXrwzQAKI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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3-7-0 2x4 II 2 6 2-11-14 2-11-14 12 10 Г 3 2x4 🍫 2x4 II 3-6-12 CSI DEFL (psf) Spacing 2-0-0 (loc) l/defl L/d PLATES GRIP in n/a 999 MT20 244/190 n/a 999 n/a n/a FT = 20% Weight: 15 lb LOAD CASE(S) Standard Unbalanced roof live loads have been considered for Wind: ASCE 7-16; Vult=130mph (3-second gust) HO STATISTICS NEER M PACE MUNICIPALITY April 16,200 Truss designed for wind loads in the plane of the truss TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15



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Scale = 1:31.9

Loading

1)

TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.15	Vert(LL)	n/a	-	1			
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15		BC	0.17	Vert(TL)	n/a	-	1			
TCDL	10.0	Rep Stress Incr	YES		WB	0.00	Horiz(TL)	0.00	3	1			
BCLL	0.0*	Code	IRC201	8/TPI2014	Matrix-MP								
BCDL	10.0												
LUMBER TOP CHORD BOT CHORD WEBS BRACING	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3		5 6 7	<ul> <li>Building Des verifying Rai requirement</li> <li>Gable requir</li> <li>Gable studs</li> </ul>	signer/Project en in Load = 5.0 (ps s specific to the es continuous be spaced at 4-0-0	gineer res of) covers r use of this ottom chor oc.	consible for ain loading truss compo d bearing.	nent.					
TOP CHORD	Structural wood she 3-6-12 oc purlins, e	athing directly applie except end verticals.	ed or <sup>8</sup>	<ol> <li>This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> </ol>									
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 o	c 9	on the botto	nas been design m chord in all are	ed for a liv	e load of 20.0 a rectangle	Upst					
REACTIONS	(size)         1=3-7-0, 1           Max Horiz         1=94 (LC)           Max Uplift         1=-13 (LC)           Max Grav         1=138 (LC)	3=3-7-0 11) C 14), 3=-52 (LC 14) C 2), 3=155 (LC 25)	1	3-06-00 tall 1 chord and ai 0) Provide meo bearing plate 3 and 13 lb t	by 2-00-00 wide ny other member chanical connecti capable of with uplift at joint 1.	will fit betv rs. ion (by oth istanding 5	veen the bott ers) of truss i2 lb uplift at j	om to joint					
FORCES	(lb) - Maximum Con Tension	pression/Maximum	1	<ol> <li>Beveled plat surface with</li> </ol>	e or shim require truss chord at io	ed to provi pint(s) 1.	de full bearin	g					
TOP CHORD BOT CHORD NOTES	1-2=-172/98, 2-3=-1 1-3=-184/168	17/154	1:	2) This truss is International R802.10.2 a	designed in acc Residential Coo nd referenced st	ordance w de sections andard AN	ith the 2018 R502.11.1 a ISI/TPI 1.	and					

this design.

2) Vasd=103mph; 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 3-5-4 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) 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)
- 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



Job	Truss	Truss Type	Qty	Ply	1033 Serenity		
P01985-24565	V5A	Valley	1	1	Job Reference (optional)	172808528	

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 10:58:32 ID:dgpuEIdDO\_d?ftgZgULXrwzQAKI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:28.1

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 10.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TP	912014	CSI TC BC WB Matrix-MP	0.05 0.07 0.00	<b>DEFL</b> Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 9 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 2-4-5 oc purlins, exa Rigid ceiling directly bracing. (size) 1=2-4-10, Max Horiz 1=58 (LC Max Uplift 1=-9 (LC Max Grav 1=90 (LC	athing directly applie cept end verticals. applied or 10-0-0 oc 3=2-4-10 11) 14), 3=-33 (LC 14) 2). 3=100 (LC 25)	6) Ga 7) Ga 8) Th ch 9) *T dor on 3-( ch 10) Pre 3 a 11) Be suit 10) Th	able require able studs s in struss has ord live loa This truss h the bottom 06-00 tall b nord and an ord and an aring plate and 9 lb up eveled plate urface with t	es continuous botto spaced at 4-0-0 oc. s been designed for d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. nanical connection capable of withsta lift at joint 1.	om chor or a 10.0 vith any for a liv where l fit betw (by oth- nding 3 to provie (s) 1.	d bearing. ) psf bottom other live loa e load of 20.0 a rectangle reen the botto ers) of truss t 3 lb uplift at jude full bearing the the 2000	ds. Dpsf om oint g					
FORCES	(lb) - Maximum Com Tension 1-2=-103/61, 2-3=-74 1-3117/103	pression/Maximum	IZ) IN Int R8 LOAD	ternational 802.10.2 an	Residential Code s d referenced stand Standard	ance was sections dard AN	R502.11.1 a ISI/TPI 1.	nd					
<ol> <li>NOTES</li> <li>Unbalance this design</li> <li>Wind: ASC Vasd=103</li> <li>II; Exp B; F and C-C E exposed; members a Lumber D0</li> <li>Truss desi only. For see Stand. or consult</li> <li>TCLL: ASC Plate DOL 1.15 Plate Exp.; Ce=</li> <li>Building D verifying R requirement</li> </ol>	ad roof live loads have DE 7-16; Vult=130mph mph; TCDL=6.0psf; BG Enclosed; MWFRS (en ixterior(2E) zone; canti end vertical left and rig and forces & MWFRS OL=1.60 plate grip DO igned for wind loads in studs exposed to wind ard Industry Gable End qualified building desig CE 7-16; Pr=20.0 psf (r =1.15); Pg=10.0 psf; P DOL = 1.15); IS=1.0; F DOL = 1.15); IS=1.0; T DOL = 1.0; CI=1.10 esigner/Project engine tain Load = 5.0 (psf) co nts specific to the use	been considered for (3-second gust) CDL=3.0psf; h=25ft; velope) exterior zone lever left and right pht exposed;C-C for for reactions shown; L=1.60 the plane of the trus (normal to the face), d Details as applicab gner as per ANSI/TPI roof LL: Lum DOL=1, Pf=7.7 psf (Lum DOL Rough Cat B; Partiall er responsible for overs rain loading of this truss component	Cat. e s le, l 1. 15 = y ent.							2011110	A MARINE AND A MARINE	SEA 0578	EER.

April 16,2025



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