

Trenco 818 Soundside Rd Edenton, NC 27932

Re: P02032-24619 995 Serenity

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

Pages or sheets covered by this seal: T37063770 thru T37063808

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

North Carolina COA: C-0844



April 22,2025

**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	995 Serenity	
P02032-24619	B04A	Attic	1	1	Job Reference (optional)	T37063770

#### Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:54 ID:\_k4GR38SxvDF5ctQbMJROuzPV3N-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	5-8-12	14-0-4	15-11-0	19-9-0	
	5-8-12	8-3-8	1-10-12	3-10-0	
cale = 1:73.4					

## Plate Offsets (X, Y): [8:Edge,0-7-0], [11:0-1-12,0-2-0], [12:0-1-12,0-2-0], [13:Edge,0-8-2]

Loading ICLL (roof) Snow (Pf/Pg) ICDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 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-MS	1.00 0.53 0.20	DEFL Vert(LL) Vert(CT) Horz(CT) Attic	in -0.24 -0.34 0.01 -0.18	(loc) 9-11 9-11 9 11-12	l/defl >977 >694 n/a >545	L/d 240 180 n/a 360	PLATES MT20 Weight: 123 lb	<b>GRIP</b> 244/190 FT = 20%	
UMBER TOP CHORD 2x 30T CHORD 2x VEBS 2x VEBS 2x 30T CHORD SI FOP CHORD SI OP CHORD Ri OP CHORD Ri OP CHORD SI A SOT CHORD SI COP CHORD SI COP CHORD SI SI COP CHORD SI SI COP CHORD SI SI COP CHORD SI SI SI SI SI SI SI SI SI SI	4 SP No.2 *Excep 4 SP No.2 *Excep 4 SP No.3 *Excep 5 SP No.3 *E	t* 5-8:2x4 SP No.1 t* 12-11:2x6 SP No.2 t* 7-11,3-12,4-6:2x4 S athing directly applied applied or 10-0-0 oc nical, 13=0-5-8 .C 11) 15), 13=-86 (LC 14) 2 28), 13=865 (LC 27) pression/Maximum /97, 3-4=-737/124, 7/212, 6-7=-738/126, -790/107, 8-9=-744/7 12=-31/789, 326, 4-14=-991/146, =-2/15, 2-12=-108/47 been considered for (3-second gust) DL=3.0psf; h=25ft; Ca velope) exterior zone 2-1-0, Interior (1) 2-1-1 12-10-8, Interior (1)	3) SP 4) , 5) 6) 7) 8) 9) 10) 5 11) 0, 12) LO at. 0	TCLL: ASCE Plate DOL=1 1.15 Plate DO Exp.; Ce=1.0 This truss ha load of 12.0 g overhangs no Building Desi verifying Rair requirements This truss ha chord live loa * This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Bottom chorc chord dead lo Refer to girdd Provide mech bearing plate 13 and 68 lb This truss is of International R802.10.2 ar Attic room ch	7-16; Pr=20.0 psf .15); Pg=10.0 psf; DL = 1.15); Is=1.0; t; Cs=1.00; Ct=1.1; s been designed fr bas for 1.00 times fl bas concurrent with igner/Project engin n Load = 5.0 (psf) · specific to the uss; s been designed fr d nonconcurrent with gener/Project enging n chord in all areas; y 2-00-00 wide will bas been designed fr d nonconcurrent with is posific to the uss; been designed fr d nonconcurrent with is posific to the uss; been designed fr d nonconcurrent with is posific to the uss; been designed fr to compare the top of the use; the load (20.0 ps bad (5.0 psf) applied er(s) for truss to tru- hanical connections; capable of withst uplift at joint 9. designed in accorre. Residential Code and referenced stan- lecked for L/360 de Standard	(roof LL Pf=7.7 ; Rough 0 or great at roof ld other liv eer res covers r e of this or a 10.0 with any for a liv s where al fit betw f) and a ed only t uss conr h (by oth anding 8 dance w sections dard AN eflection	: Lum DOL= osf (Lum DOL Cat B; Partia er of min roof pad of 7.7 psf ve loads. consible for ain loading truss compor 0 psf bottom other live loa e load of 20.0. a rectangle veen the bottot dditional bottot o room. 11-1 tections. ers) of truss t 6 lb uplift at j tith the 2018 R502.11.1 a ISI/TPI 1.	1.15 live i on hent. ds. 0psf om 2 o oint nd				SEAL 04332	ROJ NA OVAL 25	

Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 9-10-8, Exterior(2R) 9-10-8 to 12-10-8, Interior (1) 12-10-8 to 19-7-4 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

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mmm April 22,2025

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	995 Serenity	
P02032-24619	B05	Нір	1	1	Job Reference (optional)	T37063771

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:56 ID:AfpiRGuLLy1SX8cKDOQ\_uzzPV2P-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	8-7-2	11-1-14	19-9-0	
	8-7-2	2-6-12	8-7-2	
Scale = 1:75.2				
Plate Offsets (X, V): [4:0-3-0.0-2-3] [5:0-3-0.0-2-3]				

Fiale Oliseis (	, 1). [4.0-3-0,0-2-3],	[5.0-3-0,0-2-3]												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 7.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MS	0.48 0.83 0.55	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.20 -0.39 0.02	(loc) 11-12 11-12 8	l/defl >999 >591 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 116 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=91n II; Exp B; I and C-C E to 8-814, 110 2 to 2	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exc 2-0-0 oc purlins, (6-0 Rigid ceiling directly bracing. (size) 8= Mecha Max Horiz 12=125 (L Max Uplift 8=-89 (LC Max Grav 8=-796 (LC (lb) - Maximum Com Tension 1-2=0/32, 2-3=-58/97 4-5=-644/133, 5-6=-4 7-8=-291/64 11-12=-126/785, 10- 8-10=-85/732 3-11=-163/142, 6-10 5-10=-33/288, 3-12= 2-12=-155/94 ed roof live loads have n. CE 7-16; Vult=115mph nph; TCDL=4.2psf; BCI Exterior(2E) -0-11-0 to 2 Exterior(2E) -0-11-0 to 2	athing directly applied cept end verticals, an -0 max.): 4-5. applied or 10-0-0 oc nical, 12=0-5-8 .C 13) :15), 12=-107 (LC 14 C 27), 12=-850 (LC 26 pression/Maximum 7, 3-4=-837/127, 833/139, 6-7=-394/63 :11=-29/666, !=-181/141, 4-11=-29, e-927/89, 6-8=-635/10 been considered for (3-second gust) DL=3.0psf; h=25ft; C: velope) exterior zone 2-1-0, Interior (1) 2-1- 11-0-2, Exterior(2R)	3) 4) d or 6) 7) 3, 9) 3, 10 /315, 11 /315, 11 /315, 12 .08, 12 .00	<ul> <li>TCLL: ASCE</li> <li>Plate DOL=1</li> <li>1.15 Plate DI</li> <li>Exp.; Ce=1.0</li> <li>This truss ha</li> <li>load of 12.0 j</li> <li>overhangs nd</li> <li>Building Des</li> <li>verifying Rain</li> <li>requirements</li> <li>Provide aded</li> <li>This truss ha</li> <li>chord live loa</li> <li>* This truss ha</li> <li>on the bottom</li> <li>3-06-00 tall b</li> <li>chord and ar</li> <li>Refer to girdd</li> <li>Provide med</li> <li>bearing plate</li> <li>8 and 107 lb</li> <li>This truss is</li> <li>International</li> <li>R802.10.2 ar</li> <li>Graphical pu</li> <li>or the orienta</li> <li>bottom chorc</li> <li>DAD CASE(S)</li> </ul>	7-16; Pr=20.0 psf .15); Pg=10.0 psf; .0L = 1.15); Is=1.0; cs=1.00; Ct=1.1 s been designed for some of the second second second is specific to the use puate drainage to p s been designed for d nonconcurrent with igner/Project engin a been designed for d nonconcurrent with second second second puate drainage to p s been designed for d nonconcurrent with as been designed for d nonconcurrent with as been designed for d nonconcurrent with second second second particle of the second part of the second capable of withstat uplift at joint 12. designed in accord Residential Code nd referenced stan rlin representation tion of the purlin a Standard	(roof LL Pf=12.7; Rough 0, Lu=50 or greate at roof le other lin- beer resp covers r e of this prevent to or a 10.0 with any for a liv s where II fit betw with BC uss conr a (by oth anding 8 dance w sections dard AN does no along the	L: Lum DOL=' 7 psf (Lum DC Cat B; Partia D-0-0 er of min roof ye loads. Donsible for ain loading truss compor water ponding 0 psf bottom other live loa e load of 20.0 a rectangle ween the bottom DL = 10.0psf hections. ers) of truss t 9 lb uplift at ju ith the 2018 s R502.11.1 a ISI/TPI 1. ot depict the s e top and/or	1.15 DL = Ily ilve on hent. J. ds. Dpsf om o o oint ilze				SEA 0433	ROUNA 25	
cantilever right expo	left and right exposed sed:C-C for members a	; end vertical left and and forces & MWFRS	6								14	Y GIN	EGANN	

and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 8-8-14, Exterior(2É) 8-8-14 to 11-0-2, Exterior(2R) 11-0-2 to 15-4-5, Interior (1) 15-4-5 to 19-7-4 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



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	995 Serenity	
P02032-24619	B06	Нір	1	1	Job Reference (optional)	T37063772

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:56 ID:Bq17\_mXeJk99r1?TBystPezPV0H-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	1	7-1-2	12-7-14	19-9-0	1
	1	7-1-2	5-6-12	7-1-2	
Scale = 1:65.3					
Plate Offsets (X, Y): [4:0-3-0,0-2-3], [5:0-3-0,0-2-3]					

	., .). [	,[]												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 7.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2	014	CSI TC BC WB Matrix-MS	0.38 0.38 0.31	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.12 0.02	(loc) 8-10 8-10 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 118 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.1 *Excep 2x4 SP No.3 *Excep Structural wood she 6-0-0 oc purlins, ex 2-0-0 oc purlins (6- Rigid ceiling directly bracing.	ot* 9-8:2x4 SP No.2 ot* 4-10:2x4 SP No.2 eathing directly applie cept end verticals, ar )-0 max.): 4-5. r applied or 10-0-0 oc	3) TCL Plate 1.15 Exp. 4) This nd or load over 5) Built verif requ	L: ASCE Plate D ; Ce=1.0 truss ha of 12.0 hangs n ling Des ying Rai irements	: 7-16; $Pr=20.0 \text{ ps}$ 1.15); $Pg=10.0 \text{ ps}$ OL = 1.15; $Is=1.0OL = 1.0$ ; $Ct=1.Star bear designed psf or 1.00 times 1 on-concurrent with igner/Project engin n  Load = 5.0  (psf)s specific to the us$	f (roof LL f; Pf=12.7 ); Rough 10, Lu=50 for great flat roof lo h other liv ineer res o covers r se of this	.: Lum DOL= 7 psf (Lum Dr Cat B; Partia 0-0-0 er of min roo bad of 7.7 ps ye loads. boonsible for ain loading truss compo	1.15 OL = ally f live if on						
REACTIONS	(size) 8= Mecha Max Horiz 12=111 ( Max Uplift 8=-82 (LC Max Grav 8=718 (L	anical, 12=0-5-8 LC 11) C 15), 12=-99 (LC 14) C 2), 12=779 (LC 2)	6) Prov 7) This chor 8) * Th on th	ide adeo truss ha d live loa s truss h e bottor	quate drainage to as been designed ad nonconcurrent has been designer m chord in all area	prevent for a 10.0 with any d for a liv as where	water pondin ) psf bottom other live loa e load of 20. a rectangle	g. ads. Opsf						
FORCES	(lb) - Maximum Con	npression/Maximum	3-06	-00 tall b	by 2-00-00 wide w	vill fit betv	veen the bott	tom						
TOP CHORD	1-2=0/32, 2-3=-248/ 4-5=-634/143, 5-6=- 2-12=-268/79, 7-8=-	/61, 3-4=-808/143, .812/142, 6-7=-232/4 .193/51	cnor 9) Refe 6, 10) Prov bear	r to gird ide mec ing plate	er(s) for truss to to hanical connectio capable of withs	:. russ conr n (by oth tanding 8	nections. ers) of truss 2 lb uplift at	to ioint						
BOT CHORD	11-12=-116/680, 10	-11=-71/632,	8 an	d 99 lb u	plift at joint 12.			,						
WEBS	4-11=-27/244, 5-10 3-11=-95/101, 6-10 3-12=-685/97	=-14/247, 4-10=-74/7 =-104/104, 6-8=-708/	7, Inter 107, R80 12) Grap	truss is national 2.10.2 a phical pu	Residential Code nd referenced sta Irlin representation	rdance w sections ndard AN n does no	R502.11.1 a SI/TPI 1. SI/TPI 1.	and size			J.M.	ORTH CA	ROUT	
NOTES			or th	e orienta	ation of the purlin	along the	e top and/or				:2		ON: Y	1'2
<ol> <li>Unbalance this design</li> <li>Wind: ASC Vasd=91m II; Exp B; I and C-C E to 7-2-14, 11-5-13 to (1) 16-91 exposed; members a Lumber De</li> </ol>	ed roof live loads have CE 7-16; Vult=115mpt ph; TCDL=4.2psf; BC Enclosed; MWFRS (er ixterior(2E) -0-11-0 to Exterior(2R) 7-2-14 tc 12-6-2, Exterior(2R) 1 to 19-7-4 zone; cantil end vertical left and ri and forces & MWFRS OL=1.60 plate grip DC	been considered for (3-second gust) DL=3.0psf; h=25ff; C welope) exterior zon 2-1-0, Interior (1) 2-1 11-5-13, Interior (1) 12-6-2 to 16-9-1, Inte ever left and right ght exposed; C-C for for reactions shown; DL=1.60	LOAD C	ASE(S)	standard						P. P. P. P.	SEA 0433	L 25 	A CONTRACTOR OF THE OWNER OWNE



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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	B07	Нір	1	1	Job Reference (optional)	T37063773

#### Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:56 ID:OAUW5w2M?qw3PAzXpHJgQlzPUeN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	5-7-2	9-10-8	14-1-14	19-9-0	
Scale = 1:61.1	5-7-2	4-3-6	4-3-6	5-7-2	

### Plate Offsets (X, Y): [3:0-3-0,0-2-3], [5:0-3-0,0-2-3], [6:Edge,0-7-0], [12:Edge,0-7-0]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 7.0 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	0.50 0.23 0.20	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.06 0.01	(loc) 7-9 7-9 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 116 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.1 *Excep 2x4 SP No.3 Structural wood sher 5-7-1 oc purlins, ext 2-0-0 oc purlins (6-0 Rigid ceiling directly	t* 8-7:2x4 SP No.2 athing directly applie cept end verticals, a -0 max.): 3-5. applied or 10-0-0 or	3) 4) ed or nd 5) c	TCLL: ASCE Plate DOL=1 1.15 Plate D Exp.; Ce=1.0 This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements	7-16; Pr=20.0 p .15); Pg=10.0 ps OL = 1.15); Is=1. ); Cs=1.00; Ct=1. s been designed psf or 1.00 times on-concurrent wi igner/Project eng n Load = 5.0 (ps] s specific the u	sf (roof LL sf; Pf=12.7 .0; Rough .10, Lu=50 I for great flat roof lo th other liv gineer res f) covers r ise of this	: Lum DOL= (' psf (Lum D) Cat B; Partia )-0-0 er of min roo pad of 7.7 ps //e loads. ponsible for ain loading truss compo	=1.15 OL = ally f live if on					
REACTIONS	bracing. (size) 7= Mecha Max Horiz 12=93 (LC Max Uplift 7=-72 (LC Max Grav 7=718 (LC	nical, 12=0-5-8 C 13) : 15), 12=-90 (LC 14 C 2), 12=779 (LC 2)	6) 7) 9) 8)	Provide adeo This truss ha chord live loa * This truss h	quate drainage to s been designed ad nonconcurrent has been designed n chord in all are	o prevent for a 10.0 t with any ed for a liv	vater pondin ) psf bottom other live loa e load of 20. a rectangle	ig. ads. Opsf					
FORCES	(lb) - Maximum Com	pression/Maximum		3-06-00 tall b	by 2-00-00 wide v	will fit betv	veen the bott	tom					
TOP CHORD	1-2=0/32, 2-3=-914/ 4-5=-692/135, 5-6=-9 6-7=-664/100	121, 3-4=-686/136, 913/123, 2-12=-724,	9) /128, 10	Refer to gird Provide mec	er(s) for truss to the hanical connection of with the hanical	s. truss conr on (by oth	ections. ers) of truss	to					
BOT CHORD	11-12=-152/322, 10-	-11=-118/840, 74/207		12 and 72 lb	uplift at joint 7.			joint					
WEBS	3-11=-21/279, 4-11= 5-9=-23/275, 6-9=-8 2-11=-101/465	-278/93, 4-9=-275/9 9/489, 4-10=0/136,	)4, 12	R802.10.2 a	Residential Code nd referenced star	e sections andard AN	R502.11.1 a ISI/TPI 1.	and size			and and	TH CA	
NOTES			12	or the orient	ation of the purlin	along the	top and/or	0120					DA: Kin
<ol> <li>Unbalanc this desig</li> <li>Wind: ASG Vasd=91r II; Exp B; and C-C E to 5-8-14, 9-10-8 to</li> </ol>	ed roof live loads have n. CE 7-16; Vult=115mph nph; TCDL=4.2psf; BC Enclosed; MWFRS (en Exterior(2E) -0-11-0 to 2 Exterior(2R) 5-8-14 to 14-0-2, Exterior(2R) 14	been considered fo (3-second gust) DL=3.0psf; h=25ft; ( velope) exterior zor 2-1-0, Interior (1) 2- 9-10-8, Interior (1) -0-2 to 18-3-1, Inter	r LC Cat. ne 1-0 rior	bottom choro DAD CASE(S)	l. Standard					. ann ann ann ann ann ann ann ann ann an	P P	SEA 0433	L 25

to 5-8-14, Exterior(2R) 5-8-14 to 9-10-8, Interior (1)
9-10-8 to 14-0-2, Exterior(2R) 14-0-2 to 18-3-1, Interior (1)
18-3-1 to 19-7-4 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

er left and right ht exposed;C-C for or reactions shown; =1.60



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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	B08	Нір	1	1	Job Reference (optional)	T37063774

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:57 ID:L\_L7dwwbVSS3V\_KJOKb0CzzPUby-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:62.5			ł	<u>4-1-2</u> 4-1-2	9-10	- <u>8</u> 6		<u>15-7-14</u> 5-9-6		<u>19-9</u> 4-1-	-0 -2		
Plate Offsets	(X, Y): [3:0-3-0,0-2-3],	[5:0-3-0,0-2-3]											
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 7.0 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-MS	0.39 0.38 0.38	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.08 0.02	(loc) 10 8-10 7	l/defl >999 2 >999 1 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 108 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep Structural wood she 5-9-10 oc purlins, e 2-0-0 oc purlins (6-0	t* 11-4,8-4:2x4 SP N athing directly applie xcept end verticals, a -0 max.): 3-5.	lo.2 d or and	<ul> <li>TCLL: ASCE Plate DOL= 1.15 Plate D Exp.; Ce=1.0</li> <li>This truss ha load of 12.0 overhangs n</li> <li>Building Des</li> </ul>	<ul> <li>F-16; Pr=20.0 p;</li> <li>1.15); Pg=10.0 ps</li> <li>OL = 1.15); Is=1.</li> <li>D; Cs=1.00; Ct=1.</li> <li>as been designed</li> <li>psf or 1.00 times</li> <li>on-concurrent wit</li> <li>signer/Project eng</li> </ul>	sf (roof Ll f; Pf=12. 0; Rough 10, Lu=5 for great flat roof I h other li ineer res	L: Lum DOL 7 psf (Lum D Cat B; Parti 0-0-0 er of min roo oad of 7.7 p ve loads. ponsible for	=1.15 DOL = ially of live sf on					
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc		verifying Rai requirement	in Load = 5.0 (psf s specific to the u	) covers i se of this	ain loading truss compo	onent.					
REACTIONS	bracing. EACTIONS (size) 7= Mechanical, 12=0-5-8 Max Horiz 12=70 (LC 13) Max Uplift 7=-76 (LC 10), 12=-79 (LC 11) Max Grav 7=718 (LC 2), 12=779 (LC 2)				<ul> <li>6) Provide adequate drainage to prevent water ponding.</li> <li>7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</li> <li>* This truss has been designed for a live load of 20.0psf on the bottom chord live load reacting the reacting t</li></ul>								
FORCES	(lb) - Maximum Com	pression/Maximum		3-06-00 tall	by 2-00-00 wide v	vill fit betw	ween the bot	ttom					
TOP CHORD	1-2=0/32, 2-3=-928/ 4-5=-736/119, 5-6=-	121, 3-4=-733/119, 934/123_6-7=-681/9	3 4	<ul> <li>Refer to gird</li> <li>Revide med</li> </ul>	ler(s) for truss to t	russ con	nections.	to					
BOT CHORD	11-12=-70/58, 10-11 8-10=-192/1138, 7-8	=-192/1138, =-43/112		bearing plate	e capable of withs	tanding	79 lb uplift at	t joint					
WEBS	3-11=-22/292, 4-11= 4-8=-506/128, 5-8=- 6-8=-101/630, 2-12=	509/129, 4-10=0/23 17/295, 2-11=-71/74 749/117	81, 1 0,	1) This truss is International R802.10.2 a	designed in acco Residential Code nd referenced sta	rdance w e sections indard Al	rith the 2018 s R502.11.1 NSI/TPI 1.	and				TH CA	BOIN
NOTES			1	2) Graphical pu	urlin representatio	n does n	ot depict the	size			50	N. Jel	NIN'I
1) Unbalanc	ed roof live loads have	been considered for		or the orient	ation of the purlin	along the	e top and/or			1	2		N: Y :-
this desig 2) Wind: AS Vasd=91r II; Exp B; and C-C I to 4-2-14, 8-5-13 to cantilever right expo for reactio DOI = 1 60	n. CE 7-16; Vult=115mph mph; TCDL=4.2psf; BC Enclosed; MWFRS (er Exterior(2E) -0-11-0 to : Exterior(2R) 4-2-14 to 15-6-2, Exterior(2E) 15 left and right exposed used;C-C for members : on	(3-second gust) DL=3.0psf; h=25ft; C ivelope) exterior zon 2-1-0, Interior (1) 2-1 8-5-13, Interior (1) -6-2 to 19-7-4 zone; ; end vertical left anc and forces & MWFR: L=1.60 plate grip	L e -0 d S	LOAD CASE(S)	u. Standard					The second second	Print Print	SEA 0433	L 25 REGALIT



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(IIIIIII) April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	B09G	Hip Girder	1	2	Job Reference (optional)	T37063775

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:57 ID:fhvvxO2lqj20X7M?nfFbxNzPUaW-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



			2-7-	2	7-5-6		12-3-10		17	-1-14		19-9-0	
Scale = 1:53.2			2-7-	2 '	4-10-4		4-10-4		4-	10-4		2-7-2	
Plate Offsets (	(X, Y): [3:0-1-4,0-2-0],	[6:0-3-0,0-2-3]											
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDI	(psf) 20.0 12.7/10.0 7.0 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	0.22 0.28 0.20	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.05 -0.09 0.02	(loc) 11-12 11-12 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 238 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD	2x4 SP No.2 2x6 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 2 No.3 1-6-0 Structural wood shea 6-0-0 oc purlins, exc 2-0-0 oc purlins, exc 2-0-0 oc purlins (6-0 Rigid ceiling directly bracing. (size) 2=0-5-8, & Max Horiz 2=42 (LC Max Uplift 2=-285 (L Max Grav 2=1129 (L (lb) - Maximum Com Tension 1-2=0/27, 2-3=-1488 4-5=-2337/647, 5-6= 6-8=-1388/355 2-13=-368/1235, 12- 11-12=-669/2357, 9- 8-9=-283/1142	2-11-10, Right 2x4 SP athing directly applied ept -0 max.): 3-6. applied or 10-0-0 oc 3= Mechanical 7) C 7), 8=-249 (LC 6) .C 2), 8=1053 (LC 2) pression/Maximum /411, 3-4=-1241/361, -1107/299, 13=-669/2357, 11=-646/2337,	2) or 4) 5) 6) 7) 8) 9)	All loads are except if not CASE(S) se provided to unless othei Unbalanced this design. Wind: ASCE Vasd=91mp II; Exp B; Er cantilever le right expose TCLL: ASCI Plate DOL= 1.15 Plate D Exp.; Ce=1. This truss h load of 12.0 overhangs r Building De: verifying Ra requirement Provide ade This truss h chord live lo	e considered e ted as front (F ction. Ply to p distribute only wise indicated roof live load 57-16; Vult=1 ih; TCDL=4.2p closed; MWF ft and right ex d; Lumber DC 57-16; Pr=200 L1.15); Pg=10.1 OL = 1.15); Is 0; Cs=1.00; C as been desig psf or 1.00 tir on-concurren signer/Project in Load = 5.0 s specific to tf quate drainag as been desig ad nonconcur	equally applied ) or back (B) i ly connection loads noted i d. s have been of 15mph (3-sect 5sf; BCDL=3.0 RS (envelope posed ; end v DL=1.60 plate 0. psf; Pf=12.7 s=1.0; Rough t=1.10, Lu=50 (ned for great mes flat roof lu engineer ress (psf) covers r he use of this ly to prevent v res to prevent v rest or a 10.0 rent with any	d to all plies, face in the LC s have been as (F) or (B), considered fo cond gust) Opsf; h=25ft; ( ) exterior zor vertical left an grip DOL=1. : Lum DOL=1. : Lum DOL=1. : Lum DOL=1. Cat B; Partia O-0-0 er of min roof coad of 7.7 psf ve loads. consible for ain loading truss compor water ponding 0 psf bottom 0 ther live loa	DAD r Cat. he; d 60 1.15 DL = live fon hent. g. ds.	14) Gra or ti bott 15) "NA (0.1 <b>LOAD (</b> 1) De Inc Ur Cc	aphical p he orient tom chor ULED" in ULED" in ULED" in Valta 8'x3.2 CASE(S) ead + Sr crease= inform Lc Vert: 1 Oncentra Vert: 10 23=-44 27=-45 31=-28 35=-68	urlin re tation o d. dicate 5") toe ) Stan ow (bz 1.15 0 Stan ow (bz 1.15 0 Stan ow (bz 1.15 0 Stan ow (bz (B), 24 (B), 24 (B), 32 (B)	weight: 238 ib presentation doe of the purlin along s 3-10d (0.148"x: -nails per NDS gundard alanced): Lumber b/ft) 3-6=-39, 6-8=-29 ads (lb) B), 11=-28 (B), 5= =-44 (B), 25=-44 =-14 (B), 25=-44 =-14 (B), 25=-44 =-28 (B), 33=-28	<ul> <li>FT = 20%</li> <li>s not depict the size the top and/or</li> <li>s") or 3-12d iddines.</li> <li>Increase=1.15, Plate</li> <li>, 14-18=-20</li> <li>-44 (B), 22=-44 (B), (B), 26=-44 (B), 7 (B), 30=-28 (B), (B), 34=-28 (B),</li> <li>(B), 34=-28 (B),</li> </ul>
WEBS <b>NOTES</b> 1) 2-ply truss (0.131*x3' Top chord oc. Bottom ch staggered Web conn	3-13=-131/539, 4-13 4-11=-34/24, 5-11=0 6-9=-114/556 s to be connected toget ") nails as follows: Is connected as follows: ls connected as follows hords connected as follows hords connected as follows: at 0-9-0 oc. hected as follows: 2x4 -	=-1245/355, 4-12=0/2 /274, 5-9=-1363/406, ther with 10d t: 2x4 - 1 row at 0-9-0 ows: 2x6 - 2 rows 1 row at 0-9-0 oc.	279, 10 11 12 13	) * This truss on the botto 3-06-00 tall chord and a ) Refer to girc ) Provide mer bearing plat 8 and 285 lt ) This truss is Internationa R802.10.2 a	has been des m chord in all by 2-00-00 wi ler(s) for truss chanical conne e capable of v o uplift at joint designed in a I Residential C and referenced	igned for a liv areas where de will fit betw bers. to truss conr ection (by oth vithstanding 2 2. accordance w Code sections d standard AN	e load of 20.0 a rectangle veen the botto nections. ers) of truss t 49 lb uplift at ith the 2018 s R502.11.1 a ISI/TPI 1.	)psf om joint nd			N. P. S.	SEA 0433	L 25 ALTING

April 22,2025

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	C01E	Common Supported Gable	1	1	Job Reference (optional)	T37063776

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:58 ID:xDU9wEmkGHk2VJqgz4iJu9zPXJA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale =	1:50
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13-11-0

Plate Offsets (	(X, Y): [2:0-2-12,0-0-4	], [2:0-6-6,0-1-8], [3:0-6	6-0,0-5-8	8], [13:0-6-0,0	-5-8], [14:0-2-12,0-	-0-4], [14	:0-6-6,0-1-8]						
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 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	0.13 0.02 0.03	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 14	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 98 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 - 1-6-8 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=13-11-( 16=13-11 20=13-11 22=13-11	1 1-6-8, Right 2x4 SP No athing directly applied applied or 10-0-0 oc 0, 14=13-11-0, -0, 17=13-11-0, -0, 21=13-11-0, -0, 21=13-11-0, -0, 23=13-11-0,	BC 3 W or N( 1) 2)	EBS DTES Unbalanced this design. Wind: ASCI Vasd=91mp II; Exp B; E and C-C Ct to 6-11-8, C 9-11-8 to 11	2-24=-33/92, 23-2 21-22=-35/95, 20- 18-19=-35/95, 17- 14-16=-33/94 8-20=-75/19, 7-21 5-23=-76/58, 3-24 10-18=-74/62, 11- d roof live loads have E 7-16; Vult=115mp oh; TCDL=4.2psf; E nclosed; MWFRS ( orner(3R) 6-11-8 t 5-2-0 zone; cantilev	4=-35/95 21=-35/95 21=-35/9 18=-35/9 =-78/50, =-62/43, 17=-76/5 ve been of ph (3-sec 3CDL=3. (envelope 1-5-9, Ex o 9-11-8, ver left ar	, 22-23=-35/9 5, 19-20=-35/ 5, 16-17=-35/ 6-22=-73/62, 9-19=-76/50, 8, 13-16=-62/ considered for considered for	5, 95, 95, 43 - Cat. e -9 -9	11) * Th on t 3-0( cho 12) Pro bea 2 lb join lb u join 13) This Inte R8( LOAD (	his truss he botto 5-00 tall rd and a vide me ring plat uplift at t 22, 37 plift at jo t 17 and s truss is rnationa 02.10.2 a <b>CASE(S</b>	has be by 2-0 any othe chanica ic capa joint 1 lb uplif bint 19, 39 lb u desig a desig and refe ) Star	een designed for rd in all areas w 0-00 wide will fit er members. al connection (b bble of withstanc 4, 33 lb uplift at jo uplift at joint 23, 30 l 39 lb uplift at jo uplift at joint 16. ned in accordan dential Code sec erenced standar ndard	a live load of 20.0psf here a rectangle between the bottom y others) of truss to ing 6 lb uplift at joint 2, joint 21, 38 lb uplift at b uplift at joint 24, 31 int 18, 37 lb uplift at ce with the 2018 tions R502.11.1 and 'd ANSI/TPI 1.
FORCES TOP CHORD	24=13-11 Max Horiz 2=-94 (LC Max Uplift 2=-6 (LC 16=-39 (L 21=-33 (L 23=-37 (L Max Grav 2=176 (LC 16=72 (LC 18=-101 (L 20=98 (LC 22=100 (L 22=100 (L 24=68 (LC (lb) - Maximum Com Tension 1-2=0/31, 2-3=-86/5 5-6=-58/49, 6-7=-52 8-9=-57/110, 9-10=- 11-13=-39/20, 13-14	-0 (12) 10), 14=-2 (LC 15), C 15), 17=-37 (LC 15), C 15), 19=-31 (LC 15), C 14), 22=-38 (LC 14), C 14), 24=-30 (LC 14), C 2), 14=176 (LC 2), C 27), 17=103 (LC 27), C 27), 17=103 (LC 26), C 26), 23=103 (LC 26), C 26), 23=103 (LC 26), C 26), 23=103 (LC 26), C 26), 23=103 (LC 26), C 7, 19=105 (LC 26), C 7, 10=105 (LC 26), 10, 100 (LC 26),	3) (, (), (), (5) (6) (7) (8) (9) (10)	end vertical forces & MU DOL=1.60   Truss desig only. For s see Standa or consult C TCLL: ASC Plate DOL= 1.15 Plate I Exp.; Ce=1 This truss h load of 12.0 overhangs Building De verifying Ra requiremen All plates ai Gable requ Gable stud;	left and right expo WFRS for reactions olate grip DOL=1.6 ined for wind loads tuds exposed to wind rd Industry Gable E ualified building de E 7-16; Pr=20.0 ps 1.15); Pg=10.0 ps DOL = 1.15); Is=1.0 .0; Cs=1.00; Ct=1.1 .0; Cs=1.00; Ct=1.1 .0; Cs=1.00; Ct=1.1 .0; Ct=1.1 .0; Ct	sed;C-C s shown; 0 in the pli- nd (norm End Deta signer a: if (roof LL ; Pf=7.7 ;; Rough 10 for great flat roof ld h other list neer res covers r se of this tom chor ic. for a 10.0 with any	for members Lumber ane of the trus al to the face) ils as applicat s per ANSI/TF psf (Lum DOL Cat B; Partial psf (Lum DOL Cat B; Partial er of min roof poad of 7.7 psf ve loads. ponsible for ain loading truss compon erwise indicat d bearing. D psf bottom other live load	and ss , le, le, .15 live on live on eent. ed.			And	SEA 0433	EER CANING

- 9) Gable studs spaced at 1-4-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	C02	Common	1	1	Job Reference (optional)	T37063777

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:58 ID:Tg7tnd1ygWbMIYZhSIdeiHzPWIz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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				1	6-11-8	1		13-11-0	)				
Scale = 1:52.8				Γ	6-11-8	1		6-11-8					
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 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	0.52 0.42 0.11	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.10 0.03	(loc) 8-15 8-15 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 64 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 2 2-1-7 Structural wood shere 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 6 Max Horiz 2=101 (LC Max Uplift 2=-87 (LC Max Grav 2=582 (LC	2-1-7, Right 2x4 SP No athing directly applied applied or 10-0-0 oc 5=0-5-8 2 13) 2 14), 6=-87 (LC 15) 2 2), 6=582 (LC 2)	4) 5) 6) or 7) 8) 9)	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 on the bottor 3-06-00 tall t chord and ar Provide mec bearing plate 2 and 87 lb u This truss is	is been designed i psf or 1.00 times f on-concurrent with igner/Project engi in Load = 5.0 (psf) is specific to the us is been designed ad nonconcurrent has been designed in chord in all area by 2-00-00 wide w hy other members hanical connection e capable of withst uplift at joint 6. designed in accor	for great lat roof lin other lin neer res covers r se of this for a 10.1 with any d for a lin s where ill fit betw n (by oth canding & dance w	er of min roof pad of 7.7 psl ve loads. ponsible for ain loading truss compoi 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 87 lb uplift at j ith the 2018	f live f on nent. dds. Opsf om to joint					
FORCES	(lb) - Maximum Com Tension 1-2=0/37, 2-4=-464/2 6-7=0/37	pression/Maximum 238, 4-6=-464/238,	LO	International R802.10.2 a AD CASE(S)	Residential Code nd referenced star Standard	sections	s R502.11.1 a NSI/TPI 1.	and					
BOT CHORD	2-8=-182/386, 6-8=-	122/386											
NOTES 1) Unbalancı this desig 2) Wind: AS( Vasd=91n II; Exp B; and C-C E 6-11-8, Ex to 15-2-0 : vertical lef forces & M DOL=1.6( 3) TCLL: AS Plate DOL 1.15 Plate Exp.; Ce=	ed roof live loads have n. CE 7-16; Vult=115mph nph; TCDL=4.2psf; BC Enclosed; MWFRS (en Exterior(2E) -1-3-0 to 1- kterior(2E) -1-3-0 to 1- kterior(2R) 6-11-8 to 9- zone; cantilever left ann ft and right exposed;C- MWFRS for reactions sl 0 plate grip DOL=1.60 CE 7-16; Pr=20.0 psf ( L=1.15); Pg=10.0 psf; f = DOL = 1.15); ls=1.0; f t.10; Cs=1.00; Ct=1.10	been considered for (3-second gust) DL=3.0psf; h=25ft; Cat velope) exterior zone -9-0, Interior (1) 1-9-0 t 11-8, Interior (1) 9-11-8 d right exposed ; end C for members and hown; Lumber roof LL: Lum DOL=1.1 2f=7.7 psf (Lum DOL = Rough Cat B; Partially	5								North Contraction of the second secon	SEA 0433	EER.CAN

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 BCEL Building Component Schut Information, purplication for the trust structure Bucking Component Advancement and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	C03	Common	3	1	Job Reference (optional)	T37063778

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:58 ID:ECba6r5iJDPJhajYW2TY24zPVvg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



					<u>6-11-8</u> 6-11-8			<u>13-11-</u> 6-11-8	- <u>0</u> B		-		
Scale = 1:52.8		i			· · · · ·								
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	0.53 0.42	DEFL Vert(LL) Vert(CT)	in -0.06 -0.10	(loc) 8-15 8-15	l/defl >999 >999	L/d 240 180	PLATES MT20	<b>GRIP</b> 244/190
TCDL BCLL BCDL	7.0 0.0* 10.0	Rep Stress Incr Code	YES IRC2018	3/TPI2014	WB Matrix-MS	0.11	Horz(CT)	0.03	2	n/a	n/a	Weight: 64 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 2 2-1-7 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 6 Max Horiz 2=99 (LC Max Uplift 2=-87 (LC Max Grav 2=584 (LC	2-1-7, Right 2x4 SP N athing directly applied applied or 10-0-0 oc 6=0-5-8 13) 2 14), 6=-81 (LC 15) 2 2), 6=563 (LC 2)	4) 5) No.3 6) d or 7) 8) 9)	This truss ha load of 12.0 overhangs n Building Des verifying Rai requirement This truss ha chord live lo * This truss ha chord live lo * This truss i on the bottoo 3-06-00 tall chord and an Provide med bearing plata 2 and 81 lb This truss is	as been designed psf or 1.00 times f signer/Project engi in Load = 5.0 (psf) s specific to the us as been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide w ny other members chanical connection e capable of withst uplift at joint 6. designed in accor	for great flat roof I n other li neer res covers I se of this for a 10. with any d for a liv s where ill fit betv n (by oth tanding 8	er of min roo pad of 7.7 ps ve loads. ponsible for ain loading truss compo 0 psf bottom other live loa e load of 20. a rectangle veen the bott ers) of truss 37 lb uplift at ith the 2018	f live if on inent. ads. Opsf to joint					
FORCES TOP CHORD	(lb) - Maximum Com Tension 1-2=0/37, 2-4=-467/2	pression/Maximum 238, 4-6=-467/222,	LC	International R802.10.2 a DAD CASE(S)	Residential Code nd referenced star Standard	sections	s R502.11.1 a NSI/TPI 1.	and					
BOT CHORD WEBS	6-7=0/27 2-8=-184/388, 6-8=- 4-8=0/297	130/388											
NOTES 1) Unbalanci this desig 2) Wind: ASK Vasd=91n II; Exp B; and C-CE 6-11-8, E) to 14-10-C vertical lef forces & N DOL=1.60 3) TCLL: AS Plate DOL 1.15 Plate Exp.; Ce=	ed roof live loads have n. CE 7-16; Vult=115mph mph; TCDL=4.2psf; BC Enclosed; MWFRS (er Exterior(2E) -1-3-0 to 1. xterior(2R) 6-11-8 to 9- 0 zone; cantilever left a ft and right exposed;C- MWFRS for reactions s 0 plate grip DOL=1.60 CE7 7-16; Pr=20.0 psf ( L=1.15); Pg=10.0 psf; F DOL = 1.15); Is=1.0; I =1.0; Cs=1.00; Ct=1.10	been considered for (3-second gust) DL=3.0psf; h=25ft; C ivelope) exterior zone -9-0, Interior (1) 1-9-0 11-8, Interior (1) 9-11 nd right exposed; en C for members and hown; Lumber roof LL: Lum DOL=1. 2f=7.7 psf (Lum DOL Rough Cat B; Partiall	at. e 0 to I-8 dd .15 = y								and the second	SEA 0433	L 25 D'RECALINI

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



Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	D01	Valley	1	1	Job Reference (optional)	T37063779

6-0-12 4-10-8

7-3-0

뷙

1-2-4

1-2-4

<mark>-}</mark>9 2

2x4 II 3x6=

⊠ 10

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

Loading

TCDL

BCLL

BCDL

WFBS

WEBS

NOTES

1)

2)

3)

Run; 9.13 S 8.83 Apr 11 2025 Print; 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:58 ID:B2u9ITy3C0gvU41ckPqOGTzPa?x-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

7-3-0

1-2-4

2x4 II

3

12 🖂

3x6=

134

Page: 1

MANDER PROVIDENT

#### 1-8-4 4-7-0 4 8 6 2x4 II 6x8 = 6x8= 2x4 u 1-2-4 7-3-0 6-0-12 4-10-8 1-2-4 1-2-4 Scale = 1:49.2 Spacing 2-0-0 CSI DEFL l/defl L/d PLATES GRIP (psf) in (loc) Plate Grip DOL TCLL (roof) 20.0 1.15 TC 0.63 Vert(LL) n/a n/a 999 MT20 244/190 BC Snow (Pf/Pg) 12 7/10 0 Lumber DOL 1 15 0 24 Vert(TL) n/a n/a 999 7.0 Rep Stress Incr YES WB 0.28 Horiz(TL) 0.00 5 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MP 10.0 Weight: 58 lb FT = 20%TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Vert: 1-4=-39, 5-8=-20 LUMBER 4) Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum DOL = Concentrated Loads (lb) TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Vert: 9=-155, 10=-76, 11=-76, 12=-76, 13=-155 2x4 SP No.3 Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 5) Building Designer/Project engineer responsible for BRACING verifying Rain Load = 5.0 (psf) covers rain loading TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-4, except requirements specific to the use of this truss component. end verticals. Provide adequate drainage to prevent water ponding. 6) BOT CHORD Rigid ceiling directly applied or 10-0-0 oc Gable requires continuous bottom chord bearing. 7) bracing. 8) Truss to be fully sheathed from one face or securely (size) REACTIONS 5=7-3-0, 6=7-3-0, 7=7-3-0, 8=7-3-0 braced against lateral movement (i.e. diagonal web). Max Horiz 8=-118 (LC 10) Gable studs spaced at 4-0-0 oc. Max Uplift 5=-257 (LC 26), 6=-217 (LC 10), 10) This truss has been designed for a 10.0 psf bottom 7=-222 (LC 11), 8=-261 (LC 25) chord live load nonconcurrent with any other live loads. Max Grav 5=132 (LC 10), 6=895 (LC 26), \* This truss has been designed for a live load of 20.0psf 7=900 (LC 25), 8=139 (LC 11) on the bottom chord in all areas where a rectangle FORCES (lb) - Maximum Compression/Maximum 3-06-00 tall by 2-00-00 wide will fit between the bottom Tension chord and any other members, with BCDL = 10.0psf. TOP CHORD 1-8=-317/333, 1-2=-21/24, 2-3=-41/32, 12) Provide mechanical connection (by others) of truss to 3-4=-21/25, 4-5=-302/320 bearing plate capable of withstanding 261 lb uplift at joint BOT CHORD 7-8=-181/201. 6-7=-112/150. 5-6=-60/80 8, 257 lb uplift at joint 5, 222 lb uplift at joint 7 and 217 lb 2-7=-692/230. 3-6=-692/232. 1-7=-329/344. uplift at joint 6. 4-6=-315/331 13) This truss is designed in accordance with the 2018 The American Annual 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 NOR 14) Graphical purlin representation does not depict the size this design Wind: ASCE 7-16; Vult=115mph (3-second gust) or the orientation of the purlin along the top and/or Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. bottom chord. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 15) Hanger(s) or other connection device(s) shall be and C-C Corner (3) zone; cantilever left and right provided sufficient to support concentrated load(s) 202 SEAL exposed ; end vertical left and right exposed;C-C for Ib down and 63 lb up at 0-6-4, 145 lb down and 45 lb up members and forces & MWFRS for reactions shown; at 2-6-4, 145 lb down and 45 lb up at 3-7-8, and 145 lb 043325 Lumber DOL=1.60 plate grip DOL=1.60 down and 45 lb up at 4-8-12, and 202 lb down and 62 lb Truss designed for wind loads in the plane of the truss up at 6-8-12 on top chord. The design/selection of such connection device(s) is the responsibility of others. only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, LOAD CASE(S) Standard or consult qualified building designer as per ANSI/TPI 1. Dead + Snow (balanced): Lumber Increase=1.15, Plate 1) Increase=1.15 O Uniform Loads (lb/ft) mm April 22,2025 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) Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	D02	Roof Special Girder	1	1	Job Reference (optional)	T37063780

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:59 ID:NzdbJgiyb3U6wcnXMQyxmYzPa\_z-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:45.4

#### Plate Offsets (X, Y): [1:0-3-0,0-0-11], [2:0-3-12,0-2-0], [3:0-3-12,0-2-0]

	(), E	;; E = = ; = = ;; E = ;											
Loading TCLL (roof) Snow (Pf/Pg TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 7.0 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/TF	PI2014	CSI TC BC WB Matrix-MP	0.13 0.12 0.07	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 6	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 68 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORI BOT CHORI WEBS BRACING TOP CHORI BOT CHORI JOINTS REACTIONS	<ul> <li>2x4 SP No.2</li> <li>2x6 SP No.2</li> <li>2x4 SP No.3</li> <li>Structural wood shee</li> <li>6-0-0 oc purlins, exit</li> <li>2-0-0 oc purlins (6-0</li> <li>Rigid ceiling directly bracing.</li> <li>1 Brace at Jt(s): 5</li> <li>(size) 6=7-3-0, 7</li> <li>Max Horiz 8=-131 (LI</li> <li>Max Grav 6=347 (LC</li> <li>8=347 (LC</li> </ul>	athing directly applied cept end verticals, and -0 max.): 2-3. applied or 10-0-0 oc /=7-3-0, 8=7-3-0 C 8) - 13), 7=-61 (LC 9), 8= - 226), 7=182 (LC 7),	4) T( P 1. 5) U or 6) B 5) G 6) 6 7) P 8) G 9) G 9) G 10) Ti c c c c -82 11) * 3	CLL: ASCE late DOL=1. 15 Plate DO xp.; Ce=1.0 Inbalanced s esign. uilding Desi erifying Rain quirements rovide adeq adurements rovide adeq able studs s his truss has hord live loa This truss h n the bottorr -06-00 tall b	7-16; Pr=20.0 ps 15); Pg=10.0 ps DL = 1.15); Is=1.0; Cs=1.00; Ct=1.1 snow loads have gner/Project enging Load = 5.0 (psf) specific to the us uate drainage to uate drainage to spaced at 4-0-0 o s been designed d nonconcurrent as been designed t chord in all area y 2-00-00 wide w	f (roof Ll ; Pf=12. ; Rough 10, Lu=5 been col neer res covers I covers I se of this prevent tom choi c. for a 10. with any d for a lin as where ill fit betw	2: Lum DOL== 7 psf (Lum DC Cat B; Partia 0-0-0 nsidered for th ponsible for rain loading truss compor water ponding rd bearing. 0 psf bottom other live load of 20.0 a rectangle ween the botto	1.15 DL = Ily nis nent. J. ds. Jpsf om	Ur	hiform Lo Vert: 1-2 Oncentra Vert: 2= 13=-37	oads (I 2=-29, tted Lo 2 (B), (B)	b/ft) b/ft) ads (lb) 3=-2 (B), 5=-13	I, 6-8=-20, 1-4=-20 (В), 12=-37 (В),
FORCES	(lb) - Maximum Com Tension	pression/Maximum	12) Pi	rovide mech	anical connection	n (by oth	ers) of truss t	0 oint					
TOP CHORI	D 1-8=-371/90, 1-2=-40 3-4=-408/54, 4-6=-32	08/53, 2-3=-395/38, 21/38	8, 13) TI	, 30 lb uplift	at joint 6 and 61	lb uplift a	at joint 7.	onn					
BOT CHORI	D 7-8=-108/111, 6-7=-3 4-5=-69/333	38/29, 1-5=-71/341,	In R	ternational 802.10.2 an	Residential Code	section	s R502.11.1 a NSI/TPI 1.	nd			~	"TH CA	BOIL
WEBS	2-5=0/184, 3-5=0/18	3, 1-7=-127/116	14) G	aphical pur	rlin representatior	n does n	ot depict the s	ize			5	n'i i i	A INT
NOTES			or	r the orienta	tion of the purlin	along the	e top and/or				22		N. SI
<ol> <li>Unbalan this desi</li> <li>Wind: A: Vasd=9' II; Exp B cantileve right exp</li> <li>Truss de only. Foc see Star or consu</li> </ol>	alanced roof live loads have been considered for design.       bottom chord.         d: ASCE 7-16; Vult=115mph (3-second gust) d=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat.       15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 54 lb down and 56 lb up at 2-5-2, and 45 lb down and 24 lb up at 3-7-8, and 54 lb down and 56 lb up at 4-9-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.         ss designed for wind loads in the plane of the truss /. For studs exposed to wind (normal to the face), /. Standard Industry Gable End Details as applicable, consult qualified building designer as per ANSI/TPI 1.       16) In the LOAD CASE(S) scandard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15							P. I.I.	SEA 0433	EER. A			

April 22,2025

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	D03	Valley	1	1	Job Reference (optional)	T37063781

Run: 8.83 E Feb 1 2025 Print: 8.830 E Feb 1 2025 MiTek Industries, Inc. Tue Apr 22 14:55:55 ID:cBZgfTwcDBobBm8Ow0uUBjzPZYH-inj1B8nJYiU3u9DQCdxCQZJGxAyqZJBFnbWP09zO7mo Page: 1



Scale = 1:43.5

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 0.0* 10.0	Spacing         22           Plate Grip DOL         1           Lumber DOL         1           Rep Stress Incr         Y           Code         II	2-0-0 .15 .15 /ES RC2018	/TPI2014	CSI TC BC WB Matrix-MR	0.12 0.11 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 6	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 BOT CHORD BOT CHORD WEBS NOTES 1) Wind: ASC Vasd=91m II; Exp B; I and C-CE to 2-1-0, Ir and right e C for mem shown; Lu	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood shea 6-0-0 oc purlins, exc Rigid ceiling directly bracing. (lb/size) 6=72/7-3-1 8=118/7-3 Max Grav 6=147 (LC (LC 2) (lb) - Maximum Com Tension 2-8=-117/0, 1-2=0/17 3-4=-67/37, 4-5=0/8, 7-8=0/13, 6-7=0/13 3-7=-171/0 CE 7-16; Vult=115mph ph; TCDL=4.2psf; BC Enclosed; MWFRS (en xterior(2E) 7-1-4 to 7- therior (1) 2-1-0 to 3-7- therior (1) 2-1-0 to	athing directly applied o cept end verticals. applied or 10-0-0 oc 0, 7=147/7-3-0, -0 2 2), 7=251 (LC 2), 8=14 pression/Maximum 7, 2-3=-67/37, 6-9=-117/0, 4-9=-117/0 (3-second gust) DL=3.0psf; h=25ft; Cat. velope) exterior zone 1-4, Exterior(2R) -0-11-1 8 zone; cantilever left 8 zone; cantilever left eft and right exposed;C (FRS for reactions grip DOL=1.60	2) 3) 47 4) 5) 47 6) 7) 6) 7) 10) 11) 0 12) - LO	Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 1.15 Plate DC Exp.; Ce=1.0 This truss ha load of 12.0 p overhangs nd Building Desi verifying Rain requirements Gable require Truss to be fu braced again Gable studs s Gable studs s Cable studs s This truss ha on the bottom an All bearings a capacity of 50 This truss is fo The truss is a Chord and an All bearings a capacity of 50 This truss is a Chord and an All bearings a Cable Stude S Cable S Cable Stude S Cable Stude S Cable Stude S Cable S Cabl	ed for wind loads i ds exposed to wind I Industry Gable Er alified building des 7-16; Pr=20.0 psf. 15); Pg=10.0 psf; 15); Pg=10.0 psf; cs = 1.00; Ct=1.10 s been designed fo sof or 1.00 times file on-concurrent with gner/Project engin Load = 5.0 (psf) or specific to the use se continuous botto ully sheathed from st lateral movemer spaced at 4-0-0 oc, s been designed fo d nonconcurrent wi a boen designed market on chord in all areas y 2-00-00 wide will y 2-00-00 wide will y other members. The assumed to be 55 psi. Besigned in accord Residential Code s d referenced stand Standard	in the pl d (norm nd Deta igner as (roof LL Pf=7.7   Rough ) or greate at roof k of this or greate at roof k of this or greate at roof k of this or of this on char on char on char on char on char on char on char on a 10.0 vith any for a liv where l fit betw SP No. ance w sections dard AN	ane of the tru al to the face ils as applicas s per ANSI/TI :: Lum DOL= psf (Lum DO) Cat B; Partia er of min roof ad of 7.7 psl re loads. consible for ain loading truss compoid d bearing. e or securely iagonal web) 0 psf bottom other live loa e load f 20.0 a rectangle veen the bottot 2 crushing th the 2018 R502.11.1 a ISI/TPI 1.	uss ), ble, 11.15 L = Illy live f on ment.			and the second s	SEA 0433	L 25 REGAMIN

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TRENCO AMITEK Affiliate

818 Soundside Road Edenton, NC 27932

April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	D04	Valley	1	1	Job Reference (optional)	T37063782

#### Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:24:59 ID:kMICZYDkY\_N\_1Xa4eYPsgwzPaCV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:38.9

Loading	(psf)	Spacing	2-0-0		CSI	0.40	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15			0.13	Vert(LL)	n/a	-	n/a	999	M120	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15		BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	7.0	Rep Stress Incr	YES		WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC20	18/TPI2014	Matrix-MR								FT 000/
BCDL	10.0											Weight: 38 lb	FI = 20%
LUMBER			4	) TCLL: ASCE	7-16; Pr=20.0 psf	(roof Ll	L: Lum DOL=	1.15					
TOP CHORD	2x4 SP No.2			Plate DOL=1	.15); Pg=10.0 psf;	Pf=7.7	psf (Lum DOI	L=					
BOT CHORD	2x4 SP No.2			1.15 Plate D	OL = 1.15); ls=1.0;	Rough	Cat B; Partia	lly					
WEBS	2x4 SP No.3			Exp.; Ce=1.0	); Cs=1.00; Ct=1.10	C							
OTHERS	2x4 SP No.3		!	<ol><li>This truss has</li></ol>	s been designed for	or great	er of min roof	live					
BRACING				load of 12.0	psf or 1.00 times fla	at roof l	bad of 7.7 psf	fon					
TOP CHORD	Structural wood she	athing directly applie	ed or	overhangs n	on-concurrent with	other li	ve loads.						
	6-0-0 oc purlins, exe	cept end verticals.	(	<ol><li>Building Des</li></ol>	igner/Project engin	eer res	ponsible for						
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	<b>b</b>	verifying Rai	n Load = 5.0 (pst) (	covers r	ain loading						
	bracing.		-	requirements	s specific to the use		truss compor	nent.					
REACTIONS	(size) 6=7-3-0, 7	7=7-3-0, 8=7-3-0		) Gable requir	es continuous potto		d bearing.						
	Max Horiz 8=106 (LC	C 13)		braced again	ully sheathed from		liagonal wob						
	Max Uplift 6=-68 (LC	15), 8=-68 (LC 14)		) Gable stude	snaced at 1-0-0 oc	ii (i.e. c	liagoriai web)	•					
	Max Grav 6=197 (LC	C 2), 7=235 (LC 2), 8	3=197	0) This trues ha	s been designed for	ora 10 i	) nef hottom						
	(LC 2)			chord live lo	ad nonconcurrent w	vith anv	other live loa	shi					
FORCES	(lb) - Maximum Com	pression/Maximum		1) * This truss h	as been designed	for a liv	e load of 20.0	Opsf					
	Tension			on the bottor	n chord in all areas	where	a rectangle						
TOP CHORD	2-8=-167/230, 1-2=0	)/32, 2-3=-81/149,		3-06-00 tall b	y 2-00-00 wide wil	l fit betv	veen the botto	om					
	3-4=-80/148, 4-5=0/3	32, 4-6=-167/230		chord and ar	y other members.								
BOT CHORD	7-8=-50/57, 6-7=-50	/57		2) Provide mec	hanical connection	(by oth	ers) of truss t	o					
WEBS	3-7=-156/0			bearing plate	capable of withsta	anding 6	68 lb uplift at j	oint					
NOTES				8 and 68 lb u	plift at joint 6.								115
1) Unbalance	ed roof live loads have	been considered for	r '	<ol><li>This truss is</li></ol>	designed in accord	lance w	ith the 2018					11111 01	1111
this desig	n.			International	Residential Code :	sections	R502.11.1 a	ind			4	TH UA	Papille
2) Wind: AS	CE 7-16; Vult=115mph	(3-second gust)		R802.10.2 a	nd referenced stan	dard AN	ISI/TPI 1.				1	A	SIN'S
Vasd=91n	nph; TCDL=4.2psf; BC	DL=3.0psf; h=25ft; C	Cat. I	OAD CASE(S)	Standard						52	·······································	N. ST.
II; Exp B;	Enclosed; MWFRS (en	velope) exterior zon	e								: `		7
and C-C C	Corner(3E) -0-11-0 to 2	-1-0, Exterior(2N) 2-	1-0							-			N 1
to 3-7-8, C	Corner(3R) 3-7-8 to 6-7	'-8, Exterior(2N) 6-7-	-8 to									SEA	1 1 -
8-2-0 zon	e; cantilever left and rig	pht exposed ; end								=		ULA	· <u>·</u> : =
vertical lei	It and right exposed;C-	C for members and								=		0433	25 : 5
TORCES & N	VIVERS for reactions s	nown; Lumber									1	•	1 E -
2) Truce doo	igned for wind loads in	the plane of the true									- /	·	- 1 × 3
only For	stude exposed to wind	(normal to the face)	55								1	K SNOW	EEM. DI
see Stand	lard Industry Gable En	d Details as applicab	, 10								1	11 GIN	Str. Gra
or consult	qualified building desig	nner as per ANSI/TP	ло, И 1								1	IP IC	Y'RE.I'

- to 3-7-8, Corner(3R) 3-7-8 to 6-7-8, Exterior(2N) 6-7-8 to 8-2-0 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), 3) see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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O'P (IIIIIII) April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity				
P02032-24619	D05	Valley	1	1	Job Reference (optional)	T37063783			



Page: 1



Scale = 1:34.7

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MR	0.12 0.11 0.03	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 6	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 34 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: AS( Vasd=91n I); Exp B; and C-C E to 3-7-8, E 8-2-0 zone vertical lef forces & M DOL=1.6C 3) Truss des only. For see Stand	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exc Rigid ceiling directly bracing. (size) 6=7-3-0,7 Max Horiz 8=79 (LC Max Uplift 6=-72 (LC Max Uplift 6=-72 (LC Max Grav 6=215 (LC (LC 2) (lb) - Maximum Com Tension 2-8=-185/174, 1-2=0 3-4=-105/125, 4-5=0 7-8=-28/63, 6-7=-28/ 3-7=-120/0 ed roof live loads have brack to the state of the state of the state control (2R) 3-7-8 to 6- is; cantilever left and right tand right exposed; C-1 WFRS for reactions st plate grip DOL=1.60 igned for wind loads in studs exposed to wind ard Industry Gable End	athing directly applie cept end verticals. applied or 10-0-0 oc 7=7-3-0, 8=7-3-0 13) : 15), 8=-71 (LC 14) C 2), 7=200 (LC 2), 8 pression/Maximum 1/32, 2-3=-106/126, 1/32, 4-6=-185/173 /63 been considered for (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zon 2-1-0, Interior (1) 2-1 7-8, Interior (1) 6-7-8 pht exposed ; end C for members and hown; Lumber the plane of the trus (normal to the face), d Details as applicab	4) 5) d or 6) = 215 9) 10 11 12 12 13 13 14	<ul> <li>TCLL: ASCE Plate DOL=1</li> <li>1.15 Plate DD Exp.; Ce=1.0</li> <li>This truss ha load of 12.0   overhangs m</li> <li>Building Des verifying Raii requirements</li> <li>Gable requir</li> <li>Truss to be f braced again</li> <li>Gable studs</li> <li>This truss ha chord live loa</li> <li>This truss ha chord live loa</li> <li>* This truss to on the bottor</li> <li>3-06-00 tall b chord and ar</li> <li>Provide mec bearing plate 8 and 72 lb u</li> <li>This truss is International R802.10.2 ar</li> <li>GAD CASE(S)</li> </ul>	7-16; Pr=20.0 psf 15); Pg=10.0 psf; DL = 1.15); Is=1.0; ; Cs=1.00; Ct=1.1; s been designed f psf or 1.00 times fl pn-concurrent with gner/Project engin 1 Load = 5.0 (psf); specific to the us es continuous bott ully sheathed from st lateral moveme spaced at 4-0-0 or s been designed fu nonconcurrent to as been designed fu nonconcurrent to a been design	f (roof LL Pf=7.7   Rough 0 or greated lat roof lo or den resp covers r or of the line covers r or of this or covers r or of this or a covers r or a factor of a live s where Il fit betw the den den den and ing 7 dance w sections and AN	:: Lum DOL=1 psf (Lum DOL Cat B; Partial er of min roof pad of 7.7 psf ve loads. consible for ain loading truss compor d bearing. e or securely iagonal web). D psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss to 1 lb uplift at jo th the 2018 R502.11.1 a ISI/TPI 1.	I.15 			And	SEA 0433	L 25 EEPEGATU	

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

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O' mmm April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	D06	Valley	1	1	Job Reference (optional)	T37063784
84 Lumber-2383 (Dunn, NC), Du	nn, NC - 28334,	Run: 9.13 S 8.83 Ap	11 2025 Prir	nt: 8.830 S Ar	or 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:00	Page: 1

2-6-1



ID:\_reqNI2O?yrmhf00gGXXndzPZVY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:34.6

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 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	0.15 0.15 0.06	<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: 26 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she: 7-3-0 oc purlins. Rigid ceiling directly bracing. (size) 1=7-3-0, 3 Max Horiz 1=-43 (LC (LC 14) Max Grav 1=-72 (LC (LC 2) (lb) - Maximum Com Tension 1-2=-66/168, 2-3=-6 1-4=-121/103, 3-4=- 2-4=-266/136	athing directly applied applied or 6-0-0 oc 3=7-3-0, 4=7-3-0 12) 14), 3=-11 (LC 15), 4 31), 3=72 (LC 32), 4 pression/Maximum 6/168 121/103	4) 5) d or 6) 7) 8) =-66 9) =439 10 11	TCLL: ASCE Plate DOL=1 1.15 Plate D Exp.; Ce=1.0 Building Desi verifying Rain requirements Gable require Gable studs This truss ha chord live loa This truss ha chord live loa This truss ha chord and an 3-06-00 tall b chord and an D) Provide med bearing plate 11 Ib uplift at 11 This truss is International	7-16; Pr=20.0 ps/ .15); Pg=10.0 ps/ .15); Pg=10.0 ps/ .15); Pg=10.0 ct=1.1 gner/Project engin l Load = 5.0 (ps/) specific to the us es continuous bott spaced at 4-0-0 of s been designed f d nonconcurrent as been designed n chord in all areas y 2-00-00 wide wi y other members. nanical connectior capable of withst joint 3 and 66 lb u designed in accord	f (roof LL Pf=7.7; Rough 0 neer res covers r e of this om chor c. or a 10.0 with any I for a liv s where Il fit betw n (by oth anding 3 uplifa ti j dance w sections	L: Lum DOL=1 posf (Lum DOL Cat B; Partial consible for ain loading truss compor d bearing. ) psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss to lb uplift at joi pint 4. tith the 2018 R502.1.1.1 at us/UTP1 4	I.15 - = ly ment. ds. upsf or nt 1, nd					
NOTES 1) Unbalance this design 2) Wind: ASC Vasd=91n II; Exp B; and C-C E 3-7-8, Ext 7-3-0 zone vertical lef forces & M DOL=1.6C 3) Truss des only. For see Stand or consult	ed roof live loads have CE 7-16; Vult=115mph nph; TCDL=4.2psf; BC Enclosed; MWFRS (er :xterior(2E) 0-0-0 to 3-1 erior(2R) 3-7-8 to 6-5-C erior(2R) 3-7-8 to 6-5-C is; cantilever left and rig t and right exposed; C- twFRS for reactions s plate grip DOL=1.60 igned for wind loads in studs exposed to wind ard Industry Gable En- qualified building design	been considered for (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zone 0-0, Interior (1) 3-0-0 0, Interior (1) 6-5-0 to jht exposed ; end C for members and hown; Lumber the plane of the trus (normal to the face), d Details as applicab gner as per ANSI/TP	Lt at. e to s le, l 1.	DAD CASE(S)	Standard						Print Print	SEA 0433	POLAR DAR L 25 L 25

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818 Soundside Road Edenton, NC 27932

O' mmm April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity				
P02032-24619	D07	Valley	1	1	Job Reference (optional)	T37063785			

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:00 ID:rYx3h7woRsuoKAMW?kc1v?zPZEw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



4-5-6

Scale = 1:22.4

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

		1	-										
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15		BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	7.0	Rep Stress Incr	YES		WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/1	TPI2014	Matrix-MP								
BCDL	10.0											Weight: 13 lb	FT = 20%
LUMBER			6) (	Gable require	es continuous botto	om chor	d bearing.						
TOP CHORD	2x4 SP No.2		7) (	Gable studs :	spaced at 4-0-0 oc								
BOT CHORD	2x4 SP No.2		8)	This truss ha	s been designed fo	or a 10.0	) psf bottom						
BRACING			C	chord live loa	d nonconcurrent w	vith any	other live load	ds.					
TOP CHORD	Structural wood she 4-5-6 oc purlins.	athing directly applie	dor 9)*	* This truss h on the botton	as been designed 1 chord in all areas	for a liv where	e load of 20.0 a rectangle	)psf					
BOT CHORD	Rigid ceiling directly bracing	applied or 10-0-0 oc		3-06-00 tall b chord and an	y 2-00-00 wide will y other members.	l fit betw	een the botto	om					
REACTIONS	(size) 1=4-5-6	3=4-5-6	10) I	Provide mech	nanical connection	(by oth	ers) of truss to	0					
	Max Horiz 1=-24 (LC	2 10)	ł	bearing plate	capable of withsta	anding 2	2 lb uplift at jo	oint					
	Max Uplift 1=-22 (LC	2 14), 3=-22 (LC 15)	44) -	1 and 22 lb u	plift at joint 3.								
	Max Grav 1=165 (LC	C 2), 3=165 (LC 2)		International	Residential Code s	ance w	R502 11 1 a	nd					
FORCES	(lb) - Maximum Com	pression/Maximum	F	R802 10 2 ar	d referenced stan	dard AN	ISI/TPI 1	nu					
	Tension		104	D CASE(S)	Standard	aara / ir							
TOP CHORD	1-2=-249/101, 2-3=-	249/101			otandara								
BOT CHORD	1-3=-74/201												
NOTES													
1) Unbalanc	ed roof live loads have	been considered for											
2) Wind AS	n. CE 7-16: Vult–115mph	(3-second quist)											
Vasd=91r	nph: TCDL=4.2psf: BC	DL=3.0psf: h=25ft: C	Cat.										Un.
II; Exp B;	Enclosed; MWFRS (en	velope) exterior zon	e									What CA	Dall
and C-C I	Exterior(2E) zone; canti	ilever left and right									1	alm	170/11
exposed ;	end vertical left and rig	ght exposed;C-C for									51	O illes	Di Alle
members	and forces & MWFRS	for reactions shown;									54		No. 7 -
Lumber D	OL=1.60 plate grip DO	L=1.60										in V	K: =
3) Truss des	signed for wind loads in	the plane of the trus	S										7 I E -
See Stand	fard Industry Gable En	d Details as applicab	,  0							=	- 1	SEA	.L <u>i</u> E
or consult	aualified building desig	aner as per ANSI/TP	11.							=	:	0433	25 : =
4) TCLL: AS	CE 7-16; Pr=20.0 psf (	roof LL: Lum DOL=1	.15							-			TT ( 2 )
Plate DOI	L=1.15); Pg=10.0 psf; F	Pf=7.7 psf (Lum DOL	=							-	-		1. 1. 3
1.15 Plate	e DOL = 1.15); ls=1.0; l	Rough Cat B; Partial	ly								12	S. SNOW	EFR. SI
Exp.; Ce=	1.0; Cs=1.00; Ct=1.10										14	GIN	F.F. Gra
5) Building D	Designer/Project engine	er responsible for									1	TP 10	2'RE.II
veritying I	≺am Load = 5.0 (pst) C	overs rain loading	ont									11110.0	in in the second s
requireme	ents specific to the use	or uns truss compon	ent.									A	1 22 2025
												Apri	1 22,2023



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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	G01E	Monopitch Supported Gable	1	1	Job Reference (optional)	T37063786

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:00 ID:zMkpa4u5nrT3RhODliy6FTzPZ5w-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:91 21-5-8 Plate Offsets (X, Y): [2:0-3-8.Edge], [2:Edge.0-1-8], [19:0-3-11.Edge], [20:Edge.0-1-8], [25:0-1-8.0-1-8]

	Λ, Τ). [2.0	-5-0,∟uge],	[2.Luge,0-1-0], [19.0	J-J-11,L	-ugoj, [zo.cugo	,0-1-0], [23.0-1-0,0-	1 0]							
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL		(psf) 20.0 7.7/10.0 7.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2	018/TPI2014	CSI TC BC WB Matrix-MS	0.67 0.32 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 20	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 207 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N 21-18,22-	o.2 o.2 o.2 o.3 *Excep 17,23-16,2	t* 4-15,26-14,27-13:2x	4 SP	FORCES	(lb) - Maximum Co Tension 1-2=0/19, 2-4=-471 5-6=-415/250, 6-7= 9-10=-345/220, 10 11-12=-298/203, 11 2142 - 251/472	mpressi //283, 4 393/23 -11=-32 2-13=-2	on/Maximum -5=-443/264, 38, 7-9=-369/2 2/212, 75/195, 27(170	28,	4) TC Pla 1.1 Ex 5) Un de	LL: ASC te DOL= 5 Plate [ p.; Ce=1. balanced sign.	E 7-16 1.15); DOL = 0; Cs= I snow	; Pr=20.0 psf (rc Pg=10.0 psf; Pf: 1.15); Is=1.0; Rc 1.00; Ct=1.10 loads have bee	of LL: Lum DOL=1.15 =7.7 psf (Lum DOL = bugh Cat B; Partially n considered for this
SLIDER BRACING TOP CHORD BOT CHORD WEBS	No.2 Left 2x4 S Structural 6-0-0 oc p Rigid ceili bracing. 1 Row at	SP No.3 2 I wood shea ourlins, exa ing directly midpt	2-4-10 athing directly applie cept end verticals. applied or 10-0-0 oc 19-20, 18-21, 17-22, 16-23	d or	BOT CHORD	15-16=-204/170, 1 15-16=-204/170, 1 17-18=-149/161, 1 19-20=-77/97 2-35=-136/171, 34 33-34=-133/169, 3 31-32=-133/169, 2 27-28=-133/169, 2	-35=-13 -35=-13 2-33=-1 0-31=-1 8-29=-1 6-27=-1	2//179, 81/164, 1/107, 33/169, 33/169, 33/169, 33/169, 33/169,		<ul> <li>Ioa</li> <li>ov</li> <li>7) Bu</li> <li>ve</li> <li>rec</li> <li>8) All</li> <li>9) Ga</li> <li>10) Ga</li> </ul>	d of 12.0 erhangs i ilding De ilfying Ra juiremen plates ar ble requi ble studs	ipsf or non-co signer/ in Loa ts spec res col s space	1.00 times flat r ncurrent with otl /Project enginee d = 5.0 (psf) cov cific to the use o (  ) MT20 unless ntinuous bottom ed at 1-4-0 oc.	oof load of 7.7 psf on her live loads. r responsible for rers rain loading i this truss component. s otherwise indicated. chord bearing.
REACTIONS	(size) Max Horiz Max Uplift Max Grav	2=21-5-8, 22=21-5-8 29=21-5-8 32=21-5-8 35=21-5-8 35=21-5-8 2=316 (LC 23=-38 (L 23=-38 (L 26=-29 (L 30=-29 (L 34=-35 (L 24=29 (L 24=29 (L 23=99 (L 21=109 (L 23=99 (L 23=99 (L 23=99 (L 33=100 (L 35=124 (L	16-23 20=21-5-8, 21=21-5 8, 23=21-5-8, 24=21-5 8, 27=21-5-8, 28=21-5 8, 30=21-5-8, 31=21-5 9, 33=21-5-8, 34=21-3 12), 20=-65 (LC 15), C 16), 22=-32 (LC 15), C 16), 22=-32 (LC 16), C 16), 27=-29 (LC 16), C 16), 32=-27 (LC 16), C 16), 35=-35 (LC 16), 3=-29 (LC 16), 35=-35 (LC 16), 3=-29 (LC 16), 35=-35 (LC 16), C 31), 20=58 (LC 12), C 31), 20=58 (LC 12), C 31), 22=100 (LC 2), 2 (LC 2), 32=98 (LC 2), C 2), 34=99 (LC 2), C 2), 34=94 (LC 2), C 2), 34=94 (LC 2), C 2), 54=94 (LC 2), C	-8, 5-8, 5-8, 5-8, 5-8, 3), 5), 5), 5), 5), 5), 5), 5), 5), 5), 5	WEBS NOTES 1) Unbalanced this design. 2) Wind: ASC Vasd=91m II; Exp B; E and C-C C to 21-3-12 vertical left forces & M DOL=1.60 3) Truss desig only. For s see Standa or consult of	24-26=-133/169, 2 24-26=-133/169, 2 22-23=-133/169, 2 20-21=-133/169, 2 20-21=-133/169, 2 20-21=-133/169, 2 20-21=-133/169, 2 20-21=-133/169, 2 16-23=-72/42, 12, 1 16-23=-72/42, 12-2 10-30=-72/42, 9-31 6-33=-72/42, 9-31 6-32 6-32 7-32 7-32 7-32 7-32 7-32 7-32 7-32 7	2-241 1-22=-7 24=-72/4 28=-72/4 28=-72/4 2-77/51, e been h (3-sec CDL=3, envelope 2-10, E and righ >-C for r shown; h the pl d (norm nd Deta signer a:	33/169, 33/169, 4/60, 11, 14-26=-72/ 11, 11-29=-72/ 2, 7-32=-72/42 4-35=-86/47 considered for considered for co	42, 42, , cat. e e 1-0 nd ss , ile, 11.	10) Th chi 12) * T on 3-(-	bit studies for the studies his truss the bottc 66-00 tall ord and a	as bee and nor has be m cho by 2-0 iny oth	on designed for a noconcurrent with een designed for a noconcurrent with een designed for out all areas w 0-00 wide will fit er members.	a 10.0 psf bottom any other live loads. a live load of 20.0psf here a rectangle between the bottom

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

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	G01E	Monopitch Supported Gable	1	1	Job Reference (optional)	137063786

- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 2, 65 lb uplift at joint 20, 58 lb uplift at joint 21, 32 lb uplift at joint 22, 38 lb uplift at joint 23, 27 lb uplift at joint 24, 29 lb uplift at joint 26, 29 lb uplift at joint 27, 28 lb uplift at joint 28, 29 lb uplift at joint 29, 29 lb uplift at joint 30, 29 lb uplift at joint 31, 29 lb uplift at joint 32, 27 lb uplift at joint 33, 35 lb uplift at joint 34 and 35 lb uplift at joint 35.
- 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: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:00
 Page: 2

 ID:zMkpa4u5nrT3RhODliy6FTzPZ5w-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f
 Page: 2

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



Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	G02	Monopitch	5	1	Job Reference (optional)	Т37063787

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:00 ID:dU2eocfcyCP7UNiKxRaullzPZ4x-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





	7-3-0	14-2-8	21-5-8	_
Scale = 1:89.4	7-3-0	6-11-8	7-3-0	7
ate Offsets (X_Y): [2:0-4-1 0-0-1]				

Scale = 1:89.4				7-3-0		0-11-0		7-3-0						
Plate Offsets	(X, Y): [2:0-4-1,0-0-1]													
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MS	0.70 0.67 0.62	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.12 -0.20 0.03	(loc) 8-10 8-10 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 130 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep Left 2x4 SP No.3 1 Structural wood she 4-11-0 oc purlins, e Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 8 Max Horiz 2=326 (LC Max Uplift 2=-126 (L Max Grav 2=896 (LC (lb) - Maximum Com Tension 1-2=0/22, 2-4=-1295	t* 4-11:2x4 SP No.3 1-6-0 athing directly applie xcept end verticals. applied or 9-3-13 oc 7-8, 6-8 3= Mechanical C 15) C 16), 8=-194 (LC 1) C 3), 8=892 (LC 30) apression/Maximum 5/216, 4-6=-810/180,	3) 4) ed or 5) ; 6) 7) 6) 8) 9)	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 Des verifying Raii requirements This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Refer to girdd	7-16; $Pr=20.0$ .15); $Pg=10.0$ OL = 1.15); $Is=b; Cs=1.00; Ct=snow loads hais been designpof or 1.00 timeon-concurrentigner/Project ein Load = 5.0 (fis specific to theis been designad nonconcurrenthas been designin chord in all aby 2-00-00 widdby other member(s) for truss t$	p psf (roof LL psf; Pf=7.7 1.0; Rough 1.10; Rough 1.10 ve been cor ed for greate es flat roof le with other lin ingineer resp ssf) covers r e use of this ed for a 10.0 ent with any ined for a liv reas where e will fit betw ers, with BC o truss conr	: Lum DOL= bsf (Lum DO Cat B; Partia sidered for t er of min roo ad of 7.7 ps re loads. bonsible for ain loading truss compo o psf bottom other live loa e load of 20. a rectangle recen the bott DL = 10.0ps	1.15 L = ally f live f on nent. ads. Opsf f.						
BOT CHORD	6-7=-188/135, 7-8=- 2-11=-439/1121, 10- 8-10=-235/640	157/113 -11=-379/1121,	10	) Provide mecl bearing plate 8 and 126 lb	hanical connect capable of with uplift at joint 2	ction (by oth thstanding 1	ers) of truss 94 lb uplift a	to t joint				mmm	1117	
NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=911 II; Exp B; and C-C I to 21-3-1: vertical le forces & I DOL=1.60	6-8=-877/232 eed roof live loads have in. CE 7-16; Vult=115mph mph; TCDL=4.2psf; BC Enclosed; MWFRS (er Exterior(2E) -0-11-0 to : 2 zone; cantilever left a ift and right exposed;C- WWFRS for reactions s 0 plate grip DOL=1.60	been considered for (3-second gust) DL=3.0psf; h=25ft; C ivelope) exterior zon 2-1-0, Interior (1) 2-1 nd right exposed ; er C for members and hown; Lumber	Cat. e I-O nd	And CASE(S)	Residential Co nd referenced : Standard	ode sections standard AN	R502.11.1 a	and			ALL AND ALL AN	SEA 0433	L 25 EERCATI	ANNOUTH DEL

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)



O'P 111111111 April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	G03	Monopitch	4	1	Job Reference (optional)	Т37063788

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:01 ID:qmQCftRqKMwGdzRa2pjMllzPZ2e-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



	7-2-8	14-1-8	21-4-0	
Scale = 1:89.2	7-2-8	6-11-0	7-2-8	
Plate Offsets (X, Y): [2:0-4-1 0-0-1]				

	(/(, 1): [2:0 1 1,0 0 1]													
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 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	0.69 0.66 0.61	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.19 0.03	(loc) 8-10 8-10 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 129 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=911 II; Exp B; and C-C I to 21-2-4 vertical le forces & I DOL=1.6(	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep Left 2x4 SP No.3 - * Structural wood she 4-11-5 oc purlins, e Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 8 Max Horiz 2=324 (LC Max Uplift 2=-125 (L Max Grav 2=891 (LC (lb) - Maximum Com Tension 1-2=0/22, 2-4=-1286 6-7=-187/135, 7-8=- 2-11=-437/1114, 10- 8-10=-235/636 4-11=0/266, 4-10=-5 6-8=-872/231 ed roof live loads have n. CE 7-16; Vult=115mph mph; TCDL=4.2psf; BC Enclosed; MWFRS (er Exterior(2E) -0-11-0 to zone; cantilever left an ft and right exposed;C- /WFRS for reactions s 0 plate grip DOL=1.60	t* 4-11:2x4 SP No.3 1-6-0 athing directly applie xcept end verticals. applied or 9-3-15 oc 7-8, 6-8 3= Mechanical 2.15) C 16), 8=-193 (LC 10 C 3), 8=887 (LC 30) pression/Maximum 5/215, 4-6=-805/180, 157/112 -11=-378/1114, 552/172, 6-10=-51/59 been considered for (3-second gust) DL=3.0psf; h=25ft; C twelope) exterior zonu- 2-1-0, Interior (1) 2-1 d right exposed ; end C for members and hown; Lumber	3) d or 5) 6) 7) 6) 8) 9) 10 11, 11 LC sat. e -0 i	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 on the bottor 3-06-00 tall b chord and ar Refer to gird Provide mec bearing plate 8 and 125 lb ) This truss is International R802.10.2 ar	7-16; Pr=20.0 ps .15); Pg=10.0 psf OL = 1.15); Is=1.0 ; Cs=1.00; Ct=1.1 snow loads have I as been designed f psf or 1.00 times f on-concurrent with igner/Project engin n Load = 5.0 (psf) s specific to the us is been designed f ad nonconcurrent has been designed n chord in all area by 2-00-00 wide with y other members, er(s) for truss to tr hanical connection e capable of withst uplift at joint 2. designed in accor Residential Code nd referenced star Standard	f (roof LL ; Pf=7.7 ; Rough 0 been cor for great lat roof k nother lin heer res covers r e of this for a 10.0 with any 1 for a liv s where all for a liv s where s where and for a s to the the s where and the the s where the the the s where and the the s where the the the s where the the s where the the the the s where the the the s where the the the the s where the the the the the the the the the s where the the the the the the the the the th	:: Lum DOL= psf (Lum DO Cat B; Partia nsidered for t er of min rool bad of 7.7 ps ve loads. ponsible for ain loading truss compo 0 psf bottom other live loa e load of 20.1 a rectangle veen the bott DL = 10.0ps nections. ers) of truss i 93 lb uplift al ith the 2018 s R502.11.1 a ISI/TPI 1.	1.15 L = Illy his f on nent. ds. Opsf om f. t joint			Print	SEA 0433	25 EFE CALL	

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818 Soundside Road Edenton, NC 27932

O'F (IIIIIII) April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	J1	Jack-Open	7	1	Job Reference (optional)	T37063789

4-0-0 4-0-0

4-0-0

3x6 ≠

3

P

-0-11-0

0-11-0

10 <sup>2</sup>

3x6 II

1

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

2-9-7

0-8-4

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:01 ID:mwgO50?nmVXa3W2EYpAfmXzPUaa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4-0-0 12 6 Г 11 2-8-4 5

Scale = 1:28.6

Plate Offsets (X, Y): [2:0-3-4.0-0-5]

	,,													
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MP	0.19 0.15 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.01 -0.02 0.01	(loc) 5-8 5-8 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 17 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD SUIDER BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Wind: ASK Vasd=91n II; Exp B; and C-C E to 3-11-4 ; vertical lei to	2x4 SP No.2 2x4 SP No.2 Left 2x4 SP No.3 1 Structural wood she 4-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 4 Mechanic Max Horiz 2=68 (LC Max Uplift 2=-25 (LC (LC 16) Max Grav 2=201 (LC (LC 7) (lb) - Maximum Com Tension 1-2=0/22, 2-4=-128/ 2-5=-131/76 CE 7-16; Vult=115mph nph; TCDL=4.2psf; BC Enclosed; MWFRS (er Exterior(2E) -0-11-0 to zone; cantilever left an t and right exposed;C- WWFRS for reactions s 0 plate grip DOL=1.60 CE 7-16; Pr=20.0 psf ( =-1.15); Pg=10.0 psf; F DOL = 1.10; ct=1.10 ed snow loads have be	1-6-0 athing directly applie applied or 10-0-0 or 4= Mechanical, 5= al 16) 2 16), 4=-45 (LC 16), 2 2), 4=91 (LC 2), 5= pression/Maximum 33 (3-second gust) DL=3.0psf; h=25f; 0 velope) exterior zor 2-1-0, Interior (1) 2- d right exposed ; en C for members and hown; Lumber roof LL: Lum DOL=1 2f=7.7 psf (Lum DOL=1 2f=7.7 psf (Lum DOL=1 2f=7.7 psf (Lum DOL=1 2f=7.7 psf (Lum DOL=1) Rough Cat B; Partial	4) 5) ed or 6) c 7) , 5=-2 9) =69 10 LC Cat. he 1-0 d 1.15 = Ily his	This truss ha load of 12.0 overhangs n Building Des verifying Rai requirement: This truss ha chord live loa * This truss loand live loa * This truss loand live loa 03-06-00 tall l chord and an Refer to gird Provide mec bearing platt 4, 25 lb uplif 1) This truss is International R802.10.2 a DAD CASE(S)	is been designed psf or 1.00 times on-concurrent witi igner/Project eng n Load = 5.0 (psf s specific to the u is been designed ad nonconcurrent has been designed n chord in all are- py 2-00-00 wide v y other members er(s) for truss to hanical connectic e capable of withs at joint 2 and 2 I designed in acco Residential Code nd referenced sta Standard	I for greate flat roof lc th other liv jineer resp () covers ra- se of this I for a 10.0 to with any ed for a liv- as where will fit betw s. truss com- on (by othe- standing 4 b uplift at redance will e sections andard AN	er of min roof aad of 7.7 ps (e loads. consible for ain loading truss compo () psf bottom other live load e load of 20.1 a rectangle veen the bott nections. ers) of truss () 5 lb uplift at () joint 5. th the 2018 R502.11.1 a (SI/TPI 1.	f live f on nent. ads. 0psf oom to joint and			and the second s	SEA 0433	ROLL 25 REGATION	

This J. U. W. J. O'F

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April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	J1H	Half Hip	1	1	Job Reference (optional)	T37063790

Run: 8.83 E Feb 1 2025 Print: 8.830 E Feb 1 2025 MiTek Industries, Inc. Tue Apr 22 14:58:12

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



1-11-5

Page: 1

Scale = 1:27.7

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

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.09	DEFL Vert(LL)	in -0.01	(loc) 6-9	l/defl >999	L/d 240	PLATES MT20	<b>GRIP</b> 244/190	
Snow (Pf/Pg)	12.7/10.0	Lumber DOL	1.15 VEC	BC	0.11	Vert(CT)	-0.01	6-9	>999	180			
	7.0	Rep Stress Incr		14 Notrix I	0.02	HOIZ(CT)	0.00	2	n/a	n/a			
BCDL	10.0	Code		14 Maurix-r							Weight: 21 lb	FT = 20%	
LUMBER TOP CHORD SOT CHORD WEBS SLIDER BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.2 Structural wood she 4-0-0 oc purlins, ex 2-0-0 oc purlins: 4- Rigid ceiling directly	1-6-0 eathing directly applie cept end verticals, ar 5.	3) TCLL Plate 1.15 Exp.; roofs expor d or accor ad 4) Unba desig 5) This t	ASCE 7-16; Pr DOL=1.15); Pg= DOL=1.15 Ce=1.0; Cs=1.0; now load govern ed surfaces with dance with IBC - anced snow load n. russ has been d	=20.0 psf (roof Ll 10.0 psf; Pf=12. ); Is=1.0; Rough 0; Ct=1.10, Lu=5 s. Rain surchars slopes less than 608.3.4. Is have been co ssigned for great	L: Lum DOL= 7 psf (Lum D Cat B; Partii 0-0-0; Min. fl ge applied to 0.500/12 in nsidered for	=1.15 OL = ally at all this						
REACTIONS	2-0-0 cc purlins: 4-5. CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. <b>TIONS</b> (lb/size) 2=128/0-5-8, 5=26/ Mechanical, 6=77/ Mechanical Max Horiz 2=51 (LC 15) Max Uplift 2=-36 (LC 16), 5=-14 (LC 12), 6=15 (LC 13) Max Grav 2=200 (LC 38), 5=39 (LC 37), 6=101 (LC 2) <b>Horstruss has been designed for greater of min roof live</b> load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads. <b>Building Designer/Project engineer responsible for</b> verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. <b>Provide adequate drainage to prevent water ponding.</b> <b>This truss has been designed for a 10.0 psf bottom</b> chord live load on nonconcurrent with any other live loads.												
FORCES TOP CHORD BOT CHORD	(lb) - Maximum Con Tension 1-2=0/24, 2-3=-169, 4-11=-45/45, 5-6=0, 2-6=-90/68 4-6=-88/83	npression/Maximum /30, 3-11=-62/42, /0, 4-5=-22/24	9) This on the 3-06- choro 10) All be capa	<ul> <li>9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.</li> <li>10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.</li> </ul>									
VCES NOTES 1) Unbalance this design 2) Wind: AS( Vasd=91n II; Exp B; and C-C E to 2-63, E and right c C for men shown; Lu	4-0=-80/83 ed roof live loads have n. CE 7-16; Vult=115mph nph; TCDL=4.2psf; BC Enclosed; MWFRS (e Exterior(2E) 2-6-3 to 3 exposed ; end vertical obers and forces & MV imber DOL=1.60 plate	been considered for (3-second gust) CDL=3.0psf; h=25ft; C tivelope) exterior zon 2-1-0, Interior (1) 2-1 10-4 zone; cantilever left and right exposed VFRS for reactions grip DOL=1.60	11) Refer 12) Refer 13) Provi beari 6, 36 tat. 14) This t e Interr -0 R802 left 15) Grapi d;C- or the bottor	<ul> <li>11) Refer to girder(s) for truss to truss connections.</li> <li>12) Refer to girder(s) for truss to truss connections.</li> <li>13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 6, 36 lb uplift at joint 5.</li> <li>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.</li> <li>15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.</li> </ul>							and		
			LOAD CA	SE(S) Standa	d						in the second se	un.	



April 22,2025

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	J2	Half Hip Girder	1	1	Job Reference (optional)	T37063791

2-3-8

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:01 ID:jIn8Wi02I6oIIpCcgEC7ryzPUaY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



4-0-0

Scale 1.20 /

Scale = 1.30.4	•											-	
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 12.7/10.0 7.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC2018	/TPI2014	CSI TC BC WB Matrix-MP	0.11 0.08 0.02	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.01 0.00	(loc) 5-8 5-8 2	l/defl >999 >999 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 2x6 SP No.2 2x4 SP No.3 Structural wood she 4-0-0 oc purlins, ex 2-0-0 oc purlins: 3-4 Rigid ceiling directly bracing. (size) 2=0-5-8, 5 Max Horiz 2=57 (LC	athing directly applie cept end verticals, a applied or 10-0-0 or 5= Mechanical 11)	6) 7) 8) ed or 9) c 10) 11)	Building Des verifying Rai requirements Provide adee This truss ha chord live lo: * This truss I on the botton 3-06-00 tall I chord and an Refer to gird Provide mee	igner/Project engin n Load = 5.0 (psf) s specific to the us quate drainage to p as been designed f ad nonconcurrent v has been designed m chord in all area: by 2-00-00 wide wi ny other members. for truss to tru- hanical connection	neer res covers r e of this or event for a 10. with any l for a liv s where ll fit betw uss conr n (by oth	ponsible for ain loading truss compor- water ponding 0 psf bottom other live loa e load of 20.0 a rectangle ween the botto nections. ers) of truss t	nent. g. ds. )psf om					
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=91r II; Exp B; cantilever right expo	Max Uplift 2=-47 (LC Max Grav 2=209 (LC (Ib) - Maximum Com Tension 1-2=0/24, 2-3=-85/5 2-5=-54/40 3-5=-84/48 red roof live loads have n. CE 7-16; Vult=115mph mph; TCDL=4.2psf; BC Enclosed; MWFRS (er r left and right exposed sed: Lumber DOL=1.6	<ul> <li>12), 5=-66 (LC 9)</li> <li>34), 5=-149 (LC 2)</li> <li>ppression/Maximum</li> <li>4, 3-4=-18/14, 4-5=-</li> <li>been considered for</li> <li>(3-second gust)</li> <li>DL=3.0psf; h=25ft; 0</li> <li>velope) exterior zor</li> <li>; end vertical left an</li> <li>0 plate grip DQL=1</li> </ul>	12) 24/9 13) 14) Cat. e; d 15) 50	2 and 66 lb u This truss is International R802.10.2 a Graphical pu or the orients bottom chore Hanger(s) on provided suf down and 42 down and 28 design/selec responsibility In the LOAD of the truss a	y upfift at joint 5. designed in accord Residential Code nd referenced star irlin representation ation of the purlin a d. other connection ficient to support c 3 lb up at 3-0-3 on tion of such conner y of others. CASE(S) section, are noted as front (	dance w sections ndard AN does nd along the device(s oncentra top cho bottom wction de loads a (F) or ba	ith the 2018 is R502.11.1 a ISI/TPI 1. ot depict the sist top and/or is) shall be ated load(s) 6 rd, and 44 lb chord. The vice(s) is the pplied to the f ck (B).	ind size 2 lb face			A. C.	NINTH CA	SOLINA III

- right exposed; Lumber DOL=1.60 plate grip DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum DOL = 3) 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
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- LOAD CASE(S) Standard Dead + Snow (balanced): Lumber Increase=1.15, Plate 1) Increase=1.15
  - Uniform Loads (lb/ft)
  - Vert: 1-3=-29, 3-4=-39, 5-6=-20
  - Concentrated Loads (lb)
  - Vert: 3=-18 (F), 10=-13 (F)



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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	J3	Jack-Open	1	1	Job Reference (optional)	T37063792

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:02 ID:F6EmJM?QXogRgfdQ6WhuJIzPUaZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







1-9-11

Scale = 1:28.1

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL	(psf) 20.0 7.7/10.0 7.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/T	FPI2014	CSI TC BC WB Matrix-MP	0.05 0.02 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 8 5-8 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	<b>GRIP</b> 244/190	
BCDL	10.0			-								Weight: 10 lb	FT = 20%	
LUMBER TOP CHORD 3OT CHORD SLIDER BRACING TOP CHORD 3OT CHORD 3OT CHORD CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Wind: AS(C Vasd=91m II; Exp B; I and C-C E exposed ; members a: Lumber DU 2) TCLL: AS( Plate DOL 1.15 Plate Exp.; Ce= 3) Unbalance design. 4) This truss	2x4 SP No.2 2x4 SP No.2 Left 2x4 SP No.3 1 Structural wood shea 1-9-11 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 4 Mechanic: Max Horiz 2=37 (LC Max Uplift 2=-19 (LC (LC 16) Max Grav 2=128 (LC (LC 7) (lb) - Maximum Com Tension 1-2=0/22, 2-4=-39/15 2-5=-28/22 CE 7-16; Vult=115mph nph; TCDL=4.2psf; BCI Enclosed; MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti end vertical left and rig and forces & MWFRS (en Exterior (2E) zone; canti	L-6-0 athing directly applied applied or 10-0-0 oc l= Mechanical, 5= al 16) 16), 4=-20 (LC 16), C 2), 4=36 (LC 2), 5= pression/Maximum 5 (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zone lever left and right yht exposed;C-C for for reactions shown; L=1.60 roof LL: Lum DOL=1. Y=7.7 psf (Lum DOL=1. Y=7.7 psf (Lum DOL=1. Y=7.7 psf (Lum DOL=1. Y=7.7 psf (Lum DOL=1. Sough Cat B; Partially en considered for thi	5) E v 6) T c 8) F 9) F 2 5=-1 10) T 28 F LOA at. 3 4 5 5 5 5 5 5 -1 10) T 28 F LOA	Building Desi verifying Rain requirements This truss ha chord live loa This truss the both the bottom 3-06-00 tall b chord and an Refer to girde Provide mect 2, 1 lb uplift a This truss is of international R802.10.2 ar D CASE(S)	gner/Project engine l Load = 5.0 (psf) c specific to the use s been designed fo d nonconcurrent w as been designed in chord in all areas y 2-00-00 wide will y other members. er(s) for truss to tru- nanical connection capable of withsta t joint 5 and 20 lb u designed in accord: Residential Code s and referenced stance Standard	eer respovers r. of this or a 10.0 ith any for a liv where fit betw uss conn (by oth anding 1 uplift at ance wi ections dard AN	consible for ain loading truss compor ) psf bottom other live load e load of 20.0 a rectangle veen the botto nections. ers) of truss tr joint 4. th the 2018 R502.11.1 a ISI/TPI 1.	nent. ds. lpsf om oint nd			Print Print	SEA 0433	L 25 EER.GA	
load of 12. overhangs	.0 psf or 1.00 times flat s non-concurrent with o	roof load of 7.7 psf o other live loads.	n									Thum J. C	in in it.	

April 22,2025

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	J4	Jack-Open	1	1	Job Reference (optional)	T37063793

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:02 ID:F6EmJM?QXogRgfdQ6WhuJlzPUaZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





0-3-12

Scale = 1:33.7

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 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 0.04 0.03	<b>DEFL</b> Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 4-5 4-5 3	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 WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she: 2-0-0 oc purlins, exi Rigid ceiling directly bracing. (size) $3=$ Mecha 5=0-5-8 Max Horiz $5=46$ (LC Max Uplift $3=-22$ (LC 5=-10 (LC Max Grav $3=35$ (LC (LC 2) (lb) - Maximum Com Tension	athing directly applied cept end verticals. applied or 10-0-0 oc nical, 4= Mechanical. 14) : 14), 4=-11 (LC 14), : 14) 26), 4=37 (LC 5), 5=' pression/Maximum	5) 6) 1 or 7) 8) 9) 10] 142 LO	Building Desi verifying Rair requirements This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Refer to girdœ Provide mecl bearing plate 5, 11 lb uplift This truss is a International R802.10.2 ar <b>AD CASE(S)</b>	gmer/Project engin a Load = 5.0 (psf) specific to the us s been designed f a been designed a chord in all area y 2-00-00 wide wi y other members. er(s) for truss to ti nanical connection capable of withst at joint 4 and 22 1 designed in accor Residential Code dr referenced star Standard	neer resp covers r ee of this for a 10.0 with any d for a liv s where ill fit betv russ con n (by oth anding 1 b uplift a dance w sections ndard AN	oonsible for ain loading truss compor 0 psf bottom other live loa e load of 20.0 nections. ers) of truss t 0 lb uplift at jr t joint 3. ith the 2018 i R502.11.1 a ISI/TPI 1.	nent. ds. )psf om oint nd					
TOP CHORD BOT CHORD WEBS	2-5=-124/64, 1-2=0/3 4-5=-94/34 2-4=-36/99	32, 2-3=-37/24											
NOTES 1) Unbalance this design 2) Wind: ASG Vasd=91n II; Exp B; and C-C E exposed ; members Lumber D 3) TCLL: AS Plate DOL 1.15 Plate Exp.; Ce= 4) This truss load of 12 overhangs	ed roof live loads have n. CE 7-16; Vult=115mph mph; TCDL=4.2psf; 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 ( =1.15); Pg=10.0 psf; F e DOL = 1.15); Is=1.0; F 1.0; Cs=1.00; Ct=1.10 has been designed for .0 psf or 1.00 times flat s non-concurrent with c	been considered for (3-second gust) DL=3.0psf; h=25ft; C: velope) exterior zone lever left and right ght exposed;C-C for for reactions shown; L=1.60 roof LL: Lum DOL=1. %T=7.7 psf (Lum DOL Rough Cat B; Partially greater of min roof lit toof load of 7.7 psf of ther live loads.	at. 15 = / ve on								And	SEA 0433	L 25 PREGATION

April 22,2025

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	J5	JACK	1	1	Job Reference (optional)	T37063794

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:02 ID:OKbxWO2J2wpGdlFj277OhzzPS8H-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

1-1-9



1-8-9

Scale = 1:33.4

												i	
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.11	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15		BC	0.03	Vert(CT)	0.00	4-5	>999	180		
TCDL	7.0	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC201	8/TPI2014	Matrix-MR								
BCDL	10.0											Weight: 6 lb	FT = 20%
			5)	Building Desi	gner/Project engine	eer res	oonsible for						
BOT CHORD	2x4 SP N0.2 2x4 SP No.2			requirements	specific to the use	of this	truss compon	ent					
WERS	2x4 SP No.2		6)	This truss ha	s been designed fo	ra 10.0	) psf bottom	ioni.					
REACING			-,	chord live loa	d nonconcurrent w	ith any	other live load	ds.					
TOP CHORD Structural wood sheathing directly applied or 7) * This truss has been designed for a live load of 20.0psf													
	1-1-9 oc purlins. exc	cept end verticals.		on the botton	n chord in all areas	where	a rectangle						
BOT CHORD	Rigid ceiling directly bracing.	iy applied or 10-0-0 oc 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.											
REACTIONS	(size) 3= Mecha 5=0-3-8	nical, 4= Mechanical	l, 8) 9)	Provide mecl	er(s) for truss to tru nanical connection	iss con (by oth	nections. ers) of truss to	D					
	Max Horiz 5=29 (LC	14)		5 5 lb uplift a	capable of withstal	naing i Inlift at	2 ID UPIIIT AL JC	JIN					
	Max Uplift 3=-13 (LC	14), 4=-5 (LC 14), 5	i=-12 <sub>10</sub>	) This truss is	designed in accorda	ance w	ith the 2018						
	(LC 14) International Residential Code sections R502.11.1 and												
	Max Grav 3=9 (LC 1	2), 4=16 (LC 5), 5=1	25	R802.10.2 ar	nd referenced stand	ard AN	ISI/TPI 1.						
	(LC 2)		LC	DAD CASE(S)	Standard								
FORCES	(ID) - Maximum Com	pression/iviaximum											
TOP CHORD	1-2=0/32 2-3=-28/17	7 2-5=-107/84											
BOT CHORD	4-5=0/0	, 2 0= 101/01											
NOTES													
1) Unbalance	ed roof live loads have	been considered for											
this design	n.												in the second se
2) Wind: ASC	CE 7-16; Vult=115mph	(3-second gust)									2	THUA	ROUL
Vasd=91n	nph; TCDL=4.2psf; BC	DL=3.0psf; h=25ft; C	at.								N	A sites	V. SIN'I
II; Exp B;	Enclosed; MWFRS (en	velope) exterior zone	e								22		DAinty -
and C-C E	end vortical loft and ric	lever left and right										R	1. 2
members	and forces & MWFRS	for reactions shown.								-			
Lumber D	OL=1.60 plate grip DO	L=1.60								=	:	SEA	L : =
3) TCLL: AS	CE 7-16; Pr=20.0 psf (I	roof LL: Lum DOL=1.	.15							=		0/33	25 =
Plate DOL	_=1.15); Pg=10.0 psf; P	f=7.7 psf (Lum DOL	=									0455	23 : E
1.15 Plate	DOL = 1.15); Is=1.0; F	Rough Cat B; Partiall	у							-		<b>1</b>	1. 2
Exp.; Ce=	1.0; Cs=1.00; Ct=1.10	and the stands of the									10	· ENIO	CR. SS
<li>4) This truss load of 12</li>	nas been designed for	greater of min roof I	ive								11	Y, GIN	E.F. GR.S
overhance	s non-concurrent with o	ther live loads									1	SIP , a	VREUN
overnange												11. J. C	





April 22,2025

J. O'F J. U.

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	J6	Diagonal Hip Girder	1	1	Job Reference (optional)	T37063795

-1-6-5

3-3-0

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

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:02 ID:F6EmJM?QXogRgfdQ6WhuJIzPUaZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





0-0-8

Scale = 1:28.6

		ge,0 0 10]	, [2.0 1 10,0 7 1]												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	7.	(psf) 20.0 .7/10.0 7.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC2018	Building Des	CSI TC BC WB Matrix-MP	0.07 0.04 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 21 lb	<b>GRIP</b> 244/190 FT = 20%	
JUMBER TOP CHORD 30T CHORD WEDGE <b>3RACING</b> TOP CHORD 30T CHORD 30T CHORD <b>30T CHORD</b> <b>30T CHORD</b> <b>3</b>	2x6 SP No 2x6 SP No Left: 2x4 S Structural V Rigid ceilin bracing. (size) 2 Max Uplift 2 Max Uplift 2 Max Grav 2 (lb) - Maxim Tension 1-2=031, 2 2-4=-21/11 CE 7-16; Vult mph; TCDL=4 Enclosed; MV left and right sed; Lumber CE 7-16; Pr=1 = DDL = 1.15) -1.0; Cs=1.00 ed snow load	.2 .2 P No.3 wood shea urlins. ng directly 2=0-8-3, 3 Mechanics 2=52 (LC 2=-53 (LC (LC 12) 2=222 (LC (LC 7) mum Comp 2=252 (LC (LC 7) mum Comp 2=3=-25/23 ==115mph %FRS (en ; DOL=1.6( 2:0.0 psf (r 10.0 psf; P ; Ct=1.10 s have be signed for t times flat rent with o	athing directly applie applied or 10-0-0 oc = Mechanical, 4= al 12) 8), 3=-39 (LC 12), 4 2), 3=66 (LC 2), 4= pression/Maximum 3 (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zon end vertical left and 0 plate grip DOL=1.6 oof LL: Lum DOL= f=7.7 psf (Lum DOL= Rough Cat B; Partiall en considered for thi greater of min roof 1 roof load of 7.7 psf ther live loads.	5) 6) d or 7) 53 10) 53 11) 53 11) 53 11) 53 11) 53 11) 53 11) 53 11) 53 11) 53 53 11) 53 53 11) 53 53 53 53 53 53 53 53 53 53	building Des verifying Rai requirements This truss ha chord live loc * This truss ha chord live loc * This truss ha chord and ar Refer to gird Provide mec bearing plate 3, 53 lb upliff ) This truss is International R802.10.2 ai R802.10.2 ai (Alager(s) or provided suff down and 27 up at 3-2-4 of 1-10-11 on b connection do in the LOAD Dead + Snc Increase=1 Uniform Lo: Vert: 1-3 Concentratt Vert: 3=-	Igner/Poject eng Igner/Poject eng is specific to the us is specific to the us is been designed ad nonconcurrent has been designed in chord in all area by 2-00-00 wide w hy other members er(s) for truss to hanical connection capable of withs at joint 2 and 3 ll designed in acco Residential Code Residential Code other connection ficient to support 1 lb up at 1-10-11 lb up at 1-10-11 lb up at 1-10-11 lb up at 1-10-13 (b) section are noted as front Standard w (balanced): Lu .15 ads (lb/ft) =-29, 4-5=-20 ed Loads (lb) 1 (F), 10=-3 (B)	(First Parks)	ain loading truss compoi of psf bottom other live loa e load of 20.1 a rectangle veen the botti nections. ers) of truss t 9 lb uplift at j joint 4. th the 2018 r R502.11.1 a (SI/TPI 1. ) shall be ted load(s) 1 lb down and 2 SI/TPI 1. ) shall be ted load(s) 1 lb down and 5 sty of others. oplied to the f ck (B).	nent. dds. Opsf om to joint and 1 lb 23 lb o at uch face Plate			and the second sec	SEA 0433	L 25 FEFREGAT 122,2025	and an

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	JD01	Jack-Open	2	1	Job Reference (optional)	Т37063796

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:02 ID:jrKm57xRRjY2swTQAhJ9jFzPa?y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



0	-7	-0

Scale = 1:30.5

Plate	Offsets	(X,	Y):	[2:0-0-12,0-0-5],	[2:0-0-9,0-8-15]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 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	0.10 0.08 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 4-9 4-9 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 14 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEDGE BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Wind: AS( Vasd=91n II; Exp B; and C-CC to 3-3-8 zi vertical lef forces & N DOL=1.6( 2) TCLL: AS Plate DOL 1.15 Plate Exp.; Ce= 3) Unbalanci design. 4) This truss load of 12 overhangs	2x4 SP No.2 2x4 SP No.2 Left: 2x4 SP No.3 Structural wood shea 3-4-4 oc purlins. Rigid ceiling directly bracing. (size) 2=0-2-2, 3 Mechanic: Max Horiz 2=60 (LC Max Uplift 2=-46 (LC Max Uplift 2=-46 (LC Max Uplift 2=-46 (LC (LC 7) (lb) - Maximum Com Tension 1-2=0/30, 2-3=-238/2 2-4=-194/287 CE 7-16; Vult=115mph mph; TCDL=4.2psf; BCI Enclosed; MWFRS (en Corner (3) -1-3-9 to 2-1 one; cantilever left and ft and right exposed;C-/ MWFRS for reactions sl 0 plate grip DOL=1.60 CE 7-16; Pr=20.0 psf; P = DOL = 1.15); Is=1.0; 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 o	athing directly applie applied or 10-0-0 oc 3= Mechanical, 4= al 16) 2 ), 3=-25 (LC 16) 2 ), 3=46 (LC 23), 4 pression/Maximum 205 (3-second gust) DL=3.0psf; h=25ft; C welope) exterior zonu 1-6, Exterior(2R) 2-1 right exposed ; end C for members and hown; Lumber roof LL: Lum DOL=1 Y=7.7 psf (Lum DOL=1) Y=7.7 psf (Lum DOL	5) 6) 10) =42 11) LO at. 1-6 15 = y s ive pn	Building Des verifying Rain requirements This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and ar Refer to girdd Provide mecl bearing plate 3 and 46 lb u This truss is International R802.10.2 ar <b>AD CASE(S)</b>	igner/Project engin a Load = 5.0 (psf) of specific to the uses s been designed for d nonconcurrent v as been designed in achord in all areas y 2-00-00 wide will y other members. er(s) for truss to tri- nanical connection capable of withsta- plift at joint 2. designed in accord Residential Codes and referenced stan Standard	eer resp covers rait and this or a 10.0 vith any for a liv s where I fit betw uss con (by oth anding 2 lance w sections dard AN	consible for ain loading truss compon ) psf bottom other live load e load of 20.0 nections. ers) of truss to ers) of truss to 5 lb uplift at jo ith the 2018 R502.11.1 at ISI/TPI 1.	nent. ds. )psf om o o o o nt nd			Number of the second se	SEA 0433	L 25 PAREMINING	

April 22,2025



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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	JD02	Jack-Open	3	1	Job Reference (optional)	T37063797

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:02 ID:jrKm57xRRjY2swTQAhJ9jFzPa?y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:30.6

	(, .). [=												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL LUMBER	(psf) 20.0 7.7/10.0 7.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014 Building Des	CSI TC BC WB Matrix-MP	0.06 0.04 0.00 gineer resj	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 4-9 4-9 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 11 lb	<b>GRIP</b> 244/190 FT = 20%
TOP CHORD BOT CHORD WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 Left: 2x4 SP No.3 Structural wood shea 2-5-8 oc purlins. Rigid ceiling directly bracing. (size) 2=0-1-8, 3 Mechanic	athing directly applie applied or 10-0-0 or 8= Mechanical, 4= al	5) ed or 6) c 7) 8)	verifying Rai requirements This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Refer to gird Provide mec	In Load = 5.0 (psf s specific to the u as been designed ad nonconcurrent nas been designed n chord in all are oy 2-00-00 wide v y other member: er(s) for truss to hanical connection	f) covers r ise of this I for a 10.0 t with any ed for a liv as where will fit betw s. truss con on (by oth	ain loading truss compor 0 psf bottom other live loa e load of 20.0 a rectangle ween the botto nections. ers) of truss t	nent. ds. )psf om o					
FORCES TOP CHORD	Max Horiz 2=61 (LC Max Uplift 2=-25 (LC (LC 14) Max Grav 2=183 (LC (LC 5) (lb) - Maximum Com Tension 1-2=0/27, 2-3=-107/ <sup>-1</sup>	14) : 14), 3=-24 (LC 14), 2 2), 3=35 (LC 26), 4 pression/Maximum 109	, 4=-1 <sup>9)</sup> <sup>4=30</sup> 10 Lo	bearing plate Provide mec bearing plate 3, 1 lb uplift )) This truss is International R802.10.2 a DAD CASE(S)	at joint(s) 2. chanical connection capable of withs at joint 4 and 25 I designed in acco Residential Code nd referenced stat Standard	on (by oth standing 2 b uplift at ordance w e sections andard AN	ers) of truss t 4 lb uplift at j joint 2. ith the 2018 i R502.11.1 a ISI/TPI 1.	o oint nd					
<ul> <li>BOT CHORD NOTES</li> <li>1) Wind: AS( Vasd=91n II; Exp B; and C-C E to 2-4-12: vertical lef forces &amp; M DOL=1.6C</li> <li>2) TCLL: AS Plate DOL 1.15 Plate Exp.; Ce=</li> <li>3) This truss load of 12 overhange</li> </ul>	2-4=-100/154 CE 7-16; Vult=115mph mph; TCDL=4.2psf; BC Enclosed; MWFRS (en Exterior(2E) -0-11-0 to 2 zone; cantilever left and ft and right exposed;C- WWFRS for reactions si 0 plate grip DOL=1.60 OCE 7-16; Pr=20.0 psf (F L=1.15); Pg=10.0 psf; F 2 DOL = 1.15); Is=1.0; F 4.0; CS=1.00; Ct=1.10 has been designed for 0.0 psf or 1.00 times flat s non-concurrent with c	(3-second gust) DL=3.0psf; h=25ft; ( ivelope) exterior zon 2-1-0, Interior (1) 2-1 d right exposed ; end C for members and hown; Lumber roof LL: Lum DOL=1 2f=7.7 psf (Lum DOL Rough Cat B; Partial greater of min roof t roof load of 7.7 psf ther live loads.	Cat. ne 1-0 d 1.15 _ = Ily live on								Part Part	SEA 0433	L 25 PREGATION



April 22,2025

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	P01	Half Hip Girder	1	1	Job Reference (optional)	T37063798

#### Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:03 ID:o2fqBRprkCruBlKzAPtROuzPSpB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

6-5-8

2-7-4

Page: 1





0-4-8

Scale = 1:30

Loa	ading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCI	LL (roof)	20.0	Plate Grip DOL	1.15		TC	0.10	Vert(LL)	0.00	6-10	>999	240	MT20	244/190
Sno	ow (Pf/Pg)	12.7/10.0	Lumber DOL	1.15		BC	0.10	Vert(CT)	-0.01	6-10	>999	180		
TCI	DL	7.0	Rep Stress Incr	NO		WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BC	LL	0.0*	Code	IRC20	8/TPI2014	Matrix-MP								
BC	DL	10.0		-			-						Weight: 33 lb	FT = 20%
LUI TOI BO	MBER P CHORD T CHORD BS	2x4 SP No.2 2x6 SP No.2 2x4 SP No.3		6	<ul> <li>Building Des verifying Ra requirement</li> <li>Provide ade</li> </ul>	signer/Project eng in Load = 5.0 (psf s specific to the u quate drainage to	gineer res f) covers r use of this o prevent	consible for ain loading truss compo vater pondin	nent. g.					
BR.	ACING			8	) This truss ha	as been designed	for a 10.0	) psf bottom						
TO	P CHORD	Structural wood shea 6-0-0 oc purlins, exc	athing directly applic cept end verticals, a	ed or and 9	chord live lo * This truss on the botto	ad nonconcurrent has been designe m chord in all are	t with any ed for a liv as where	other live loa e load of 20. a rectangle	ads. Opsf					
BO	T CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 o	IC .	3-06-00 tall chord and a	by 2-00-00 wide v ny other members	will fit betv s.	veen the bott	om					
RE	ACTIONS	(size) 2=0-4-0, 5 Max Horiz 2=47 (LC	5=0-5-8 9)	1	0) Provide mea bearing plat 5 and 99 lb	chanical connection e capable of withs uplift at joint 2.	on (by oth standing 4	ers) of truss 8 lb uplift at j	to joint					
		Max Uplift 2=-99 (LC	(LC 9)	1	1) This truss is	designed in acco	ordance w	ith the 2018						
		Max Grav 2=372 (LC	2), 5=284 (LC 2)		Internationa	Residential Code	e sections	R502.11.1 a	and					
FO	RCES	(lb) - Maximum Com	pression/Maximum		R802.10.2 a	ind referenced sta	andard AN	ISI/TPI 1.						
то	P CHORD	l ension 1-2=0/19, 2-3=-362/7 4-5=-85/19	76, 3-4=-13/10,	1	<ol> <li>Graphical po or the orient bottom chor</li> </ol>	urlin representatio ation of the purlin d.	on does no along the	ot depict the s top and/or	size					
BO	T CHORD	2-6=-87/317, 5-6=-68	8/302	1	3) Hanger(s) o	r other connectior	n device(s	) shall be						
WE	BS	3-6=-2/183, 3-5=-34	6/69		provided suf	fficient to support	concentra	ted load(s) 7	′9 lb					
NO	TES				down and 64	4 lb up at 4-0-0, a	and 53 lb	down at 6-3-	-12					
1)	Unbalance this design	ed roof live loads have n.	been considered fo	or	on top chore bottom chor	d, and 90 lb down d. The design/se	and 16 lb	up at 4-0-0 such connec	on tion					in the second se
2)	Wind: AS	CE 7-16; Vult=115mph	(3-second gust)		device(s) is	the responsibility	of others.						THUM	Dille
	Vasd=91n	nph; TCDL=4.2psf; BC	DL=3.0psf; h=25ft;	Cat. 1	<ol> <li>In the LOAL</li> </ol>	CASE(S) section	n, loads a	oplied to the	face			5	n'i i i i i i i i i i i i i i i i i i i	JAN'S
	II; Exp B;	Enclosed; MWFRS (en	velope) exterior zor	ne;		are noted as from	t (F) or ba	СК (В).				:2		N: N'
	cantilever	left and right exposed	; end vertical left an	nd L	OAD CASE(S)	Standard							. Solo	71. 2
2)	right expo	sed; Lumber DOL=1.6	U plate grip DOL=1.	15U 1	) Dead + Sn	ow (balanced): Lu	umber Inc	rease=1.15,	Plate					
3)	TULL: AS	CE 7-16; Pr=20.0 pst (	root LL: Lum DOL=	1.15	Increase=1	1.10 ada (lb/ft)					Ξ		SEA	LiE
	Plate DOL	_=1.15); Pg=10.0 pst; P	r=12.7 psf (Lum DC	JL =			E 20				=		0422	
	FVD · Co-	$U \cup L = 1.10$ ; $IS = 1.0$ ; $I$	Tu=50-0-0	uiy	Vent 1-3	)=-29, 3-4=-39, 2-	-5=-20						0433	25 : 5
4)	Unbalance	ed snow loads have be	en considered for th	his	Vert 4-	-23 (B) 686 (B)	335 (F	3			-	3		1 2
4)	Unbalance	ed snow loads have be	en considered for th	nis	Vert: 4=	-23 (B), 6=-86 (B)	), 3=-35 (E	5)				10.00	•	

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



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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	P02	Diagonal Hip Girder	1	1	Job Reference (optional)	T37063799

1-11-12

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:03 ID:Js6Sz5pDzvj1ZcIndiLCrgzPSpC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1









Scale = 1:39.6

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	7.7/	(psf) 20.0 /10.0 7.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	8/TPI2014	CSI TC BC WB Matrix-MP	0.20 0.13 0.05	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.01 0.00	(loc) 6-7 6-7 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 23 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Wind: AS Vasd=91r II; Exp B; cantilever right expc; 2) TCLL: AS Plate DOI 1.15 Plate Exp; Cee 3) Unbalanc design. 4) This truss load of 12 overhang:	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wo 5-6-6 oc purli Rigid ceiling ( bracing. (size) 2=: Max Uplift 2= (LC Max Grav 2= (LD) - Maximu Tension 1-2=0/20, 2-3 2-7=-250/213 3-7=0/101, 3 CE 7-16; Vult=1 mph; TCDL=4.2[ Enclosed; MWF left and right ex psed; Lumber DC CE 7-16; Pr=20 L=1.15); Pg=10. a DDL = 1.15); Is =1.0; CS=1.00; CC ed snow loads f has been desig 20 psf or 1.00 tir s non-concurrer	200d sheat ins. directly (-5-11, echanicz (-51 (LC - -98 (LC - -98 (LC - -98 (LC C C 12) (-322 (LC C 7) um Comp (-33, 6-7=-2 (-5) (-3, 6-7=-2 (-5) (-2, -2) (-2, -2)	athing directly applie applied or 10-0-0 oc 4= Mechanical, 5= al 3) 8), 4=-23 (LC 8), 5= cression/Maximum 44, 3-4=-15/11 (3/213, 5-6=0/0 (46) (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zone end vertical left and D plate grip DOL=1.6 oof LL: Lum DOL=1 f=7.7 psf (Lum DOL tough Cat B; Partiall en considered for thi greater of min roof I roof load of 7.7 psf ther live loads.	5) d or 7) 11 1( 111 1: 111 1: 1111 1: 1111 1: 1111 1: 1111 1: 1111 1: 1111 1: 111111 1: 1111 1: 1	Building Des verifying Raii requirements This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar Refer to gird Provide mec bearing plate 4, 11 lb uplift Provide mec bearing plate 4, 11 lb uplift Norther truss is International R802.10.2 ar NAILED" inc (0.148"x3.25 2) In the LOAD of the truss a <b>DAD CASE(S)</b> Dead + Snc Increase=1 Uniform Loa Vert: 1-4- Concentrate	igner/Project engin in Load = 5.0 (psf) of specific to the use s been designed for d nonconcurrent w las been designed in chord in all areas by 2-00-00 wide will y other members. er(s) for truss to tru- hanical connection a capable of withsta at joint 5 and 98 lb designed in accord Residential Code s do referenced stam- licates 3-10d (0.14 ") toe-nails per NDI CASE(S) section, I re noted as front (f Standard to (balanced): Lum 15 ads (lb/ft) =-29, 5-8=-20 ed Loads (lb) 2 (F=1, B=1)	eer resp covers r a 10.0 vith any for a liv s where I fit betw uss conr (by oth anding 2 o uplift a lance w sections dard AN 8"x3") c S guidlii loads ap F) or ba	bonsible for ain loading truss compo 0 psf bottom other live loa e load of 20.1 veen the bott rections. ers) of truss i 3 lb uplift at j t joint 2. ith the 2018 r. R502.11.1 a ISI/TPI 1. or 2-12d nes. opplied to the ck (B). rease=1.15,	nent. ads. Opsf om to joint and face Plate			And	SEA 0433	EER. CANNEL

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818 Soundside Road Edenton, NC 27932

April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	P03	Monopitch	7	1	Job Reference (optional)	T37063800

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:03

2x4 🛛

ID:dl4ya6lxJVuD\_vOfWpaq0KzPSoZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

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

#### -1-1-8 5-10-8 5-10-8 1-1-8 5-10-8 2x4 🛚 12 4 Г 3 6 2-3-7 2-7-11 10 2 12 0-3-1 볫 4 P Ř

2x4 =

0-4-8



Scale = 1:32.5

-													
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) <b>S</b> 20.0 P 7.7/10.0 Lu 7.0 R 0.0* C 10.0	Spacing Plate Grip DOL umber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI	12014	<b>CSI</b> TC BC WB Matrix-MP	0.37 0.28 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.03 -0.07 0.00	(loc) 4-9 4-9 2	l/defl >999 >941 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 FORCES TOP CHORD BOT CHORD BOT CHORD	<ul> <li>2x4 SP No.2</li> <li>2x4 SP No.2</li> <li>2x4 SP No.3</li> <li>Structural wood sheathing the second structural wood structural wood sheathing the second structural wood structural</li></ul>	ing directly applied opt end verticals. plied or 10-0-0 oc Mechanical ) 2), 4=-40 (LC 16) ), 4=186 (LC 2) ession/Maximum 0, 3-4=-124/108	6) Bu ver rec 7) Thi chc 8) * T on 3-C chc 9) Re 10) Prc bea 4 a 11) Thi Inta R8 <b>LOAD</b>	ilding Desi rifying Rair quirements is truss ha ord live loa his truss h the bottom D6-00 tall b ord and an offer to girde ovide med and 79 lb u is truss is ernational 302.10.2 ar <b>CASE(S)</b>	igner/Project engine h Load = 5.0 (psf) ci is specific to the use is been designed for a specific to the use is been designed for a chord in all areas by 2-00-00 wide will by other members. er(s) for truss to tru hanical connection capable of withsta plift at joint 2. designed in accord Residential Code s and referenced stance Standard	eer res overs r of this r a 10.0 ith any for a liv where fit betv ss conr (by oth nding 4 ance w sections dard AN	consible for ain loading truss compor ) psf bottom other live loa e load of 20.0 a rectangle veen the botto nections. ers) of truss t 0 lb uplift at ju ith the 2018 c R502.11.1 a ISI/TPI 1.	nent. ds. )psf om oint					
NOTES 1) Unbalance this desig 2) Wind: AS Vasd=911 II; Exp B; and C-C I to 5-8-12	eed roof live loads have ber n. CE 7-16; Vult=115mph (3- mph; TCDL=4.2psf; BCDL= Enclosed; MWFRS (envel Exterior(2E) -1-1-8 to 1-10- zone; cantilever left and ri	en considered for -second gust) =3.0psf; h=25ft; Ca lope) exterior zone -8, Interior (1) 1-10 ight exposed ; end	at. )-8									WITH CA	BOLIN

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) Unbalanced snow loads have been considered for this desian.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.

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O mmm April 22,2025

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	P03E	Monopitch	1	1	Job Reference (optional)	T37063801

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:03

ID:Zxn\_iExBqnZir2xr7R1FfVzPSnk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

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

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

Plate Offsets	(X. Y	):	[2:0-3-8.Edge].	[2:0-5-12.Edge]
	(*, ,	·	[£.0 0 0,Eugo],	[2.0 0 12,2090]

Scale = 1:27.5

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 0.0* 10.0	<b>Spacing</b> Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MP	0.14 0.11 0.07	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - 2	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 25 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 2x4 SP No.3 Structural wood she 5-10-8 oc purlins, e Rigid ceiling directly bracing. (size) 2=5-6-0, 6 Max Horiz 2=57 (LC Max Uplift 2=-68 (LC (LC 16) Max Grav 2=234 (LC (LC 2)	athing directly applie xcept end verticals. applied or 10-0-0 or 5=5-6-0, 7=5-6-0 15) 5 12), 6=-39 (LC 2), 7 5 2), 6=10 (LC 16), 7	4) 5) ed or 6) c 7) 7=-62 8) 9) 7=290 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 Gable studs This truss ha chord live loa	7-16; Pr=20.0 ps 1.15); Pg=10.0 ps OL = 1.15); Is=1.0 ); Cs=1.00; Ct=1. snow loads have us been designed psf or 1.00 times on-concurrent wit igner/Project eng n Load = 5.0 (psf s specific to the u spaced at 1-4-0 c us been designed ad nonconcurrent nas been designed	sf (roof LL f; Pf=7.7 D; Rough 10 been cor for great flat roof lt h other lin ineer res ) covers r se of this oc. for a 10.0 with any d for a liv	.: Lum DOL= psf (Lum DOI Cat B; Partia sidered for th er of min roof pad of 7.7 psf ve loads. ponsible for ain loading truss compor opsf bottom other live loa e load of 20.0	1.15 _ = Ily inis ion nent. ds. Dpsf					
FORCES	(lb) - Maximum Com Tension 1-2=0/19, 2-4=-104/0	pression/Maximum 66, 4-5=-35/35,	11	3-06-00 tall t chord and ar	by 2-00-00 wide w by other members	vill fit betv 3.	veen the botto	om					
BOT CHORD WEBS <b>NOTES</b> 1) Unbalanc this desig 2) Wind: AS Vasd=91r II: Exp B:	5-6=-24/25 2-7=-59/111, 6-7=-2 4-7=-200/234 ed roof live loads have n. CE 7-16; Vult=115mph mph; TCDL=4.2psf; BC Enclosed: MWERS (er	2/30 been considered fo (3-second gust) DL=3.0psf; h=25ft; ( velope) exterior zor	12 r 13 Cat. <b>L(</b>	<ul> <li>bearing plate</li> <li>6, 68 lb uplift</li> <li>uplift at joint</li> <li>N/A</li> <li>This truss is</li> <li>International</li> <li>R802.10.2 a</li> <li>DAD CASE(S)</li> </ul>	e capable of withs at joint 2, 62 lb u 2. designed in acco Residential Code nd referenced sta Standard	rdance w sections	9 lb uplift at j nt 7 and 68 lk ith the 2018 R502.11.1 a ISI/TPI 1.	oint o		10.0	- Ville	OR CAN	ROLUNI

and C-C Corner(3E) -1-1-8 to 1-8-13, Exterior(2N) 1-8-13 to 5-8-12 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

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



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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	P04	Monopitch	4	1	Job Reference (optional)	T37063802

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:03

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

## ID: WbRAhkA6Mdy? dzuUkxtiwVzPSnR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? figure for the second structure of the second st-1-1-8 5-8-8 5-8-8 1-1-8 5-8-8 2x4 II 12 4 Г 3 ø 2-2-12 2 0-3-15 ų 4 2x4 II 2x4 =

5-8-8

Scale = 1:28.3

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

2-7-0

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.40	Vert(LL)	-0.04	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15		BC	0.33	Vert(CT)	-0.09	4-7	>740	180		
TCDL	7.0	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC201	8/TPI2014	Matrix-MP								
BCDL	10.0											Weight: 22 lb	FT = 20%
LUMBER			6)	Building Des	igner/Project eng	ineer res	oonsible for						
TOP CHORD	2x4 SP No.2			verifying Rai	n Load = 5.0 (psf)	) covers r	ain loading						
BOT CHORD	2x4 SP No.2			requirements	s specific to the us	se of this	truss compo	nent.					
WEBS	2x4 SP No.3		7)	This truss ha	as been designed	for a 10.0	) psf bottom						
BRACING				chord live loa	ad nonconcurrent	with any	other live loa	ids.					
TOP CHORD	Structural wood she	athing directly applie	ed or <sup>8)</sup>	* This truss h	has been designe	d for a liv	e load of 20.	0psf					
	5-8-8 oc purlins, ex	cept end verticals.		3-06-00 tall b	2 - 00 - 00 wide w	as where	a reclarigie	om					
BOICHORD	<ul> <li>Rigid celling directly bracing.</li> </ul>	applied or 10-0-0 of	c	chord and ar	ny other members	S.							
REACTIONS	(size) 2=0-5-8, 4	4= Mechanical	9)	Refer to gird	er(s) for truss to the	russ conr	ections.	10					
	Max Horiz 2=64 (LC	15)	1	booring plate	nanical connectio	tonding (	2 lb uplift at	ioint					
	Max Uplift 2=-73 (LC	2 12), 4=-42 (LC 16)		4 and 73 lb i	nlift at joint 2	anung 4		Joint					
	Max Grav 2=273 (LC	C 2), 4=200 (LC 2)	1.	1) This truss is	designed in acco	rdance w	ith the 2018						
FORCES	(lb) - Maximum Com	pression/Maximum		International	Residential Code	sections	R502.11.1 a	and					
	Tension			R802.10.2 a	nd referenced sta	ndard AN	ISI/TPI 1.						
TOP CHORD	1-2=0/19, 2-3=-88/4	8, 3-4=-130/109	L	DAD CASE(S)	Standard								
BOT CHORD	2-4=-54/104												
NOTES													
1) Unbalance	ced roof live loads have	been considered fo	r										
this desig	yn.	(a											
2) Wind: AS	SCE 7-16; Vult=115mph	(3-second gust)	0-4										1111
Vasu=91	Epologod: MW/EBS (or	DL=3.0psi; n=25it; (	Jal.									IN TH CA	Roill
II; EXP B;	Enclosed; MWFRS (en	10.8 Interior (1) 1									1	A 10	······································
to 5-6-12	zone: cantilever left an	d right exposed : en	0-01 h								32		ON: WAY
vertical le	eft and right exposed C-	C for members and	ŭ									:0	7: 1 -
forces &	MWFRS for reactions s	hown: Lumber								-			S
DOL=1.6	0 plate grip DOL=1.60	. ,								-	:	SEA	1 1 5
3) TCLL: AS	SCE 7-16; Pr=20.0 psf (	roof LL: Lum DOL=	1.15							-			
Plate DO	L=1.15); Pg=10.0 psf; F	Pf=7.7 psf (Lum DOL	_ =							=		0433	25 -
1.15 Plat	e DOL = 1.15); ls=1.0; l	Rough Cat B; Partia	lly							-	8	•	1 E
Exp.; Ce	=1.0; Cs=1.00; Ct=1.10										- 1	·	0123
4) Unbaland	ced snow loads have be	en considered for th	nis								1.1	K SNOW	EEN. DI
design.											1	11	- CG N
5) This trus	s has been designed for	r greater of min roof	live									TP 1 C	D'RE.II
load of 12	2.0 pst or 1.00 times flat	t root load of 7.7 pst	on									11110.0	unin'

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

The J. C. April 22,2025

Page: 1



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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	P05	Jack-Open	2	1	Job Reference (optional)	T37063803

Run; 9.13 S 8.83 Apr 11 2025 Print; 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:04 ID:Js6Sz5pDzvj1ZcIndiLCrgzPSpC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -1-1-8

1-7-15

Page: 1





Scale = 1:29.5

BOT CHORD

NOTES

1)

2)

3)

4)

desian.

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)	0.01	4-9	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	4-9	>999	180		
TCDL	7.0	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%
			5) Building De	signer/Project en	nineer res	nonsible for						
			verifying P	ain Load - 50 (ng	of) covers r							

TOF CHORD	2X4 OF IN	0.2
BOT CHORD	2x4 SP N	0.2
BRACING		
TOP CHORD	Structura	l wood sheathing directly applied or
	4-0-0 oc p	ourlins.
BOT CHORD	Rigid ceil	ing directly applied or 10-0-0 oc
	bracing.	
REACTIONS	(size)	2=0-4-0, 3= Mechanical, 4=
		Mechanical
	Max Horiz	2=52 (LC 12)
	Max Uplift	2=-67 (LC 12), 3=-31 (LC 16)
	Max Grav	2=238 (LC 2), 3=77 (LC 2), 4=61
		(LC 7)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	1-2=0/19,	2-3=-104/121

2-4=-126/137

DOL=1.60 plate grip DOL=1.60

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

Wind: ASCE 7-16; Vult=115mph (3-second gust)

Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone

and C-C Exterior(2E) -1-1-8 to 1-10-8, Interior (1) 1-10-8

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.

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

#### verifying Rain Load = 5.0 (psf) covers rain loading 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.

- \* 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.
- Refer to girder(s) for truss to truss connections. 8)
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 3 and 67 lb uplift at joint 2.
- 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



# 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	995 Serenity	
P02032-24619	P06	Jack-Open	2	1	Job Reference (optional)	T37063804

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:04 ID:Js6Sz5pDzvj1ZcIndiLCrgzPSpC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1









0-4-8

#### Scale = 1:27.7

Loading	I	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (ro	oof)	20.0	Plate Grip DOL	1.15	тс	0.09	Vert(LL)	0.00	5	>999	240	MT20	244/190
Snow (P	f/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	5	>999	180		
TCDL	0,	7.0	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%
			1		1	-	I		-			- 5	
LUMBE	R			<ol><li>This truss has</li></ol>	as been designed	d for a 10.0	0 psf bottom						
TOP CH	ORD 2x4 SF	P No.2		chord live loa	ad nonconcurren	it with any	other live loa	ds.					
BOT CH	ORD 2x4 SF	P No.2		<ol><li>7) * This truss I</li></ol>	has been designe	ed for a liv	e load of 20.0	Opsf					
BRACIN	IG			on the bottor	m chord in all are	eas where	a rectangle						
TOP CH	ORD Struct	ural wood she	eathing directly applie	d or 3-06-00 tall l	by 2-00-00 wide v	will fit betv	veen the botto	om					
	1-10-1	5 oc purlins.		chord and ar	ny other member	rs.							
BOT CH	ORD Rigid	ceiling directl	y applied or 10-0-0 or	; 8) Refer to gird	er(s) for truss to	truss con	nections.						
	bracin	g.		9) Provide med	nanical connection	on (by oth	ers) of truss t	0					
REACTI	ONS (size)	2=0-4-0,	3= Mechanical, 4=	bearing plate	e capable of with	standing 8	o in uplint at jo	111(3					
		Mechani	cal	10) This trues is	designed in acco	ordance w	ith the 2018						
	Max Ho	riz 2=33 (LC	2 12)	International	Residential Cod	le sections	R502 11 1 a	ind					
	Max Up	lift 2=-69 (L	C 12), 3=-8 (LC 16)	R802 10 2 a	nd referenced st	andard AN	ISI/TPI 1	ina					
	Max Gra	av 2=186 (L	.C 2), 3=15 (LC 2), 4=		Standard								
		(LC 7)			otandara								
FORCE	<b>S</b> (lb) - N	laximum Cor	mpression/Maximum										
	Tensic	on											
TOP CH	ORD 1-2=0/	19, 2-3=-104	/123										
BOT CH	ORD 2-4=-1	27/136											
NOTES													
1) Wine	d: ASCE 7-16;	Vult=115mp	h (3-second gust)										
Vas	d=91mph; TCE	DL=4.2psf; B0	CDL=3.0psf; h=25ft; C	Cat.									
II; E	xp B; Enclosed	; MWFRS (e	nvelope) exterior zon	e									1111.
and	C-C Exterior(2	E) zone; can	tilever left and right									White CA	Dalle
expo	osed ; end vert	ical left and r	ight exposed;C-C for									ath	50/ 14
men	ber DOI -1 60	es & IVIVERS	DI -1 60								5	Oright	in nin
		Pr=20.0 pcf	JL=1.00	15							32		Vi. Ti
Z) TOL Plate	DOI =1 15)	$P_{a}=10.0 \text{ psi}$	Pf=7 7 pef (Lum DOL=1	-							5	id.	N. 3
1 15	Plate DOI = 1	1 15): Is=1 0:	Rough Cat B: Partial	lv							1		. <u>11</u> - 1
Exp.	: Ce=1.0: Cs=	1.00: Ct=1.10	)	· )							:	SEA	ιL : Ξ
3) Unb	alanced snow	loads have b	een considered for th	is						=		0/22	25 : =
desi	gn.									1		0433	25
4) This	truss has bee	n designed fo	or greater of min roof	live								•	1 - E
load	of 12.0 psf or	1.00 times fla	at roof load of 7.7 psf	on							:1	· · A.	A:23
over	hangs non-cor	ncurrent with	other live loads.								11	Y. VGIN	EFTORN
5) Build	ding Designer/	Project engin	eer responsible for								11	×15	FON
verif	ying Rain Load	d = 5.0  (psf)	covers rain loading									11,~ J. (	)'h''''
reau	irements snec	ific to the use	of this truss compon	ent								111	

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

April 22,2025

J. O'F in J. On

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	V01	Valley	1	1	Job Reference (optional)	T37063805

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:04 ID:gZXTFtMww7auOnT?jsMDqzzPUlk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



24-3-0

Scale = 1:64.9
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Plate Offsets (X, Y): [10:0-1-8.0-1-8]

	(, .). <b>[</b>	1												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 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	0.19 0.18 0.16	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 7	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 98 lb	<b>GRIP</b> 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD DTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 cp purlins. Rigid ceiling directly bracing. (size) 1=24-3-0, 9=24-3-0, 13=24-3-0 Max Horiz 1=-77 (LC Max Uplift 1=-9 (LC (LC 17), 9 16), 13=-4 Max Grav 1=79 (LC 8=348 (LC 11=427 (L 13=345 (L (11=427 (L 13=345 (L) 11=-26/135, 12-13 9-11=-56/135, 12-135, 12-135, 12-135, 12-135, 12-	athing directly applied applied or 6-0-0 oc 7=24-3-0, 8=24-3-0, 11=24-3-0, 12=24-3-0 2 (17) 17), 7=-4 (LC 17), 12=-93 38 (LC 16) 35), 7=107 (LC 36), C 3), 9=347 (LC 38), C 29), 12=350 (LC 37), C 3) pression/Maximum 26/129, 3-4=-41/140, /106, 6-7=-155/107 3=-56/71, 11-12=-56/7 6/71, 7-8=-56/134 232/120, 2-13=-221/1 223/103 been considered for	2) l or 3) 0, 89 (LC 7), 6) 7), 6) 7), 8) 9) 1, 10 03, 11 12	Wind: ASCE Vasd=91mpl II; Exp B; En and C-C Extt 12-2-0, Extet to 24-3-8 zor vertical left a forces & MW DOL=1.60 pl Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 1.15 Plate DO Exp.; Ce=1.0 Unbalanced design. Building Des verifying Rai requirements All plates are Gable requir Gable studs ) This truss ha chord live loa * This truss ha on the bottor 3-06-00 tall b chord and ar ) Provide mec	7-16; Vult=115m r; TCDL=4.2psf; closed; MWFRS erior(2E) 0-7-7 tc irior(2E) 12-20 tc rior(2R) 12-20 tc re; cantilever left nd right exposed (FRS for reaction ate grip DOL=1.6 ed for wind loads uds exposed to w d Industry Gable ialified building r7-16; Pr=20.0 p 15); Pg=10.0 ps OL = 1.15); Is=1. c); Cs=1.00; Ct=1. snow loads have igner/Project eng n Load = 5.0 (psf s specific to the u 2 2x4 (  ) MT20 u es continuous bo spaced at 4-0-0 is been designed n chord in all are y 2-00-00 wide v hanical connective capable of withs oint 7, 93 lb upili	here is a second	ond gust) Dpsf; h=25ft; C ) exterior zon erior (1) 3-7-7 hterior (1) 15-7 hterior (1) 15-7 exposed; end hembers and Lumber ane of the trus al to the face) Is as applicab per ANSI/TP is (Lum DOL=1 bsf (Lum DOL=1 hembers) cat B; Partial isidered for th bonsible for ain loading truss compon other live load d bearing. D psf bottom other live load e load of 20.0 a rectangle reen the bottom DL = 10.0psf. 2, 88 lb uplift at join 2, 88 lb uplift	Cat. e 7 to 2-0 d ss, ple, Pl 1. . = ly is eent. ed. ds. psf m o nt 1, at	LOAD	CASE(S)	Star	NATION SEA 0433	L 25	
			13	) This truss is International R802.10.2 a	designed in acco Residential Cod nd referenced sta	ordance w e sections andard AN	th the 2018 R502.11.1 ar ISI/TPI 1.	nd				LIP J. C	PRECINI	



April 22,2025

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Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	V02	Valley	1	1	Job Reference (optional)	T37063806

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:04 ID:8I4rSDMYhQil0x2CHZtSNAzPUlj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:43.4

18-11-0

Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.15		TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	-	7.7/10.0	Lumber DOL	1.15		BC	0.22	Vert(TL)	n/a	-	n/a	999		
TCDL		7.0	Rep Stress Incr	YES		WB	0.18	Horiz(TL)	-0.01	5	n/a	n/a		
BCLL		0.0*	Code	IRC201	8/TPI2014	Matrix-MS								
BCDL		10.0											Weight: 70 lb	FT = 20%
LUMBER				3)	Truss desigr	ed for wind loads	in the pla	ane of the tru	JSS					
TOP CHORD	2x4 SP N	lo.2		,	only. For stu	uds exposed to wir	nd (norm	al to the face	e),					
BOT CHORD	2x4 SP N	lo.2		rd Industry Gable End Details as applicable,										
OTHERS	2x4 SP N	lo.3		alified building de	signer a	s per ANSI/T	PI 1.							
BRACING				4)	7-16; Pr=20.0 ps	f (roof LL	.: Lum DOL=	1.15						
TOP CHORD	Structura	I wood she	athing directly applie	ed or	Plate DOL=1	1.15); Pg=10.0 psf	; Pf=7.7	psf (Lum DO	)L =					
	10-0-0 oc	c purlins.			1.15 Plate D	OL = 1.15; Is=1.0	); Rough	Cat B; Partia	ally					
BOT CHORD	Rigid ceil	ling directly	applied or 6-0-0 oc	5)	Exp.; Ce=1.0	); CS=1.00; Cl=1.1	IU boon cor	cidorod for t	hic					
	bracing.			5)	design	Show loads have	been cor		.1115					
REACTIONS	(size)	1=18-11-	0, 5=18-11-0, 6=18-1	11-0, 6)	Building Des	ianer/Project engi	ineer res	ponsible for						
		8=18-11-	0, 9=18-11-0	0)	verifving Rai	n Load = 5.0 (psf)	covers r	ain loading						
	Max Horiz	1=-56 (LC	(17)		requirement	s specific to the us	se of this	truss compo	nent.					
	Max Uplift 1=-54 (LC 36), 6=-120 (LC 17),					es continuous bot	tom chor	d bearing.						
	Max Gray	9=-123 (L	-0 10) -25) 5-1 (I C 2) 6-4	112 8)	Gable studs	spaced at 4-0-0 o	C.							
	Wax Grav	(LC 36) 8	33), 3=1 (202), 0=2 3=498 (1 C 2) 9=422	(IC 9)	This truss ha	as been designed	for a 10.0	0 psf bottom						
		35)	D=450 (LO Z), 3=422	(LO	chord live lo	ad nonconcurrent	with any	other live loa	ads.					
FORCES	(lb) - Max	vimum Con	noression/Maximum	)) * This truss I	has been designed	d for a liv	e load of 20.	0psf						
IONOLO	Tension		ipression/maximum		on the botton	n chord in all area	as where	a rectangle						
TOP CHORD	1-2=-119/	/382, 2-3=-	2/355, 3-4=0/354,		3-06-00 tall i	by 2-00-00 wide w		veen the bott	Om					
	4-5=-117/	/382	, ,	1.	) Provide med	hanical connection	n (hv oth	ore) of truce	to					
BOT CHORD	1-9=-284/	/108, 8-9=-	284/93, 6-8=-284/93	i, '	bearing plate	capable of withst	tanding 5	54 lb uplift at	ioint					
	5-6=-284/	/93			1, 123 lb upl	ift at joint 9 and 12	20 lb upli	ft at joint 6.	,				minin	11111
WEBS	3-8=-451/	/68, 2-9=-2	87/137, 4-6=-284/13	<sup>18</sup> 12	2) This truss is	designed in accor	dance w	ith the 2018					"TH CA	Rally
NOTES					International	Residential Code	sections	s R502.11.1 a	and			S'	R	The line
1) Unbalance	ed roof live l	loads have	been considered for	r	R802.10.2 a	nd referenced star	ndard AN	ISI/TPI 1.				3.	ELP	and the second
this desig	n.			L	DAD CASE(S)	Standard						52		7.7 -
2) Wind: AS	CE 7-16; Vu	ult=115mph	(3-second gust)	_								£	19	K :
Vasd=91n	nph; TCDL=	=4.2psf; BC	DL=3.0psf; h=25ft; 0	Cat.								:	SEA	u : =
II; Exp B;	Enclosed; IV	/IVVFRS (ei	velope) exterior zon	ie 7 to							=	:	JLF	·Ľ: =
	= xterior(2P) 0	0-7-7 10 3-	-7-7, Interior (1) 3-7-7	to							=		0433	325 : =
9-0-0, EXI	one: cantiles	ver left and	right exposed : end	510								3		1 3
vertical let	ft and right e	exposed C	-C for members and										·	1123
forces & N	WFRS for I	reactions s	shown: Lumber									17	K SNOW	EEM. DI
DOL=1.60	) plate grip [	DOL=1.60	.,									11	1, SUN	S. GIN
													TP 1	J'RE.II
													11110.	· · · · · ·

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April 22,2025

Job	Truss	Truss Type	Qty	Ply	995 Serenity	
P02032-24619	V03	Valley	1	1	Job Reference (optional)	T37063807

Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:04 ID:8I4rSDMYhQil0x2CHZtSNAzPUIj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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13-7-0

Scale =	1:37.9
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Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 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	0.52 0.43 0.20	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 45 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=13-7-0 Max Horiz 1=-44 (L0 Max Uplift 1=-75 (L1 4=-138 (I) Max Grav 1=41 (LC 4=1000 (	eathing directly applie y applied or 6-0-0 oc 0, 3=13-7-0, 4=13-7-0 C 17) C 36), 3=-65 (LC 35), LC 16) C 35), 3=69 (LC 36), LC 2)	4) 5) ed or 6) 7) 8) 9) 10	TCLL: ASCE Plate DOL=' 1.15 Plate D Exp.; Ce=1.0 Unbalanced design. Building Des verifying Rai requirement: Gable requir Gable requir Gable studs This truss ha chord live loo	7-16; Pr=20.0 ps 15); Pg=10.0 ps OL = 1.15); Is=1.0 ); Cs=1.00; Ct=1. <sup>-</sup> snow loads have igner/Project engin n Load = 5.0 (psf) s specific to the us es continuous bot spaced at 4-0-0 o s been designed ad nonconcurrent has been designed ad nonconcurrent has been designed	f (roof LL ; Pf=7.7 ); Rough 10 been cor se of this tom chor c. for a 10.0 with any d for a liv is where	L: Lum DOL= psf (Lum DO Cat B; Partia asidered for th ponsible for ain loading truss compoid bearing. D psf bottom other live loa e load of 20.1 a rectangle	1.15 L = IIIy his nent. ds. Dpsf					
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Maximum Cor Tension 1-2=-186/582, 2-3= 1-4=-455/215, 3-4= 2-4=-786/310	npression/Maximum -181/583 -455/215	11	3-06-00 tall i chord and ai ) Provide med bearing plate 1, 65 lb uplif	by 2-00-00 wide w by other members hanical connectio capable of withs t at joint 3 and 138 designed in accord	n (by oth tanding 7 b uplift	ers) of truss t 6 uplift at j at joint 4.	om to oint					

#### NOTES

NULES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-7 to 3-7-7, Interior (1) 3-7-7 to 6-10-0, Exterior(2R) 6-10-0 to 9-10-0, Interior (1) 9-10-0 to 13-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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Job	Truss	Truss Type		Ply	995 Serenity	
P02032-24619	V04	Valley	1	1	Job Reference (optional)	T37063808

## Run: 9.13 S 8.83 Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Sat Apr 19 01:25:05 ID:8I4rSDMYhQil0x2CHZtSNAzPUlj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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= 20%



8-3-0

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 7.7/10.0 7.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MP	0.19 0.19 0.07	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 26 lb	<b>GRIP</b> 244/190 FT = 20 <sup>6</sup>
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 8-3-0 oc purlins. Rigid ceiling directly bracing. (size) 1=8-3-0, 5 Max Horiz 1=-27 (LC Max Uplift 1=-13 (LC 4=-64 (LC Max Grav 1=49 (LC (LC 2)	athing directly applie applied or 6-0-0 oc 3=8-3-0, 4=8-3-0 2 17) 2 36), 3=-15 (LC 17), 2 16) 35), 3=77 (LC 36), 4	4) 5) ed or 6) 7) 8) 9) 4=509	TCLL: ASCE Plate DOL=1 1.15 Plate D Exp.; Ce=1.0 Unbalanced design. Building Des verifying Rai requirements Gable requir Gable studs This truss ha chord live loa ) * This truss ha on the botton 3-06-00 tall h	F7-16; Pr=20.0 ps I.15); Pg=10.0 ps OL = 1.15); Is=1.0; Cs=1.00; Ct=1. snow loads have igner/Project eng n Load = 5.0 (psf) s specific to the us es continuous be spaced at 4-0-0 c is been designed ad nonconcurrent nas been designed n chord in all area y 2-00-00 wide w	f (roof LL ; Pf=7.7 ); Rough 10 been cor ineer res covers r se of this tom chor c. for a 10.1 with any d for a liv as where ill fit betw	: Lum DOL= psf (Lum DO Cat B; Partia nsidered for t ponsible for ain loading truss compo rd bearing. 0 psf bottom other live loa re load of 20. a rectangle	1.15 L = Illy his nent. ds. Opsf					
FORCES TOP CHORD BOT CHORD WEBS NOTES	(lb) - Maximum Corr Tension 1-2=-112/248, 2-3=- 1-4=-198/149, 3-4=- 2-4=-353/191	npression/Maximum 106/249 198/149	11 12	<ul> <li>) Provide mec bearing plate</li> <li>1, 15 lb uplifi</li> <li>) This truss is International</li> </ul>	by 2-00-00 while w hay other members hanical connection capable of withs t at joint 3 and 64 designed in accoor Residential Code	n (by oth tanding 1 lb uplift a rdance w sections	ers) of truss 13 lb uplift at j at joint 4. ith the 2018 5 R502.11.1 a	to joint and					

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

Wind: ASCE 7-16; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-7 to 3-7-7, Interior (1) 3-7-7 to 4-2-0, Exterior(2R) 4-2-0 to 7-1-3, Interior (1) 7-1-3 to 8-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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



