

Trenco 818 Soundside Rd Edenton, NC 27932

Re: P02509-25343 903 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: I73424066 thru I73424109

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

North Carolina COA: C-0844



May 14,2025

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	903 Serenity	
P02509-25343	A01	Roof Special	9	1	Job Reference (optional)	173424066

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Mon May 12 14:09:32 ID:aldSp5DyxC0y0TMTcgzZIjzxQqe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



	7-10-14	15-3-12	21-9-7	23-5-8
	7-10-14	7-4-14	6-5-11	1-8-1
Scale = 1:89.1				

Plate Offsets (X, Y): [5:0-7-4.0-2-0], [7:0-3-11,Edge], [8:Edge.0-2-0]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL LUMBER TOP CHORD BOT CHORD	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0 2x4 SP No.2 *Excep 2x4 SP No.2 *Excep	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code t* 5-7:2x4 SP No.1 t* 11-8:2x4 SP DSS	2-0-0 1.15 1.15 YES IRC20	15/TPI2014) Unbalanced design.) This truss ha	CSI TC BC WB Matrix-MS snow loads have as been designed	0.88 0.83 0.95 been cor	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.32 -0.66 0.04 his	(loc) 9-10 9-10 8	l/defl >866 >426 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 142 lb	GRIP 244/190 FT = 20%
WEBS BRACING TOP CHORD	2x4 SP No.2 *Excep Structural wood shea 3-1-9 oc purlins, exc Bioid ceiling directly	t* 3-12:2x4 SP No.3 athing directly applie cept end verticals.	ed or ⁶	load of 12.0 overhangs n Building Des verifying Rai requirements	psf or 1.00 times on-concurrent wit igner/Project eng n Load = 5.0 (psf) s specific to the us	flat roof lo h other liv ineer resp) covers r se of this	bad of 11.5 p ve loads. ponsible for ain loading truss compo	osf on ment.					
WEBS REACTIONS	high county bracky bracing. 1 Row at midpt (size) 2=0-5-8, 8 Max Horiz 2=324 (LC Max Uplift 2=-85 (LC Max Gray, 2=989 (LC	7-8, 5-9 3= Mechanical C 16) : 16), 8=-213 (LC 16 : 2) 8=931 (LC 2)	، ٤)	 This truss has chord live los * This truss l on the bottor 3-06-00 tall l chord and an 	as been designed ad nonconcurrent has been designe in chord in all area by 2-00-00 wide w hy other members	for a 10.0 with any d for a liv as where vill fit betw s, with BC	0 psf bottom other live loa e load of 20. a rectangle veen the bott DL = 10.0ps	ads. Opsf com f.					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	1	 Refer to gird Provide med bearing plate 	er(s) for truss to t hanical connections capable of withs	russ conr n (by oth tanding 2	ections. ers) of truss t 213 lb uplift at	to t joint					
TOP CHORD BOT CHORD	1-2=0/21, 2-3=-1772 5-6=-175/0, 6-7=-27/ 2-12=-350/1588, 10-	2/110, 3-5=-994/32, /114, 7-8=-345/64 ·12=-350/1588,	I	8 and 85 lb t OAD CASE(S).	iplift at joint 2. Standard								
WEBS	9-10=-182/847, 8-9= 3-12=0/306, 3-10=-8 5-9=-1112/237, 6-9=	11/45 27/186, 5-10=-68/64 3/265	47,										in the second se
NOTES 1) Unbalance this design 2) Wind: ASG Vasd=91n II; Exp B; and C-C E 23-3-12 ze vertical lef MWFRS f grip DOL= 3) TCLL: AS Plate DOL	ed roof live loads have n. CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior (2) -0-11-0 to 2 one; cantilever left and ft exposed;C-C for men or reactions shown; Lu =1.60 CE 7-10; Pr=20.0 psf ((=1.15); Pg=15.0 psf ((=1.15); Pg=15.0 psf ((been considered for (3-second gust) DL=3.0psf; h=25ft; Civelope) exterior zon -1-0, Interior (1) 2-1- right exposed ; end nbers and forces & mber DOL=1.60 plat roof LL: Lum DOL=1 tround snow); Pf=11	Cat. le -0 to te .15 .5							Willing		SEA 0363	L 22 EER H

grip DOL=1.60 TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10

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) 818 Soundside Road Edenton, NC 27932 and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



G minin May 14,2025

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	AE01	Roof Special Supported Gable	1	1	Job Reference (optional)	173424067

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:33 ID:_KIaR6GqE7OXtw52HoXGwLzxQqb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



23-5-8



Scale = 1:85.7	
Plate Offsets (X, Y):	[16:Edge,0-1-8]

	, , , , , , , , , , , , , , , , , , , ,	Luge,0-1-0	1												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	1	(psf) 20.0 1.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.56 0.29 0.12	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 16	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 166 lb	GRIP 244/190 0 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD WEBS	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N 17-14,18- Structura 6-0-0 oc Rigid ceil bracing. 1 Row at	o.2 o.2 o.3 *Excep 13,19-12,2 I wood shea ourlins, exc ing directly midpt	t* 1-11:2x4 SP No.2 athing directly applie cept end verticals. applied or 10-0-0 or 15-16, 14-17, 13-18	Wed or C S S S O	EBS Unbalanced this design	2-27=-121/143, 26 25-26=-121/143, 2 23-24=-121/143, 2 21-22=-121/143, 1 18-19=-121/143, 1 16-17=-121/143 14-17=-146/166, 1 12-19=-121/61, 11 7-23=-141/56, 6-2 4-26=-97/46, 3-27 d roof live loads have	-27=-12 4-25=-1: 2-23=-1: 9-21=-1: 7-18=-1: 3-18=-1: -21=-11: 4=-119/5 =-181/89	1/143, 21/143, 21/143, 21/143, 21/143, 21/143, 20/78, 9/58, 9-22=-1- 4, 5-25=-125/ considered for	41/54, /57, r	 9) Gai 10) Gai 11) Thi chc 12) * Ti 3-0 chc 13) Pro bra 16, upli 22, 	ble requi ble studs s truss h ord live lc his truss the botto 6-00 tall ord and a vide me aring plat 54 lb up ift at join 38 lb up	res cor space as bee bad nor has be m choi by 2-0 iny othe chanica e capa lift at jo t 19, 37 lift at jo	ntinuous bottom ad at 2-0-0 oc. In designed for a inconcurrent with een designed fo rd in all areas w 0-00 wide will fi er members. al connection (b bible of withstanc bible of withstanc bible of withstanc bible of withstanc bible of withstanc bible of withstanc bible of withstanc	chord bearing. a 10.0 psf bottom n any other live loads. r a live load of 20.0ps here a rectangle t between the bottom ny others) of truss to ding 41 lb uplift at join dift at joint 18, 48 lb t 21, 38 lb uplift at join lift at joint 24, 39 lb	sf 1 nt
REACTIONS	(size) Max Horiz Max Uplift Max Grav	2=23-5-8, 18=23-5-8 22=23-5-8 25=23-5-8 2=337 (LC 16=-41 (L 18=-38 (LL 21=-37 (L 23=-38 (L 25=-39 (L 27=-63 (L) 27=-63 (L) 17=205 (L 19=190 (L 22=199 (L 22=199 (L 24=173 (L) 26=127 (l)	16=23-5-8, 17=23-5 3, 19=23-5-8, 21=23 3, 23=23-5-8, 24=23 3, 26=23-5-8, 27=23 2 15) C 13), 17=-54 (LC 1 C 16), 19=-48 (LC 1 C 16), 22=-38 (LC 1 C 16), 26=-26 (LC 1 C 16), 26=-26 (LC 1 C 16), 26=-26 (LC 2 C 2), 18=190 (LC 2 C 2), 21=184 (LC 2 C 2), 21=184 (LC 2 C 2), 25=183 (LC 2 C 2), 25=183 (LC 2 C 2), 25=724 (LC 2	5-8, 2) -5-8, 5-5-8 6), 6), 6), 6), 6), 6), 3) $), 0, 1000000000000000000000000000000000$	Wind: ASCI Vasd=91mp II; Exp B; E and C-C Cc 23-3-12 zor vertical left forces & MV DOL=1.60 µ Truss desig only. For s see Standa or consult c TCLL: ASC Plate DOL= psf (flat roo Category II;	E 7-10; Vult=115mp bh; TCDL=6.0psf; E nclosed; MWFRS (orner (3) -0-11-0 to ne; cantilever left ar and right exposed; WFRS for reactions plate grip DOL=1.60 med for wind loads tuds exposed to win rd Industry Gable E qualified building de E 7-10; Pr=20.0 ps f snow: Lum DOL=1 f snow: Lum DOL=1	bh (3-sec CDL=3.4 envelope 2-1-0, E: dright e C-C for n shown;) in the pla d (norm ind Deta signer as f (roof LL (ground 1.15 Plat p.; Ct=1	cond gust) Dpsf; h=25ft; C exterior zon xterior (2) 2-1- xposed; end hembers and Lumber ane of the trus al to the face) ils as applicat s per ANSI/TF .: Lum DOL=1 snow); Pf=11 e DOL=1.15); .10	Cat. le -0 to ss), ble, Pl 1. 1.15 5 ;	upii join 14) In t of t LOAD (1) Do In Ui	t at join' t 27. he LOAE he truss CASE(S ; ead + Sr crease=' niform Lo Vert: 1-'	D CASE are noi) Star now (ba 1.15 bads (lt 10=-43	5 lb uplift at joint E(S) section, loa ted as front (F) ndard alanced): Lumbe o/ft) , 10-15=-43	inclusion 2. (or labor 26 and 63 lb uplift at 4ds applied to the face or back (B). ≫r Increase=1.15, Plat	t :e ıte
FORCES	(lb) - Max Tension 1-2=0/21, 4-5=-392, 7-9=-300, 10-11=-2 12-13=-2 14-15=-1	2-3=-460/2 (210, 5-6=-3 (177, 9-10= 64/168, 11- 12/148, 13- 04/108, 15-	240, 3-4=-418/214, 361/198, 6-7=-331/1 -2271/165, 12=-250/162, 14=-176/141, 16=-46/45	, 5) 6) 88, 7) 8)	Unbalanced design. This truss h load of 12.0 overhangs Building De verifying Ra requiremen All plates al	d snow loads have bas been designed if psf or 1.00 times f non-concurrent with signer/Project engi ain Load = 5.0 (psf) ts specific to the us re 2x4 () MT20 ur	for great for great lat roof lo other liv neer res covers r e of this less oth	nsidered for the pad of 11.5 ps ve loads. ponsible for ain loading truss compon erwise indicati	nis live of on nent. ed.						

May 14,2025

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Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **AMSUTP11 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)



Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	AE01	Roof Special Supported Gable	1	1	Job Reference (optional)	173424067

Trapezoidal Loads (lb/ft)

 $\begin{array}{l} \label{eq:Vert: 28=-20-to-30=-20 (F=0), 30=-20 (F=0)-to-27=-22 (F=-2), 27=-22 (F=-2)-to-26=-24 (F=-4), 26=-24 (F=-4)-to-25=-25 (F=-5), 25=-25 (F=-5)-to-24=-26 (F=-6), 24=-26 (F=-6)-to-23=-27 (F=-7), 23=-27 (F=-7)-to-22=-29 (F=-9)-to-21=-30 (F=-10), 21=-30 (F=-10)-to-20=-30 (F=-10), 20=-30 (F=-10)-to-19=-31 (F=-11), 19=-31 (F=-11), 10=-33 (F=-13), 18=-33 (F=-13)-to-17=-34 (F=-14), 17=-34 (F=-14)-to-16=-35 (F=-15) \end{array}$

Will Dig

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:33 ID:_KlaR6GqE7OXtw52HoXGwLzxQqb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	B01	Common	3	1	Job Reference (optional)	173424068

6-8-11

3x6 II

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:33 ID:XulmTdh1nU6AV9oob1vjtFzxXRX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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8

Ø

3x6=



20

21	10	9	
	3x6=		
	3	3x6=	

	7-6-13	14-10-3	22-5-0	I
Scale = 1:69.3	7-6-13	7-3-5	7-6-13	1

11

3x6=

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

Loading FCLL (roof) Snow (Pf/Pg) FCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.43 0.56 0.75	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.12 -0.18 0.04	(loc) 10-11 10-11 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 119 lb	GRIP 244/190 FT = 20%	
JUMBER FOP CHORD SOT CHORD VEBS SLIDER BRACING FOP CHORD SOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep No.2 Left 2x4 SP No.3 *Excep No.2 Left 2x4 SP No.3 2 Structural wood shea 4-5-9 oc purlins, exx Rigid ceiling directly bracing. (size) 2=0-5-8, 8 Max Horiz 2=89 (LC Max Uplift 2=-106 (L Max Grav 2=947 (LC (lb) - Maximum Com Tension 1-2=0/25, 2-4=-1288 5-6=-1103/183, 6-7= 2-11=-158/1199, 10 8-10=-104/991 4-11=-318/146, 5-11 6-10=-180/126, 6-8= ed roof live loads have b CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en exterior (2) 11-10-8 to 1 22-3-4 zone; cantileve end vertical left and rig	t* 11-5,10-5,8-6:2x4 2-6-0 athing directly applie cept end verticals. applied or 10-0-0 oc 3=0-5-8 20) C 16), 8=-84 (LC 17) C 16), 8=-84 (LC 17) C 2), 8=890 (LC 2) pression/Maximum /165, 4-5=-1283/196 -193/65, 7-8=-198/7 11=-47/790, =-113/521, 5-10=-66 -1074/99 been considered for (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zon -1-0, Interior (1) 2-1- 4+10-8, Interior (1) er left and right pht exposed;C-C for for croction consumer	3) SP 4) 5) d or ; 6) 7) 8) 9) 9) 0 9, 9) 0 5/349, C 5/349, C 5/349, C 5/349, C 5/349, C 5/349, C	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; I Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Raii requirements This truss ha chord live loa * This truss ha chord and ar Provide mec bearing plate 2 and 84 lb u DAD CASE(S)	7-10; Pr=20.0 psl .15); Pg=15.0 psl snow: Lum DOL= ¹ Exp B; Partially Ex snow loads have to s been designed f bon-concurrent with igner/Project engin h Load = 5.0 (psl) is specific to the us is been designed find nonconcurrent to as been designed in chord in all area: y 2-00-00 wide wi y other members, hanical connection capable of withst- plift at joint 8. Standard	(roof LL (ground 1.15 Plata p.; Ct=1 been cor or greate at roof lo other lim heer res covers r e of this or a 10.0 with any for a liv s where ll fit betw with BC h (by oth anding 1	: Lum DOL= snow); Pf=1 e DOL=1.15; 10 isidered for t er of min rool aad of 11.5 p ve loads. oonsible for ain loading truss compo 0 psf bottom other live loa e load of 20. a rectangle DL = 10.0ps ers) of truss i 06 lb uplift at	1.15 1.5); his f live sf on nent. ads. Opsf om f. to t joint				NHTH CA ORTESS SEA 0363		annum Sin
Lumber D	OL=1.60 plate grip DO	L=1.60									11	10	BEN	s

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G mmm May 14,2025

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	B02	Roof Special	5	1	Job Reference (optional)	173424069

Scale = 1:79.1

Loading

TCDL

BCLL

BCDL

TCLL (roof)

Snow (Pf/Pg)

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Mon May 12 14:09:34 ID:XulmTdh1nU6AV9oob1vjtFzxXRX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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GRIP

Weight: 144 lb

244/190

FT = 20%



LUMBER		2)
TOP CHORD	2x4 SP No.1 *Except* 7-10:2x4 SP No.2	
BOT CHORD	2x4 SP No.2 *Except* 17-16,8-13:2x4 SP	
	No.3, 4-14:2x4 SP DSS	
WEBS	2x4 SP No.3 *Except* 9-11,7-15:2x4 SP No.2	
SLIDER	Left 2x4 SP No.1 0-10-7	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or	
	2-2-0 oc purlins, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	3)
REACTIONS	(size) 2=0-5-8, 11=0-5-8	
	Max Horiz 2=89 (LC 20)	1
	Max Uplift 2=-106 (LC 16), 11=-84 (LC 17)	4)
	Max Grav 2=947 (LC 2), 11=890 (LC 2)	5)
FORCES	(lb) - Maximum Compression/Maximum	0,
	Tension	
TOP CHORD	1-2=0/25, 2-3=-649/74, 3-4=-1086/128,	6)
	4-5=-2835/396, 5-6=-1795/198,	
	6-7=-1820/283, 7-8=-1127/186,	
	8-9=-1201/183, 9-10=-236/89, 10-11=-242/86	7)
BOT CHORD	2-18=-141/774, 17-18=-141/774,	
	16-17=-114/665, 4-16=-403/2562,	8)
	15-16=-435/2745, 14-15=-54/934,	
	13-14=0/33, 8-14=-54/29, 12-13=-14/45,	
	11-12=-91/1000	
WEBS	5-15=-11/5/263, 6-15=-351/143,	9)
	3-18=-186/38, 4-17=-826/152,	
	9-11=-1038/66, 7-14=-79/402,	
	1-15=-199/957, 9-12=-206/61, 9-14=-66/97, 12 14- 91/1002	L
	12-14=-01/1003	
NOTES		

0.0

10.0

Code

IRC2015/TPI2014

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

Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-13, Interior (1) 2-1-13 to 11-10-8, Exterior (2) 11-10-8 to 14-10-8, Interior (1) 14-10-8 to 22-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.5

Matrix-MS

Wind: ASCE 7-10; Vult=115mph (3-second gust)

psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10 Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads. Building Designer/Project engineer responsible for
- verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 2 and 84 lb uplift at joint 11.

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

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	BE01	Common Structural Gable	1	1	Job Reference (optional)	173424070

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:34 ID:yTQv5fjv4PUkMdXMHATQUuzxXRU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f









	7-6-13	14-10-3	22-5-0	L
Scale = 1:69.3	7-6-13	7-3-5	7-6-13	1
Plate Offsets (X, Y): [2:0-3-8,Edge], [17:0-2-0,0-1-8]				

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	1	(psf) 20.0 1.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC20	15/TPI2014	CSI TC BC WB Matrix-MS	0.33 0.11 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.01 -0.01 0.00	(loc) 24-33 24-33 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 167 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD JOINTS	BER BOT CHC CHORD 2x4 SP No.2 CHORD 2x4 SP No.2 S 2x4 SP No.3 *Except* 22-8,18-8,13-11:2x4 SP No.2 SP No.3 RS 2x4 SP No.3 *Except* 22-8,18-8,13-11:2x4 SP No.2 WEBS RRS 2x4 SP No.3 2-6-0 CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. TS 1 Brace at Jt(s): 25, 27, 28, 30 CTIONS (size) 2=22-5-0, 18=22-5-0, 18=22-5-0, 19=22-5-0, 20=22-5-0, 21=22-5-0, 22=22-5-0, 23=22-5-0, 24=22-5-0 Max Horiz 2=88 (LC 20)				NOT CHORD 2	2-2424/81, 23-2424/81, 22-2324/80, 21-2221/60, 20-2121/60, 19-2021/60, 18-1921/60, 16-1823/123, 15-1623/123, 14-1523/123, 13-1423/123, 5-2296/3, 22-2682/13, 25-2631/19, 8-25=-24/9, 8-2766/1, 18-2773/1, 18-28258/135, 11-28245/126, 11-2993/1, 29-3064/0, 13-3068/0, 8-2040/10, 7-25132/61, 21-25153/66, 6-26106/45, 5-2327/23, 4-24200/88, 9-27146/56, 19-27139/56, 10-2821/24, 16-2829/40, 15-2944/3, 14-302/8 ed roof live loads have been considered for					 7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss comp 8) All plates are 2x4 () MT20 unless otherwise indic 9) Gable studs spaced at 2-0-0 oc. 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live lo 11) * This truss has been designed for a live load of 2C on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bo chord and any other members. 12) Provide mechanical connection (by others) of truss bearing plate capable of withstanding 11 lb uplift at 2, 66 lb uplift at joint 22, 102 lb uplift at joint 18, 56 uplift at joint 13, 53 lb uplift at joint 21, 86 lb uplift at 				
FORCES TOP CHORD	(size) Max Horiz Max Uplift Max Grav (lb) - Max Tension 1-2=0/25, 5-6=-57/6 8-9=-62/1 11-12=-13	2=22-5-0, 15=22-5-0 19=22-5-0 2=22-5-0 2=22-5-0 2=22-5-0 2=22-5-0 2=23-1 (LC 18=-102 (I 21=-53 (LC 24=-86 (LC 24=-86 (LC 24=-23 (LC 14=125 (L 16=77 (LC 19=194 (L 21=214 (L 21=214 (L 21=214 (L 21=214 (L 21=214 (L 21=214 (L) 23=42 (LC imum Com 2-4=-146/2 3, 6-7=-67/ 07, 9-10=-4 38/78, 12-1	13=22-5-0, 14=22-5- , 16=22-5-0, 18=22-4 , 20=22-5-0, 21=22-4 , 23=22-5-0, 24=22-4 20) 16), 13=-56 (LC 17) LC 17), 19=-48 (LC 16 C 16) 34), 13=255 (LC 2), C 7), 18=299 (LC 2), C 34), 13=255 (LC 2), C 35), 20=104 (LC 7 C 34), 22=241 (LC 2) pression/Maximum 27, 4-5=-111/63, 88, 7-8=-82/114, 15/72, 10-11=-64/65, 3=-174/74	-0, 1 5-0, 2 5-0, 2 5-0 , 7), 3), 3), 3), 3), 4 5 6	 Unbalanced this design. Wind: ASCE Vasd=91mpf II; Exp B; En- and C-C Exttr 22-3-4 zone; vertical left a forces & MW DOL=1.60 pl Truss design only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1 psf (flat roof : Category II; fl Unbalanced design. This truss ha load of 12.0 l 	roof live loads have 7-10; Vult=115mpl ; TCDL=6.0psf; BC closed; MWFRS (e erior (2) -0-11-0 to 2 rior (2) 11-9-0 to 14 cantilever left and nd right exposed;C FRS for reactions s ate grip DOL=1.60 ed for wind loads in ids exposed to wind d industry Gable Er alified building des 7-10; Pr=20.0 psf (.15); Pg=15.0 psf (snow: Lum DOL=1 Exp B; Partially Exp snow loads have b is been designed fo cosf or 1.00 times fit	been of n (3-sec CDL=3.0 nvelope 2-1-0, In -9-0, In right ex -9-0, In right ex -C for n shown; n the pla d (norm d Deta igner as (roof LL ground 1.5 Plat 0.; Ct=1 een cor or greate at roof bt troof the construction of the c	considered for ond gust) ipsf; h=25ft; () exterior zon iterior (1) 2-1: ierior (1) 2-1: ierior (1) 14-9 posed; end iembers and Lumber ane of the tru: al to the face, is as applicat ; per ANSI/TF :: Lum DOL=' snow); Pf=11 e DOL=1.15) .10 isidered for th er of min roof pad of 11.5 ps	r Cat. -0 to -0 to -0 to ss), ble, -1 1. 1.15 1.5 ; iive sf on	upii 24, 13) In t of tt LOAD (1) De Inc Ur	t at joint 48 lb up he LOAL he truss :ASE(S) ad + Sn crease=1 iform Lo	13, 5, 5 lift at jµ OCASI Staare no Staa ow (ba . 15 . 15 nads (II	b ib upilit at joint 1 joint 19 and 11 lb (S) section, load ted as front (F) o ndard alanced): Lumber b/ft)	21, 86 lb upint at joint uplift at joint 2. Is applied to the face r back (B). Increase=1.15, Plate	*

overhangs non-concurrent with other live loads.

May 14,2025

Continued on page 2 Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. WARNING Design valid for use only with MTek connectors. This design is based only upon parameters and property incorporate this design is based only upon parameters and property incorporate this design into the overall building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	BE01	Common Structural Gable	ible 1 1		Job Reference (optional)	173424070

Vert: 1-8=-43 8-12=-43

Trapezoidal Loads (lb/ft) Vert: 31=-20-to-33=-20 (F=0), 33=-20 (F=0)to-24=-23 (F=-3), 24=-23 (F=-3)-to-23=-24 (F=-4), 23=-24 (F=-4)-to-22=-25 (F=-5), 22=-25 (F=-5)to-21=-27 (F=-7), 21=-27 (F=-7)-to-20=-28 (F=-8), 20=-28 (F=-8)-to-19=-29 (F=-9), 19=-29 (F=-9)to-18=-30 (F=-10), 18=-30 (F=-10)-to-17=-31 (F=-11), 17=-31 (F=-11)-to-16=-31 (F=-11), 16=-31 (F=-11)-to-15=-32 (F=-12), 15=-32 (F=-12)-to-14=-33 (F=-13), 14=-33 (F=-13)-to-13=-35 (F=-15)

lain This

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Mon May 12 14:09:34 ID:yTQv5fjv4PUkMdXMHATQUuzxXRU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/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	903 Serenity	
P02509-25343	BG01	Common Girder	1	2	Job Reference (optional)	173424071

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:35 ID:Ma9usJA6Mn8UIJsUxRd6UhzxXQv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f _

Page: 1



4-1-6	7-11-15	11-10-8	17-0-0	22-5-0	L
4-1-6	3-10-9	3-10-9	5-1-8	5-5-0	1

		_
Plate Offsets (X Y):	[2·Edge 0-3-8] [10·Edge 0-2-4] [11·0-5-0 0-4-12] [13·0-4-0 0-4-0] [14·0-3-8 0-4-0]	

		_												
Loading TCLL (roof)	(p 20	sf) 0.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.76	DEFL Vert(LL)	in -0.11	(loc) 14-15	l/defl >999	L/d 240	PLATES MT20	GRIP 244/190
TCDL	11.5/15	5.0 5.0	Rep Stress Incr	NO		WB	1.00	Horz(CT)	-0.22	14-15	>999 n/a	180 n/a	MIBARS	180/179
BCLL	(0.0*	Code	IRC20	15/TPI2014	Matrix-MS		()					1	
BCDL	10	0.0											Weight: 304 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.1 *E 2x6 SP DSS 2x4 SP No.3 *E Left 2x4 SP No Structural wood 3-5-10 oc purlin Rigid ceiling di bracing. (size) 2=0- Max Horiz 2=10 Max Horiz 2=10	Except 5.3 1 d sheans, ex rectly -5-8, 1 02 (LC	* 6-9:2x4 SP No.2 * 10-9:2x4 SP No.2 -11-0 athing directly applie (cept end verticals. applied or 10-0-0 oc 0=0-5-8 (36) (36) (36)	d or 2	 All loads are except if not CASE(S) see provided to c unless other Unbalanced this design. Wind: ASCE Vasd=91mpl II; Exp B; En cantilever lef exposed; Lui TCLL: ASCE 	considered equally ed as front (F) or ba tion. Ply to ply con listribute only loads wise indicated. roof live loads have 7-10; Vult=115mp 1; TCDL=6.0psf; Bt closed; MWFRS (et and right exposed mber DCL=1.60 pls 7-10; Pr=20.0 psf	/ applie ack (B) inection s noted e been o h (3-sec CDL=3.0 nvelope d; end v ate grip (roof LL	d to all plies, face in the LC s have been as (F) or (B), considered fo cond gust) Dpsf; h=25ft; () exterior zor vertical left DOL=1.60 .: Lum DOL=:	DAD r Cat. he; 1.15	14) Use SD at 8 15 cho 15) Use Tru 9-3 to fi 16) Use Tru 17 to fi	e Simpso 2212 Tru- -0-0 oc 3-12 to o rd. 2 Simpso ss) or ec 3-12 from cont face ss) or ec 3-12 from cont face	on Stro uss, Si max. s connect on Stro quivale the le of bot on Stro quivale m the l of bot	ng-Tie LUS24 (ngle Ply Girder) tarting at 5-3-12 t truss(es) to fro ng-Tie LUS24 (nt spaced at 2-0 ft end to 13-3-12 tom chord. ng-Tie LUS26 (nt spaced at 2-1 eft end to 21-5-4 tom chord.	 4-SD9112 Girder, 2- or equivalent spaced from the left end to nt face of bottom 4-10d Girder, 2-10d 0 oc max. starting at 2 to connect truss(es) 4-10d Girder, 4-10d -8 oc max. starting at 4 to connect truss(es)
	Max Oplift 2=-6 Max Grav 2=49	943 (LU	C 2) 10=-556 (LC 2)	13) 2)	Plate DOL=1	.15); Pg=15.0 psf	(ground	snow); Pf=11	1.5	17) Fill	all nail h	oles w	here hanger is i	n contact with lumber.
FORCES	(lb) - Maximum Tension	n Com	pression/Maximum	-, F	Category II;	psr (int roor snow): Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10 Ubalanced snow (balanced): Lumber Increase=1.1							er Increase=1.15, Plate	
TOP CHORD	Tension IP CHORD 1-2=0/31, 2-4=-8484/1049, 4-5=-7527/803, 5-6=-5679/587, 6-7=-5664/592, 7-8=-7152/710, 8-9=-879/119, 9-10=-521/81				design.) This truss ha load of 12.0	design. This truss has been designed for greater of min roof live load of 12 0 psf or 1 00 times flat roof load of 11 5 psf on							20	
BOT CHORD	2-15=-969/743 13-14=-713/67 10-11=-525/56	6, 14- 32, 11 89	15=-969/7436, -13=-513/5804,	8	overhangs n Building Des	on-concurrent with igner/Project engin	other liv eer res	ve loads.			ncentra			11111
WEBS 4-15=-253/1027, 4-14=-851/298, 5-14=-304/2403, 5-13=-2545/395, 6-13=-475/4812, 8-10=-6350/579, 7-13=-1320/196, 7-11=-158/1623, 8-11=-98/1261 NOTES 1) 2-ply truss to be connected together with 10d (0.131*x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 oc. Web connected as follows: 2x4 - 1 row at 0-9-0 oc.				9 1 1 0 1 1	requirements) All plates are 0) This truss ha chord live loa 1) * This truss h on the bottor 3-06-00 tall b chord and ar 2) Provide mec bearing plate 2 and 556 lb 3) Use Simpson SD9212 Trus from the left bottom chord	s specific to the use MT20 plates unless been designed fr ad nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will by other members. hanical connection capable of withsts uplift at joint 10. In Strong-Tie LUS2 ss, Single Ply Girde end to connect trust.	e of this ss other or a 10. vith any for a liv s where I fit betv (by oth anding 6 6 (4-SD er) or ec ss(es) to	truss compor wise indicate) psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t i14 lb uplift at 9112 Girder, uivalent at 4- front face of	nent. d. Dpsf om joint 4- 0-4		Contraction of the second seco	THE REAL PROPERTY OF THE PROPE	SEA 0363	AL B22 EEER AT INTERNAL VIII.2025

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)

Job	Truss	Truss Type	Qty	Ply	903 Serenity	170 10 1071
P02509-25343	BG01	Common Girder	1	2	Job Reference (optional)	1/34240/1

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:35 ID: Ma9usJA6Mn8UIJsUxRd6UhzxXQv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?ff

Page: 2

Vert: 15=-995 (F), 22=-719 (F), 23=-708 (F), 24=-695 (F), 25=-681 (F), 26=-668 (F), 27=-660 (F), 28=-984 (F), 29=-787 (F), 30=-789 (F)



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C02	Common	5	1	Job Reference (optional)	173424072

Scale = 1:84.9

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:35 ID:mdoALiogfFEu4Y_WdQZqk9zxXRO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





-0-11-0				
0 11 0	7-2-3	14-0-13	21-3-0	
	7-2-3	6-10-11	7-2-3	-
0-11-0	0	0.0011	. = 0	

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/	/TPI2014	CSI TC BC WB Matrix-MS	0.35 0.46 0.72	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.12 -0.16 0.02	(loc) 9-11 9-11 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 144 lb	GRIP 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.2 *Excep SP No.3 Structural wood she 5-10-9 oc purlins, e Rigid ceiling directly bracing. (size) 1= Mecha Max Horiz 1=-212 (L Max Uplift 1=-168 (L 12=-201 L Max Grav 1=159 (L) 12=1007	ot* 9-5,11-3,12-2,8-6:2 eathing directly applied except end verticals. <i>v</i> applied or 10-0-0 oc anical, 8=0-5-8, 12=0- LC 12) LC 12), 8=-84 (LC 15) (LC 14) C 11), 8=901 (LC 2), (LC 26)	3) 2x4 4) d or 5) 5-8 6) , 7)	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar	7-10; Pr=20.0 ps .15); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E as been designed psf or 1.00 times on-concurrent wit igner/Project eng n Load = 5.0 (psf s specific to the us sbeen designed ad nonconcurrent nas been designed n chord in all arer by 2-00-00 wide w ay other members or (c) for thruss to t	sf (roof LL f (ground f (ground f (ground f (ground f for great flat roof h h other lin ineer res) covers r se of this for a 10.4 with any d for a liv as where vill ft betv s, with BC	: Lum DOL= snow); Pf=1 e DOL=1.15; 10 er of min rool vad of 11.5 p re loads. ponsible for ain loading truss compo) psf bottom other live load e load of 20.1 a rectangle reen the bott DL = 10.0ps	1.15 1.5); f live sf on nent. ads. 0psf om f.					
FORCES TOP CHORD BOT CHORD WEBS NOTES	(lb) - Maximum Con Tension 1-2=-254/283, 2-3=- 4-5=-888/205, 5-6=- 2-12=-391/173, 6-8- 11-12=-78/752, 9-1 4-9=-146/460, 5-9=- 3-11=-232/178, 3-12	npression/Maximum -391/180, 3-4=-871/20 -341/161, 6-7=0/41, 366/147 1=0/526, 8-9=-8/674 -237/193, 4-11=-130/4 2=-796/66, 5-8=-735/5	9))7, LO 142, 5	Provide mec bearing plate 1, 201 lb upl AD CASE(S)	hanical connection e capable of withs ift at joint 12 and a Standard	on (by oth standing 1 84 lb upli	ers) of truss † 68 lb uplift a t at joint 8.	to t joint				WITH CA	ROLAN
 Unbalance this design Wind: ASC Vasd=91m II; Exp B; I and C-C E 	ed roof live loads have CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (er ixterior (2) -0-10-4 to 2	been considered for (3-second gust) DL=3.0psf; h=25ft; C nvelope) exterior zone 2-1-12. Interior (1) 2-1	at. 9 -12							A	ž	SEA	

to 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 22-2-0 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 SEAL 036322 MGINEER A. GILBER May 14,2025

Page: 1

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C03	Common	3	1	Job Reference (optional)	173424073

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:35 ID:kuqcaVuhNn8M0niA9u?7EFzHDyl-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





-0-11-0	5-5-8	15-11-0	21-3-0
0-11-0	5-5-8	10-5-8	5-4-0

Scale = $1:84.9$)													
Plate Offsets	(X, Y): [9:0-2-4,0-3-0],	[10:0-1-8,0-2-8]			-									
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.41 0.43 0.87	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.05 -0.10 0.02	(loc) 9-10 9-10 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 172 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	 2x4 SP No.2 2x4 SP No.2 *Excep 2x4 SP No.3 *Excep No.2 Structural wood she 4-11-2 oc purlins, e Rigid ceiling directly bracing. (size) 1= Mecha Max Horiz 1=-212 (L Max Uplift 1=-195 (L 11=-224 (Max Grav 1=171 (LC 11=1154) 	ot* 10-9:2x8 SP DSS ot* 9-4,10-4,8-5:2x4 S athing directly applied xcept end verticals. applied or 10-0 oc anical, 8=0-5-8, 11=0- C 12), 8=-105 (LC 15 (LC 14) C 11), 8=1040 (LC 2), (LC 26)	3) P 4) d or 5) 5-8 6)), 7)	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements This truss ha chord live loa * This truss f on the bottor 3-06-00 tall t chord and ar Refer to gird	7-10; Pr=20.0 p: .15); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E is been designed psf or 1.00 times on-concurrent wit 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: by 2-00-00 wide w by other members er(s) for truss to t	sf (roof LL f (ground =1.15 Plai xp.; Ct=1 for great flat roof li- ineer res) covers r se of this for a 10. with any d for a liv as where vill fit betv s, with BC russ com	: Lum DOL= snow); Pf=1 te DOL=1.15/ .10 er of min rool bad of 11.5 p ve loads. ponsible for ain loading truss compo 0 psf bottom other live loa te load of 20.1 a rectangle veen the bott :DL = 10.0ps	1.15 1.5); I live sf on nent. dds. 0psf om f.						
FORCES	(lb) - Maximum Com Tension 1-2=-261/301, 2-3=- 4-5=-1232/289, 5-6= 2-11=-1110/239, 6-8	npression/Maximum 1158/133, 3-4=-1131, 358/171, 6-7=0/41, 3=-382/153	9) /256, 1(L(Provide mec bearing plate 1, 224 lb upli)) In the LOAD of the truss a DAD CASE(S)	hanical connectic e capable of withs if at joint 11 and CASE(S) sectior are noted as front Standard	on (by oth standing 1 105 lb up n, loads a (F) or ba	ers) of truss 95 lb uplift at lift at joint 8. pplied to the ck (B).	to t joint face				WIND CA	Route	
WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=911 II; Exp B; and C-C to 10-7-8 13-7-8 to end vertic forces & I DOL=1.6	A loc 11=40/141, 8-10 4-9=-224/780, 5-9=- 3-10=-326/207, 2-10 ced roof live loads have n. ICE 7-10; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (er Exterior (2) -0-10-4 to 2 , Exterior (2) -0-10-4 to 2 , Exterior (2) -0-7-8 to - 22-2-0 zone; cantilevel call left and right expose MWFRS for reactions s 0 plate grip DOL=1.60	//000 244/218, 4-10=-172/5 244/218, 4-10=-172/5)=-48/780, 5-8=-1000, been considered for (3-second gust) :DL=3.0psf; h=25ft; C: velope) exterior zone 2-1-12, Interior (1) 2-1 13-7-8, Interior (1) r left and right expose ad;C-C for members a hown; Lumber	1) ;71, 1) /18 at. -12 d ; nd	Dead + Sno Increase=10 Uniform Loc Vert: 1-2 4-18=-40	ow (balanced): Lu .15 ads (lb/ft) =-43, 2-4=-43, 4- (F)	ımber Inc	rease=1.15, 7=-43, 8-11=	Plate -20,		C. Comment		SEA 0363	L 22 ILBERT	Mounning

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C04	Common	1	1	Job Reference (optional)	173424074

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:36 ID:Qf_HI?kXrjcbzm6Zqt_f15zxXRT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	-0-11-0	5-5-8	11-11-0	15-9-8	21-3-0	
Scale = 1:84.9	0-11-0	5-5-8	6-5-8	3-10-8	5-5-8	

Plate Offsets (X, Y): [7:0-7-7,Edge], [8:0-3-8,0-2-0], [10:0-1-8,0-2-4]

				-									
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.55 0.55 0.68	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.12 0.03	(loc) 8-10 8-10 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 165 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 *Excep 2x4 SP No.3 *Excep Right 2x8 SP DSS Structural wood shea 4-7-10 oc purlins, e: Rigid ceiling directly bracing. (size) 1= Mecha Max Horiz 1=196 (LC Max Uplift 1=-186 (LL 11=-240 (Max Grav 1=169 (LC 11=1156 (t* 10-8:2x8 SP DSS t* 8-4,10-4:2x4 SP N 1-11-0 athing directly applie xcept end verticals. applied or 10-0-0 oc nical, 7=0-5-8, 11=0 C 12), 7=-91 (LC 15) LC 14) C 12), 7=975 (LC 2), (LC 26)	3) lo.2 4) d or 5) : 6) :5-8), 7) 8)	TCLL: ASCE Plate DOL= psf (flat roof Category II; Building Dee verifying Ra chord live lo * This truss ha chord live lo * This truss on the botto 3-06-00 tall chord and a Refer to girc Provide mee bearing plat	E 7-10; Pr=20.0 ps 1.15); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E: 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 ler(s) for truss to ti chanical connection e capable of withs t at joint 7 and 240	if (roof LL f (ground 1.15 Plat xp.; Ct=1 neer res covers r se of this for a 10.1 with any d for a liv as where ill fit betw , with BC russ conr n (by oth tanding 1) blo upliff	: Lum DOL= snow); Pf=1 e DOL=1.15/ .10 consible for ain loading truss compo 0 psf bottom other live loa e load of 20. a rectangle e load of 20. a rectangle DL = 10.0ps lections. ers) of truss i 86 lb uplift ai t ioint 11.	1.15 1.5); nent. ads. 0psf om f. to t joint					
FORCES	(lb) - Maximum Com Tension 1-2=-258/282, 2-3=- 4-5=-1190/321, 5-7= 2-11=-1113/255	pression/Maximum 1166/131, 3-4=-1139 1139/152,	9) 9/255, L(1)	In the LOAD of the truss a DAD CASE(S) Dead + Sn Increase=1	CASE(S) section are noted as front Standard ow (balanced): Lu .15	, loads a (F) or ba mber Inc	pplied to the ck (B). rease=1.15,	face Plate					900.
WEBS	10-11=-42/135, 8-10 4-8=-259/730, 5-8=-3 3-10=-324/207, 2-10	=-12/608, 7-8=-76/8 300/225, 4-10=-168/ =-65/782	17 606,	Uniform Lo Vert: 1-2 (F)	ads (lb/ft) 2=-43, 2-4=-43, 4-7	7=-43, 11	-12=-20, 4-2	2=-40			ALL S	ORTH CA	ROLIN
 Unbalance this design Wind: ASC Vasd=91n II; Exp B; I and C-C E to 10-7-8, 13-7-8 to 2 end vertic: forces & M DOL=1.60 	ed roof live loads have n. CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en sixterior (2) -0-10-4 to 2 Exterior (2) 10-7-8 to 1 21-3-0 zone; cantilever al left and right expose MWFRS for reactions sl 0 plate grip DOL=1.60	been considered for (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zon -1-12, Interior (1) 2-1 3-7-8, Interior (1) left and right expose d;C-C for members a hown; Lumber	cat. e I-12 ed ; and									SEA 03633	L 22 ILBERTIN

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C05	Common	2	1	Job Reference (optional)	173424075

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:36 $ID:f_qzrT22hO4ujXn1MvwQDqzHIIq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f$

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-0-11-0		
5-5-8	15-11-0	21-3-8
5-5-8	10-5-8	5-4-8
0-11-0		

Scale = 1:84.9

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL LUMBER TOP CHORD	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0 2x4 SP No.2	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-1-8 1.15 1.15 NO IRC2015 3)	/TPI2014 TCLL: ASCE Plate DOL=1	CSI TC BC WB Matrix-MS 7-10; Pr=20.0 psf (15); Pg=15.0 psf (0.44 0.46 0.94 (roof LL ground	DEFL Vert(LL) Vert(CT) Horz(CT) : Lum DOL= snow); Pf=1	in -0.06 -0.10 0.02 1.15 1.5	(loc) 8-9 8-9 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 171 lb	GRIP 244/190 FT = 20%	
BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 *Excep 2x4 SP No.3 *Excep No.2 Structural wood shea 4-9-7 oc purlins, exc Rigid ceiling directly bracing	t* 9-8:2x8 SP DSS t* 9-4,8-4,7-5:2x4 SF athing directly applied cept end verticals. applied or 10-0-0 oc	4) d or 5) 6)	Category II; I Building Des verifying Rain requirements This truss ha chord live loa * This truss h	Exp B; Partially Exp igner/Project engin h Load = 5.0 (psf) d specific to the use s been designed for d nonconcurrent w as been designed	covers r covers r covers r of this or a 10.0 vith any for a liv	e DOL=1.15, 10 ponsible for ain loading truss compo 0 psf bottom other live loa e load of 20.0	nent. Ids. Opsf						
REACTIONS	(size) 1= Mecha 10=0-5-8 Max Horiz 1=218 (LC Max Uplift 1=-198 (L 10=-247 (LC Max Grav 1=187 (LC 10=1215 (nical, 7= Mechanical C 11) C 12), 7=-94 (LC 15) LC 14) C 11), 7=1024 (LC 2) (LC 26)	, , 7) , 8) ,	on the bottom 3-06-00 tall b chord and an Refer to girdd Provide med bearing plate 1, 247 lb upli	n chord in all areas y 2-00-00 wide wil y other members, er(s) for truss to tru- nanical connection capable of withsta ft at joint 10 and 90	where I fit betw with BC ss conr (by oth anding 1 I b uplit	a rectangle veen the bott DL = 10.0ps nections. ers) of truss t 98 lb uplift a t at joint 7.	om f. to t joint						
FORCES TOP CHORD	(lb) - Maximum Com Tension 1-2=-286/304, 2-3=- 3-4=-1197/270, 4-5= 5-6=-338/143, 2-10=	pression/Maximum 1225/139, 1312/308, 1169/262, 6-7=-308	9) LO 1) 8/118	of the truss a AD CASE(S) Dead + Sno Increase=1.	CASE(S) section, re noted as front (I Standard w (balanced): Lum 15 ads (Ib/ft)	ioads aj ⁻) or ba iber Inc	ck (B). rease=1.15,	race Plate					11111	
BOT CHORD WEBS NOTES	9-10=-43/149, 7-9=-3 3-9=-347/220, 5-8=-2 4-9=-182/608, 4-8=-2	54/933 273/235, 2-9=-60/818 239/832, 5-7=-1079/4	8, 41	Vert: 1-2: (F)	=-46, 2-4=-46, 4-6=	=-46, 7- ⁻	10=-21, 4-17	=-40		4	1111	OR FESS	N. N.	
 Unbalance this design Wind: ASG Vasd=91n II; Exp B; and C-C E to 10-7-8, 13-7-8 to 2 exposed; members Lumber D 	ed roof live loads have h. CE 7-10; Vult=115mph hpph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior (2) -0-10-4 to 2 Exterior (2) 10-7-8 to 1 21-1-12 zone; cantileve end vertical left and rig and forces & MWFRS OL=1.60 plate grip DO	been considered for (3-second gust) DL=3.0psf; h=25ft; C ivelope) exterior zone -1-12, Interior (1) 2-1 (3-7-8, Interior (1) er left and right ght exposed;C-C for for reactions shown; 'L=1.60	at. e -12							CONTRACT.		SEA 0363	ER. K	hanning and a start and a start

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C06	Нір	1	1	Job Reference (optional)	173424076

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:36 ID:Ve7oZaJziYLOt8NaiiCuC3zHIdk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	-0-11-0		11-1-14		
		10-1-2	1 1	21-3-8	
	r i	10-1-2	1 1	10-1-10	1
	0-11-0		1-0-11		
e = 1:83.1					

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

Scale

	(,,,), [,],], [,	, [e.e : .,e <u>=</u> e]												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 16.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MS	0.57 0.87 0.69	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.23 -0.46 0.03	(loc) 8-10 8-10 8	l/defl >999 >551 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 142 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep Structural wood she 5-7-9 oc purlins, ex 2-0-0 oc purlins, ex 2-0-0 oc purlins (6-1 Rigid ceiling directly bracing. (size) 1= Mecha 12=0-5-8 Max Horiz 1=195 (L Max Uplift 1=-157 (I 12=-198 Max Grav 1=159 (L 12=1072 (lb) - Maximum Con Tension 1-2=-251/260, 2-3= 4-5=-619/160, 5-6= 2-12=-429/151, 7-8 11-12=-89/813, 10- 3-11=-274/158, 4-1	bt* 12-2,8-7:2x4 SP Ne eathing directly applied coept end verticals, an 0-0 max.): 4-5. / applied or 10-0-0 oc anical, 8= Mechanical, C 13) .C 14), 8=-67 (LC 17); (LC 16) C 13), 8=1004 (LC 39 (LC 39) npression/Maximum -456/128, 3-4=-953/16 -956/167, 6-7=-386/95 =-327/87 11=0/619, 8-10=-53/8; 11=-62/306, 5-10=-63/2	3) o.3 d or d 5) (), 7) (), 9) (), 9) (), 10 (), 11 (), 11 (), 11 (), 11 (), 11 (), 7 (), 11 (), 7 (), 7 (), 7 (), 11 (), 7 (), 7	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; I Unbalanced design. Building Des verifying Rai requirements Provide aded This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar Refer to gird Provide med bearing plate 1, 198 lb upil) Graphical pu or the orients bottom chord	7-10; Pr=20.0 psf .15); Pg=15.0 psf (snow: Lum DOL=1 Exp B; Partially Exp snow loads have b igner/Project engin n Load = 5.0 (psf) of s specific to the use quate drainage to p s been designed fi ad nonconcurrent w has been designed n chord in all areas by 2-00-00 wide will by other members. er(s) for truss to tru- hanical connection e capable of withsts t at joint 12 and 67 nit nepresentation ation of the purlin a d. Standard	(roof LL ground .15 Plat .; Ct=1 een cor eer res covers r e of this revent 0 or a 100. //ith any for a liv s where l fit betv //ss conr (by oth anding the long the	L: Lum DOL= snow); Pf=11 e DOL=1.15) .10, Lu=50-0 asidered for the consible for ain loading truss compoo yesf bottom other live loa e load of 20.1 a rectangle veen the botto nections. ers) of truss 1 57 lb uplift at t at joint 8. bt depict the se top and/or	1.15 6.5); -0 his nent. g. ds. 0psf om to t joint size				NITH CA	ROL	
NOTES 1) Unbalance this desig 2) Wind: ASI Vasd=91r II; Exp B; and C-C to 0.11 C	ed roof live loads have n. CE 7-10; Vult=115mpt nph; TCDL=6.0psf; BC Enclosed; MWFRS (e Exterior (2) -0-10-4 to 2	been considered for (3-second gust) CDL=3.0psf; h=25ft; Convelope) exterior zone 2-1-12, Interior (1) 2-1	at. -12							V	Z	SEA 0363	22	

to 9-11-6, Exterior (2) 9-11-6 to 15-6-8, Interior (1) 15-6-8 to 21-1-12 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

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

818 Soundside Road Edenton, NC 27932

GI 1111111

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C07	Нір	1	1	Job Reference (optional)	173424077

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:37 ID:KQfdEWdjGkx4qkeL1O8DarzHIc2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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-0-11-0				
	8-10-12	12-4-4	21-3-8	
	8-10-12	3-5-8	8-11-4	- 1
0-11-0	0 10 12	000	0111	

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

Scale = 1:78.3

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL LUMBER	1	(psf) 20.0 6.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	15/TPI2014 3) TCLL: ASCE	CSI TC BC WB Matrix-MS	0.50 0.67 0.49 sf (roof Ll	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.17 -0.33 0.03 1.15	(loc) 8-10 8-10 8	l/defl >999 >752 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 133 lb	GRIP 244/190 FT = 20%
TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N 2x4 SP N Structura 6-0-0 oc 2-0-0 oc Rigid ceil	o.2 o.3 *Excep I wood she purlins, exp purlins (6-0 ing directly	t* 11-4,10-5:2x4 SP athing directly applie cept end verticals, ar o max.): 4-5. applied or 10-0-0 oc	No.2 d or nd	 Plate DOL=1 psf (flat roof Category II; I Building Des verifying Rain requirements Provide adec This truss had 	.15); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E igner/Project eng n Load = 5.0 (psf s specific to the u quate drainage to s been designed	f (ground =1.15 Plat xp.; Ct=1 ineer res) covers r se of this prevent for a 10.	snow); Pf=10 te DOL=1.15) .10, Lu=50-0 ponsible for rain loading truss compo- water ponding 0 psf bottom	6.5); -0 nent. g.					
REACTIONS	bracing. (size) Max Horiz Max Uplift Max Grav	1= Mecha 12=0-5-8 1=176 (LC 1=-166 (L 12=-196 (1=172 (LC	nical, 8= Mechanica C 11) C 12), 8=-65 (LC 15) LC 14) C 11), 8=839 (LC 2), C 26)	I,), ;	 chord live loa * This truss h on the bottor 3-06-00 tall h chord and ar Refer to gird Provide mec bearing plate 	ad nonconcurrent has been designe in chord in all are: by 2-00-00 wide v hy other members er(s) for truss to t hanical connectio e capable of withs	with any d for a liv as where vill fit betw s, with BC truss conr on (by oth standing 1	other live loa re load of 20.0 a rectangle veen the both CDL = 10.0psi nections. ers) of truss to 166 lb uplift at	ids. Opsf om f. to t joint					
FORCES	12=966 (LC 26) CES (Ib) - Maximum Compression/Maximum Tension CHORD 1-2=-245/250, 2-3=-406/142, 3-4=-807/175, 4-5=-551/163, 5-6=-809/174, 6-7=-331/88, 2-12=-376/137, 7-8=-2807/75					size				mm	uu.,			
BOT CHORD WEBS	2-12=-37 11-12=-7 3-11=-17 6-10=-19	6/137, 7-8= 5/673, 10-1 8/140, 4-11 6/161, 3-12	1=-17/560, 8-10=-64 =-41/278, 5-10=-43/ !=-698/120, 6-8=-682	4/663 281, 2/82								Tri	OR ESS	ROUN
NOTES 1) Unbalance this design 2) Wind: ASG Vasd=91n II; Exp B; and C-C E to 8-9-0, E 16-10-111 exposed; members Lumber D	ed roof live n. CE 7-10; Vu nph; TCDL= Enclosed; N Exterior (2) { to 21-1-12 z end vertica and forces OL=1.60 pla	loads have 6.0psf; BC IWFRS (en 0-10-4 to 2 3-9-0 to 16- cone; cantile I left and rig & MWFRS ate grip DO	been considered for (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zon -1-12, Interior (1) 2-1 10-11, Interior (1) ever left and right system deft and right for reactions shown; L=1.60	cat. e I-12									SEA 0363	EER. Human

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C08	Нір	1	1	Job Reference (optional)	173424078

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:37 ID:Or68WGDSjn77CGtmPAXi3AzHIbH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



	-0-11-0		10.0.10	
		7-8-6	13-6-10	21-3-8
	0.11.0	7-8-6	5-10-5	7-8-14
Scale = 1:74.1	0-11-0			

Plate Offsets (X, Y): [3:0-6-4,0-2-0], [4:0-4-4,0-2-0], [5:Edge,0-8-6], [10:Edge,0-8-6]

					-								
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 16.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.93 0.46 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.09 -0.19 0.01	(loc) 6-8 6-8 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 129 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 3OT CHORD WEBS BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep Structural wood she except end verticals (6-0-0 max.): 3-4.	t* 10-2,6-5:2x4 SP Not athing directly applied , and 2-0-0 oc purlins	2) 0.3 1,	Wind: ASCE Vasd=91mpł II; Exp B; En and C-C Extt to 7-6-10, Ex to 13-8-6, Ex 17-11-5 to 2 exposed ; en	7-10; Vult=115mp n; TCDL=6.0psf; B closed; MWFRS (e erior (2) -0-10-4 to terior (2) 7-6-10 to terior (2) 13-8-6 to I-1-12 zone; cantil d vertical left and i	h (3-sec CDL=3.0 envelope 2-1-12, 11-9-8, 17-11-5 ever left right exp	ond gust))psf; h=25ft;) exterior zo Interior (1) 2 Interior (1) 1 5, Interior (1) and right osed;C-C for	Cat. ne -1-12 I1-9-8 r					
BOT CHORD WEBS REACTIONS	Rigid ceiling directly bracing. 1 Row at midpt (size) 1 = Mecha 10=0-5-8 Max Horiz 1=156 (LC Max Uplift 1=-254 (L 10=-272 (Max Grav 1=188 (LC 10=1081	applied or 10-0-0 oc 3-8 inical, 6= Mechanical, C 11) C 26), 6=-56 (LC 15), LC 14) C 14), 6=832 (LC 2), (LC 26)	3) , 4) 5)	members an Lumber DOL TCLL: ASCE Plate DOL=1 psf (flat roof Category II; I Building Des verifying Rain requirements Provide adec	d forces & MWFR =1.60 plate grip D 7-10; Pr=20.0 psf .15); Pg=15.0 psf snow: Lum DOL=1 Exp B; Partially Ex igner/Project engin n Load = 5.0 (psf) s specific to the us quate drainage to p	S for rea OL=1.60 (roof LL (ground I.15 Plat p.; Ct=1 neer res covers r e of this prevent v	ctions showr .: Lum DOL= snow); Pf=1 e DOL=1.15 10, Lu=50-0 ponsible for ain loading truss compo vater pondin	n; 6.5);)-0 onent. g.					
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	(lb) - Maximum Com Tension 1-2=-228/282, 2-3=- 4-5=-930/137, 2-10= 9-10=-96/271, 8-9=- 3-9=-0/247, 3-8=-69/ 2-9=-30/362, 5-8=-9 ed roof live loads have n.	927/140, 3-4=-604/16 -1012/293, 5-6=-758, 57/590, 6-8=-139/324 95, 4-8=0/247, 8/378 been considered for	8) 34, 7) (117 (117 (117 (117 (117 (117) (* This truss h on the bottor 3-06-00 tall b chord and ar Refer to girdd Provide mec bearing plate 1, 272 lb upli 0) Graphical pu or the orienta bottom chorc	ad nonconcurrent v has been designed in chord in all areas by 2-00-00 wide wi by other members, er(s) for truss to tru- hanical connection a capable of withsta ft at joint 10 and 5 rlin representation ation of the purlin a l.	I for a flox with any I for a liv s where II fit betw with BC uss conr h (by oth anding 2 6 Ib uplit does no along the	other live loc e load of 20. a rectangle veen the bott DL = 10.0ps ers) of truss 54 lb uplift at t at joint 6. ot depict the top and/or	ads. Opsf tom to t joint size		Con the second s		SEAL	ROW

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C09	Нір	1	1	Job Reference (optional)	173424079

-0-11-0

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:37 ID:pVv_QY4_?c32DApP3bIMS8zHIaA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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-0-	11-0		
	6-5-15	14-9-1	21-3-8
Γ	6-5-15	8-3-2	6-6-7
0-	11-0		

Scale = 1:69.9 Plate Offsets (X, Y): [3:0-4-4,0-2-0], [5:0-4-4,0-2-0], [6:0-2-12,0-1-8]

	()]	, - · · , ,		,											
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	1	(psf) 20.0 6.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MS	0.61 0.59 0.20	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.13 -0.22 0.01	(loc) 8-10 8-10 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 129 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N 2x4 SP N SP No.2 Structura 4-8-7 oc 2-0-0 oc Rigid ceil	lo.2 lo.3 *Excep l wood she purlins, ex purlins (6-0 ing directly	t* 10-4,8-4,10-2,8-6:2 athing directly applied cept end verticals, an -0 max.): 3-5. applied or 10-0-0 oc	2) 2x4 d or d	Wind: ASCE Vasd=91mpl II; Exp B; En and C-C Extr to 6-4-3, Extr to 14-10-13, 19-1-11 to 2 ⁻ exposed ; en members an Lumber DOL	7-10; Vult=115mph n; TCDL=6.0psf; BC closed; MWFRS (er erior (2) -0-10-4 to 2 erior (2) 6-4-3 to 10 Exterior (2) 14-10-1 1-1-12 zone; cantile id vertical left and ri d forces & MWFRS .=1.60 plate grip DC	n (3-sec CDL=3.0 nvelope 2-1-12, -7-8, In 13 to 19 ever left ght exp for rea DL=1.60	cond gust) Dpsf; h=25ft; exterior condition interior (1) 2- terior (1) 10- terior (1) 10- interior interior and right iosed;C-C four ctions showr o	Cat. ne -1-12 7-8 or (1) r n;						
REACTIONS	bracing. (size) Max Horiz Max Uplift Max Grav	1= Mecha 11=0-5-8 1=137 (L0 1=-182 (L 11=-208 (1=140 (L0 11=998 ()	nical, 7= Mechanical C 11) C 26), 7=-50 (LC 15) LC 14) C 11), 7=834 (LC 2), C 2)	3) , , 4) 5)	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; Building Des verifying Rai requirements Provide aded	: 7-10; Pr=20.0 psf (.15); Pg=15.0 psf (snow: Lum DOL=1. Exp B; Partially Exp igner/Project enging n Load = 5.0 (psf) c s specific to the use quate drainage to pl	(roof LL ground 15 Plat o.; Ct=1 eer res overs r of this revent	.: Lum DOL= snow); Pf=1(e DOL=1.15) .10, Lu=50-0 ponsible for ain loading truss compo- water ponding	1.15 6.5); -0 nent. g.						
FORCES	(lb) - Max Tension 1-2=-194, 4-5=-650,	/225, 2-3=- /155, 5-6=-	954/138, 3-4=-636/14 960/136, 2-11=-943/2	6) 7) 14, 234,	This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b	is been designed fo ad nonconcurrent w has been designed f n chord in all areas by 2-00-00 wide will	or a 10.0 ith any for a liv where fit bety) psf bottom other live loa e load of 20.0 a rectangle veen the botto	ads. Opsf om					11/1/1/ P	
BOT CHORD WEBS NOTES	0-7=-779, 10-11=-7 3-10=-35, 5-8=-25/3	/1/186, 8-10 /315, 4-10= 310, 2-10=-	0=-81/728, 7-8=-100/2 219/95, 4-8=-206/97 47/462, 6-8=-76/484	219 8) 7, 9)	chord and ar Refer to gird Provide mec bearing plate 1, 208 lb upli	ny other members, wer(s) for truss to trus hanical connection capable of withsta ift at joint 11 and 50	with BC ss conr (by oth nding 1 Ib upli	DL = 10.0psi nections. ers) of truss t 82 lb uplift at t at joint 7.	f. to t joint		4	in the	ORTHESE		
 Unbalance this design 	ed roof live n.	loads have	been considered for	10 LC) Graphical pu or the orienta bottom chore DAD CASE(S)	rlin representation of ation of the purlin al d. Standard	does no ong the	ot depict the s top and/or	size		THE OWNER OF THE OWN		SEA 0363	L 22	WILLIN.



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C10	Нір	1	1	Job Reference (optional)	173424080

Run: 8.83 S. Apr 24 2025 Print: 8.830 S. Apr 24 2025 MiTek Industries. Inc. Mon May 12 14:09:37 Page: 1 ID:InZ4u8vGloIF?nagca2YIhzHIZ5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -0-11-0 5-1-13 21-3-8 10-7-8 16-1-3 F 5-1-13 5-5-11 5-5-11 5-2-5 0-11-0 22-2-8 4x8= 2x4 II 4x8= 16 🖂 3 ⊠15 5 4 12 10 5-5-4 5-3-8 14 3x6 🖌 3x8. 13 18 2 6 0-11-9 o o × 11 10 9 8 2x4 **I** 2x4 II 4x6= 3x8= 3x6= 4x6= -0-11-0 5-3-9 10-7-8 15-11-7 21-3-8 H 5-3-15 5-3-9 5-3-15 5-4-1 0-11-0 Scale = 1:65.7 Plate Offsets (X, Y): [3:0-6-4,0-2-0], [5:0-6-4,0-2-0] Loading Spacing 2-0-0 CSI DEFL in l/defl L/d PLATES GRIP (psf) (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 тс 0.42 Vert(LL) -0.02 10 >999 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.30 Vert(CT) -0.05 8-10 >999 180 TCDL Rep Stress Incr WB 0.22 Horz(CT) 10.0 YES 0.01 7 n/a n/a BCLL 0.0 Code IRC2015/TPI2014 Matrix-MS Weight: 128 lb BCDL 10.0 FT = 20% 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) LUMBER Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. TOP CHORD 2x4 SP No 2 II; Exp B; Enclosed; MWFRS (envelope) exterior zone BOT CHORD 2x4 SP No.2 and C-C Exterior (2) -0-10-4 to 2-1-12, Interior (1) 2-1-12 WEBS 2x4 SP No.3 *Except* 10-3,10-5:2x4 SP No.2 to 5-1-13, Exterior (2) 5-1-13 to 9-4-11, Interior (1) 9-4-11 BRACING to 16-1-3, Exterior (2) 16-1-3 to 20-4-2, Interior (1) TOP CHORD Structural wood sheathing directly applied or 20-4-2 to 21-1-12 zone; cantilever left and right 5-7-3 oc purlins, except end verticals, and exposed ; end vertical left and right exposed;C-C for 2-0-0 oc purlins (5-8-9 max.): 3-5. members and forces & MWFRS for reactions shown; BOT CHORD Rigid ceiling directly applied or 10-0-0 oc Lumber DOL=1.60 plate grip DOL=1.60 bracing. 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 **REACTIONS** (size) 1= Mechanical, 7= Mechanical, Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 12=0-5-8 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Max Horiz 1=118 (LC 11) Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0 1=-128 (LC 12), 7=-44 (LC 10), Max Uplift Building Designer/Project engineer responsible for 12=-159 (LC 11) verifying Rain Load = 5.0 (psf) covers rain loading Max Grav 1=110 (LC 11), 7=836 (LC 2), requirements specific to the use of this truss component. 12=950 (LC 2) Provide adequate drainage to prevent water ponding. FORCES (lb) - Maximum Compression/Maximum 6) This truss has been designed for a 10.0 psf bottom Tension chord live load nonconcurrent with any other live loads. 1-2=-160/181. 2-3=-960/141. 3-4=-918/174. TOP CHORD 7) * This truss has been designed for a live load of 20.0psf 4-5=-918/174, 5-6=-969/138, 2-12=-902/209, on the bottom chord in all areas where a rectangle 6-7=-787/115 3-06-00 tall by 2-00-00 wide will fit between the bottom ORT BOT CHORD 11-12=-47/128, 10-11=-88/654, 8-10=-43/667, chord and any other members. 7-8=-66/153 8) Refer to girder(s) for truss to truss connections. 3-11=0/161, 3-10=-93/397, 4-10=-375/119, WEBS Provide mechanical connection (by others) of truss to 9) 5-10=-95/386, 5-8=0/165, 2-11=-75/531, Vanananan bearing plate capable of withstanding 128 lb uplift at joint 6-8=-79/522 1, 159 lb uplift at joint 12 and 44 lb uplift at joint 7. NOTES 10) Graphical purlin representation does not depict the size SEAL 1) Unbalanced roof live loads have been considered for or the orientation of the purlin along the top and/or 036322 this design. bottom chord. LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C11	Нір	1	1	Job Reference (optional)	173424081

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:38 ID:qg7Py2jIzOCIY4CY18kFyqzHIY2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







Scale = 1.01.3

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	16	(psf) 20.0 5.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MS	0.64 0.41 0.26	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.10 0.01	(loc) 10-11 8-10 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 120 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No 2x4 SP No 2x4 SP No Structural 5-9-13 oc 2-0-0 oc p Rigid ceili bracing.	0.2 0.3 *Excep wood shea purlins, ea purlins (4-7 ng directly	t* 10-3,10-5:2x4 SP athing directly applie xcept end verticals, a -5 max.): 3-5. applied or 10-0-0 oc	2) No.2 d or and	Wind: ASCE Vasd=91mph II; Exp B; En- and C-C Exte to 3-11-6, Ext 17-3-10, Exte left and right exposed;C-C reactions sho DOL=1.60	7-10; Vult=115mp i; TCDL=6.0psf; Bi closed; MWFRS (e erior (2) -0-10-4 to terior (2) 3-11-6 to erior (2) 3-11-6 to erior (2) 17-3-10 to exposed ; end ven for members and own; Lumber DOL=	h (3-sec CDL=3.0 envelope 2-1-12, 8-2-5, I 21-1-12 tical left forces & =1.60 pl	cond gust) Opsf; h=25ft; e) exterior zo Interior (1) 2 nterior (1) 8- 2 zone; cantil and right & MWFRS fo ate grip	Cat. ne -1-12 2-5 to lever r					
REACTIONS	(size) Max Horiz Max Uplift Max Grav	1= Mecha 12=0-5-8 1=98 (LC 1=-93 (LC 12=-156 (1=83 (LC 12=921 (L	nical, 7= Mechanical 11) 12), 7=-68 (LC 10), LC 11) 11), 7=838 (LC 2), C 2)	, 3) 4)	TCLL: ASCE Plate DOL=1 psf (flat roof s Category II; I Building Des verifying Rain requirements	7-10; Pr=20.0 psf .15); Pg=15.0 psf snow: Lum DOL=1 Exp B; Partially Exp gner/Project engin 1 Load = 5.0 (psf) of specific to the use	(roof LL (ground .15 Plat p.; Ct=1 heer res covers r e of this	: Lum DOL= snow); Pf=1 e DOL=1.15 .10, Lu=50-0 consible for ain loading truss compo	:1.15 6.5); I-0 ment.					
FORCES	(lb) - Max Tension	imum Com	pression/Maximum	5) 6)	This truss ha	s been designed for	orevent or a 10.0) psf bottom	g.					
TOP CHORD	1-2=-128/ 4-5=-1184 2-12=-890	144, 2-3=-! 4/193, 5-6= 0/180, 6-7=	963/139, 3-4=-1184/ -976/136, -806/112	193, 7)	* This truss h on the botton	as been designed n chord in all areas	for a liv s where	e load of 20. a rectangle	opsf				mmm	un.
BOT CHORD	11-12=-30)/57, 10-11 4	=-99/680, 8-10=-61/	694,	chord and an	y other members.	i ili belv		OIII				"TH CA	Rollin
WEBS	3-11=-14/ 5-10=-121 6-8=-83/6	129, 3-10= I/604, 5-8= 29	-119/616, 4-10=-464 -5/136, 2-11=-96/63	8) /143, 9) 9,	Provide mech bearing plate 1, 156 lb upli	er(s) for truss to tru nanical connection capable of withsta ft at joint 12 and 68	iss conr (by oth anding 9 8 lb upli	nections. ers) of truss 13 lb uplift at it at joint 7.	to joint		4	i	O' ÉÉSS	Mare -
NOTES 1) Unbalance this design	ed roof live l	oads have	been considered for	10) Graphical pu or the orienta bottom chore	rlin representation tion of the purlin a	does no long the	ot depict the set top and/or	size		11111		SEAI 03632	22

LOAD CASE(S) Standard



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

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	C12	Нір	1	1	Job Reference (optional)	173424082

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:38 ID:rTihfUKHz3dW9vcLWM9DXazHIXF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1





-0-11	-0			
L	2-10-12	10-7-8	18-4-4	21-3-8
	2-10-12	7-8-12	7-8-12	2-11-4
0-11-	-0			

Scale = 1:57.3

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	1	(psf) 20.0 6.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.93 0.53 0.31	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.18 0.01	(loc) 8-10 8-10 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 113 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Except* 10-3,10-5:2x4 SP No. Structural wood sheathing directly applied or 5-8-6 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-5. Rigid ceiling directly applied or 6-0-0 oc bracing. (size) 1= Mechanical, 7= Mechanical, 12=0-5-8 Max Horiz 1=79 (LC 11) Max Uplift 1=-70 (LC 12), 7=-89 (LC 10), 12=-156 (LC 11) Max Grav 1=61 (LC 11), 7=838 (LC 2), 12=917 (LC 2) (lb) - Maximum Compression/Maximum Tension 1-2=-99/114, 2-3=-943/132, 3-4=-1621/247, 4-5=-1621/247, 5-6=-966/128, 2-12=-919/155, 6-7=-837/106 11-12=-45/12, 10-11=-104/694, 8-10=-78/71 7-8=-23/24 3-11=-76/98, 3-10=-176/1009, 4-10=-542/166, 5-10=-176/991, 5-8=-59/111 2-11=-115/757 6-8=-92/733			2) or 3) 4) 5) 6) 7, 7) 715, 8) 9)	 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-4 to 2-1-12, Interior (1) 2-1-12 to 2-9-0, Exterior (2) 2-9-0 to 6-11-15, Interior (1) 6-11-15 to 18-6-0, Exterior (2) 18-6-0 to 21-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0 Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component. Provide adequate drainage to prevent water ponding. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. Refer to girder(s) for truss to truss connections. 								TH CA	ROULU
4-10=-542/166, 5-10=-176/991, 5-8=-59/111, 2-11=-115/757, 6-8=-92/733 NOTES 1) Unbalanced roof live loads have been considered for this design.					 a) Graphical pu b) Graphical pu c) or the orienta bottom chord bottom CASE(S) 	r at joint 12 and 85 rlin representation tion of the purlin al Standard	b uplid does no long the	t at joint 7. t depict the top and/or	size		N. I.I.I.I.I.		SEA 0363	



A. GILD May 14,2025

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

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	CE01	Common Supported Gable	1	1	Job Reference (optional)	173424083

Run: 8.83 E Feb 1 2025 Print: 8.830 E Feb 1 2025 MiTek Industries, Inc. Tue May 13 16:26:31 ID:3zjpp5t30P7uPc0sXPBTWdzxXRH-mHwuKN3EIn8NxmmkpF4cvCqRaUaNtC6W4IFMhqzGsNs





Scale = 1:55.9

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(ps 20 11.5/15 10 0 10	(psf) Spacing 2-0-0 CSI DEFL in 20.0 Plate Grip DOL 1.15 TC 0.08 Vert(LL) 0.00 11.5/15.0 Lumber DOL 1.15 BC 0.04 Vert(CT) 0.00 10.0 Rep Stress Incr YES WB 0.06 Horz(CT) 0.00 0.0* Code IRC2015/TPI2014 Matrix-MS Matrix-MS 2) Wind: ASCE 7-10; Vult=115mph (3-second gust)								(loc) 10-11 10-11 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 79 lb	GRIP 244/190 FT = 20%		
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood 6-0-0 oc purling Rigid ceiling dir bracing.	d sheathing d s, except enc rectly applied	lirectly applie d verticals. or 10-0-0 oc	2) ed or ; 3)	Wind: ASCE Vasd=91mph II; Exp B; En and C-C Corr to 5-11-8, Co to 12-10-0 zc vertical left at forces & MW DOL=1.60 pl Truss design	cond gust) Dpsf; h=25ft; (exterior zon Exterior (2) 1- Exterior (2) 8- tt exposed ; en nembers and Lumber lane of the tru	 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 1, 74 lb uplift at joint 14, 81 lb uplift at joint 15, 74 lb uplift at joint 12, 96 lb uplift at joint 11 and 45 lb uplift at joint 16. 15) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 16) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B). 									
REACTIONS	(lb/size) 1=15 11=1 13=1 15=1 Max Uplift 1=-9 12=- Max Grav 1=10 11=1 13=1 15=1	5/ Mechanical 32/11-11-0, 11/11-11-0, 22/11-11-0, 36 (LC 12) 5 (LC 10), 11 74 (LC 15), 1 81 (LC 14), 1 44 (LC 13), 1(86 (LC 27), 1 54 (LC 30), 1	I, 10=135/11. 12=155/11-1 14=144/11-1 16=97/11-11 =-96 (LC 15, 4=-74 (LC 1, 6=-45 (LC 1, 0=181 (LC 2, 12=205 (LC 2, 14=196 (LC 2, 16=172 (LC 2, 1	-11-0, 1-0, 1-0, 4), 4), 5) 1, 27), 26), 26), 26)	only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1 psf (flat roof s Category II; E This truss ha load of 12.0 p overhangs no Building Desi verifying Rain requirements	Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10 This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads. Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading						LOAD CASE(S) Standard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-2=-43, 2-5=-43, 5-8=-43, 8-9=-43 Trapezoidal Loads (lb/ft) Vert: 16=-20-to-15=-22 (F=-2), 15=-22 (F=-2)- to-14=-25 (F=-5), 14=-25 (F=-5)-to-13=-28 (F=-8), 13=-28 (F=-8)-to-12=-30 (F=-10), 12=-30 (F=-10)- to-11=-33 (F=-13), 11=-33 (F=-13)-to-10=-35 (F=-15)				
FORCES	(lb) - Maximum Tension	Compression	n/Maximum	7)	All plates are	2x4 () MT20 unl	ess oth	erwise indicat	ed.				WHY CA	Della		
TOP CHORD	HORD 2-16=-110/58, 1-2=-164/177, 2-3=-135/134, 3-4=-104/79, 4-5=-116/117, 5-6=-116/117, 6-7=-61/50, 7-8=-45/52, 8-9=0/41, a) Truss to be fully sheatined inform the face of securely braced against lateral movement (i.e. diagonal web). 9) Gable studs spaced at 2-0-0 oc. 10) This truss has been designed for a 10.0 psf bottom								The second secon							

- 8-10=-113/70 BOT CHORD 15-16=-53/81, 14-15=-59/86, 13-14=-59/86, 12-13=-59/86, 11-12=-59/86, 10-11=-54/82 WEBS 5-13=-105/47, 4-14=-142/84, 3-15=-142/109, 6-12=-141/83, 7-11=-138/99, 3-16=-108/79,
- NOTES

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

7-10=-87/50

- chord live load nonconcurrent with any other live loads. 11) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 13) Refer to girder(s) for truss to truss connections.



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	CE02	Common Structural Gable	1	1	Job Reference (optional)	173424084

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:39 ID:?VrT70CLLjIEo4y_dtf3?ozHJJm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scolo -	1.010
	1 04 7

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(ps 20. 11.5/15. 10. 0. 10.	sf) .0 .0 .0 .0* .0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC20 ⁷	15/TPI2014	CSI TC BC WB Matrix-MS	0.34 0.44 0.31	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.13 0.01	(loc) 21-22 21-22 12	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 204 lb	GRIP 244/190 FT = 20%		
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD JOINTS REACTIONS	RD 2x4 SP No.2 RD 2x4 SP No.2 2x4 SP No.3 *Except* 17-6,21-6,22-3,12-9:2x4 SP No.2 2x4 SP No.3 *Except* 19-6:2x4 SP No.2 RD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. RD Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Brace at Jt(s): 23, 25, 28 NS (size) 1 = Mechanical, 12=9-9-8, 13=9-9-8, 14=9-9-8, 16=9-9-8, 17=9-9-8, 18=9-9-8, 22=0-5-8 Max Horiz 1=-209 (LC 12) Max Uplift 1=-184 (LC 12), 12=-78 (LC 15), 17=-125 (LC 14), 18=-47 (LC 15), 22=-191 (LC 14) Max Grav 1=162 (LC 1), 12=346 (LC 2), 13=129 (LC 5), 14=100 (LC 5), 16=80 (LC 5), 17=590 (LC 2),				 VEBS 17-26=-304/222, 9-26=-263/191, 3-24=-199/134, 21-24=-226/161, 6-25=-406/45, 17-25=-446/49, 21-23=-141/415, 6-23=-162/454, 3-22=-350/48, 6-19=-20/73, 9-27=-148/126, 27-28=-120/109, 12-28=-117/104, 5-23=-111/57, 20-23=-69/35, 4-24=-37/29, 7-25=-151/62, 18-25=-127/74, 8-26=-1/8, 16-26=-33/52, 14-27=-37/23, 13-28=-4/7 IOTES) Unbalanced roof live loads have been considered for this design.) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-4 to 2-1-12, Interior (1) 2-1-12 to 10-5-2, Exterior (2) 10-5-2 to 13-5-2, Interior (1) 13-5-2 to 22-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber 						 This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. Refer to girder(s) for truss to truss connections. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 1, 125 lb uplift at joint 17, 78 lb uplift at joint 12, 191 lb uplift at joint 22 and 47 lb uplift at joint 18. In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B). LOAD CASE(S) Standard Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-2=-43, 2-6=-43, 6-10=-43, 10-11=-43, 22-33=-20 Trapezoidal Loads (lb/ft) 					
FORCES TOP CHORD BOT CHORD	(lb) - Maximum Tension 1-2=-254/291, 2 4-5=-436/154, 5 7-8=-140/128, 8 10-11=0/41, 2-2 21-22=-59/418, 19-20=-27/210, 17-18=-27/211, 13-14=0/104, 12	2 (LC) 29 (LC) 00 (LC) 04 (L Comp 2-3=-3 5-6=-4 3-9=-1 22=-4: 20-2: 18-1! 16-1 2-13=	 C 5), 14=100 (LC 5); 5), 17=590 (LC 2); C 31), 22=731 (LC 2); c arcssion/Maximum 367/176, 3-4=-458/1 178/194, 6-7=-191/1 63/111, 9-10=-262/2 21/196, 10-12=-323 1=-27/210, 9=-27/211, 7=0/104, 14-16=0/1: 0/104 	, 3 26) 4 28, 81, 1 186, 5 /166 5 04, 6 7 8 9	 Truss design only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1 psf (flat roof s Category II; E This truss ha load of 12.0 p overhangs no Building Desi verifying Rain requirements All plates are Truss to be fu braced again Gable studs s 	ed for wind loads ds exposed to wi 4 Industry Gable I alified building de 7-10; Pr=20.0 ps .15); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E s been designed sof or 1.00 times pn-concurrent wit gner/Project eng 1 Load = 5.0 (psf specific to the .2x4 () MT20 u ully sheathed fror st lateral movem spaced at 2-0-0 c	in the plaind (norm End Deta sesigner as solgner as sf (roof LL f (ground ef.1.15 Plat xp.; Ct=1 for greate flat roof lk h other lin ineer res) covers r se of this nless oth m one fac ent (i.e. cooc.	ane of the tru al to the face ils as applical s per ANSI/TF as per ANSI/TF to DOL=: snow); Pf=11 te DOL=1.15) .10 er of min roof oad of 11.5 p: ve loads. ponsible for ain loading truss compor erwise indical truss compor erwise indical trus compor erwise indical trus compor erwise indical	ss), ble, Pl 1. 1.15 I.5 ; live sf on nent. ted.		A HILLING		SEA OJEESE SEA OJEESE SEA OJEESE SEA OJEESE	EER. K		



May 14,2025

Continued on page 2 Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MTek connectors. This design is based only upon parameters and property incorporate this design is based only upon parameters and property incorporate this design into the overall building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	CE02	Common Structural Gable	1	1	Job Reference (optional)	173424084

 $\begin{array}{l} \mbox{Vert: } 33=-20\mbox{-}to\mbox{-}21=-21 \ (F=-1), \ 21=-21 \ (F=-1)\mbox{-}\\ to\mbox{-}20=-23 \ (F=-3), \ 20=-23 \ (F=-3)\mbox{-}to\mbox{-}19=-25 \ (F=-5), \ 19=-25 \ (F=-7)\mbox{-}10=-28 \ (F=-8), \ 17=-28 \ (F=-8)\mbox{-}to\mbox{-}16=-29 \ (F=-9)\mbox{-}16=-29 \ (F=-9)\mbox{-}16=-29 \ (F=-9)\mbox{-}16=-29 \ (F=-9)\mbox{-}10\mbox{-}16=-21 \ (F=-10)\mbox{-}16=-21 \ (F=-11)\mbox{-}10=-13\ (F=-10)\mbox{-}10=-33 \ (F=-13)\mbox{-}12=-35 \ (F=-15)\mbox{-}15 \end{array}$

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:39 ID:?VrT70CLLjIEo4y_dtf3?ozHJJm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	CG01	Half Hip Girder	1	1	Job Reference (optional)	173424085

Scale = 1:57.8

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:39 ID:0dM?pb6_YEWCBXzW9u1xnezxXR_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL	(psf) 20.0 16.5/15.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.93 0.64 0.89	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.10 -0.21 0.04	(loc) 10-13 10-13 9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0											Weight: 125 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD	2x4 SP No.1 *Excep 2x6 SP No.2 2x4 SP No.3 Left 2x6 SP No.2 Structural wood she 4-4-9 oc purlins, exc 2-0-0 oc purlins (2-1 Rigid ceiling directly	t* 1-4:2x4 SP No.2 1-11-0 athing directly applied sept 1-10 max.): 4-8. applied or 8-8-14 oc	4 5 d or 6 7	This truss ha load of 12.0 p overhangs no Building Des verifying Rain requirements Provide adeo This truss ha chord live loa * This truss h	s been designed fo osf or 1.00 times fla on-concurrent with gner/Project engine h Load = 5.0 (psf) or specific to the use juate drainage to p s been designed fo d nonconcurrent w as been designed	or great at roof lo other liv eer res overs r of this revent or a 10.0 ith any for a liv	er of min rool bad of 11.5 p ve loads. ponsible for ain loading truss compo water pondin. D psf bottom other live loa e load of 20.	f live sf on nent. g. ads. 0psf					
REACTIONS	bracing. (size) 2=0-5-8, 9 Max Horiz 2=71 (LC Max Uplift 2=-263 (L Max Grav 2=1240 (L	9= Mechanical 33) C 7), 9=-291 (LC 7) _C 2), 9=1206 (LC 2)	9) 1)	on the botton 3-06-00 tall b chord and an Refer to girde) Provide mect	n chord in all areas y 2-00-00 wide will y other members. er(s) for truss to tru nanical connection	where fit betv ss conr (by oth	a rectangle veen the bott nections. ers) of truss	om to					
FORCES	(lb) - Maximum Com	pression/Maximum		2 and 291 lb	uplift at joint 9.								
TOP CHORD	1-2=0/35, 2-4=-1412 5-7=-2843/683, 7-8=	2/370, 4-5=-2023/476 1943/455	, 1	 Graphical pu or the orienta bottom chord 	rlin representation of the purlin al	does no ong the	ot depict the s top and/or	SIZE					
BOT CHORD	2-14=-278/1022, 13- 10-13=-603/2404, 9-	-14=-718/2851, -10=0/0	1:	 2) "NAILED" inc (0.148"x3.25 	licates 3-10d (0.14)	8"x3") (S quidli	or 3-12d						
WEBS	8-9=-1132/292, 4-14 5-13=-16/129, 5-14= 7-10=-879/282, 8-10	l=-239/1197, 994/297, 7-13=-90/4)=-505/2157	1: 190, L	 a) In the LOAD of the truss a b) OAD CASE(S) 	CASE(S) section, I re noted as front (F Standard	oads a) or ba	oplied to the ck (B).	face			and and	WH CA	ROUN
NOTES 1) Unbalance this design 2) Wind: ASC Vasd=91n II; Exp B; cantilever exposed; 3) TCLL: AS Plate DOL psf (flat ro Category	ed roof live loads have n. CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (er left and right exposed Lumber DOL=1.60 plai CE 7-10; Pr=20.0 psf (c of snow: Lum DOL=1. II; Exp B; Partially Exp	been considered for (3-second gust) DL=3.0psf; h=25ft; C ivelope) exterior zone ; end vertical left te grip DOL=1.60 roof LL: Lum DOL=1. ground snow); Pf=16. 15 Plate DOL=1.15); ;; Ct=1.10, Lu=50-0-0	1 at. e; 15 5	Dead + Snc Increase=1. Uniform Loa Vert: 1-4 Concentrate Vert: 4=- 19=-22 (f 23=-22 (f 31=-24 (f	w (balanced): Lum 15 ads (lb/ft) =-43, 4-8=-53, 9-15 ed Loads (lb) 34 (B), 6=-22 (B), 1 3), 20=-22 (B), 21= 3), 24=-22 (B), 25= 3), 28=-24 (B), 29= 3), 32=-24 (B), 33=	ber Inc =-20 2=-24 (-22 (B) -22 (B) -24 (B) -24 (B)	rease=1.15, B), 11=-24 (I 22=-22 (B), 26=-22 (B), 30=-24 (B), 34=-24 (B)	Plate 3),		L'anna anna anna anna anna anna anna ann		SEA 0363	L 22 ILBER I

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	J2	Jack-Open Girder	1	1	Job Reference (optional)	173424086

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:40 ID:muJbwW?KfTNUc9nn7VNpwkzxXR7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1







Scale = 1:37.3

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	5/TPI2014	CSI TC BC WB Matrix-MP	0.24 0.18 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	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD SLIDER BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD NOTES 1) Wind: ASI Vasd=91r II; Exp 8; cantilever right expo 2) TCLL: AS Plate DOI psf (flat ro Category 3) Unbalance design. 4) This truss load of 12 overhang;	2x4 SP No.2 2x4 SP No.2 Left 2x4 SP No.3 1 Structural wood shea 3-11-8 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8,4 Mechanic Max Horiz 2=71 (LC Max Uplift 2=-25 (LC (LC 12)) Max Grav 2=221 (LC Max Uplift 2=-25 (LC (LC 7)) (lb) - Maximum Com Tension 1-2=0/25, 2-4=-146/: 2-5=-65/62 CE 7-10; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (en left and right exposed Sed; Lumber DOL=1.6 (CE 7-10; Pr=20.0 psf (go of snow: Lum DOL=1.' II; Exp B; Partially Exp. ed snow loads have be thas been designed for 2.0 psf or 1.00 times flat s non-concurrent with c	1-11-0 athing directly applie applied or 10-0-0 od 4= Mechanical, 5= al 12) 2 12), 4=-44 (LC 12), 2 2), 4=-44 (LC 2), 5 2 2), 4=101 (LC 2), 5 pression/Maximum 36 (3-second gust) DL=3.0psf; h=25ff; 0 velope) exterior zon ; end vertical left an 0 plate grip DOL=-1. (roof LL: Lum DOL=1 ground snow); Pf=11 15 Plate DOL=1.15); ;; Ct=1.10 sen considered for th r greater of min roof t roof load of 11.5 ps ther live loads.	5) 6) 6) 6 7) 5 8) 9) 9) 10 5 6 11 10 10 10 10 10 10 10 10 10	Building Des verifying Rai requirements This truss ha chord live loa * This truss h on the bottor 3-06-00 tall t chord and ar Refer to gird Provide mec bearing platt 4, 25 lb upliff) "NALLED" in (0.148"x3.25) In the LOAD of the truss a DAD CASE(S) Dead + Snc Increase=1 Uniform Lo Vert: 10=	igner/Project eng n Load = 5.0 (psf s specific to the u is been designed ad oncocurrent has been designed nchord in all arec by 2-00-00 wide v yo other members er(s) for truss to hanical connectic e capable of withs t at joint 2 and 6 il dicates 3-10d (0.1 ") toe-nails per N CASE(S) section are noted as front Standard bw (balanced): Lu .15 ads (lb/ft) =-43, 5-6=-20 ed Loads (lb) =-15 (F), 12=-12 (ineer res;) covers r se of this for a 10.0 with any d for a liv as where vill fit betv s. truss con on (by oth tanding 4 b uplift at 148"x3") c DS guidlii h, loads aµ (F) or ba mber Inc	ponsible for ain loading truss compo 0 psf bottom other live load e load of 20.1 a rectangle veen the bott nections. ers) of truss f 4 lb uplift at j joint 5. or 3-12d nes. oplied to the ck (B). rease=1.15,	nent. dds. 0psf om to joint face Plate		M. OTHINK.		SEA 0363	ROLUL 22 EER.R.I.

- psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10 3) Unbalanced snow loads have been considered for this
- desian.
- 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 11.5 psf on overhangs non-concurrent with other live loads.

G mmm May 14,2025

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Job	Truss	Truss Type	Qty	Ply	903 Serenity				
P02509-25343	J3	Jack-Open	9	1	Job Reference (optional)	173424087			

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:40 ID:3zjpp5t30P7uPc0sXPBTWdzxXRH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:29.3

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

-														
Loading TCLL (roof) Snow (Pf/Pg)	(psf) 20.0 11.5/15.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15		CSI TC BC	0.21 0.15	DEFL Vert(LL) Vert(CT)	in 0.01 -0.02	(loc) 5-8 5-8	l/defl >999 >999	L/d 240 180	PLATES MT20	GRIP 244/190	
TCDL BCLL BCDL	10.0 0.0* 10.0	Rep Stress Incr Code	YES IRC2015	5/TPI2014	WB Matrix-MP	0.00	Horz(CT)	0.01	2	n/a	n/a	Weight: 17 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD SLIDER BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD NOTES 1) Wind: ASC Vasd=91m II; Exp B; E and C-C E 3-10-12 zc vertical left forces & M DOL=1.60 2) TCLL: ASC Plate DOL psf (flat roc) Category I 3) Unbalance design.	2x4 SP No.2 2x4 SP No.2 Left 2x4 SP No.3 1 Structural wood shea 3-11-8 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 4 Mechanic: Max Horiz 2=71 (LC Max Uplift 2=-18 (LC (LC 16) Max Grav 2=217 (LC (LC 7) (lb) - Maximum Com Tension 1-2=0/25, 2-4=-146/3 2-5=-109/67 CE 7-10; Vult=115mph nph; TCDL=6.0psf; BCI Enclosed; MWFRS (en ixterior (2) -0-11-0 to 2 one; cantilever left and t and right exposed;C-1 WFRS for reactions sl plate grip DOL=1.60 CE 7-10; Pr=20.0 psf (g of snow: Lum DOL=1.1 I; Exp B; Partially Exp. dd snow loads have be	I-11-0 athing directly applie applied or 10-0-0 oc I= Mechanical, 5= al 16) 16), 4=-42 (LC 16), 2 2), 4=100 (LC 2), 5 pression/Maximum 36 (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zon -1-0, Interior (1) 2-1- right exposed ; end C for members and hown; Lumber roof LL: Lum DOL=1 round snow); Pf=11 15 Plate DOL=1.15); ; Ct=1.10 en considered for th	4) 5) d or 6) 7) 5=-1 8) 9) =69 LC cat. e 0 to .15 5	This truss ha load of 12.0 overhangs n Building Des 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 bearing plate 4, 18 lb uplift DAD CASE(S)	Is been designed f psf or 1.00 times fl on-concurrent with igner/Project engin n Load = 5.0 (psf) s specific to the us is been designed n chord in all area by 2-00-00 wide win y other members. er(s) for truss to th hanical connection e capable of withst : at joint 2 and 1 lb Standard	for greate lat roof k n other lix neer resp covers r ie of this for a 10.0 with any d for a liv s where ill fit betw russ conin n (by oth anding 4 o uplift at	er of min roof aad of 11.5 p ve loads. oonsible for ain loading truss compoo 0 psf bottom other live load e load of 20.1 a rectangle veen the bott nections. ers) of truss i 2 lb uplift at j joint 5.	f live sf on nent. dds. 0psf om to ioint		M. HILLING		SEA 0363	ROLINE L 22 BERNIN	a hanning
												Thum .	in in it.	

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	J4	Jack-Open	1	1	Job Reference (optional)	173424088

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:40 ID:3zjpp5t30P7uPc0sXPBTWdzxXRH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:42.8

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

Loa TCL Sno TCL	ading LL (roof) ow (Pf/Pg) DL	(psf) 20.0 16.5/15.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES		CSI TC BC WB	0.11 0.03 0.02	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 6-7 6-7 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190	
BCI BCI	LL DL	0.0* 10.0	Code	IRC201	5/TPI2014	Matrix-MP							Weight: 13 lb	FT = 20%	
LUN TOF 301 WE BR/ TOF BO1	MBER P CHORD T CHORD BS ACING P CHORD T CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shee 1-11-8 oc purlins, ee 2-0-0 oc purlins: 3-4. Rigid ceiling directly bracing. (size) 4= Mecha	athing directly applie cept end verticals, a applied or 10-0-0 oc nical, 5= Mechanica	4) 5) and c 7) c 7) l, 9)	Unbalanced design. This truss ha load of 12.0 overhangs n. Building Des verifying Raii requirements Provide adeo This truss ha chord live loa	snow loads have b s been designed for psf or 1.00 times fla on-concurrent with igner/Project engin n Load = 5.0 (psf) of s specific to the use quate drainage to p is been designed fr ad nonconcurrent w has been designed	preen cor pr great at roof la other liv heer res covers r e of this prevent v pr a 10.0 vith any for a liv	isidered for t er of min rooi bad of 11.5 p ve loads. bonsible for ain loading truss compo water pondin) psf bottom other live load e load of 20	his f live osf on onent. g. ads. 0psf						
		7=0-5-8 Max Horiz 7=34 (LC Max Uplift 4=-11 (LC (LC 16) Max Grav 4=50 (LC (LC 36)	13) : 12), 5=-9 (LC 13), 7 35), 5=36 (LC 7), 7=	-12 -190 11	on the bottor 3-06-00 tall b chord and ar) Refer to gird) Provide mec	n chord in all areas by 2-00-00 wide wil by other members. er(s) for truss to tri hanical connection	s where I fit betv uss con (by oth	a rectangle veen the bott nections. ers) of truss	to ioint						
F O F TOF BOT	RCES P CHORD T CHORD	(lb) - Maximum Com Tension 2-7=-173/58, 1-2=0/5 6-7=-54/45, 5-6=0/0	pression/Maximum 58, 2-3=-49/15, 3-4=	:0/0	7, 11 lb uplift Praphical pu or the orienta bottom choro	at joint 4 and 9 lb rlin representation ation of the purlin a	uplift at does no long the	joint 5. ot depict the top and/or	size					10	
WE	BS	3-6=-41/28, 2-6=-56/	/73	LC	DAD CASE(S)	Standard							W'LL CA	Dalle	
NO	TES											1	ATT	10/11	
1) 2)	Unbalance this design	ed roof live loads have n. CE 7-10: Vult-115mph	been considered for								6	X	O'EESS	1	1
3)	Vasd=91n II; Exp B; I and C-C E left and rig exposed;C reactions s DOL=1.60 TCLL: ASP Plate DOL	ph; TCDL=6.0ps; BC Enclosed; MWFRS (en Exterior (2) -0-11-0 to 1 pht exposed ; end vertic C-C for members and fc Shown; Lumber DOL=1) CE 7-10; Pr=20.0 psf (r =1.15); Pg=15.0 psf (r =0.15); Pg=15.0 psf (r	L=3.0ps; h=25ft; C velope) exterior zon -11-6 zone; cantilevo cal left and right orces & MWFRS for 1.60 plate grip roof LL: Lum DOL=1 fround snow); Pf=16	Cat. e er .15 .5							Partition States		SEA 0363	L 22 LBER	hannan

- DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0



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May 14,2025

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	M01	Monopitch	5	1	Job Reference (optional)	173424089

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:40

Page: 1

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

ID:X9GB1RuhnjFI1mb356ji3rzxXRG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -1-2-0 7-4-8 7-4-8 1-2-0 7-4-8 5x6 = 12 4 Г 3 11 2-3-15 3-1-14 10 5 0-3-15 0-5-8 8 9 3x6 = 4x6 II 3x6 = 7-4-8 7-1-0 7-1-0 0-3-8

Scale = 1:37.5

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/	TPI2014	CSI TC BC WB Matrix-MR	0.64 0.41 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.09 -0.11 0.00	(loc) 4-8 4-8 2	l/defl >999 >799 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 30 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 2=0-3-0, § Max Horiz 2=86 (LC Max Uplift 2=-122 (L Max Grav 2=367 (LC (lb) - Maximum Com Tension 1-2=0/22, 2-3=-260/	athing directly applie cept end verticals. applied or 10-0-0 oc 9=0-1-8 12) C 12), 9=-96 (LC 12) C 12), 9=258 (LC 2) pression/Maximum 123, 4-5=-133/153,	5) 6) d or 7) ; 8)) 9) 10) 11)	This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Bearing at jo using ANSI/7 designer sho Provide meco	is been designed 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 ad nonconcurrent has been designed n chord in all area by 2-00-00 wide w ny other members int(s) 9 considers IPI 1 angle to grai uld verify capacity hanical connection a ti joint(s) 9.	for great lat roof k n other lin neer res covers r se of this for a 10.0 with any d for a liv s where ill fit betv parallel t n formula y of bear n (by oth n (by oth	er of min rooi oad of 11.5 p ve loads. consible for ain loading truss compo 0 psf bottom other live loa e load of 20. a rectangle veen the bott to grain value a. Building ng surface. ers) of truss	f live losf on onent. ads. 0psf to to					
BOT CHORD	3-5=-152/173 2-4=-141/215			2 and 96 lb u	e capable of withs plift at joint 9.	anding 1	22 lb uplift a	t joint					
WEBS	3-9=-228/197		LOA	AD CASE(S)	Standard								
NOTES 1) Unbalance this design 2) Wind: AS(Vasd=91r II; Exp B; and C-C E to 6-11-4: vertical lef for memb- Lumber D 3) TCLL: AS Plate DOL psf (flat ro Cottagen)	ed roof live loads have n. CE 7-10; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (er Exterior (2) -1-2-0 to 1 zone; cantilever left an ft exposed; porch left a ers and forces & MWFI IOL=1.60 plate grip DC CE 7-10; Pr=20.0 psf (_=1.15); Pg=15.0 psf (of snow: Lum DOL=1.	been considered for (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zon 10-0, Interior (1) 1-10 d right exposed; c-0 RS for reactions shor DL=1.60 roof LL: Lum DOL=1 ground snow); Pf=11 15 Plate DOL=1.15; · C+110	Cat. e O J C wn; .15 .5								2	SEA 0363	ROLL 22

- vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15);
- Category II; Exp B; Partially Exp.; Ct=1.10 4) Unbalanced snow loads have been considered for this design.

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May 14,2025



Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	M02	Monopitch	5	1	Job Reference (optional)	173424090

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:40 ID:X9GB1RuhnjF11mb356ji3rzxXRG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:34.3

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

														_
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	5/TPI2014	CSI TC BC WB Matrix-MR	0.33 0.22 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.03 -0.03 0.00	(loc) 4-8 4-8 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 23 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS DTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood shea 5-6-8 oc purlins, exc Rigid ceiling directly bracing. (size) 2=0-3-0, 9 Max Horiz 2=67 (LC Max Uplift 2=-101 (LI Max Grav 2=296 (LC (Ib) - Maximum Com Tension	athing directly applie sept end verticals. applied or 10-0-0 oc 9=0-1-8 12) C 12), 9=-68 (LC 12 C 12), 9=-68 (LC 2) pression/Maximum	5) 6) ed or 7) 5 8)) 9)	This truss ha load of 12.0 (overhangs n Building Des verifying Raii requirements This truss ha chord live loa * This truss th on the bottor 3-06-00 tall b chord and ar Bearing at jo using ANSI/T designer sho Provide mec bearing plate	s been designed fo psf or 1.00 times fla on-concurrent with o igner/Project engine n Load = 5.0 (psf) c s specific to the use s been designed fo ad nonconcurrent w has been designed fo ad nonconcurrent w ha	r great t roof k other live eer res overs r of this r a 10.0 th any or a liv where fit betv arallel t formula of bear (by oth	er of min roof pad of 11.5 p: ve loads. ponsible for ain loading truss compor 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto o grain value a. Building ng surface. ers) of truss t	live sf on nent. ids. Dpsf om						
BOT CHORD	1-2=0/22, 2-3=-191/§ 3-5=-73/82 2-4=-111/160	97, 4-5=-98/110,	11) Provide mec bearing plate 2 and 68 lb u	hanical connection capable of withstai plift at joint 9.	(by oth nding 1	ers) of truss t 01 lb uplift at	to t joint						
WEBS	3-9=-126/111		LC	DAD CASE(S)	Standard									
NOTES 1) Unbalance this desigr 2) Wind: ASC	ed roof live loads have h. CE 7-10; Vult=115mph	been considered for (3-second gust)	r								in'	ORTH CA	ROLIN	

2) White ASCE 7-10, Vull=113hiph (5-second gdst) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-2-0 to 1-10-0, Interior (1) 1-10-0 to 5-1-4 zone; cantilever left and right exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

SEAL 036322 MGINEEP A. GILBER May 14,2025

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	ME01	Monopitch	1	1	Job Reference (optional)	173424091

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:40 ID:X9GB1RuhnjFI1mb356ji3rzxXRG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:37.2

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing2Plate Grip DOL2Lumber DOL2Rep Stress Incr2Code1	2-0-0 1.15 1.15 YES RC2015/TPI2014	CSI TC BC WB Matrix-MR	0.09 0.07 0.03	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.01 0.00	(loc) 8-12 8-12 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 34 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2 BOT CHORD 2 WEBS 2 OTHERS 2 BRACING TOP CHORD 5 BOT CHORD 5 BOT CHORD 6 BOT CHORD 7 BOT CHORD 6 BOT CHORD 1 COP CHORD 1 BOT CHORD 1 BOT CHORD 1 BOT CHORD 1 BOT CHORD 1 COP CHORD 1 BOT CHORD 2 WEBS 4 NOTES 1) Unbalanced 1 this design. 2) Wind: ASCE Vasd=91mph II; Exp B; Enc. and C-C Exte to 6-11-4 zor vertical left at forces & MW DOL=1.60 pl 3) Truss design	tx4 SP No.2 tx4 SP No.2 tx4 SP No.3 tx4 SP No.3 tx4 SP No.3 Structural wood sheat t-0-0 oc purlins, exx Rigid ceiling directly pracing. ze) $2=7-1-0.6$ 13=0-1-8 ax Horiz $2=81$ (LC ax Uplift $2=-41$ (LC 8=-48 (LC ax Grav $2=198$ (LC (LC 2), 8= tb) - Maximum Com rension -2=0/22, 2-3=-51/3(3) -2=-17/0, 5-9=-24/3(3) -2=-10/35, 7-8=-10(3) -7=-95/37, 3-8=-16(3) roof live loads have roof live loads have roof live loads have roof live loads have from cip exposed; C- FRS for reactions si ate grip DOL=1.60 ed for wind loads in the protoches the state the s	athing directly applied c cept end verticals. applied or 10-0-0 oc 3=7-1-0, 7=7-1-0, 8=7-1 12) 12), 7=-24 (LC 12), 16), 13=-26 (LC 12) 2), 6=43 (LC 7), 7=11 :247 (LC 2), 13=29 (LC pression/Maximum 0, 3-4=-39/9, 4-5=-27/4 3 (15, 6-7=-10/15 8/55, 5-13=-21/14 been considered for (3-second gust) DL=3.0psf; h=25ft; Cat. ivelope) exterior zone 10-0, Interior (1) 1-10-0 d right exposed ; end C for members and hown; Lumber	 4) TCLL: ASCE Plate DOL=' psf (flat roof Category II; 5) Unbalanced design. 6) This truss ha load of 12.0 overhangs n 7) Building Des verifying Rai requirement: 8) Gable studs 9) This truss ha chord live loa chord live loa chord live loa 10) * This truss ha on the bottor 2) 3-06-00 tall I chord and an 11) Bearing at ja using ANSI/ designer sho 12) Provide med bearing plate 2, 24 Ib uplif joint 2 and 2 LOAD CASE(S) 	F-10; Pr=20.0 psf. 1.15); Pg=15.0 psf snow: Lum DOL=1 Exp B; Partially Ex snow loads have t as been designed f psf or 1.00 times fl on-concurrent with igner/Project engin n Load = 5.0 (psf) s specific to the us; spaced at 2-0-0 oc is been designed ad nonconcurrent v as been designed n chord in all areas by 2-00-00 wide wi ny other members. int(s) 13 considers? FPI 1 angle to grain ould verify capacity hanical connection a at joint(s) 13. hanical connection a capable of withsta t at joint 7, 48 lb up 6 lb uplift at joint 13 Standard	(roof LL (ground .15 Plat p.; Ct=1 been cor or great at roof k other lin heer res covers r e of this covers r e of this s where ll fit betw parallel h formula of bearin (by oth anding 4 lift at joi 3.	L: Lum DOL= snow); Pf=1: e DOL=1.15) .10 sidered for the er of min roof bad of 11.5 p ve loads. ponsible for ain loading truss compo D psf bottom other live load e load of 20.0 a rectangle veen the botth to grain valu a. Building ing surface. ers) of truss the ers) of truss the ers	1.15 1.5 ; his flive sf on nent. dds. Opsf om le to to oint lift at				SEA 0363	ROLL 22

only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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818 Soundside Road Edenton, NC 27932

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mmm May 14,2025

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	ME02	Monopitch	1	1	Job Reference (optional)	173424092

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Mon May 12 14:09:41 ID:X9GB1RuhnjFI1mb356ji3rzxXRG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:34.3

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

Loading FCLL (roof) Snow (Pf/Pg) FCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr * Code	2-0-0 1.15 1.15 YES IRC201	5/TPI2014	CSI TC BC WB Matrix-MR	0.30 0.21 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.03 0.00	(loc) 4-8 4-8 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 23 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD SOT CHORD WEBS DTHERS BRACING TOP CHORD SOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood s 5-6-8 oc purlins, Rigid ceiling direc bracing. (size) 2=5-3-1 Max Horiz 2=67 (I Max Uplift 2=-63 (Max Grav 2=287 (LC 2)	heathing directly applie except end verticals. tly applied or 10-0-0 o), 4=5-3-0, 9=0-1-8 .C 12) LC 12), 9=-49 (LC 12) (LC 2), 4=169 (LC 7), 9	4) 5) ed or 6) C 7) 9=64	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; I Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Raii requirements Gable studs This truss ha chord live loa	7-10; Pr=20.0 psf .15); Pg=15.0 psf snow: Lum DOL=1 Exp B; Partially Ex snow loads have b as been designed f psf or 1.00 times fl on-concurrent with igner/Project engin n Load = 5.0 (psf) s specific to the us spaced at 2-0-0 of is been designed f ad nonconcurrent to as been designed f	f (roof LL (ground 1.15 Plat p.; Ct=1 been cor for great lat roof lo o ther lim neer res covers r e of this c. or a 10.0 with any	:: Lum DOL= snow); Pf=1 e DOL=1.15); .10 isidered for t er of min rool bad of 11.5 p ve loads. bonsible for ain loading truss compo 0 ps bottom other live loa e load of 20	1.15 1.5); his f live sf on nent. ads. Onef					
FORCES	(lb) - Maximum C Tension 1-2=0/22, 2-3=-16	ompression/Maximum 5/41, 4-5=-58/0,	, i	on the bottor 3-06-00 tall b chord and ar	n chord in all areas by 2-00-00 wide winy other members.	s where Il fit betv	a rectangle veen the bott	om					
BOT CHORD WEBS	3-5=-102/71 2-4=-67/135 3-9=-41/9		1	 Bearing at jo using ANSI/1 designer sho 	int(s) 9 considers FPI 1 angle to grain puld verify capacity	parallel t n formula of bear	o grain value a. Building ng surface.	9				mun	U117
NOTES I) Unbalance this design	ed roof live loads ha	ve been considered fo	r 1: 1:	 Provide mechanism bearing plate Provide mechanism 	hanical connection at joint(s) 9. hanical connection	n (by oth n (by oth	ers) of truss t ers) of truss t	to to			ALL S	OR EESS	ROLIN

- Wind: ASCE 7-10; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-2-0 to 1-10-0, Exterior (2) 1-10-0 to 5-1-4 zone; cantilever left and right exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- tanding 63 lb uplift at joint 2, 63 lb uplift at joint 2 and 49 lb uplift at joint 9. LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	P01	Monopitch	9	1	Job Reference (optional)	173424093

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:41 ID:Ci8g3XC9DISyKPxr9KtZhLzHK8i-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:37.3

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

_oading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015,	/TPI2014	CSI TC BC WB Matrix-MR	0.70 0.46 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.13 0.00	(loc) 4-8 4-8 2	l/defl >999 >686 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 31 lb	GRIP 244/190 FT = 20%	
JUMBER IOP CHORD 30T CHORD WEBS DTHERS BRACING IOP CHORD 30T CHORD 30T CHORD REACTIONS (# M FORCES IOP CHORD BOT CHORD WEBS NOTES 1) Unbalanced this design. 2) Wind: ASCE Vasd=91mp II; Exp B; Er and C-C Exp B; Er and C-	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) 2=0-5-4, 9 Aax Horiz 2=83 (LC Aax Uplift 2=-68 (LC Aax Grav 2=375 (LC (Ib) - Maximum Com Tension 1-2=0/21, 2-3=-274/2 3-5=-37/194 2-4=-40/226 3-9=-251/0 I roof live loads have 5-7-10; Vult=115mph th; TCDL=6.0psf; BCI closed; MWFRS (en terior (2) -1-1-0 to 1-1 e; cantilever left and and right exposed;C-1 VFRS for reactions sf late grip DOL=1.60 E 7-10; Pr=20.0 psf (ft 1.15); Pg=15.0 ps	athing directly applied sept end verticals. applied or 10-0-0 oc 12), 9=-53 (LC 16) 2), 9=-53 (LC 2) pression/Maximum 23, 4-5=0/161, been considered for (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zone (1-0, Interior (1) 1-11 right exposed ; end C for members and nown; Lumber roof LL: Lum DOL=1. round snow); Pf=11. 5 Plate DOL=1.15);	5) 6) d or 7) 8) 9) 10) 11) LO, at. -0	This truss ha load of 12.0 p overhangs no Building Des verifying Rain requirements This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and an Bearing at jo using ANSI/T designer sho Provide mecl bearing plate Provide mecl bearing plate 2 and 53 lb u AD CASE(S)	s been designed i sof or 1.00 times f pon-concurrent with igner/Project engi n Load = 5.0 (psf) is specific to the us s been designed i id nonconcurrent ias been designed y 2-00-00 wide w by other members int(s) 9 considers PI 1 angle to gracity hanical connection at joint(s) 9. hanical connection capable of withst plift at joint 9. Standard	for greate lat roof lo n other liv neer resp covers r. se of this for a 10.0 with any d for a 10.1 with any d for a 10 parallel t n formula of beat n formula of beat n (by oth- ianding 6	er of min roof aad of 11.5 p ve loads. oonsible for ain loading truss compo b psf bottom other live loa e load of 20.0 a rectangle veen the bott o grain value a. Building ng surface. ers) of truss t 8 lb uplift at j	f live sf on nent. ads. Opsf om to to joint		And the second s		SEA 0363	L 22	Mamming

- vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15
- Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

G mmm May 14,2025

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	PE01	Monopitch Supported Gable	2	1	Job Reference (optional)	173424094

Run: 8.83 E Feb 1 2025 Print: 8.830 E Feb 1 2025 MiTek Industries, Inc. Tue May 13 16:27:04 ID:kE2sHO_tSDAWAeZN5YYLyYzHK9_-IdQMFfTxWwilOro4FhALl9i0HnnV67XNfxkcMPzGsNL Page: 1



Scale = 1:32

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

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/T	⁻ PI2014	CSI TC BC WB Matrix-MP	0.33 0.27 0.04	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: 32 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (Ib/size) 2=199/7-6 6=374/7-5 Max Horiz 2=90 (LC Max Uplift 2=-52 (LC (LC 16) Max Grav 2=259 (LC (LC 2))	athing directly applied cept end verticals. applied or 10-0-0 oc 0-2, 5=-46/7-9-2, 0-2 15) 5 12), 5=-57 (LC 2), 6= C 2), 5=17 (LC 16), 6=	3)	Truss desigr ponly. For stu see Standarc or consult qu CCLL: ASCE Plate DOL=1 Osf (flat roof st Category II; f Unbalanced Juhalanced design. This truss ha oad of 12.0 p overhangs no Building Desi verifying Raii equirements Gable requirt Gable studs	hed for wind loads ds exposed to wind d Industry Gable Er alified building des 7-10; Pr=20.0 psf (snow: Lum DOL=1 Exp B; Partially Exp snow loads have b s been designed for bosf or 1.00 times fla on-concurrent with igner/Project engin n Load = 5.0 (psf) of s specific to the use se continuous botto spaced at 2-0-0 oc	in the p d (norm d Deta igner a igner a (roof Ll ground .15 Plat b.; Ct=1 a, 5, Ct=1 core a or great at roof lo other life eer res covers r e of this om chor	lane of the tru al to the face) ills as applicat s per ANSI/TF snow); Pf=11 e DOL=1.15) .10 isidered for the er of min roof bad of 11.5 ps /e loads. ponsible for ain loading truss compor d bearing.	iss), ole, , PI 1. 1.15 .5 ; inis live of on						
TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanci this desigi 2) Wind: AS(Vasd=91r II; Exp 8; and C-C 0 to 7-7-6 zi vertical lef forces & N DOL=1.6((ib) - Maximum Com Tension 1-2=0/21, 2-10=-123 11-12=-106/80, 3-12 4-5=-24/32 2-6=-47/73, 5-6=-35, 3-6=-315/219 ed roof live loads have n. CE 7-10; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (er Enclosed; MWFRS (for Corner (3) -1-1-0 to 1-1 one; cantilever left and ft and right exposed;C- MWFRS for reactions s 0 plate grip DOL=1.60	pression/Maximum 3/58, 10-11=-114/63, 2=-104/82, 3-4=-57/50 /46 been considered for (3-second gust) DL=3.0psf; h=25ft; Ca ivelope) exterior zone 1-0, Exterior (2) 1-11- right exposed ; end C for members and hown; Lumber	10) T 11) * 11) * 12) / 12) / 13) F 2 13) F 2 2 14) T 0 F LOA	This truss ha chord live loas This truss h on the botton 3-06-00 tall b chord and an All bearings a capacity of 5 Provide mecl bearing plate 2, 57 lb uplift at joint : This truss is nternational R802.10.2 ar D CASE(S)	s been designed fo d nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will by other members. are assumed to be 65 psi. hanical connection capable of withsta at joint 5, 91 lb up 2. designed in accord Residential Codes and referenced stand Standard	or a 10. ith any for a liv where fit betw SP No. (by oth nding 5 lift at joi ance w sections dard AN	D psf bottom other live load e load of 20.0 2 crushing ers) of truss to 2 b uplift at junt 6 and 52 lb ith the 2015 FS502.11.1 a ISI/TPI 1.	ds.)psf om opint o		Manna Manna		SEA 0363	ROV PROVINE L 22 EERRAL	Mannung

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V01	Valley	1	1	Job Reference (optional)	173424095

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:41 ID:ZomI8UU_iYwRrjKCgE?78kzxQQU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:48.7

Plate Offsets (X, Y): [2:Edge,0-1-8], [5:0-2-8,0-1-8], [7:Edge,0-2-0]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 16.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/7	TPI2014	CSI TC BC WB Matrix-MR	0.80 0.36 0.13	DEFL Vert(LL) Vert(CT) Horz(CT)	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: 52 lb	GRIP 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 2-0-0 oc purlins: 1 Rigid ceiling direct bracing. (size) 7=6-4-8 10=6-4- Max Horiz 10=-145 Max Uplift 7=-281 9=-230 Max Grav 7=233 (9=382 (-6, except end vertica ly applied or 6-0-0 oc , 8=6-4-8, 9=6-4-8, 8 9 (LC 10) (LC 11), 8=-286 (LC 1 (LC 11), 10=-227 (LC LC 10), 8=438 (LC 27 LC 26), 10=185 (LC 1	3) - (4) - (4) - (5) - (6) - (6) - (6) - (6) - (7) - (7) - (7) - (8) - (6) - (7) - () (7) - () () - ()	Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 Plate DOL=1 Category II; I This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements Provide adec Gable requir	ed for wind load dis exposed to w d Industry Gable alified building d 7-10; Pr=20.0 p .15); Pg=15.0 p snow: Lum DOL Exp B; Partially I is been designed psf or 1.00 times on-concurrent w igner/Project eng n Load = 5.0 (ps s specific to the u quate drainage to es continuous bo	Is in the pla vind (norm. End Detai lesigner as ssf (roof LL sf (ground =1.15 Plat Exp.; Ct=1. d for greate f flat roof lc ith other lin gineer resp f) covers r, f) covers r, to covers r, to cover the state o prevent watten chore	ane of the tru al to the face Is as applica per ANSI/TI : Lum DOL= snow); Pf=10 e DOL=1.15) 10, Lu=50-0 er of min roof vad of 11.5 p re loads. bonsible for ain loading truss compoind d bearing.	iss), ble, PI 1. 1.15 6.5 -0 f live sf on nent. g.						
FORCES	(Ib) - Maximum Co Tension 2-10=-145/190, 1- 3-4=-19/16, 4-5=-1 5-7=-170/221	mpression/Maximum 2=0/0, 2-3=-19/16, 9/16, 5-6=0/0,	(117 12)	braced again Gable studs This truss ha chord live loa * This truss h	ist lateral moven spaced at 4-0-0 is been designed ad nonconcurren nas been designed	nent (i.e. d oc. d for a 10.0 t with any ed for a live) psf bottom other live loa e load of 20.0	nds. Opsf				MILLI	un.	
WEBS NOTES 1) Unbalanc this desig 2) Wind: ASI Vasd=91r II; Exp B; and C-C E to 7-6-4 z vertical lei forces & N DOL=1.60	9-10=-141/147, 8- 3-9=-210/169, 4-8: ed roof live loads hav n. CE 7-10; Vult=115mp nph; TCDL=6.0psf; E Enclosed; MWFRS (Exterior (2) -1-1-12 to one; cantilever left ar ft and right exposed; /WFRS for reactions) plate grip DOL=1.6(=-141/14/, 7-8=-141 =-243/202 re been considered fo cDL=3.0psf; h=25ft; (envelope) exterior zor 1-10-4, Interior (1) 1- id right exposed; end C-C for members and shown; Lumber	r 13) r 13) Cat. Lee 14) (10-4 (LOA	on the bottor 3-06-00 tall b chord and ar Provide mec bearing plate 10, 281 lb up lb uplift at joi Graphical pu bottom chorc AD CASE(S)	n chord in all are by 2-00-00 wide ' by other member hanical connecti e capable of with lift at joint 7, 230 nt 8. rlin representation ation of the purlir J. Standard	eas where will fit betw rs, with BC on (by oth standing 2 0 lb uplift a on does no n along the	a rectangle reen the bott DL = 10.0psi 27 lb uplift at t joint 9 and : t depict the s top and/or	om f. to t joint 286 size		Weining .		SEA 0363	L 22 EER. KIN	7



GI mmm May 14,2025

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

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V02	Valley	1	1	Job Reference (optional)	173424096

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:42 ID:VBu2ZAWFE9A941Uanf2bD9zxQQS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:42.5

Plate Offsets (X, Y): [2:Edge,0-1-8], [4:0-2-8,0-1-8], [6:Edge,0-1-8]

5-3-7

					_								
Loading ICLL (roof) Snow (Pf/Pg) ICDL BCLL BCDL	(psf) 20.0 16.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/TPI2014	CSI TC BC WB Matrix-MR	0.63 0.34 0.10	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	GRIP 244/190 FT = 20%	
LUMBER 'OP CHORD 30T	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 (size) 6=6-4-8,7 Max Horiz 8=-141 (L Max Uplift 6=-118 (L 8=211 (LC 8=211 (LC 8=211 (LC 8=211 (LC (lb) - Maximum Com Tension 2-8=-171/135, 1-2=0 3-4=-18/14, 4-5=0/0, 7-8=-18/14, 4-5=0/0, 7-8=-131/138, 6-7=- 3-7=-191/59 ed roof live loads have hopt; TCDL=6.0psf; BC Enclosed; MWFRS (er exterior (2) -1-1-12 to 1 nor; cantilever left and t and right exposed;C- WFRS for reactions s plate grip DOL=1.60 igned for wind loads in studs exposed to wind	I-0 max.): 1-5, except applied or 6-0-0 oc 7=6-4-8, 8=6-4-8 C 10) C 11), 7=-39 (LC 15), C 10) C 26), 7=341 (LC 33), C 27) pression/Maximum 0/0, 2-3=-18/14, , 4-6=-171/135 131/138 been considered for (3-second gust) DL=3.0psf; h=25ft; C- tivelope) exterior zone -10-4, Interior (1) 1-1 right exposed ; end C for members and hown; Lumber the plane of the truss (normal to the face),	 4) TCLL: ASC Plate DOL- psf (flat roc Category II 5) This truss I load of 12. overhangs 6) Building De verifying Rarequiremer 7) Provide ad 8) Gable requiremer 7) Provide ad 8) Gable requiremer 9) Truss to be braced aga 10) Gable studi 11) This truss I chord live I 12) * This truss on the botti 3-06-00 tai 13) Provide me bearing pla 8, 118 lb up 14) Graphical p or the orier bottom cho at. LOAD CASE(S 	E 7-10; Pr=20.0 p E 7-10; Pr=20.0 p f snow: Lum DOL Exp B; Partially I tas been designed b) ps or 1.00 times inn-concurrent wi signer/Project eng in Load = 5.0 (ps ts specific to the u aquate drainage tt res continuous bo fully sheathed fro inst lateral moven s spaced at 4-0-0 has been designed by 2-00-00 wide i by 2-00-00 wide i by 2-00-00 wide i te capable of with lift at joint 6 and 3 urlin representation tation of the purlin rd.) Standard	ssf (roof LL sf (ground =1.15 Plat Exp.; Ct=1 d for greats f flat roof Ik ith other lis gineer resp f) covers r use of this o prevent v ottom chor om one fac nent (i.e. d oc. d for a 10.0 t with any ef for a liv was where will fit betw 's, with BC on (by oth standing 1 39 lb uplift on does no a along the	.: Lum DOL= snow); Pf=16 e DOL=1.15) 10, Lu=50-0- er of min roof pad of 11.5 p: re loads. ponsible for ain loading truss compor water ponding d bearing. e or securely iagonal web) 0 psf bottom other live loa e load of 20.0 a rectangle ween the botts DL = 10.0psf truss t 18 lb uplift at at joint 7. bt depict the se top and/or	1.15 5.5 ; -0 live sf on nent. g. ds. Opsf om 5. o o size				SEA 0363	ROLINI L 22 BERINI	Ammun.

- 1; MWERS (envel and C-C Exterior (2) -1-1-12 to 1-10-4, Interior (1) 1-10-4 to 7-6-4 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
- 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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GI

11111111 May 14,2025

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V03	Valley	1	1	Job Reference (optional)	173424097

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:42 ID:_NSQnWWt?TI0iB3mLNZqmMzxQQR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:41.2

Plate Offsets (X, Y): [2:Edge,0-1-8], [4:0-2-8,0-1-8], [6:Edge,0-1-8]

		-			-								
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 16.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	/TPI2014	CSI TC BC WB Matrix-MR	0.56 0.30 0.09	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: 42 lb	GRIP 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 2-0-0 oc purlins (6-0 end verticals. Rigid ceiling directly bracing. (size) 6=6-4-8, 7 Max Horiz 8=-134 (L Max Uplift 6=-112 (L 8=-112 (L Max Grav 6=207 (LC 8=207 (LC	-0 max.): 1-5, except applied or 6-0-0 oc 7=6-4-8, 8=6-4-8 C 10) C 11), 7=-39 (LC 15), C 10) C 26), 7=340 (LC 33), C 27)	4) 5) 6) 7) 8) 9) 10) 11)	TCLL: ASCE Plate DOL=' psf (flat roof Category II; This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements Provide adee Gable requin Truss to be f braced again Gable studs This truss ha	7-10; Pr=20.0 ps .15); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E; ss been designed psf or 1.00 times to on-concurrent with igner/Project engin n Load = 5.0 (psf) s specific to the us quate drainage to es continuous bot ully sheathed from nst lateral movements spaced at 4-0-0 of the spaced st at -0-0 of the spa	f (roof LL f (ground 1.15 Plat xp.; Ct=1 for great flat roof li- h other li- ineer res covers r se of this prevent tom choin n one fac ent (i.e. c c. for a 10.	:: Lum DOL= snow); Pf=16 e DOL=1.15) .10, Lu=50-0 er of min roof boad of 11.5 p; ve loads. ponsible for ain loading truss compon water ponding. d bearing. e or securely liagonal web) D psf bottom	1.15 5.5 ; -0 live sf on nent. g.					
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance	Check 201 (LC 27) Chord live DRCES (lb) - Maximum Compression/Maximum 12) * This trus Tension 12) * This trus on the bot DP CHORD 2-8=-171/13, 1-2=0/0, 2-3=-17/13, 3-06-00 tic 3-4=-17/13, 4-5=0/0, 4-6=-171/130 chord and DT CHORD 7-8=-123/130, 6-7=-123/130 13) Provide m BES 3-7=-191/59 bearing pl DTES 8, 112 lb c 14) Graphical				iss has been designed for a live load of 20.0psf ottom chord in all areas where a rectangle tall by 2-00-00 wide will fit between the bottom id any other members, with BCDL = 10.0psf. mechanical connection (by others) of truss to plate capable of withstanding 112 lb uplift at joint uplift at joint 6 and 39 lb uplift at joint 7.							ROLA	
this design 2) Wind: ASC	n. CE 7-10; Vult=115mph	(3-second gust)	,	or the orient	ation of the purlin a	along the	e top and/or			4	Ì	FESS	The 2

- 2 Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-1-12 to 1-10-4, Interior (1) 1-10-4 to 7-6-4 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
- 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.

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	903 Serenity	
P02509-25343	V04	Valley	1	1	Job Reference (optional)	173424098

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:42 ID:_NSQnWWt?TI0iB3mLNZqmMzxQQR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:40

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

			-											
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 16.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/	/TPI2014	CSI TC BC WB Matrix-MR	0.50 0.27 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: 41 lb	GRIP 244/190 FT = 20%	6
LUMBER IOP CHORD SOT CHORD WEBS DTHERS BRACING IOP CHORD C	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x5 SP No.3 2x6 SP No.3 SP No.3 Max Horiz & Se-106 (L 8 Se-106 (L) 8 Se	-0 max.): 1-5, excep applied or 6-0-0 oc 7=6-4-8, 8=6-4-8 C 12) C 11), 7=-39 (LC 15) C 10) C 3), 7=340 (LC 33), C 4, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10	4) 5) (1 6) 7) 8) 9) 10) 11) 12) 13) 14) at. LO 30-4	TCLL: ASCE Plate DOL=1 Plate DOL=1 Posf (flat roof Category II; I This truss ha load of 12.0 0 overhangs n Building Des verifying Raii requirements Provide adec Gable requin Truss to be f braced again Gable studs This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar Provide mec bearing plate 8, 106 lb upli Graphical pu or the orienta bottom chorc AD CASE(S)	7-10; Pr=20.0 psf .15); Pg=15.0 psf .15); Pg=15.0 psf .15); Pg=15.0 psf .15); Pg=15.0 psf .15, Pg=15.0 psf .15, Partially Exp s been designed for .10 times fla on-concurrent with .10 times fla .10 times fl	(roof LL ground 1.5 Plat or great at roof lo other live eer resp covers r of this revent v on efac of this revent v on efac of this on a 10.0 (by oth lo uplift does no long the	: Lum DOL=' snow); Pf=16 e DOL=1.15) .10, Lu=50-0- er of min roof aad of 11.5 ps /e loads. jonsible for ain loading truss compor water ponding d bearing. e or securely iagonal web) 0 psf bottom other live loa e load of 20.0 a rectangle /een the bottt DL = 10.0psf DL = 10.0psf DL = 10.0psf of lb uplift at at joint 7. th depict the s top and/or	1.15 5.5 -0 live sf on nent. g. ds. Opsf com f. to size			2 A A A A A A A A A A A A A A A A A A A	SEA 0363	ROJ L 22 IL BER	

DOL=1.60 plate grip DOL=1.60 Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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818 Soundside Road Edenton, NC 27932

mmm May 14,2025

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V05	Valley	1	1	Job Reference (optional)	173424099

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Mon May 12 14:09:42

Page: 1

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



1-5-11

Scale = 1:38.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 40 lb	FT = 20%
LUMBER			4) TCLL: ASC	E 7-10; Pr=20.0	osf (roof LL	: Lum DOL=	1.15					

2x4 SP N	0.2
2x4 SP N	0.2
2x4 SP N	0.3
2x4 SP N	0.3
2-0-0 oc p end vertic	ourlins (6-0-0 max.): 1-5, except cals.
Rigid ceili bracing.	ing directly applied or 6-0-0 oc
(size)	6=6-4-8, 7=6-4-8, 8=6-4-8
Max Horiz	8=-118 (LC 10)
Max Uplift	6=-101 (LC 11), 7=-39 (LC 15),
-	8=-101 (LC 10)
Max Grav	6=203 (LC 3), 7=340 (LC 33),
	8=203 (LC 3)
(lb) - Max	imum Compression/Maximum
Tension	
2-8=-171/	/121, 1-2=0/0, 2-3=-15/12,
3-4=-15/1	2, 4-5=0/0, 4-6=-171/121
7-8=-109/	/115, 6-7=-109/115
3-7=-191/	/60
	2x4 SP N 2x4 SP N (sige cell bracing. (size) Max Horiz Max Uplift Max Grav (lb) - Max Tension 2-8=-171/ 3-4=-15/1 7-8=-109/ 3-7=-191/

NOTES

- Unbalanced roof live loads have been considered for 1) this design
- Wind: ASCE 7-10; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-1-12 to 1-10-4, Interior (1) 1-10-4 to 7-6-4 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
- 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.

- Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0 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 11.5 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for 6) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely 9) braced against lateral movement (i.e. diagonal web). 10) Gable studs spaced at 4-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 8, 101 lb uplift at joint 6 and 39 lb uplift at joint 7.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V06	Valley	1	1	Job Reference (optional)	173424100



Page: 1



4-2-7

Scale = 1:37.6

_oading FCLL (roof)	(psf) 20.0 16 5/15 0	Spacing Plate Grip DOL	2-0-0 1.15 1.15	CSI TC BC	0.38	DEFL Vert(LL)	in n/a n/a	(loc) -	l/defl n/a	L/d 999	PLATES MT20	GRIP 244/190	
TCDL BCLL BCDL	10.0 0.0* 10.0	Rep Stress Incr Code	YES IRC2015/TPI2014	WB Matrix-MR	0.06	Horz(CT)	0.00	6	n/a	n/a	Weight: 39 lb	FT = 20%	
LUMBER	2x4 SP No.2		4) TCLL: ASCI Plate DOL=	E 7-10; Pr=20.0 1.15); Pg=15.0 p	psf (roof LL osf (ground	.: Lum DOL= snow); Pf=16	1.15 6.5						

TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	2-0-0 oc p end vertic	ourlins (6-0-0 max.): 1-5, except cals.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 6-0-0 oc
REACTIONS	(size)	6=6-4-8, 7=6-4-8, 8=6-4-8
	Max Horiz	8=-111 (LC 12)
	Max Uplift	6=-96 (LC 11), 7=-39 (LC 15),
	-	8=-96 (LC 10)
	Max Grav	6=203 (LC 3), 7=339 (LC 33),
		8=203 (LC 3)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	-
TOP CHORD	2-8=-171/	/117, 1-2=0/0, 2-3=-15/11,
	3-4=-15/1	1, 4-5=0/0, 4-6=-171/117
BOT CHORD	7-8=-101/	/108, 6-7=-101/108
WEBS	3-7=-191/	/60

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-1-12 to 1-10-4, Interior (1) 1-10-4 to 7-6-4 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

 TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
 This truss has been designed for greater of min roof live

- load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
 Gable requires continuous bottom chord bearing
- 8) Gable requires continuous bottom chord bearing.9) Truss to be fully sheathed from one face or securely
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 Gable studs spaced at 4-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle
- 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 13) Provide mechanical connection (by others) of truss to
- bearing plate capable of withstanding 96 lb uplift at joint 8, 96 lb uplift at joint 6 and 39 lb uplift at joint 7.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard



818 Soundside Road

Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V07	Valley	1	1	Job Reference (optional)	173424101

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:43 ID:Sa0p_sXVmnQtJLezv443IazxQQQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36.1

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	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR									
BCDL	10.0										Weight: 37 lb	FT = 20%	
			4) TCLL · ASC	E 7-10 [.] Pr=20.0 r	osf (roof LL	· Lum DOI =	1 15						

LUMBER		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	2-0-0 oc p	ourlins (6-0-0 max.): 1-5, except
	end vertic	als.
BOT CHORD	Rigid ceil	ing directly applied or 6-0-0 oc
	bracing.	
REACTIONS	(size)	6=6-8-0, 7=6-8-0, 8=6-8-0
	Max Horiz	8=-100 (LC 10)
	Max Uplift	6=-82 (LC 11), 7=-42 (LC 15),
		8=-83 (LC 10)
	Max Grav	6=187 (LC 32), 7=282 (LC 31),
		8=187 (LC 31)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	2-8=-161/	/106, 1-2=0/0, 2-3=-14/10,
	3-4=-14/1	0, 4-5=0/0, 4-6=-161/105
BOT CHORD	7-8=-90/9	7, 6-7=-90/97
WEBS	3-7=-207/	64

3-9-14

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 7-8-0 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

 TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
 This truss has been designed for greater of min roof live

- load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) Provide adequate drainage to prevent water ponding.
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 Gable studs spaced at 4-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 8, 82 lb uplift at joint 6 and 42 lb uplift at joint 7.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V08	Valley	1	1	Job Reference (optional)	173424102

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:43 ID:wmaBCCY7X4YkxVD9SobIrnzxQQP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:34.2

FORCES

TOP CHORD

BOT CHORD

this design

WEBS

NOTES

1)

2)

3)

8=187 (LC 31)

Tension

3-7=-206/64

4-5=0/0. 4-6=-161/100

7-8=-78/84, 6-7=-78/84

Unbalanced roof live loads have been considered for

Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat.

II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to

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.

Wind: ASCE 7-10; Vult=115mph (3-second gust)

7-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and

forces & MWFRS for reactions shown; Lumber

DOL=1.60 plate grip DOL=1.60

(lb) - Maximum Compression/Maximum

2-8=-161/100, 1-2=0/0, 2-3=-12/9, 3-4=-12/9,

.oading ⁻ CLL (roof) ふnow (Pf/Pg) ⁻ CDL 3CLL 3CDL	(psf) 20.0 16.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/	/TPI2014	CSI TC BC WB Matrix-MR	0.23 0.13 0.05	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: 35 lb	GRIP 244/190 FT = 20%	
UMBER OP CHORD 30T CHORD VEBS THERS 3RACING OP CHORD 30T CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2-0-0 oc purlins (6-0 end verticals. Rigid ceiling directly bracing. (size) 6=6-8-0, 7 Max Horiz 8=-88 (LC Max Uplift 6=-76 (LC 8=-76 (LC)-0 max.): 1-5, except r applied or 6-0-0 oc 7=6-8-0, 8=6-8-0 2 10) 2 11), 7=-42 (LC 15), 2 10) 2 22) 7 204 (LC 21)	4) 5) t 6) 7) 8) 9) 10)	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; I This truss ha load of 12.0 p overhangs nu Building Des verifying Rair requirements Provide adec Gable require Truss to be fi braced again Gable studs	7-10; Pr=20.0 ps .15); Pg=15.0 psi snow: Lum DOL= Exp B; Partially E: is been designed psf or 1.00 times i on-concurrent witt igner/Project engi n Load = 5.0 (psf) s specific to the us quate drainage to es continuous bot ully sheathed from sst lateral movemus spaced at 4-0-0 c	sf (roof LL f (ground 1.1.5 Plata xp.; Ct=1 for greate flat roof lc h other liv ineer resp covers r. se of this prevent v ttom chor n one fac ent (i.e. d oc.	: Lum DOL= snow); Pf=1 e DOL=1.15 10, Lu=50-C er of min roo aad of 11.5 p re loads. ponsible for ain loading truss compo vater pondin d bearing. e or securely iagonal web	=1.15 6.5);)-0 of live psf on pnent. ng. y						

- 11) This truss has been designed for a 10.0 psf bottom
 - chord live load nonconcurrent with any other live loads.
 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 8, 76 lb uplift at joint 6 and 42 lb uplift at joint 7.
 - a) 76 ib upinit at joint 42 ib upint at joint 7.
 a) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V09	Valley	1	1	Job Reference (optional)	173424103

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:43 ID:wmaBCCY7X4YkxVD9SobIrnzxQQP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:32.3

_oading FCLL (roof) Snow (Pf/Pg)	(psf) 20.0 16.5/15.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI TC BC	0.18 0.10	DEFL Vert(LL) Vert(CT)	in n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 244/190	
TCDL BCLL	10.0 0.0*	Rep Stress Incr Code	YES IRC2015/TPI2014	WB Matrix-MR	0.05	Horz(CT)	0.00	6	n/a	n/a	Waight: 22 lb	ET _ 20%	
	10.0		4) TCLL: ASCE	I 5 7-10; Pr=20.0 p	osf (roof LL	.: Lum DOL=	1.15	-	-		weight. 33 lb	FT = 20%	

LOWIDER		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	2-0-0 oc p end vertic	ourlins (6-0-0 max.): 1-5, except cals.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 6-0-0 oc
REACTIONS	(size)	6=6-8-0, 7=6-8-0, 8=6-8-0
	Max Horiz	8=75 (LC 11)
	Max Uplift	6=-70 (LC 11), 7=-42 (LC 15),
		8=-71 (LC 10)
	Max Grav	6=188 (LC 32), 7=280 (LC 31),
		8=188 (LC 31)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	2-8=-161/	/96, 1-2=0/0, 2-3=-11/8, 3-4=-11/8,
	4-5=0/0, 4	4-6=-161/95
BOT CHORD	7-8=-66/7	2, 6-7=-66/72
WFBS	3-7=-205/	64

2-11-6

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 7-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 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 11.5 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) Provide adequate drainage to prevent water ponding.
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 Gable studs spaced at 4-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all reads where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 8, 70 lb uplift at joint 6 and 42 lb uplift at joint 7.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V10	Valley	1	1	Job Reference (optional)	173424104

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:43 ID:1?KgMgVdTs2IStvODyWMhxzxQQT-RfC?PsB70Hg3NSgPgnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:30.4

_oading FCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.13	DEFL Vert(LL)	in n/a	(loc) -	l/defl n/a	L/d 999	PLATES MT20	GRIP 244/190	
Snow (Pf/Pg) FCDL	16.5/15.0 10.0 0.0*	Lumber DOL Rep Stress Incr	1.15 YES IRC2015/TPI2014	BC WB Matrix-MR	0.09 0.04	Vert(CT) Horz(CT)	n/a 0.00	- 6	n/a n/a	999 n/a			
BCDL	10.0	0000									Weight: 31 lb	FT = 20%	
UMBER	4) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15												

LOWIDEI		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	2-0-0 oc p	purlins (6-0-0 max.): 1-5, except
	end vertic	cals.
BOT CHORD	Rigid ceili	ing directly applied or 6-0-0 oc
	bracing.	
REACTIONS	(size)	6=6-8-0, 7=6-8-0, 8=6-8-0
	Max Horiz	8=-63 (LC 10)
	Max Uplift	6=-66 (LC 11), 7=-41 (LC 15),
		8=-66 (LC 10)
	Max Grav	6=188 (LC 32), 7=279 (LC 31),
		8=188 (LC 31)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	2-8=-161/	/92, 1-2=0/0, 2-3=-10/7, 3-4=-10/7
	4-5=0/0, 4	4-6=-161/91
BOT CHORD	7-8=-53/6	60, 6-7=-53/60
WEBS	3-7=-205/	/64

2-6-2

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 7-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
 This truss has been designed for greater of min roof live
- b) This truss has been designed for greater of min roor live load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) Provide adequate drainage to prevent water ponding.
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 Gable studs spaced at 4-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 8, 66 lb uplift at joint 6 and 41 lb uplift at joint 7.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard



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A MiTek Affi 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V11	Valley	1	1	Job Reference (optional)	173424105

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Mon May 12 14:09:43 ID:1?KgMqVdTs2IStvODyWMhxzxQQT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



S alo - 1.29 5

00ale = 1.20.0													
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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR									
BCDL	10.0	-									Weight: 29 lb	FT = 20%	
LUMBER			4) TCLL: ASC	E 7-10; Pr=20.0 p	osf (roof LL	.: Lum DOL=	1.15						

6-8-0

LOWIDER		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	2-0-0 oc p end vertic	ourlins (6-0-0 max.): 1-5, except cals.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 6-0-0 oc
REACTIONS	(size)	6=6-8-0, 7=6-8-0, 8=6-8-0
	Max Horiz	8=-50 (LC 10)
	Max Uplift	6=-62 (LC 11), 7=-41 (LC 15),
		8=-62 (LC 10)
	Max Grav	6=189 (LC 32), 7=277 (LC 31),
		8=189 (LC 31)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	2-8=-162/	/88, 1-2=0/0, 2-3=-10/6, 3-4=-10/6,
	4-5=0/0, 4	4-6=-162/88
BOT CHORD	7-8=-39/4	8, 6-7=-39/48
WFBS	3-7=-204/	64

2-0-14

NOTES

- Unbalanced roof live loads have been considered for 1) this design
- Wind: ASCE 7-10; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 7-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.

- Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0 This truss has been designed for greater of min roof live
- 5) load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhands non-concurrent with other live loads.
- Building Designer/Project engineer responsible for 6) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely 9) braced against lateral movement (i.e. diagonal web). 10) Gable studs spaced at 4-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 8, 62 lb uplift at joint 6 and 41 lb uplift at joint 7.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard



Page: 1

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V12	Valley	1	1	Job Reference (optional)	173424106

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Mon May 12 14:09:44

ID:1?KgMqVdTs2IStvODyWMhxzxQQT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

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

-1-0-0 7-8-0 6-8-0 6-8-0 1-0-0 1-0-0 6-8-0 2x4 🛛 2x4 🛛 2x4 u 1 10 5 ୲⋧ 襘∕ 0 0 • 0 8 6 2x4 II 2x4 u 2x4 u

Scale = 1:26.7													
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR									
BCDL	10.0										Weight: 27 lb	FT = 20%	
LUMBER			4) TCLL: ASC	E 7-10; Pr=20.0 p	osf (roof LL	.: Lum DOL=	1.15						

6-8-0

LUIVIDER		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	2-0-0 oc p end vertic	purlins (6-0-0 max.): 1-5, except cals.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 6-0-0 oc
REACTIONS	(size)	6=6-8-0, 7=6-8-0, 8=6-8-0
	Max Horiz	8=-38 (LC 10)
	Max Uplift	6=-59 (LC 11), 7=-41 (LC 15),
		8=-59 (LC 10)
	Max Grav	6=190 (LC 32), 7=276 (LC 31),
		8=190 (LC 31)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	2-8=-162/	/86, 1-2=0/0, 2-3=-14/5, 3-4=-14/5,
	4-5=0/0, 4	4-6=-162/86
BOT CHORD	7-8=-30/4	1, 6-7=-30/41
WEBS	3-7=-202/	/63

1-7-10

NOTES

- Unbalanced roof live loads have been considered for 1) this design
- Wind: ASCE 7-10; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 7-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.

- Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0 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 11.5 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for 6) verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely 9) braced against lateral movement (i.e. diagonal web). 10) Gable studs spaced at 4-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 8, 59 lb uplift at joint 6 and 41 lb uplift at joint 7.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V13	Valley	1	1	Job Reference (optional)	173424107

-1-0-0 Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:44 ID:VBu2ZAWFE9A941Uanf2bD9zxQQS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 7-8-0 6-8-0

6-8-0

6-8-0

2x4 II

6-8-0



5

1-0-0

2x4 🛛

6

2x4 🛚

Page: 1



2x4 II 2x4 II

1-0-0

8

Scale = 1:24.8

00010 = 1124.0													
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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR									
BCDL	10.0										Weight: 26 lb	FT = 20%	
LUMBER			4) TCLL: ASC	E 7-10: Pr=20.0 r	osf (roof LL	.: Lum DOL=	1.15						

LUMBER		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	2-0-0 oc p	ourlins (6-0-0 max.): 1-5, except
	Digid coll	ais.
	bracing.	ing directly applied of 6-0-0 oc
REACTIONS	(size)	6=6-8-0, 7=6-8-0, 8=6-8-0
	Max Horiz	8=-26 (LC 10)
	Max Uplift	6=-57 (LC 11), 7=-40 (LC 15),
		8=-57 (LC 10)
	Max Grav	6=191 (LC 32), 7=274 (LC 31),
		8=191 (LC 31)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	2-8=-163/	/84, 1-2=0/0, 2-3=-23/6, 3-4=-23/6,
	4-5=0/0, 4	4-6=-163/84
BOT CHORD	7-8=-21/3	6, 6-7=-21/36
WEBS	3-7=-201/	63

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 7-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
 This truss has been designed for greater of min roof live
- 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 11.5 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) Provide adequate drainage to prevent water ponding.
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 Gable studs spaced at 4-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 8, 57 lb uplift at joint 6 and 40 lb uplift at joint 7.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S) Standard



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V14	Valley	1	1	Job Reference (optional)	173424108

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:44 ID:HIix6Gr7Dfi8Vjw78KNIQEzHIU0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:40.2						15-9	-11						
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MS	0.23 0.11 0.09	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 57 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=15-9-11 7=15-9-11 Max Horiz 1=50 (LC Max Uplift 1=-7 (LC - (LC 17), 8 Max Grav 1=99 (LC (LC 34), 7 33)	athing directly applied applied or 6-0-0 oc 1, 5=15-9-11, 6=15-9 1, 8=15-9-11 16) 17), 5=-7 (LC 17), 6= 3-91 (LC 16) 33), 5=99 (LC 34), 6 '=347 (LC 2), 8=370	3) d or -11, 6) -91 7) =370 9)	Truss design only. For stu- see Standar or consult qu TCLL: ASCE Plate DOL=' psf (flat roof Category II; Unbalanced design. Building Des verifying Rai requirements Gable studs This truss ha chord live loo	ed for wind loads uds exposed to wi d Industry Gable I alified building de 7-10; Pr=20.0 ps 1.5); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E snow loads have igner/Project eng n Load = 5.0 (psf s specific to the u es continuous bo spaced at 4-0-0 c as been designed ad nonconcurrent	in the pl nd (norm End Deta ssigner as signer as sig (roof LL f (ground 1.15 Plat xp.; Ct=1 been cor ineer res) covers r se of this ttom chor oc. for a 10.0 with any	ane of the tru al to the face ils as applical s per ANS/TF = SNOW); PF=11 e DOL=1.15) .10 isidered for th consible for ain loading truss compor d bearing.	ss), ble, PI 1. 1.15 1.5 ; nis nent.					
FORCES TOP CHORD BOT CHORD	(lb) - Maximum Com Tension 1-2=-136/128, 2-3=- 4-5=-136/128 1-8=-64/115, 7-8=-64	pression/Maximum 5/127, 3-4=-5/120, 4/49, 6-7=-64/49	11	on the botton 3-06-00 tall I chord and and Provide med	m chord in all area by 2-00-00 wide w by other members chanical connection	vill fit betv ill fit betv in (by oth	a rectangle veen the botto	om co					
WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=91r II; Exp B; and C-C F 7-11-5, E: to 15-10-3 vertical le forces & N DOL=1.60	5-6=-64/115 3-7=-278/27, 2-8=-24 ed roof live loads have n. CE 7-10; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior (2) 0-0-8 to 3-0 kterior (2) 7-11-5 to 10- 8 zone; cantilever left al ft and right exposed;C- WWFRS for reactions sl 0 plate grip DOL=1.60	67/107, 4-6=-267/100 been considered for (3-second gust) DL=3.0psf; h=25ft; C ivelope) exterior zone -8, Interior (1) 3-0-8 t 11-5, Interior (1) 10- nd right exposed ; en C for members and hown; Lumber	6 LC at. e to 11-5 id	bearing plate 7 lb uplift at j joint 6. AD CASE(S)	e capable of withs joint 5, 91 lb uplift Standard	tanding / at joint 8	ib upiift at jo and 91 lb up	int 1, lift at		Continue		SEA 0363	L 22

DOL=1.60 plate grip DOL=1.60



GILB Unumperior May 14,2025

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Job	Truss	Truss Type	Qty	Ply	903 Serenity	
P02509-25343	V15	Valley	1	1	Job Reference (optional)	173424109

4, Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Mon May 12 14:09:44 ID:zIX_CHLTWEKRR99eKH5x5szHHsd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 4-6-13 9-1-11 4-6-13 4-6-13 9-1-11 4-6-13 4x6 = 4x6





2x4 💋

2x4 **॥** 9-1-11

Scale =	= 1:26.3
---------	----------

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 11.5/15.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.22 0.22 0.10	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: 29 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES	$\begin{array}{l} 2x4 \; {\rm SP}\; {\rm No.2} \\ 2x4 \; {\rm SP}\; {\rm No.2} \\ 2x4 \; {\rm SP}\; {\rm No.3} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	eathing directly applie v applied or 6-0-0 oc , 3=9-1-11, 4=9-1-11 16) 2 16), 3=-16 (LC 17) 2 16) 33), 3=86 (LC 34), 4 npression/Maximum 98/303 223/98	4) 5) ed or 6) 7) 8) 9) 4=622 1(1*	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; Unbalanced design. Building Des verifying Rai requirements Gable requir Gable studs This truss ha chord live loa D) * This truss ha chord live loa D) * This truss ha on the bottor 3-06-00 tall t chord and ar I) Provide mec bearing plate 1, 16 lb uplift DAD CASE(S)	F-10; Pr=20.0 psf 1.15); Pg=15.0 psf snow: Lum DOL=1 Exp B; Partially Ex snow loads have b igner/Project engin n Load = 5.0 (psf) s specific to the us es continuous bott spaced at 4-0-0 or is been designed fad nonconcurrent to has been designed n chord in all areas by 2-00-00 wide win y other members. hanical connection e capable of withstat at joint 3 and 56 l Standard	f (roof LL (ground 1.15 Plat p.; Ct=1 been cor neer res covers r e of this om chor c. or a 10.0 with any I for a liv s where II fit betv h anding 1 b uplift a	.: Lum DOL= snow); Pf=1 te DOL=1.15, .10 nsidered for t ponsible for ain loading truss compo d bearing. 0 psf bottom other live loa re load of 20. a rectangle veen the bott ers) of truss 10 lb uplift at at joint 4.	1.15 1.5); his nent. dds. Opsf om to joint					
1) Unbalanc	ed roof live loads have	been considered fo	r									mm	um.

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 4-7-5, Exterior (2) 4-7-5 to 7-7-5, Interior (1) 7-7-5 to 9-2-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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



