

Trenco 818 Soundside Rd Edenton, NC 27932

Re: P02426-25225 1056 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: I73382574 thru I73382605

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

North Carolina COA: C-0844



May 13,2025

Gilbert, Eric

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	1056 Serenity	
P02426-25225	A01T	Roof Special	1	1	Job Reference (optional)	173382574

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:29 ID:NTKr_IaA8CjIYCgxoziGQdzJEuc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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818 Soundside Road Edenton, NC 27932

G A. GIL

May 13,2025

9-6-15 9-8-10 3x6 🍫 3x6 🛷 3x6 Δ 20 3 3x6 II 衡 2 5-5-8 8 0-0-12. 22 9 ή 14 21 16 10 ₩ 3x6= ĸ 17 5x8= 11 2x4 II 2x4 II 6x8= 3x8= 2x4 🛛 2x4 🛛 3x6= 2-5-8 1-2-12 14-8-4 7-7-8 12-9-8 20-7-0 H 5-2-0 5-10-12 5-2-0 1-2-12 1-2-12 1-10-12

Scale = 1:96.8

Plate Offsets (X, Y): [4:0-1-4,0-1-8], [13:0-2-12,Edge], [15:0-5-8,0-4-0]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL LUMBER TOP CHORD	11.5/ 2x4 SP No.2	(psf) 20.0 (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 Wind: ASCE Vasd=91mph	CSI TC BC WB Matrix-MS 7-10; Vult=115mpt ; TCDL=6.0psf; BC	0.83 0.59 0.51	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.07 0.04 Cat.	(loc) 13-14 13-14 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 147 lb	GRIP 244/190 FT = 20%	
BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.3 Structural wo 4-10-7 oc pur Rigid ceiling bracing. 1 Row at mid	*Except *Except ood shea rlins, ex directly	t* 16-4:2x4 SP No.3 t* 14-5,5-13:2x4 SP athing directly applie (cept end verticals. applied or 6-0-0 oc 5-13	No.2 d or 3)	II; Exp B; Enc and C-C Exte to 10-3-8, Ex 13-0-6 to 21- end vertical I forces & MW DOL=1.60 pl TCLL: ASCE Plate DOL=1	closed; MWFRS (e prior (2) -0-11-0 to 2 terior (2) 10-3-8 to 6-0 zone; cantileve eft and right exposs FRS for reactions s ate grip DOL=1.60 7-10; Pr=20.0 psf .15): Pa=15.0 psf (nvelope 2-3-12, 13-0-6, er left ar ed;C-C shown; (roof LL around	exterior zo Interior (1) 2 Interior (1) d right expo- for members Lumber .: Lum DOL= snow): Pf=1	ne -3-12 sed ; ; and 1.15 1.5						
REACTIONS FORCES TOP CHORD	(size) 10 Max Horiz 18 Max Uplift 10 18 Max Grav 10 18 (lb) - Maximu Tension 1-2=0/41, 2-3 4-5=-636/171 7-8=-276/188 8-10=-339/17)=0-5-8, 3=203 (L)=-151 (L)=-81 (LC)=383 (L 3=673 (L um Comp 3=-475/8 3, 8-9=0, 70	11=0-5-8, 18=0-5-8 C 13) LC 15), 11=-13 (LC 1 C 15) C 27), 11=764 (LC 2 C 2) pression/Maximum 36, 3-4=-1104/215, 374/261, 6-7=-424/22 /41, 2-18=-642/126,	14), 4) 26), 5) 38, 6) 7)	psf (flat roof a Category II; E This truss ha load of 12.0 µ overhangs ne Building Des verifying Rain requirements This truss ha chord live loa * This truss h on the bottom	snow: Lum DOL=1. Exp B; Partially Exp s been designed for bosf or 1.00 times flaton- on-concurrent with gner/Project engin in Load = 5.0 (psf) of specific to the use s been designed for d nonconcurrent w as been designed in chord in all areas	15 Plat b; Ct=1 or great at roof le other liv eer res covers r e of this or a 10.0 vith any for a liv where	e DOL=1.15, 10 ar of min roop oad of 11.5 p ve loads. consible for ain loading truss compo 0 ps bottom other live load e load of 20. a rectangle	f live sf on nent. ads. 0psf				and CA		
BOT CHORD WEBS	17-18=-179/2 4-15=-49/234 13-14=-12/30 11-12=-55/0, 4-14=-879/40 5-13=-300/12	214, 16- 4, 14-15 05, 12-1 10-11= 00, 5-14 21, 2-17	17=-33/77, 15-16=-4 =-381/1270, 3=-49/0, 6-13=-44/72 -43/131 =-66/386, =-25/332, 3-17=-530	/37, ^{2,} 8) / ^{/63,} LC	3-06-00 tall b chord and an Provide mech bearing plate 18, 151 lb up DAD CASE(S)	y 2-00-00 wide will y other members, nanical connection capable of withsta lift at joint 10 and 1 Standard	l fit betv with BC (by oth Inding 8 3 lb up	veen the bott DL = 10.0ps ers) of truss 1 lb uplift at lift at joint 11	om f. to joint		Contraction of the second seco	A.	ORTH CA	2	7
NOTES 1) Unbalance this design	10-17=-123/4 7-11=-691/35 ed roof live load n.	4, 3-1: 5, 11-13 ds have	5=-229/181, =-39/170, 7-13=-50/3	367							1111 MAY	A A A A A A A A A A A A A A A A A A A		ER. KIN	

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

Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	A02	Common	5	1	Job Reference (optional)	173382575

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:30 ID:GfGKwdOWUTAR9QCr166S42zJEXc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





6-10-6	13-8-10	20-7-0	
6-10-6	6-10-5	6-10-6	

Plate Offsets (X, Y): [2:0-3-0,0-1-12], [6:0-3-0,0-1-12], [8:Edge,0-1-8]

		. , ,,,	3.7	- 1									
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) \$ 20.0 F 11.5/15.0 L 10.0 F 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	0.73 0.56 0.25	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.18 -0.29 0.02	(loc) 10-11 10-11 8	l/defl >999 >829 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 BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=91n II; Exp B; I and C-C E 10-3-8, Ex to 21-6-0; vertical lef forces & M DOL=1.60 3) TCLL: ASC Plate DOL	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Except* Structural wood sheatt 4-7-10 oc purlins, exc Rigid ceiling directly ap bracing. (size) 8=0-5-8, 12- Max Horiz 12=203 (LC Max Uplift 8=-79 (LC 1: Max Grav 8=875 (LC 2 (lb) - Maximum Compri- Tension 1-2=0/41, 2-3=-941/11 4-5=-828/203, 5-6=-94 2-12=-789/131, 6-8=-7 11-12=-92/732, 10-11= 5-10=-223/188, 4-11=- 3-11=-223/188, 4-11=- 3-11=-223/188, 4-11=- 3-11=-223/188, 4-11=- cd roof live loads have be b. CE 7-10; Vult=115mph (3 nph; TCDL=6.0psf; BCDL Enclosed; MWFRS (envei xterior (2) 10-3-8 to 13-3- zone; cantilever left and r t and right exposed;C-C WFRS for reactions sho to plate grip DOL=1.60 CE 7-10; Pr=20.0 psf (roo =1.15); Pg=15.0 psf (roo =1.15); Pg=15.0 psf (roo	10-5,11-3:2x4 SP N hing directly applied rept end verticals. pplied or 10-0-0 oc =0-5-8 13) 5), 12=-79 (LC 14) 2), 12=875 (LC 2) ression/Maximum 9, 3-4=-828/203, 11/119, 6-7=0/41, 189/131 =0/512, 8-10=-12/64 -147/418, -147/418 een considered for 8-second gust) L=3.0psf; h=25ft; Ca elope) exterior zone -0, Interior (1) 2-1-0 8, Interior (1) 13-3-8 right exposed ; end for members and wm; Lumber of LL: Lum DOL=1.1 und snow); Pf=11.5.	4) 10.3 5) 7) 8) LO 10 41. 15 15	This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar Provide mec bearing plate 12 and 79 lb AD CASE(S)	is been designed for performation of the second second second igner/Project enging in Load = 5.0 (psf) is specific to the use is been designed for ad nonconcurrent van been designed for in chord in all areas y 2-00-00 wide wil by other members, hanical connection e capable of withsta uplift at joint 8. Standard	or great at roof k other lin heer res covers r e of this or a 10.0 with any for a liv s where ll fit betw with BC (by oth anding 7	er of min rool aad of 11.5 p ve loads. ponsible for ain loading truss compo 0 psf bottom other live loa e load of 20. a rectangle veen the bott DL = 10.0ps ers) of truss i 9 lb uplift at j	f live sf on nent. ads. 0psf f. to joint				SEA 0363	ROLL 22 LBERTIN

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

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May 13,2025

Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	A02T	Roof Special	4	1	Job Reference (optional)	173382576

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:31 ID:GfGKwdOWUTAR9QCr166S42zJEXc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:96.8

Loading TCLL (roof) Snow (Pf/Pg) TCDL 3CLL 3CDL	(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	0.83 0.66 0.55	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.13 0.06	(loc) 13-14 13-14 13-14 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 147 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 14-5,5-13,18-2,10-8: Structural wood shea 2-2-0 oc purlins, exc Rigid ceiling directly bracing. (size) 10=0-5-8,	t* 16-4:2x4 SP No.3 t* 2x4 SP No.2 athing directly applie cept end verticals. applied or 6-0-0 oc 18=0-5-8	2) d or 3)	Wind: ASCE Vasd=91mph II; Exp B; En and C-C Exte to 10-3-8, Ex 13-0-6 to 21- end vertical I forces & MW DOL=1.60 pl TCLL: ASCE Plate DOL=1	7-10; Vult=115mpl n; TCDL=6.0psf; B(closed; MWFRS (e erior (2) -0-11-0 to terior (2) 10-3-8 to 6-0 zone; cantileve eft and right expos FRS for reactions : ate grip DOL=1.60 7-10; Pr=20.0 psf (15); Pg=15.0 psf	h (3-sec CDL=3.0 nvelope 2-3-12, 13-0-6, er left ar ed;C-C shown; (roof LL ground	ond gust))psf; h=25ft; ()) exterior zor Interior (1) 2- Interior (1) d right expos for members Lumber : Lum DOL= snow); Pf=1(1)	Cat. ne -3-12 sed ; and 1.15 1.5						
FORCES	Max Horiz 18=203 (L Max Uplift 10=-79 (L Max Grav 10=875 (L (lb) - Maximum Com Tension 1-2=0/41, 2-3=-643/7 4-5=-964/142, 5-6=-4 7-8=-915/108, 8-9=0 8-10=-768/122	C 13) C 15), 18=-79 (LC 14 C 2), 18=875 (LC 2) pression/Maximum 74, 3-4=-1535/222, 858/195, 6-7=-878/13 /41, 2-18=-836/114,	⁴⁾ 4) 5) 37, 6)	psf (flat roof : Category II; I This truss ha load of 12.0 overhangs n Building Des verifying Rain requirements This truss ha chord live loa	snow: Lum DOL=1 Exp B; Partially Exp s been designed for sof or 1.00 times fit con-concurrent with igner/Project engin n Load = 5.0 (psf) of s specific to the use s been designed for ad nonconcurrent w	.15 Plat b; Ct=1 or greate at roof le other liv eer resp covers r e of this or a 10.0 vith any	e DOL=1.15) 10 er of min roof pad of 11.5 ps ve loads. boonsible for ain loading truss compor) psf bottom other live loa	; flive sf on nent.						
BOT CHORD	17-18=-178/224, 16- 4-15=-46/286, 14-15 13-14=-3/571, 12-13 11-12=-18/32, 10-11 4-14=-955/401, 5-14 5-13=-158/507, 2-17 15-17=-117/645, 3-1 7-11=-179/31, 11-13	17=-34/95, 15-16=-4 =-387/1612, =0/87, 6-13=-209/10 =-11/604 =-67/397, =-6/445, 3-17=-761/ 5=-233/1000, =-10/608, 7-13=-47/	^{//46, 7)} 7, 8) 66, ¹²² LC	* This truss h on the bottor 3-06-00 tall b chord and ar Provide mec bearing plate 18 and 79 lb DAD CASE(S)	as been designed n chord in all areas by 2-00-00 wide wil yo other members, hanical connection capable of withsta uplift at joint 10. Standard	for a liv where I fit betw with BC (by oth unding 7	e load of 20.0 a rectangle veen the botto DL = 10.0psf ers) of truss t 9 lb uplift at j	Opsf om f. to oint		Charles and the second se	A	OF FESS		· Marin

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



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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	A03	Нір	1	1	Job Reference (optional)	173382577

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:31 ID:74sNZQNQ4pn?Nn2bOEsUJ4zJDii-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	9-0-4	11-6-12	20-7-0	
Scale = 1:76.9	9-0-4	2-6-8	9-0-4	

Loading (psf) Spacing 2-0-0 CSI DEFL in (loc) I/defl L/d PLATES GRIP	
TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.71 Vert(LL) -0.16 9-11 >999 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.62 Vert(CT) -0.33 9-11 >748 180 TCDL 10.0 Rep Stress Incr YES WB 0.14 Horz(CT) 0.02 9 n/a n/a BCLL 0.0* Code IRC2015/TPI2014 Matrix-MS Weight: 116 lb FT = 20%	
LUMBER TOP CHORD BC TCHORD RACING BC TCHORD SC 45 SP No.2 Zx4 SP No.2 Z	and an and the second sec

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



G١ minin May 13,2025

Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	A04	Нір	1	1	Job Reference (optional)	173382578

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:31 ID:vQxgyb5RByCdyr3xL7QJCWzJDhn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



1	7-9-14	12-9-2	20-7-0	
r Scale = 1:72.7	7-9-14	4-11-5	7-9-14	

Plate Offsets	(X, Y): [2:0-3-0,0-1-12]	, [3:0-6-4,0-2-0], [4:	0-4-4,0-2-0)], [5:0-3-0,0-1	-12], [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 IRC2018	5/TPI2014	CSI TC BC WB Matrix-MS	0.81 0.57 0.07	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.21 0.02	(loc) 7-9 7-9 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 107 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=91r II; Exp B; and C-C E 7-8-2, Ext 12-10-14,	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood sheat 4-2-15 oc purlins, ex 2-0-0 oc purlins (6-0- Rigid ceiling directly a bracing. 1 Row at midpt 3 (size) 7=0-5-8, 1 Max Horiz 11=-162 (L Max Uplift 7=-71 (LC Max Grav 7=913 (LC (lb) - Maximum Comp Tension 1-2=0/41, 2-3=-969/1 4-5=-956/142, 5-6=0/ 5-7=-799/160 10-11=-64/669, 9-10= 3-10=0/311, 4-9=-21/ ed roof live loads have the n. CE 7-10; Vult=115mph (mph; TCDL=6.0psf; BCD Enclosed; MWFRS (em Sterior (2) -0-11-0 to 2- erior (2) 7-8-2 to 11-11- Exterior (2) 12-10-14 to	Athing directly applie (cept end verticals, a 0 max.): 3-4. applied or 10-0-0 oc 3-9 1=0-5-8 .C 12) 15), 11=-71 (LC 14 · 3), 11=922 (LC 3) pression/Maximum 42, 3-4=-627/170, (41, 2-11=-808/160, 2-63/675, 7-9=-6/62 (286, 3-9=-98/98) been considered for (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zon 1-0, Interior (1) 2-1- 0, Interior (1) 2-1- 0, Interior (1) 1-11 0 17-1-13, Interior (1	3) ed or and 5) 5 6) 7) 8) 9) 2 LC Cat. e -0 to -0 to -0 to -0 to	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements Provide aded This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar Provide mect bearing plate 11 and 71 lb) Graphical pu or the orienta bottom chord DAD CASE(S)	7-10; Pr=20.0 ps 1.15); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E is been designed ps for 1.00 times on-concurrent wit igner/Project eng n Load = 5.0 (psf) s specific to the us uate drainage to is been designed ad nonconcurrent has been designed ad nonconcurrent is been designed m chord in all area by 2-00-00 wide w by other members hanical connectio e capable of withs uplif at joint 7. Irlin representation ation of the purlin d. Standard	sf (roof LL f (ground 1.15 Plat xp.; Ct=1 for great: flat roof k h other liv ineer ress) covers r se of this prevent v for a 10.0 with any d for a liv as where vill fit betw s, with BC n (by oth tanding 7 n does no along the	: Lum DOL= snow); Pf=1 e DOL=1.15. 10, Lu=50-00 pre of min roor and of 11.5 p ve loads. ponsible for ain loading truss compoor water pondin 0 psf bottom other live loa e load of 20. a rectangle veen the bott DL = 10.0ps ers) of truss 1 lb uplift at b to depict the e top and/or	1.15 6.5); I-O f live isf on nent. g. ads. Opsf to joint size				ORTH CA STEESS SEA 0363	ROLL 22

17-1-13 to 21-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



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A MiTek Af 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	A05	Нір	1	1	Job Reference (optional)	173382579

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:32 ID:O2EuGFy1wGcnQWrXNTAQS?zJDfN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





	6-7-7	13-11-9	20-7-0	I
Scale = 1:68.5	6-7-7	7-4-2	6-7-7	1
Diete Offecte (V. V), [2:0.2.0.0.4.42] [4:0.0.4.0.2.0] [5:0.4.4	0 0 01 17:0 0 0 0 4 401 10			

coading CLL (Cub) (pst) (CLL (Cub) Spacing 200 (DLL (Mark Grip DOL 1.15 (DL (Mark Grip DOL 1.00) 20-0 (DL (Mark Grip DOL 1.15 (DL (Mark Grip DOL 1.15) CSI (DL (Mark Grip DOL 1.15) DEFL (DL (Mark Grip DOL 1.15) in (loc) Identify (Mark Grip DOL 1.15) PLATES (DL (Mark Grip DOL 1.15) GRIP (Mark Grip DOL 1.15) MMBER TOP CHORD 2C0L 0.00 2:44 SP No.2 3:00	Plate Olisets ((X, Y): [2:0-3-0,0-1-12]], [4:0-6-4,0-2-0], [5:0)-4-4,0-2-(J], [7:0-3-0,0-1	-12], [9:Edge,0-1-8	5]								
 UMBER TOP CHORD 2x4 SP No.2 03C TCHORD 2x4 SP No.2 NEBS 2x4 SP No.2 NeBS 2x4 SP No.2 No.2 Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0pt; BCDL=3.0pt; h=25t; Cat. II; Exp B; Faciloset: MWFRS (envelope) extentor zone and C-C Exterior (2) -0-11-0 to 2-1-0.1 Interior (1) 2-0-10 to 6-511.Exterior (2) 6-51-10. Interior (1) 10-8-10 to 14-15. Exterior (2) 6-41-100 Pacing. WEBS 13-64-05.07: Externor (2) 6-11-10. DU-1.10 pit 24-10 DU-1.15); Pate DU-1.15); Pate DU-1.100 Pacing T-29-041, 2-3-9-27/154. 6-7-921/13, 74-90-04; 2-13-9-921/45 30T CHORD 12-13-979/145, -67-921/13, 74-90-04; 2-13-106608, 11-1277/611, 9-11-29/217, 5-11-9/247, 4-11-275/61, 6-11-627106, 3-12-627111 WETES I) Unbalanced roof live loads have been considered for this design. I) Unbalanced roof live loads have been considered for this design. I) Unbalanced roof live loads have been considered for this design. I) Unbalanced roof live loads have been considered for the oint chord and any other members, with BCDL = 10.0pst. I) Provide mechanical connection (by diversi) of truss to bearing plate capable of withstanding 65 lb uplit at joint 3 and 65 lb uplit at joint 3 and 65 lb uplit at joint 3 and 65 lb uplit at joint 3. I) First uss has been designed for a 10.0pst. I) Provide mechanical connection (by diversi) of truss to bearing plate capable of withstanding 65 lb uplit at joint 3 and 65 lb uplit at joint 3. I) Forvid	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	0.97 0.44 0.09	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.21 0.02	(loc) 11-12 11-12 9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 117 lb	GRIP 244/190 FT = 20%	
	LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep No.2 Structural wood sheat 4-4-1 oc purlins, exit 2-0-0 oc purlins (2-2 Rigid ceiling directly bracing. 1 Row at midpt (size) 9=0-5-8, 1 Max Horiz 13=-142 (Max Uplift 9=-65 (LC Max Grav 9=875 (LC (Ib) - Maximum Com Tension 1-2=0/41, 2-3=-921/ 4-5=-611/153, 5-6=-1 7-8=0/41, 2-3=-921/ 4-5=-611/153, 5-6=-1 7-8=0/41, 2-13=-709 12-13=-106/608, 11- 9-11=-29/587 4-12=-23/247, 5-11= 6-11=-62/106, 3-12= ed roof live loads have n.	t* 13-2,9-7,4-11:2x4 athing directly applie cept end verticals, ar -0 max.): 4-5. applied or 10-0-0 oc 4-11 13=0-5-8 LC 12) (15), 13=-65 (LC 14) (2), 13=875 (LC 2) pression/Maximum 139, 3-4=-806/153, 807/154, 6-7=-921/12 /145, 7-9=-799/145 -12=-77/611, -e9/247, 4-11=-75/61 -62/111 been considered for	2) SP d or id 3) 4) 5) 38, 6) 7) 8) 9) 10 LC	Wind: ASCE Vasd=91mpl II; Exp B; En and C-C Ext 6-5-11, Extel to 14-1-5, Ex 18-4-3 to 21- end vertical I forces & MW DOL=1.60 pl TCLL: ASCE Plate DOL=1 psf (flat roof Category II; I This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements Provide adec This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar Provide adec This truss ha chord and ar Provide adec thord and ar Provide mec bearing plate 13 and 65 lb O Graphical pu or the orientat bottom chorc DAD CASE(S)	7-10; Vult=115mp ; TCDL=6.0psf; B closed; MWFRS (e erior (2) -0-11-0 to rior (2) 6-5-11 to 11 terior (2) 14-1-5 to 6-0 zone; cantilevv eff and right expos (FRS for reactions ate grip DOL=1.60 ; 7-10; Pr=20.0 psf snow: Lum DOL=1 Exp B; Partially Ex is been designed f pof or 1.00 times f fon-concurrent with gner/Project engin n Load = 5.0 (psf) is specific to the us quate drainage to p is been designed n chord in all area: by 2-00-00 wide with y other members, hanical connectior e capable of withst: uplift at joint 9. I'lin representation at. Standard	h (3-sec CDL=3.) envelope 2-1-0, li 0-8-10, lo 0-8-4-3, er left ar sed;C-C shown; 0- f (roof LL (ground 1.15 Plat pp.; Ct=1 for great lat roof lk or great lat roof lk nother lim neer res covers r e of this prevent for a 10.0 with any f for a liv s where a lot ar lot for a liv s where a does na along the	cond gust) Dpsf; h=25ft; exterior zon interior (1) 2-1 interior (1) 2-1 interior (1) 1 dright exposi- for members Lumber Lumber Li Lum DOL= snow); Pf=10 e DOL=1.15; 10, Lu=50-0 rof min roof pad of 11.5 p ve loads. ponsible for ain loading truss compo- water ponding. D psf bottom other live load e load of 20.1 a rectangle veen the bott: DL = 10.0psi ers) of truss t 5 lb uplift at j bt depict the se	Cat. ne I-0 to I-8-10 sed ; and 1.15 6.5 y; -0 f live sf on nent. g. nds. Opsf om f. to joint size				SEA 0363		annun Mirina



G minin May 13,2025

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	A06	Нір	1	1	Job Reference (optional)	173382580

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:32 ID:MDkdeJsaP?rkDOBfQtUiAczJDbd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	L		5-5-1		15-1-1	5	i	2	0-7-0			
Scolo - 1:64 2	ļ		5-5-1	I	9-8-1	4	I	!	5-5-1			
Plate Offsets (X, Y): [4:0-4-4,0-2-0],	[6:0-4-4,0-2-0]											
Loading (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0*	Spacing 2- Plate Grip DOL 1. Lumber DOL 1. Rep Stress Incr Y Code IF	-0-0 .15 .15 ES RC2015	/TPI2014	CSI TC BC WB Matrix-MS	0.77 0.80 0.23	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.21 -0.47 0.02	(loc) 11-13 11-13 10	l/defl >999 >522 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 10.0											Weight: 117 lb	FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 *Except 14-2,10-8,13-5,11-5: BRACING TOP CHORD Structural wood sheat 4-2-15 oc purlins, en 2-0-0 oc purlins (6-0 BOT CHORD Rigid ceiling directly bracing. REACTIONS (size) 10=0-5-8, Max Horiz 14=-123 (I Max Uplift 10=-57 (LI Max Grav 10=875 (L FORCES (Ib) - Maximum Com Tension TOP CHORD 1-2=0/41, 2-3=-922/ 4-5=-645/137, 5-6=- 7-8=-922/131, 8-9=0 8-10=-822/139 BOT CHORD 13-14=-111/569, 11- 10-11=-30/569 WEBS 4-13=-30/312, 6-11= 5-11=-268/109, 7-11 NOTES 1) Unbalanced roof live loads have this design.	t* :2x4 SP No.2 athing directly applied or xcept end verticals, and -0 max.): 4-6. applied or 10-0-0 oc 14=0-5-8 LC 12) C 15), 14=-57 (LC 14) .C 2), 14=875 (LC 2) pression/Maximum 131, 3-4=-844/143, 645/137, 6-7=-844/143, 0/41, 2-14=-822/139, .13=-112/804, -30/312, 5-13=-268/110 =-43/144, 3-13=-43/144 been considered for	2) 3) 4) 5) 6) 7) 8) 9) 10) LO	Wind: ASCE Vasd=91mp II; Exp B; Er and C-C Ext to 5-3-5, Ext 15-3-11, Ext 19-6-10 to 2 exposed ; er members an Lumber DOI TCLL: ASCE Plate DOL=' psf (flat roof Category II; This truss ha load of 12.0 overhangs n Building Des verifying Rai chord live lo on the botton 3-06-00 tall chord and an Provide med bearing platt 14 and 57 lb Graphical pu or the orient bottom chore AD CASE(S)	57-10; Vult=115mp h; TCDL=6.0psf; E iclosed; MWFRS (erior (2) -0-11-0 to erior (2) 5-3-5 to 9 erior (2) 15-3-11 to 1-6-0 zone; cantile nd vertical left and di forces & MWFR =1.60 plate grip E =7-10; Pr=20.0 psf snow: Lum DOL= Exp B; Partially Eb as been designed psf or 1.00 times f in Load = 5.0 (psf) s specific to the us quate drainage to as been designed an onconcurrent has been designed an connection e capable of withst ouplift at joint 10. urlin representation atom of the purlin d. Standard	bh (3-sec SCDL=3.1 envelope 2-3-12, 1-6-3, Inte 0-19-6-10 wer left a right exp S for rea DOL=1.60 f (roof LL (ground 1.15 Plat yp.; Ct=1 for great lat roof h for a 10.0 with any d for a liv s where n (bey oth anding 5 n does no along the	cond gust) cond gust) pops(; h=25ft;) exterior zo Interior (1) 9-6-;), Interior (1) 9-6-;), Interior (1) 9-6-;), Interior (1) 9-6-; ind right boosed;C-C fo ctions shown) :: Lum DOL= snow); Pf=1 e DOL=1.15 .10, Lu=50-0; er of min roo pad of 11.5 p /e loads. bonsible for ain loading truss compo water pondin 0 psf bottom other live load e load of 20. a rectangle veen the bott DL = 10.0ps ers) of truss 7 lb uplift at bt depict the top and/or	Cat. ne -3-12 3 to r r, :1.15 6.5); -0 f live ssf on g. ads. 0psf to joint size				SEA 03632	ROUTE ROUTE



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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	A07	Нір	1	1	Job Reference (optional)	173382581

0-0-

4x10 u

14

3x6=

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:32 ID:gNFYp8Zykq9VAJdpq2XJWrzJDaj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

12 ⁵

3x6=

11

3x6=

Þ 9 10)

Ø

4x10 u

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13

3x8=

		ł	<u>4-2</u> 4-2	- <u>10</u> +	<u>10-3-8</u> 6-0-14	F	<u>16-</u> 6-0	4-6		20-7	<u>-0</u> 10	-1	
Scale = 1:61.9 Plate Offsets	(X, Y): [4:0-6-4,0-2-0], [[6:0-6-4,0-2-0]		-							-		
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	5/TPI2014	CSI TC BC WB Matrix-MS	0.72 0.38 0.15	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.05 -0.12 0.02	(loc) 13-14 13-14 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 117 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Except' 13-4,13-6,15-2,10-8:2 Structural wood shea 4-8-0 oc purlins, exc 2-0-0 oc purlins, exc 2-0-0 oc purlins (5-1- Rigid ceiling directly a bracing. (size) 10=0-5-8, ' Max Horiz 15=-104 (L Max Uplift 10=-58 (LC Max Grav 10=875 (LC (lb) - Maximum Comp Tension 1-2=0/41, 2-3=-863/1: 4-5=-1071/182, 5-6=- 6-7=-837/138, 7-8=-8 2-15=-812/140, 8-10= 14-15=-108/500, 13-1 11-13=-56/644, 10-11 4-14=-62/87, 4-13=-1 6-13=-113/537, 6-11= 3-14=-50/214	* 2x4 SP No.2 thing directly applied ept end verticals, and 1 max.): 4-6. applied or 10-0-0 oc 15=0-5-8 C 12) C 10), 15=-58 (LC 11 C 2), 15=875 (LC 2) pression/Maximum 24, 3-4=-837/138, 1071/182, 63/125, 8-9=0/41, =-812/140 14=-103/644, =-27/500 13/537, 5-13=-423/1 =-62/87, 7-11=-50/21 obeen considered for	2) I or d 3) 4) 5) 6) 7) 31, 4, 9) 10, LO	Wind: AS Vasd=911 II; Exp B; and C-C 4-0-14, E 20-9-0 to end vertic forces & I DOL=1.6 TCLL: AS Plate DO psf (flat rc Category This truss load of 12 overhang Building I verifying requirem Provide a This truss chord live * This trus chord live * This trus chord love provide a This trus chord and Provide a Graphica or the orig bottom ch	CE 7-10; Vult=115 mph; TCDL=6.0psf Enclosed; MWFRS Exterior (2) -0-11-0 xterior (2) 4-0-14 tc, Exterior (2) 4-0-14 tc, Exterior (2) 16-6-2 21-6-0 zone; cantil cal left and right exp MWFRS for reactio 0 o plate grip DOL=1 CE 7-10; Pr=20.0 0 L=1.15); Pg=15.0 p pof snow: Lum DOI LI; Exp B; Partially s has been designe 2.0 psf or 1.00 time is non-concurrent w Designer/Project er Rain Load = 5.0 (ps ents specific to the dequate drainage t s has been designe to dad nonconcurrent ss has been designe to load nonconcurrent ss has been designe to load nonconcurrent stab seen designe all by 2-00-00 wide d any other membe nechanical connect late capable of with 3 lb uplift at joint 10 l purlin representati entation of the purli hord. (S) Standard	mph (3-sec ; BCDL=3. § (envelope to 2-1-0, l, p 8-3-13, ln 2 to 20-90, ever left ar posed;C-C ns shown; .60 psf (roof LL ssf (ground ==1.15 Plat Exp.; Ct=1 d for great s flat roof lk ith other lin gineer res sf) covers r use of this to prevent id d for a 10. nt with any ted for a liv eas where will fit betw rs. ion (by oth standing f	cond gust) Opsf; h=25ft; e) exterior zc therior (1) 2- terior (1) 8-32 for members Lumber Lumber Lumber Lumber Lum DOL=1.15 10, Lu=50-(0 to d of 11.5 p ve loads. ponsible for ain loading truss compor water pondir D psf bottom other live loo e load of 20 a rectangle veen the bot ers) of truss 8 lb uplift at bt depict the e top and/or	(Cat. one 1-0 to 3-13 osed ; s and =1.15 (6.5); 0-0 of live osf on onent. .0psf tom to joint size				OR THESS SEA 0363	ROWER L



G 100000 May 13,2025

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	A08	Нір	1	1	Job Reference (optional)	173382582

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:33 ID:4mVz9cDq0QyrfcIB_OVzjDzJDZt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



			3-0-4		10-3-8		1	7-6-12		20)-7-0	_	
Scale = 1:61.5			3-0-4	I	7-3-4			7-3-4		3	-0-4	I	
Plate Offsets (X, Y): [2:0-3-0,0-1-12	2], [4:0-6-4,0-2-0], [6:	:0-6-4,0-2-0)], [8:0-3-0,0-1	-12]								
Loading TCLL (roof) Snow (Pf/Pg) TCDL	(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	0.87 0.49 0.21	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.17 0.02	(loc) 13-14 13-14 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCLL	0.0*	Code	IRC201	5/TPI2014	Matrix-MS							Weight: 111 lb	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 2x4 SP No.3 *Excep Structural wood she 5-6-0 oc purlins, ex 2-0-0 oc purlins (3-8 Rigid ceiling directly bracing. (size) 10=0-5-8, Max Horiz 15=-84 (L Max Uplift 10=-81 (L Max Grav 10=875 (I	t* 13-4,13-6:2x4 SP athing directly applic cept end verticals, a -13 max.): 4-6. applied or 10-0-0 or , 15=0-5-8 C 12) C 10), 15=-81 (LC 1 _C 2), 15=875 (LC 2	2) P No.2 ed or nd c 3) 1) () 4)	Wind: ASCE Vasd=91mp II; Exp 8; Er and C-C Exi 2-10-8, Exte 17-8-8, Exte and right ex C for memb shown; Lum TCLL: ASCI Plate DOL= psf (flat roof Category II; This truss hi	E 7-10; Vult=115r h; TCDL=6.0psf; closed; MWFRS terior (2) -0-11-0 trior (2) 2-10-8 to posed ; end verti ers and forces & ber DOL=1.60 p E 7-10; Pr=20.0 p 1.15); Pg=15.0 p snow: Lum DOL Exp B; Partially as been designe	mph (3-see BCDL=3. 6 (envelop to 2-1-0, I 7-1-7, Int: 21-6-0 zc cal left anu MWFRS f late grip D osf (roof LI sf (ground .=1.15 Pla Exp.; Ct=1 d for great	L cond gust) Opsf; h=25ft; e) exterior zo riterior (1) 2-i erior (1) 7-1- ne; cantileve d right expos or reactions OL=1.60 .: Lum DOL= snow); Pf=1 te DOL=1.15 .10, Lu=50-0 er of min roo	Cat. ne 1-0 to 7 to r left ed;C- =1.15 6.5);)-0 f live				vveigni. TTT ib	r 1 = 20%
TOP CHORD	(lb) - Maximum Com Tension 1-2=0/41, 2-3=-791/ 4-5=-1453/212, 5-6= 6-7=-820/122, 7-8=- 2-15=-839/136, 8-10	105, 3-4=-820/122, =-1453/212, 791/105, 8-9=0/41,)=-839/136	5)	load of 12.0 overhangs r Building Des verifying Ra requirement Provide ade	psf or 1.00 times non-concurrent w signer/Project en in Load = 5.0 (ps s specific to the quate drainage t	s flat roof l rith other li gineer res sf) covers i use of this o prevent	oad of 11.5 p ve loads. ponsible for ain loading truss compo water pondin	osf on onent.					
BOT CHORD	14-15=-91/384, 13-1 11-13=-71/664, 10-1	14=-110/664, 11=-26/384	7)	This truss ha	as been designed ad nonconcurrer	d for a 10. Int with any	0 psf bottom other live loa	ads.					11111
WEBS	4-14=-152/77, 4-13= 5-13=-503/155, 6-13 6-11=-152/78, 3-14=	=-161/871, 3=-161/871, =-63/374, 7-11=-64/3	8) 374	* This truss on the botto 3-06-00 tall	has been design m chord in all are	ed for a liv eas where will fit bety	e load of 20. a rectangle	.0psf			A	ORTHCA	ROUT
NOTES 1) Unbalance this design	ed roof live loads have n.	been considered fo	r 9) 10 LC	chord and a Provide med bearing plat 15 and 81 lk) Graphical pu or the orient bottom chor DAD CASE(S)	ny other member chanical connecti e capable of with o uplift at joint 10 urlin representati ation of the purlin d. Standard	rs. ion (by oth istanding 8 on does no n along the	ers) of truss 31 lb uplift at ot depict the e top and/or	to joint size		A THILLING		SEA 0363	L 22 HBERLIN



GI 1111111 May 13,2025

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	A09	Нір	1	1	Job Reference (optional)	173382583

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) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 10-0-5, Exterior (2) 10-0-5 to 14-9-10, Interior (1) 14-9-10 to 21-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown;

Lumber DOL=1.60 plate grip DOL=1.60

2)

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:33 ID:GfGKwdOWUTAR9QCr166S42zJEXc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





			6-11	-8	13-7-8		20-	7-0				
Scale = 1:80.9	6-11	-8	6-8-0	I	6-1	1-8	1					
Plate Offsets (X, Y)): [4:0-6-0,0-2-4]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.11	11-12	>999	240	MT20	244/190
Snow (Pf/Pg)	16.5/15.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.14	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.02	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 139 lb	FT = 20%

BODL	10.0	
LUMBER TOP CHORD BOT CHORD WEBS	2x4 SP No.2 *Except* 4-5:2x6 SP No.2 2x4 SP No.2 2x4 SP No.2 *Except* 11-6,12-3,13-2,9-7:2x4 SP No.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=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 Unbalanced snow loads have been considered for this
BRACING		design.
TOP CHORD	Structural wood sheathing directly applied or 5-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.	 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.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	 Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading
REACTIONS	(size) 9=0-5-8, 13=0-5-8 Max Horiz 13=199 (LC 15) Max Uplift 9=-79 (LC 17), 13=-79 (LC 16) Max Grav 9=1036 (LC 39), 13=1036 (LC 39)	 7) Provide adequate drainage to prevent water ponding. 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 0) * This truss has been designed for a live load of 20 0 psf.
FORCES	(lb) - Maximum Compression/Maximum Tension	on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
TOP CHORD	1-2=0/41, 2-3=-379/156, 3-4=-1079/204, 5-6=-1079/204, 6-7=-379/155, 7-8=0/41, 2-13=-379/146, 7-9=-379/146, 4-5=-582/162	 chord and any other members, with BCDL = 10.0psf. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at ioint
BOT CHORD	12-13=-86/875, 11-12=-2/614, 9-11=-8/815	13 and 79 lb uplift at joint 9.
WEBS	5-11=-139/502, 6-11=-286/186, 4-12=-139/502, 3-12=-286/186, 3-13=-860/4, 6-9=-859/4	 Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
NOTES		LOAD CASE(S) Standard
1) Unbalance	ed roof live loads have been considered for	、 <i>,</i>



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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	ACJ01	Jack-Open	2	1	Job Reference (optional)	173382584

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:33 ID:sO5h5b7V7mX2mHZoRMsooFzJDYh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







0-0-10

Scale = 1:29.7

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	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014 This truss ha	CSI TC BC WB Matrix-MR is been designed	0.29 0.11 0.00 for greate	DEFL Vert(LL) Vert(CT) Horz(CT) er of min root	in -0.01 -0.01 0.01 f live	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 15 lb	GRIP 244/190 FT = 20%
BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	 2x4 SP No.2 2x4 SP No.3 Structural wood she 3-8-0 oc purlins, ex Rigid ceiling directly bracing. 	athing directly applie cept end verticals. applied or 10-0-0 or	6) ed or 7) c 8)	overhangs n Building Des verifying Rai requirements This truss ha chord live loo * This truss	on-concurrent with igner/Project enginer n Load = 5.0 (psf) s specific to the us so been designed ad nonconcurrent has been designed	h other liv ineer res covers r se of this for a 10.0 with any d for a liv	ve loads. ponsible for ain loading truss compo 0 psf bottom other live loa e load of 20.	nent. ads. 0psf					
REACTIONS	(size) 3= Mecha 5=0-9-7 Max Horiz 5=58 (LC Max Uplift 3=-37 (LC (LC 2) (lb) - Maximum Com Tansion	anical, 4= Mechanica 16) 2 16), 5=-35 (LC 16) 2), 4=62 (LC 7), 5=; apression/Maximum	al, 9) 286 ¹⁰ LC	on the botton 3-06-00 tall I chord and an Refer to gird) Provide mec bearing plate 5 and 37 lb u DAD CASE(S)	m chord in all area by 2-00-00 wide w by other members er(s) for truss to thanical connectio e capable of withs uplift at joint 3. Standard	as where vill fit betv truss con n (by oth tanding 3	a rectangle veen the bott nections. ers) of truss 5 lb uplift at	om to joint					
TOP CHORD BOT CHORD	2-5=-246/249, 1-2=0 4-5=0/0	0/46, 2-3=-53/22											
NOTES 1) Unbalance this design 2) Wind: AS Vasd=91 II; Exp B; and C-C 3-7-4 zor vertical le forces & DOL = 1.6	eed roof live loads have m. CE 7-10; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (er Corner (3) -1-9-6 to 2-5 e; cantilever left and rig ft and right exposed;C- MWFRS for reactions s o plate or ip DOI =1.60	been considered fo (3-second gust) DL=3.0psf; h=25ft; (ivelope) exterior zor -8, Exterior (2) 2-5-8 jht exposed ; end C for members and hown; Lumber	r Cat. ie 3 to							V	I. T. M.	OR SEA	ROUN

- 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
- 4) Unbalanced snow loads have been considered for this design.



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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	AE01	Common Supported Gable	1	1	Job Reference (optional)	173382585

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:33

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



13-11-0

TCLL (root) 20.0 Pitte Grip DOL 1.15 TC 0.11 VertiC1 n/a - n/a 999 MT20 244/190 STOUL 0.00 Code ILUmber DOL 1.15 BC 0.01 VertiC1 n/a - n/a 999 MT20 244/190 LUMBER 10.0 Code IRC2015/TPI2014 Marrix-MR VertiC1 n/a	Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
Show (P(Pip) 11.5/15.0 ECU Lumber DOL 1.1.5/15.0 Rep Stress in rNO Code BC 0.0.6 Vera(CT) n/a 999 LUMBER TOP CHORD 2x4 SP No.2 Rep Stress in rNO Code NO	TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0 Rep Stress Incr NO WB 0.12 Incr(CT) 0.00 12 n/a Meight: 89 lb FT = 20% LUMBER 10.0 10.0 Incr(CD) 2/4 SP No.2 Weight: 89 lb FT = 20% DTO CHORD 2/4 SP No.2 SOT CHORD 2/4 SP No.2 .	Snow (Pf/Pg)	11.5/15.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0° Code IRC2015/TPI2014 Matrix-MR Weight: 89 lb FT = 20% LUMBER TOP CHORD 2x4 SP No.2 Weight: 89 lb FT = 20% UNDER TOP CHORD 2x4 SP No.3 The component of the componencon of the componencon the component of the c	TCDL	10.0	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.00	12	n/a	n/a		
ECDL 10.0 Weight 89 /b FT = 20% LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 CHORD 2x4 SP No.3 CTHERS 1) Unbalanced rod live loads have been considered for this design. 1) 1) 10 <td>BCLL</td> <td>0.0*</td> <td>Code</td> <td>IRC2015/TPI2014</td> <td>Matrix-MR</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
 LUMBER TOP CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 WEBS 2x4 SP No.3 CTHERS 2x4 SP	BCDL	10.0										Weight: 89 lb	FT = 20%
NOTES	ECDL BCLL BCDL LUMBER TOP CHORD BOT CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS	0.0* 10.0 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 *Excep Structural wood shee 6-0-0 oc purlins, exi Rigid ceiling directly bracing. (size) 12=13-11: 14=13-11: 16=13-11: 18=13-11: 20=13-11: Max Horiz 20=-150 (Max Uplift 12=-74 (L 14=-71 (L 14=-72 (L 14=-71 (L 14=-72	t* 16-6:2x4 SP No.2 athing directly applied cept end verticals. applied or 6-0-0 oc -0, 13=13-11-0, -0, 15=13-11-0, -0, 17=13-11-0, -0, 17=13-11-0, -0, 17=13-11-0, -0, 17=13-11-0, -0, 17=13-11-0, -0, 19=13-11-0, -0 LC 12) C 11), 13=-116 (LC 1 C 15), 15=-70 (LC 14 LC 14), 20=-102 (LC -C 26), 13=171 (LC 2) -C 27), 15=198 (LC 2) -C 26), 19=166 (LC 2) -C 26), 19=166 (LC 2) -C 27), 15=198 (LC 2) -C	 IRC2015/TPI2014 IRC2015/TPI2014 Unbalanced this design. Wind: ASCE Vasd=91mp II; Exp B; Er and C-C Coi 6-11-8, Corr 14-11-0 zon vertical left a forces & MW DOL=1.60 p Truss design only. For stu see Standar or consult qu TCLL: ASCE Plate DOL=' psf (flat roof Category II;), 5) This truss ha load of 12.0 overhangs n Truss to be 1 braced agaii Gable requir 9) Truss to be 1 braced agaii Gable studs 11) This truss ha chord live lo a, 12) * This truss li chord and an 	VPD Matrix-MR roof live loads have 7-10; Vult=115mph h; TCDL=6.0psf; BC closed; MWFRS (er mer (3) -0-11-0 to 2 er (3) 6-11-8 to 9-1 e; cantilever left and right exposed; C /FRS for reactions s late grip DOL=1.60 red for wind loads ir uds exposed to wind d Industry Gable Er alified building desi 5-7-10; 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=21.0 psf (.15); Pg=21.0 psf (.15); Pg=21.0 psf (.10) times fia on-concurrent with igner/Project engine n Load = 5.0 (psf) c s specific to the use e 2x4 (II) MT20 unle es continuous botto fully sheathed from rst lateral movemer spaced at 2-0-0 oc. as been designed fo ad nonconcurrent w has been designed for an chord in all areas by 2-00-00 wide will ny other members.	a been of a (3-sec CDL=3.0 nvelope -1-0, Ex 1-8, Ext d right e -C for m shown; d Detail d (norman d Detail gigner as (roof LL ground 15 Plat b.; Ct=1. or greated at roof lo eer resp covers ra o of this ees other for a 10.0 ith any for a liv, where fit betw	considered for ond gust) opsf; h=25ft; C) exterior zon terior (2) 2-1- erior (2) 9-11; xposed; end hembers and Lumber ane of the trus al to the face) Is as applicab per ANSI/TP is DOL=1 snow; Pf=11 e DOL=1.15); 10 er of min roof 1 and of 11.5 ps re loads. bonsible for ain loading truss compon prwise indicate d bearing. e or securely iagonal web). 0 psf bottom other live load e load of 20.0 a rectangle reen the botto	Cat. e 0 to -8 to	12 13) Prov beal 20, ' uplif joint 14) In th of th LOAD C 1) De Inc Un Tra	vide mer ring plat 74 lb up ft at joint 15, 71 he LOAL he truss CASE(S) add + Sr crease= ifform Lo Vert: 1-2 apezoida Vert: 20 to-18=-2 (F=-12), (F=-14)-	chanici e capa lift at ji lift at ji lib uplif o CASI o CASI o O CASI o O CASI o O CASI are no) Stai o W (ba 2=-43, 3 (F=- 14=-3 14=-3 to-12=	Weight: 89 lb al connection (by bble of withstandi joint 12, 69 lb uplii 22 lb uplift at joint t at joint 14 and 1 E(S) section, load ted as front (F) o ndard alanced): Lumber offt) 2-6=-43, 6-10=-4 ds (lb/ft) o-19=-21 (F=-1), 3), 18=-23 (F=-3 to-16=-28 (F=-7) 10), 15=-30 (F=- 2 (F=-12)-to-13= -35 (F=-15)	FT = 20% rothers) of truss to ng 102 lb uplift at joint ft at joint 17, 67 lb t19, 70 lb uplift at 116 lb uplift at joint 13. ds applied to the face r back (B). Increase=1.15, Plate 13, 10-11=-43 19=-21 (F=-1)- 10-to-17=-25 (F=-5), 10-to-14=-32 -34 (F=-14), 13=-34 H
	NOTES											11111 G	in in its

May 13,2025

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	AG01	Hip Girder	1	2	Job Reference (optional)	173382586

F02420-234	225 AG01	пр	Giruer			!	2	Job	Reference	e (option	al)	
84 Lumber-2383	3 (Dunn, NC), Dunn, NC - 28	3334,		Run	: 8.83 S Apr	24 2025	Print: 8.830 S /	Apr 24 202	MiTek Indu	stries, Inc.	. Fri May 09 12:55:	34 Page: 1
				ID:h	YSzMeCGjcl	CUC0yoc	ZC1WZJDYb-ŀ	RfC?PsB70	Hq3NSgPqn	_8w3u11X	bGKWrCDoi7J4zJ	C?f
		-0-11-0	0.0.40		10.0.0		44.0		40 -		21-6	S-0
			<u>6-0-12</u> 4-1-0		<u>10-3-8</u> 4-2-12		4-2-12	⁴ 2	<u>18-7</u> 4-1	-5 -0	1-11-11	-
		0-11-0									0-11	1-0
						20-7	-0					
		NAI				NAUT				N.	AILED	
		NAILE	D NAILEI	J NAILED	NAILED	INAILE	D NAILED	, NAILE	D NAILE		LED	
		$10^{\frac{12}{2}}$:8= 0 20	2x4 II	21	3x8	= 3x6=	2x 7	4 II 23	1	6x8 =	
	ТТ							× (.40 	
	3 2									\nearrow		
	-0-2-7-							\leq	//		9 9	
			0 00		0.0	9 10	0.0	<u>1</u>		[10
		ُ ۱۳ الله الم	26	16	27	15	28	14	13	3		
		8X12= 2		3x8=		2x4		3x	$B = \frac{29}{4x6}$		1∠ 3x6=	
		NAILE	NAILEI) NAILED	NAILED	NAIL	D NAILED	NAILE	NAILE	D NAI	LED 8x12=	
		NAI	LED							Ν	AILED	
		1-9-15	6-0-12		10-3-8		14-6-4	4	18-	9-1 12	20-7-0	
Scale = 1:53.8		1-9-15	4-2-12		4-2-12		4-2-12	2	4-2-	12	1-9-15	
Plate Offsets ((X, Y): [3:0-6-4,0-2-0], [8:0-6-4,0-2-0], [11:Edge,0)-7-0], [18:Ed	ge,0-7-0]								
Loading	(psf)	Spacing 2-0-	0	csi			DEFL	in	(loc) l/d	lefi L	d PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL 1.15		TC		0.16	Vert(LL)	-0.04	15 >9	99 24	0 MT20	244/190
TCDL	10.0/15.0	Rep Stress Incr NO		WB		0.29	Horz(CT)	0.09	10 >	n/a n/	/a	
BCLL	0.0*	Code IRC	2015/TPI2014	Matrix	x-MS						Mainh to 000	
BCDL	10.0										Weight: 260	0 ID FT = 20%
LUMBER	2x4 SP No 2		 All loads except i 	s are conside f noted as fr	ered equal	y applie ack (B)	d to all plies, ace in the I (Dead Increa 	+ Snow se=1 15	(balanced): Lun	hber Increase=1.15, Plate
BOT CHORD	2x6 SP No.2		CASE(S	section. P	ly to ply cor	nnection	s have been	0,12	Unifor	m Loads	s (lb/ft)	
WEBS	2x4 SP No.3		provide unless o	d to distribut otherwise inc	e only load: dicated.	s noted	as (F) or (B),		Ver 11-	t: 1-2=-4 18=-20	13, 2-3=-43, 3-8=	=-53, 8-9=-43, 9-10=-43,
TOP CHORD	Structural wood sheat	thing directly applied or	3) Unbalar	nced roof live	e loads hav	e been o	considered fo	or	Conce	entrated	Loads (lb)	
	6-0-0 oc purlins, exce	ept end verticals, and	4) Wind: A	ιgn. SCE 7-10; \	/ult=115mp	h (3-sec	ond gust)		Ver 15=	t: 17=-7 :-25 (B).	(B), 16=-25 (B), 5=-21 (B), 7=-2	3=-4 (B), 4=-21 (B), 1 (B), 14=-25 (B), 8=-4
BOT CHORD	Rigid ceiling directly a	applied or 10-0-0 oc	Vasd=9	1mph; TCDL	L=6.0psf; B	CDL=3.	Opsf; h=25ft;	Cat.	(B),	12=-7 (B), 19=-25 (B), 2	20=-21 (B), 21=-21 (B),
DEACTIONS	bracing.	19.059	cantilev	er left and right	ght expose	d; end \	ertical left ar	ne, nd	22= 26=	-21 (B), ⊧-25 (B),	23=-21 (B), 24= 27=-25 (B), 28=	25 (B), 25=-25 (B), 25 (B), 29=-25 (B),
REACTIONS	Max Horiz 18=-67 (LC	; 8)	right exp	bosed; Lumb	per DOL=1.	.60 plate	grip DOL=1	.60	30=	-25 (B)		
	Max Uplift 11=-262 (L	C 6), 18=-262 (LC 7)	Plate D	OL=1.15); P	g=15.0 psf	(ground	snow); Pf=1	6.5				
FORCES	(lb) - Maximum Comp	10 27, $10 = 1202$ (LC 26) pression/Maximum	psf (flat Catego	roof snow: L	∟um DOL=1 Partiallv F×	1.15 Plat p.: Ct=1	e DOL=1.15); I-O				
	Tension	000 0 4 0474/544	6) This tru	ss has been	designed f	or great	er of min root	flive				
TOP CHORD	4-5=-2171/544, 5-7=-2	296, 3-4=-2171/544, 2171/544,	load of overhar	12.0 pst or 1 lgs non-cond	.00 times fl current with	at roof lo	oad of 11.5 p /e loads.	ist on				
	7-8=-2171/544, 8-9=-	1178/296, 9-10=0/41,	7) Building	Designer/P	roject engir	neer res	oonsible for					
BOT CHORD	17-18=-54/71, 16-17=	=-1209/207 =-246/893,	requirer	nents specif	= 5.0 (psr)	covers r e of this	ain loading truss compo	nent.				
	15-16=-656/2633, 14-	-15=-656/2633,	8) Provide	adequate d	rainage to p	prevent	vater pondin	g.			WHY CH	CARO
WEBS	3-17=-200/92, 3-16=-3	2=-3/33 358/1465,	9) This true chord liv	ss has been /e load nonc	concurrent v	or a 10.0 with any	other live loa	ads.		6	R	
	4-16=-350/134, 5-16=	-531/132, 5-15=0/243,	10) * This tr	uss has bee	n designed	l for a liv	e load of 20.	0psf		E	2 JOFF	Ma.
	8-14=-359/1465, 8-12	2=-200/93,	on the b 3-06-00	tall by 2-00-	on all areas -00 wide wi	s wnere Il fit betv	a rectangle /een the bott	om		Q.	121	a ge
NOTES	2-17=-234/918, 9-12=	-235/918	chord a	nd any other	r members.	hu -	ore) of truct	to		Ξ	: SI	EAL : E
1) 2-plv truss	s to be connected togeth	ner with 10d	bearing	plate capab	le of withsta	i (dy oth anding 2	ers) of truss 62 lb uplift a	ເບ t joint		Ξ	0.36	5322 : E
(0.131"x3'	") nails as follows:	0.4 4	18 and	262 lb uplift	at joint 11.	docar	t donict the			E	1	1 E
i op chord oc.	is connected as follows:	∠x4 - 1 row at 0-9-0	or the o	rientation of	the purlin a	along the	top and/or	3120		11	A. En.	- Rix S
Bottom ch	ords connected as follow	ws: 2x6 - 2 rows	bottom	chord.	3-104 (0.17	18"v2"\ r	or 2-12d			1	NA VG	NEFER
Web conn	nected as follows: 2x4 - 1	1 row at 0-9-0 oc.	(0.148")	(3.25") toe-n	ails per ND	S guidli	nes.				111, A.	GILB
			LOAD CAS	E(S) Stand	dard							Aay 12 2025
											N	/iay 13,2023

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	AJ01	Jack-Open	9	1	Job Reference (optional)	173382587

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:34

Page: 1

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



Scale = 1:29.3

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 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MP	0.20 0.16 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: 16 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 BOT CHORD NOTES 1) Wind: AS(Vasd=91n II; Exp B; I and C-C 3.10-12 z vertical lef forces & M DOL=1.60 2) TCLL: AS(Plate DOL psf (flat ro 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=-125/3 2-5=-113/73 CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior (2) -0-11-0 to 2 one; cantilever left and it and right exposed;C- MWFRS for reactions si 0 plate grip DOL=1.60 (CE 7-10; Pr=20.0 psf (g of snow: Lum DOL=1.7) II; Exp B; Partially Exp. ed snow loads have be	I-6-0 athing directly applie applied or 10-0-0 oc 4= Mechanical, 5= al 16) : 16), 4=-42 (LC 16), C 2), 4=99 (LC 2), 5= pression/Maximum 35 (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 pround snow); Pf=11 15 Plate DOL=1.15); ; Ct=1.10 een considered for th	4) 5) d or 6) 5 7) 5=-1 9) 70 LC Cat. e 0 to .15 .5 is	This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements This truss ha chord live loa * This truss ha on the bottor 3-06-00 tall H chord and au Refer to gird Provide mec bearing plate 4, 18 lb uplif PAD CASE(S)	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 as been designed f ad nonconcurrent v has been designed m chord in all areas by 2-00-00 wide wi hy other members. er(s) for truss to tr thanical connection e capable of withstat t at joint 2 and 1 lb Standard	or great lat roof k o ther lin heer resp covers r e of this for a 10.1 with any l for a lin s where Il fit betw russ con n (by oth anding 4 uplift at	er of min roof pad of 11.5 p ve loads. ponsible for ain loading truss compo 0 psf bottom other live loa e load of 20.1 a rectangle veen the bott nections. ers) of truss i 12 lb uplift at j joint 5.	f live unent. ads. Opsf to joint		Manutan.		SEA 0363	L L L L BEFRIT	in Manual and



May 13,2025

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	ASE01	Common Structural Gable	1	1	Job Reference (optional)	173382588

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:35 ID:X9I9Aks6bZqRWOpeU89yghzJEwq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





6-11-8	13-7-8	20-7-0
6-11-8	6-8-0	6-11-8

Scale = 1:81.8 Plate Offsets (X, Y): [16:0-2-12,0-3-0]

	, .		-												
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	0.42 0.27 0.19	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.02 -0.05 0.01	(loc) 23-24 23-24 12	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 207 I	GRIP 244/190 b FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD JOINTS REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N 17-9,21-3 2x4 SP N No.2 Structura 6-0-0 oc Rigid ceil bracing. 1 Brace a 27, 29, 30 (size) Max Horiz Max Uplift Max Grav	o.2 o.2 *Excep ,25-2,12-11 o.3 *Excep I wood she purlins, exi ing directly at Jt(s): 26, 0, 31, 33 12=7-1-8, 15=7-1-8, 25=200 (L 12=-75 (L 15=-73 (L 25=-68 (L 12=307 (L 14=89 (LC) 17=877 (I	t* 1:2x4 SP No.3 t* 19-6,16-16:2x4 SF athing directly applie cept end verticals. applied or 6-0-0 oc 13=7-1-8, 14=7-1-8 17=7-1-8, 25=0-5-8 .C 13) C 15), 14=-1 (LC 11 C 27), 17=-149 (LC C 14) .C 31), 13=118 (LC 5) .C 2), 25=604 (LC 2)	V ed or , 2), 15), 5),	VEBS IOTES) Unbalanced this design.) Wind: ASCE Vasd=91mpl II; Exp B; En and C-C Ext 10-1-2, Exte to 21-6-0 zor vertical left a forces & MW DOL=1.60 pl	6-30=-453/0, 17-3 9-31=-248/177, 21 6-26=-179/425, 3- 21-27=-276/147, 2 28-29=-219/21, 3- 9-32=-134/134, 32 12-33=-110/112, 6 20-26=-59/40, 4-2 23-28=0/85, 24-25 18-30=-66/60, 8-3 14-32=-30/25, 13- roof live loads hav 7-10; Vult=115mp h; TCDL=6.0psf; E iclosed; MWFRS (erior (2) -0-11-0 to rior (2) 10-1-2 to 1 ne; cantilever left a and right exposed; /FRS for reactions late grip DOL=1.6	0=-511/(-26=-16 27=-224, 5-29=-2 28=-195, -33=-11, -19=-19 7=-29/2(=-19/2, 1=-30/6, 33=-3/5 // bh (3-sec CDL=3. envelope .2-1-0, h 3-1-2, In and right C-C for r .shown; 0	, 17-31=-288, 1/384, 141, 16/20, 31, 2/116, 134, 5-26=-11, 22-27=0/59, 7-30=-119/53, 15-31=-26/26 considered for considered for the second gust) 0psf; h=25ft; (f) exterior zon therior (1) 2-1. terior (1) 2-1. terior (1) 13-1 exposed ; en- nembers and Lumber	/206, 02/59, , , , , , , , , , , , , , , , , , ,	 8) Tru bra 9) Gal 10) This cho 11) * Tri on ti 3-0 cho 12) Pro 12) Pro 16, 10 17, upli 13) In ti of ti LOAD (Innu Ur 	ss to be ced agai ble studs s truss h rd live lo his truss he botto 6-00 tall rd and a vide mee ring plat 68 lb up ft at joint he truss CASE(S) acad + Sn crease=' hiform Lo Vert: 1-2 21-25=- apezoida	fully sh nst late space as bee ad nor has be m cho by 2-0 ny oth chanici 15 an o CASI e capa lift at jc 15 are no o Star 0 Star 20 20 al Loac	heathed from o bread movement ad at 2-0-0 oc. In designed for neoncurrent with een designed for di nall areas v 0-00 wide will f er members. al connection (bible of withstan bint 25, 75 lb up d 1 lb uplift at j E(S) section, lo ted as front (F) hodard alanced): Lumb b/ft) 2-6=-43, 6-10= ds (lb/ft)	e face or secure (i.e. diagonal we a 10.0 psf botton h any other live liv va live load of 20 vhere a rectangle it between the bc by others) of truss ding 149 lb uplift Jlift at joint 12, 73 oint 14. ads applied to th or back (B). er Increase=1.15	s to at joint 3 lb 6, Plate
FORCES TOP CHORD BOT CHORD	(lb) - Max Tension 1-2=0/41, 4-5=-415, 7-8=-118, 10-11=0/- 24-25=-8 20-21=-4 18-19=-4 15-17=-2 12-13=-2	imum Com , 2-3=-382/ /161, 5-6= /138, 8-9=- 41, 2-25=-4 7/427, 23-2 7/427, 21-2 1/210, 19-2 1/210, 19-2 1/212, 17-1 7/86, 14-15 7/86	pression/Maximum 147, 3-4=-433/140, 447/214, 6-7=-150/1 121/122, 9-10=-238/ 02/140, 10-12=-304 4=-87/427, 12=-87/427, 12=-87/427, 12=-87/427, 12=-41/210, 8=-41/212, =-27/86, 13-14=-27/	76, 4 (176, ⁴ /159 5 /86, 6) Truss design only. For stu see Standar or consult qu) TCLL: ASCE Plate DOL=1 psf (flat roDC)) This truss ha load of 12.0 overhangs n) Building Dess verifying Rai requirements 	ads exposed to wind loads juds exposed to wind d Industry Gable E jualified building de E 7-10; Pr=20.0 ps 1.15); Pg=15.0 psf snow: Lum DOL= Exp B; Partially E; as been designed psf or 1.00 times f ion-concurrent witt signer/Project engi in Load = 5.0 (psf) s specific to the us	In the pind (norm and peta signer as f (roof Ll (ground 1.15 Plat (p.; Ct=1 for great lat roof lo o ther limeer res covers r e of this	ane of the frace) al to the face) is as applicat sper ANSI/TF .: Lum DOL=1 snow); Pf=11 e DOL=1.15); .10 er of min roof pad of 11.5 ps ve loads. consible for ain loading truss compor	ss), ble, Pl 1. 1.15 1.5 ; live sf on						

7) All plates are 2x4 (||) MT20 unless otherwise indicated.

May 13,2025

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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. Dracing 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	1056 Serenity	
P02426-25225	ASE01	Common Structural Gable	1	1	Job Reference (optional)	173382588

Vert: 21=-20 (F=0)-to-20=-22 (F=-2), 20=-22 (F=-2)to-19=-24 (F=-4), 19=-24 (F=-4)-to-18=-26 (F=-6), 18=-26 (F=-6)-to-17=-27 (F=-7), 17=-27 (F=-7)to-16=-28 (F=-8), 16=-28 (F=-8)-to-15=-28 (F=-8), 15=-28 (F=-8)-to-14=-30 (F=-10), 14=-30 (F=-10)to-13=-33 (F=-13), 13=-33 (F=-13)-to-12=-35 (F=-15)

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Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:35 ID:X9I9Aks6bZqRWOpeU89yghzJEwq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	B01	Common	1	1	Job Reference (optional)	173382589

Scale = 1:70.1

Loading

TCLL (roof)

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GRIP

244/190



Snow (Pf/Pg)	11.5/15.0	Lumber DOL	1.15		BC	0.68	Vert(CT)	-0.31	10-12	>949	180			
TCDL	10.0	Rep Stress Incr	YES		WB	0.13	Horz(CT)	0.05	8	n/a	n/a			
BCLL	0.0*	Code	IRC201	5/TPI2014	Matrix-MS									
BCDL	10.0											Weight: 119 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep Left 2x4 SP No.3 1 1-6-0 Structural wood shea 4-0-12 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 8 Max Horiz 2=86 (LC Max Uplift 2=-112 (L Max Grav 2=1038 (L	t* 10-6,12-4:2x4 SP I-6-0, Right 2x4 SP I athing directly applie applied or 10-0-0 or 3=0-5-8 16) C 16), 8=-112 (LC 1 .C 2), 8=1038 (LC 2)	3) No.3 4) 5) ed or 5 7) 7) 8)	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	7-10; Pr=20.0 (15); Pg=15.0 p snow: Lum DOL Exp B; Partially snow loads hav as been designe psf or 1.00 times on-concurrent w igner/Project as a specific to the s been designer ad nonconcurrer has been design a been design a been design	best (roof LL sf (ground _=1.15 Plat Exp.; Ct=1 e been cor d for greats s flat roof lk ith other lin gineer res sf) covers r sf) covers r use of this d for a 10. t with any use d for a liv as where	:: Lum DOL= snow); Pf=1 te DOL=1.15) .10 asidered for t 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	1.15 1.5); his f live sf on nent. ads. Opsf						
FORCES	(lb) - Maximum Com Tension	pression/Maximum		3-06-00 tall b	by 2-00-00 wide	will fit betw	veen the bott	om f						
TOP CHORD	1-2=0/25, 2-4=-1576 5-6=-1416/207, 6-8=	;/182, 4-5=-1416/207 :-1576/182, 8-9=0/25	7, 9) 5	Provide mech bearing plate	hanical connect capable of with	ion (by oth	ers) of truss	to t joint						
BOT CHORD	2-12=-168/1351, 10-	12=-39/932,		2 and 112 lb	uplift at joint 8.	g		.,						
WEBS	5-10=-99/519, 6-10= 4-12=-332/151	-332/151, 5-12=-99/	/519,	DAD CASE(S)	Standard							TH CA	ROUL	
NOTES											N	A	E. LIN'S	
 Unbalanc this desig Wind: AS Vasd=91r II; Exp B; and C-C E 12-3-8, Ex to 25-6-0 	ed roof live loads have n. CE 7-10; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior (2) -0-11-0 to 2 xterior (2) 12-3-8 to 15- zone; cantilever left and	been considered for (3-second gust) DL=3.0psf; h=25ff; C velope) exterior zon -1-0, Interior (1) 2-1- 3-8, Interior (1) 15-3 d right exposed ; end	r Cat. ne -0 to 3-8 d							A HILLING	V	SEA 0363	L 22	1

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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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	B01H	Common	3	1	Job Reference (optional)	173382590

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:35 ID:BOOf7dGWlu9FwARD?7InMdzJGe2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	8-3-8	13-11-0	16-3-8	24-7-0
Scale = 1:70.1	8-3-8	5-7-8	2-4-8	8-3-8

Plate Offsets (X, Y): [2:0-3-13,0-0-1], [8:0-3-13,0-0-1], [10:0-2-0,0-2-0], [12:0-2-0,0-2-0]

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 NO IRC201	5/TPI2014	CSI TC BC WB Matrix-MS	0.66 0.73 0.45	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.15 0.04	(loc) 10-12 12-15 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 142 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORE BOT CHORE WEBS SLIDER BRACING TOP CHORE BOT CHORE BOT CHORE BOT CHORE BOT CHORE BOT CHORE WEBS NOTES 1) Unbalance	 2x4 SP No.2 2x4 SP No.2 *Excep 2x4 SP No.2 *Excep Left 2x4 SP No.3 1 1-6-0 Structural wood she 3-7-9 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, 8 Max Horiz 2=86 (LC Max Uplift 2=-123 (L Max Grav 2=1113 (L (Ib) - Maximum Com Tension 0 1-2=0/25, 2-4=-1719 5-6=-1607/244, 6-8= 2-12=-188/1477, 10- 8-10=-128/1519 5-10=-121/656, 6-10 5-12=-98/507, 4-12= ced roof live loads have 	t* 12-10:2x8 SP DS5 t* 10-6,12-4:2x4 SP 1-6-0, Right 2x4 SP 1 athing directly applie applied or 10-0-0 oc 3=0-5-8 16) C 16), 8=-127 (LC 1: .C 2), 8=1136 (LC 2) pression/Maximum 0/210, 4-5=-1559/235 -1767/219, 8-9=0/25 -12=-61/1068, 0=-324/150, 326/150 been considered for	3) S No.3 4) 5) d or 5; 6) 7) 8) 5; 9) 5 1)	TCLL: ASCE Plate DOL=1 psf (flat roof 3 Category II; I Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Raia requirements This truss ha chord live loa * This truss ha chord and ar Provide mec bearing plate 2 and 127 lb DAD CASE(S) Dead + Sno Increase=1 Uniform Loa	7-10; Pr=20.0 psf (.15); Pg=15.0 psf (.15); Pg=	iroof LL ground 15 Plat 15 Plat 20 Pla	: Lum DOL= snow); Pf=1 e DOL=1.15, 10 isidered for t er of min roo bad of 11.5 p ve loads. bonsible for ain loading truss compo 0 psf bottom other live load e load of 20. a rectangle veen the bott DL = 10.0ps ers) of truss 23 lb uplift a recase=1.15, 5-27=-40	1.15 1.5); this f live psf on onent. ads. Opsf to t joint Plate			AN A	OR FESS	ROLIN	2
2) Wind: AS Vasd=91	n. SCE 7-10; Vult=115mph mph; TCDL=6.0psf; BC	(3-second gust) DL=3.0psf; h=25ft; C	Cat.									SEA		

II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 12-3-8, Exterior (2) 12-3-8 to 15-3-8, Interior (1) 15-3-8 to 25-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	B01HA	Common	2	1	Job Reference (optional)	173382591

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:36 ID:BOOf7dGWlu9FwARD?7InMdzJGe2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





	8-3-8	13-11-0	16-3-8	24-7-0
Scale = 1:70.1	8-3-8	5-7-8	2-4-8	8-3-8

Plate Offsets (X, Y): [2:0-4-1,Edge], [8:0-4-1,Edge], [10:0-1-12,0-2-0], [12:0-1-12,0-2-0]

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	2-1-8 1.15 1.15 NO IRC2018	5/TPI2014	CSI TC BC WB Matrix-MS	0.78 0.77 0.46	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.16 0.05	(loc) 10-12 12-15 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 142 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalance this desig 2) Wind: ASI Vasd=91r II; Exp B; and C-C E 12-3-8, E5 to 25-6-0 vertical Iel DOL=1.66	2x4 SP No.2 2x4 SP No.2 *Excep 2x4 SP No.2 *Excep Left 2x4 SP No.3 1 1-6-0 Structural wood sheat 3-4-11 oc purlins. Rigid ceiling directly bracing. (size) 2=0-5-8, & Max Horiz 2=92 (LC Max Uplift 2=-130 (L Max Grav 2=1177 (L (lb) - Maximum Com Tension 1-2=0/26, 2-4=-1818 5-6=-1695/257, 6-8= 2-12=-199/1561, 10- 8-10=-134/1603 5-10=-127/688, 6-10 5-12=-104/540, 4-12 ed roof live loads have n. CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior (2) 10-11-0 to 2 xterior (2) 10-13-8 to 15- zone; cantilever left and t and right exposed; C- WFRS for reactions si D plate grip DOL=1.60	t* 12-10:2x8 SP DSS t* 10-6,12-4:2x4 SP I-6-0, Right 2x4 SP I athing directly applie applied or 10-0-0 oc 3=0-5-8 16) C 16), 8=-134 (LC 11 .C 2), 8=1201 (LC 2) pression/Maximum i/221, 4-5=-1648/248 -1865/230, 8-9=0/26 12=-64/1126, I=-345/159, =-345/159, =-345/159, =-347/159 been considered for (3-second gust) DL=3.0psf; h=25ft; C velope) exterior zon -1-0, Interior (1) 21-1 3-8, Interior (1) 15-3 d right exposed ; enc C for members and hown; Lumber	3) No.3 4) 5) d or 6) 7) 7) 8) 10 LC 1) sat. e 0 to 8 1	TCLL: ASCE Plate DOL=1 psf (flat root : 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 meci bearing plate 2 and 134 lb) In the LOAD of the truss a DAD CASE(S) Dead + Sno Increase=1 Uniform Loa Vert: 1-5:	7-10; Pr=20.0 psi .15); Pg=15.0 psf snow: Lum DOL= Exp B; Partially Ex snow loads have b s been designed f on-concurrent with igner/Project engin Load = 5.0 (psf) s specific to the us s been designed n donconcurrent v us been designed n chord in all area by 2-00-00 wide wi y other members, hanical connection capable of withst upift at joint 8. CASE(S) section, re noted as front (Standard bw (balanced): Lur 15 ads (lb/ft) =-46, 5-9=-46, 13-	f (roof LL (ground 1.15 Plat sp.; Ct=1 been cor for great lat roof lo n other lin neer res covers r e of this for a 10.0 with any f for a liv s where ill fit betw, with anding 1 loads al (F) or ba mber Inc 17=-21,	:: Lum DOL= snow); Pf=1 e DOL=1.15; .10 er of min rood bad of 11.5 p ve loads. ponsible for ain loading truss compo 0 psf bottom 0 psf	1.15 1.5); this f live psf on onent. ads. Opsf to to f. to to face Plate		Manuta		SEA 0363		

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G minim May 13,2025

Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	BE01	Common Supported Gable	1	1	Job Reference (optional)	173382592

FORCES

TOP CHORD

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Fri May 09 12:55:36 ID:I?_atN_1iKpHCtLrosrw3HzJGfi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





~ . - ~

Scale - 1:68 4			H-				24-7-0)						
Plate Offsets	(X, Y): [2:0-3-8	8,Edge],	[16:0-4-1,Edge]											
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	11.5	(psf) 20.0 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 IRC2	015/TPI2014	CSI TC BC WB Matrix-MS	0.06 0.04 0.08	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: 143 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.3 Left 2x4 SP 1-6-0 Structural we 6-0-0 oc pur Rigid ceiling bracing. (size) 2= 19 23 24 26 25 Max Horiz 2= Max Uplift 2= 19 27 26 26 27 26 27 26 27 26 26 27 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 26 26 26 26 26 26 26 26 26 26 26	2 3 *Except No.3 1 ood sheat lins. 1 directly =24-7-0, 9=24-7-0 3=24-7-0 9=24-7-0 9=24-7-0 ==34 (LC 9=-34 (LC 9=-34 (LC 9=-34 (LC	* 24-9:2x4 SP No.2 -6-0, Right 2x4 SP athing directly appli applied or 10-0-0 o 16=24-7-0, 18=24 , 20=24-7-0, 21=24 , 24=24-7-0, 25=24 , 27=24-7-0, 28=24 16) 17), 18=-62 (LC 17 C 17), 20=-41 (LC 2 C 17), 23=-39 (LC 2 C 16), 26=-40 (LC 2	2 No.3 ed or c 1-7-0, 1-7-0, 1-7-0, 1-7-0, 1-7), 17), 17), 16)	BOT CHORD WEBS 1) Unbalance this design 2) Wind: ASC Vasd=91m II; Exp B; E and C-C C 12-3-8, Co to 25-6-0 z vertical left forces & M DOL=1.60	2-29=-14/81, 28 26-27=-14/81, 2 32-24=-14/81, 1 9-24=-11/0, 8- 6-27=-121/60, 5 10-23=-128/103 12-20=-121/60, 14-18=-126/94 d roof live loads h E 7-10; Vult=115 ph; TCDL=6.0psf inclosed; MWFR3 orner (3) -0-11-0 rner (3) 12-3-8 to one; cantilever le and right expose WFRS for reacticip plate grip DOL=1	-29=-14/81 5-26=-14/8 1-23=-14/8 8-19=-14/8 25=-128/10 -28=-118/5 3, 11-21=-1 13-19=-118 5, 11-21=-1 13-19=-118 5, 12-23-8, 12 5 (envelope 6 (envelope 5 (envelope 5 (envelope 5 (2-3-8, Ex ft and right d;C-C for n ns shown; .60	, 27-28=-14 1, 24-25=-1 1, 20-21=-1 1, 16-18=-1 3, 7-26=-11 3, 7-26=-11 19/64, 3/57, considered f cond gust) psf; h=25ft; exposed ; e terior (2) 15- exposed ; e nembers and Lumber	/81, 4/81, 4/81, 4/81, 9/64, 6/95, for cor cor cone -3-8 to -3-8 md d	 9) Gat 10) Gat 11) This cho 12) * Th on t 3-00 cho 13) Provise 2, 44 at jc 39 I joint 14 I LOAD C 	ble requ ble studs struss h rd live k sis truss he botto 5-00 tall rd and a vide me ring pla 0 lb uplift t 20, 34 b uplift a cASE(S	ires co s space bad not has be om cho by 2-0 any oth chanic te capa ift at joi 32 lb u at joint lb uplit at joint) Sta	ntinuous bottom o ed at 2-0-0 oc. en designed for a neoncurrent with - seen designed for s or di nall areas wh 0-00 wide will fit l er members. al connection (by able of withstandii nt 25, 40 lb uplift plift at joint 28, 65 23, 40 lb uplift at t at joint 19, 62 lb 2. ndard	chord bearing. 10.0 psf bottom any other live loads. a live load of 20.0psf erere a rectangle between the bottom rothers) of truss to ng 14 lb uplift at joint at joint 26, 41 lb uplift at joint 29, joint 21, 41 lb uplift b uplift at joint 18 and

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

- TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) 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
- Unbalanced snow loads have been considered for this 5) desian.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads.
- 7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated. 8)

MILLIN ORTH WILLIAM DATE SEAL 036322 G minin May 13,2025

Page: 1

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27=-41 (LC 16), 28=-32 (LC 16),

18=177 (LC 35), 19=155 (LC 2),

20=162 (LC 35), 21=159 (LC 2),

23=168 (LC 35), 24=151 (LC 33),

25=168 (LC 34), 26=159 (LC 2),

27=162 (LC 34), 28=155 (LC 2),

29=-69 (LC 16)

29=177 (LC 34)

1-2=0/25, 2-4=-94/47, 4-5=-75/53,

14-16=-57/20, 16-17=0/25

Tension

(lb) - Maximum Compression/Maximum

5-6=-58/72, 6-7=-50/103, 7-8=-58/141,

8-9=-71/176, 9-10=-71/180, 10-11=-58/144,

11-12=-47/106, 12-13=-47/69, 13-14=-50/34,

Max Grav 2=155 (LC 2), 16=155 (LC 2),



Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	P01	Monopitch	6	1	Job Reference (optional)	173382593

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:36 ID:27mHna8zgLYGOJZVKeEBchzIZS8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.9

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	5/TPI2014	CSI TC BC WB Matrix-MR	0.33 0.22 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.03 0.00	(loc) 4-8 4-8 9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 22 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 Structural wood shea 5-6-4 oc purlins, ex Rigid ceiling directly bracing. (size) 2=0-4-8, S Max Horiz 2=60 (LC Max Uplift 2=-101 (L Max Grav 2=295 (LC	athing directly applia cept end verticals. applied or 10-0-0 o 9=0-1-8 12) C 12), 9=-67 (LC 12 C 2), 9=182 (LC 2)	4) 5) ed or c 7) 8) 2) 9)	Unbalanced design. This truss ha load of 12.0 p overhangs no Building Des verifying Rain requirements This truss ha chord live loa * This truss h on the bottom 3-06-00 tall tb chord and ar Bearing at io	snow loads have to s been designed for portion 1.00 times fl port-concurrent with igner/Project engin in Load = 5.0 (psf) is specific to the use is been designed function and the signed in chord in all areas by 2-00-00 wide with the source state of the signed in the signed in the signed in the signed in the signed in the signed in the signed signed in the signed signed in the signed signed signed in the signed signed signed in the signed signed signed signed signed in the signed signed signed signed signed in the signed signed signed signed signed signed signed signed signed signed signed signed signed signed signed signed signed s	or greate at roof lo other lin heer resp covers r e of this or a 10.0 vith any for a liv s where Il fit betw parallel t	nsidered for t er of min roo 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 veen the bott o grain value	his f live sf on nent. ads. Opsf om						
FORCES	(lb) - Maximum Com Tension 1-2=0/22, 2-3=-191/9 3-5=-69/53	pression/Maximum 98, 4-5=-97/109,	10	using ANSI/T designer sho Provide mecl bearing plate	PI 1 angle to grain uld verify capacity hanical connection at joint(s) 9.	of beari of beari (by oth	a. Building ng surface. ers) of truss	to						
BOT CHORD WEBS NOTES 1) Unbalanc	2-4=-116/160 3-9=-97/88 ed roof live loads have	been considered fo	11) r LC) Provide mech bearing plate 2 and 67 lb u DAD CASE(S)	hanical connection capable of withsta plift at joint 9. Standard	ı (by oth anding 1	ers) of truss 01 lb uplift a	to t joint				TH CA	Ro	

- 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) -1-2-0 to 1-10-0, Interior (1) 1-10-0 to 5-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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

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SEAL

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WITTER WALL

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	P02	Monopitch	3	1	Job Reference (optional)	173382594





6-6-4

2x4

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Fri May 09 12:55:36

ID:BoGc3WxQa7J7mCS8ZRQ896zIZPp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Scale =	1:29.4
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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-MP	0.61 0.48 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.13 -0.17 0.00	(loc) 4-7 4-7 2	l/defl >568 >457 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 25 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.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 2=0-4-8, 4 Max Horiz 2=77 (LC Max Uplift 2=-116 (L Max Gray, 2=31 ()	athing directly applia cept end verticals. applied or 10-0-0 or 4= Mechanical 15) C 12), 4=-87 (LC 12 C 12), 4=249 (L C 2)	6) 7) ed or 8) c 9) 10	Building Des verifying Rai requirements This truss ha chord live loa * This truss l on the botton 3-06-00 tall I chord and ar Refer to gird) Provide mec bearing plate 4 and 116 lb	igner/Project er n Load = 5.0 (p s specific to the s been designe ad nonconcurre as been design n chord in all ar by 2-00-00 wide by other membe er(s) for truss to hanical connec e capable of witt uplift at joint 2.	ngineer resp sf) covers r use of this d for a 10.0. nt with any red for a liv reas where will fit betw ers. b truss conr tion (by oth hstanding 8	consible for ain loading truss compo 0 psf bottom other live loa e load of 20. a rectangle veen the bott nections. ers) of truss 7 lb uplift at	onent. ads. Opsf com to joint					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	LC	DAD CASE(S)	Standard								
TOP CHORD	1-2=0/22, 2-3=-110/	80, 3-4=-165/110											
BOT CHORD	2-4=-110/93												
NOTES													
 Unbalance this design 	ed roof live loads have	been considered fo	r										
2) Wind: AS Vasd=91r II: Exp B:	n. CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed: MWFRS (er	(3-second gust) DL=3.0psf; h=25ft; (nyelope) exterior zor	Cat.									mmm	11111

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 6-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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.
- 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.

SEAL 036322 MGINEER May 13,2025

Page: 1

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to preven toukling 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.sbcaccomponents.com)



Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	P03	Common	2	1	Job Reference (optional)	173382595



Page: 1



4-7-8	9-3-0
4-7-8	4-7-8

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

Scale = 1:41.6

	X, 1): [2:Euge,0 0 4],	[4:Edge;0 0 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 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MS	0.23 0.25 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.02 -0.03 0.00	(loc) 6-12 6-9 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 36 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 Structural wood shee 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-0,4 Max Horiz 2=37 (LC Max Uplift 2=-57 (LC Max Uplift 2=-57 (LC Max Grav 2=433 (LC (lb) - Maximum Com Tension 1-2=0/28, 2-3=-507/3 4-5=0/28 2-6=-242/408, 4-6=-3 3-6=-192/213	athing directly applied applied or 10-0-0 oc 16) 13), 4=-57 (LC 12) 2 2), 4=433 (LC 2) pression/Maximum 348, 3-4=-507/348, 242/408	4) 5) d or 6) 7) 8) 9) LC	Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Rai requirement: This truss ha chord live loi * This truss l on the bottor 3-06-00 tall I chord and an Provide mec bearing plate 2 and 57 lb t DAD CASE(S)	snow loads have b as been designed for psf or 1.00 times fla on-concurrent with igner/Project engin in Load = 5.0 (psf) is specific to the use is been designed for ad nonconcurrent w has been designed in chord in all areas by 2-00-00 wide will by other members. hanical connection e capable of withsta uplift at joint 4.	been cor or great at roof k other lin heer res covers r of this or a 10.0 vith any for a liv s where l fit betw (by oth anding 5	er of min roof bad of 11.5 pr re loads. bonsible for ain loading truss compor 0 psf bottom other live loa e load of 20.0 a rectangle veen the bottt ers) of truss t 7 lb uplift at j	his flive sf on nent. ds. Dpsf om to oint					
 Unbalance this design Wind: ASC Vasd=91m II; Exp B; and C-C E to 4-7-8, E 10-3-8 zor vertical lef exposed;C reactions s DOL=1.60 	ed roof live loads have D. CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior (2) -1-0-8 to 17 exterior (2) -4-7-8 to 7-7 ne; cantilever left and r t and right exposed; po C-C for members and for shown; Lumber DOL=1	at. -8 0							Manna and and a state of the st	E.	SEA 0363		

 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

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May 13,2025

Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	PCJ01	Jack-Partial	2	1	Job Reference (optional)	173382596

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:37 ID:JSml?2w9MIP9oJWWjp?QzEzJGxs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:41.5

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 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MP	0.22 0.27 0.09	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.05 -0.05 0.00	(loc) 6-9 6-9 5	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 BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she: 5-6-6 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-13, Mechanic Max Horiz 2=79 (LC Max Uplift 2=-113 (L 5=-63 (LC Max Grav 2=327 (LC (LC 7) (lb) - Maximum Com Tension 1-2=0/29, 2-3=-295// 2-6=-281/278, 5-6=0 3-6=-301/304 CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en Corner (3) -1-5-11 to 2- ne; cantilever left and r t and right exposed; pc C-C for members and fc shown; Lumber DOL=1. CE 7-10; Pr=20.0 psf (g of snow: Lum DOL=1.7 II; Exp B; Partially Exp. ed snow loads have be	athing directly applie applied or 10-0-0 oc 4= Mechanical, 5= al 36) C 12), 4=-35 (LC 16) 22), 4=81 (LC 2), 5= pression/Maximum 205, 3-4=-36/22 % (3-second gust) DL=3.0psf; h=25ft; C welope) exterior zon 9-2, Exterior (2) 2-9- ight exposed ; end orch left and right orces & MWFRS for 1.60 plate grip roof LL: Lum DOL=1 ground snow); Pf=11. 15 Plate DOL=1.15); ; Ct=1.10 ven considered for thi	4) 5) d or 6) 7) 171 10) 111 10) 111 10) 111 10) 111 10) 111 10 1) 113 5 2 to	This truss ha load of 12.0 (overhangs no Building Des verifying Rain requirements This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Refer to girdd Provide med bearing plate 4, 113 lb upli) "NAILED" ind (0.148"x3.25) In the LOAD of the truss a PAD CASE(S) Dead + Snc Increase=1.1 Uniform Loa Vert: 1-4: Concentrate	s been designed for osf or 1.00 times fit pn-concurrent with igner/Project engin h Load = 5.0 (psf) of specific to the use s been designed fit d nonconcurrent w as been designed fit n chord in all areas y 2-00-00 wide wil y 2-00-00 wide wil y 2-00-00 wide wil y other members. er(s) for truss to tru- nanical connection capable of withstä tit at joint 2 and 63 licates 3-10d (0.14 ") toe-nails per ND CASE(S) section, re noted as front (I Standard w (balanced): Lurr 15 ads (lb/ft) =-43, 5-7=-20 ad Loads (lb) -18 (F), 12=-3 (F=-	or greate at roof k other liv heer resp covers r. e of this or a 10.0 vith any for a liv for a liv for a liv s where I fit betw uss conr (by oth anding 3 lb uplift 18"x3") c S guidlin loads ap F) or bar heer Inco	er of min roo aad of 11.5 p re loads. bonsible for ain loading truss compco) psf bottom other live load e load of 20. a rectangle eeen the bott rections. ers) of truss 5 lb uplift at at joint 5. r 2-12d res. oplied to the ck (B). rease=1.15,), 13=-18 (F)	f live osf on onent. ads. .0psf tom to joint face Plate				SEA 0363		

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	PE01	Monopitch Supported Gable	1	1	Job Reference (optional)	173382597

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:37

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

2-6-7

ID:mfVRJbdcyyrul?nAmo29DCzJHWO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -1-2-0 5-6-3 5-6-3 1-2-0 5-6-3 2x4 II 12 4 Г 2x4 II 4 12 0 3 11 2-2-0 10 ð 2 0-3-15 Do ٣ 5 6 2x4 = 2x4 II

5-6-3

2x4 II

Scale = 1:28.8													
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 IRC20)15/TPI2014	CSI TC BC WB Matrix-MP	0.11 0.08 0.05	DEFL Vert(LL) Vert(CT) Horz(CT)	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: 23 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASG Vasd=91n II; Exp B; I and C-C C to 5-4-7 zc vertical lef forces & M DOL=1.60	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood she 5-6-3 oc purlins, ex Rigid ceiling directly bracing. (size) 2=5-4-11, Max Horiz 2=66 (LC Max Uplift 2=-50 (LC (LC 16) Max Grav 2=200 (LC (LC 2) (lb) - Maximum Corr Tension 1-2=0/22, 2-3=-99/6 2-6=-26/34, 5-6=-26 3-6=-183/161 ed roof live loads have n. CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (er Corner (3) -1-2-0 to 1-1 one; cantilever left and ft and right exposed;C- MWFRS for reactions s 0 plate grip DOL=1.60	Pathing directly applie cept end verticals. applied or 10-0-0 oc , 5=5-4-11, 6=5-4-11 15) C 12), 5=-6 (LC 13), 6 C 2), 5=32 (LC 2), 6= apression/Maximum 0, 3-4=-39/32, 4-5=-2 /34 been considered for a (3-second gust) DL=3.0psf; h=25ft; C twelope) exterior zon 0-0, Exterior (2) 1-10 right exposed ; end C for members and shown; Lumber	ed or 5=-51 -268 29/44 - Cat. e 0-0	 TCLL: ASCE Plate DOL=1 psf (flat roof Category II; 1 Unbalanced design. Unbalanced noad of 12.0 overhangs n ropurements Gable studs Gable studs This truss ha chord live loat This truss ha chord live loat This truss ha chord live loat This truss ha chord and ar Provide mect bearing plate Bu bujift at at joint 2. Non Standar LOAD CASE(S) 	7-10; Pr=20.0 p; .15); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E snow loads have so the standard of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the solution of the sol	sf (roof LI ff (ground =1.15 Pla ixp.; Ct=1 been cool I for great flat roof I th other I igineer res f) covers I use of this oc. I for a 10. t with any d for a lin as where will fit betw s. on (by oth standing 6 ift at joint on. Revie	L: Lum DOL= snow); Pf=1' te DOL=1.15) .10 er of min roof oad of 11.5 p; ve loads. ponsible for ain loading truss compoi 0 psf bottom other live loa e load of 20.0 a rectangle veen the bottot ers) of truss t 5 lb uplift at jo 6 and 50 lb u ew required.	1.15 1.5 ; his sf on nent. ds. Dpsf om to int 5, iplift				OFESS SEA 0363	NRO NRO NL 22
 Truss desi only. For see Stand or consult 	igned for wind loads in studs exposed to wind lard Industry Gable En qualified building desi	the plane of the trus (normal to the face) d Details as applicab gner as per ANSI/TP	ss , ple, rl 1.								and the second s	S NGIN	EER. KINN

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G munn May 13,2025



Job	Truss Type		Qty	Ply	1056 Serenity	
P02426-25225	PE02	Monopitch Supported Gable	1	1	Job Reference (optional)	173382598

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:38

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GRIP 244/190

FT = 20%

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



6-6-4

Scale	_	1.30.2
ocale	_	1.00.2

Loading TCLL (ro Snow (Pf TCDL BCLL BCDL	(i of) 2 /Pg) 11.5/1 1 1	psf) Spacing 20.0 Plate Grip DOL 5.0 Lumber DOL 0.0 Rep Stress Incr 0.0* Code	2-0-0 1.15 1.15 YES IRC2015	/TPI2014	CSI TC BC WB Matrix-MP	0.19 0.15 0.06	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: 27 lb
LUMBER TOP CHO BOT CHO WEBS OTHERS BRACIN TOP CHO BOT CHO REACTIO	DRD 2x4 SP No.2 DRD 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 3 3 DRD Structural woo 6-0-0 oc purlir DRD Rigid ceiling d bracing. DNS (size) 2=6 Max Horiz 2=7 Max Uplift 2=- 6=- Max Grav 2=2 (LC	od sheathing directly applie ns, except end verticals. lirectly applied or 10-0-0 oc 6-6-4, 5=6-6-4, 6=6-6-4 77 (LC 15) 52 (LC 12), 5=-10 (LC 15), 68 (LC 16) 229 (LC 2), 5=5 (LC 23), 6= 20	4) 5) ed or 6) 5 7) 8) 9) 9:351	TCLL: ASCE Plate DOL=1 psf (flat roof Category II; Unbalanced design. This truss ha load of 12.0 overhangs n Building Des verifying Rai requirements Gable requir Gable studs This truss ha chord live loa	7-10; Pr=20.0 p: .15); Pg=15.0 ps snow: Lum DOL= Exp B; Partially E snow loads have is been designed psf or 1.00 times on-concurrent wit igner/Project eng n Load = 5.0 (psf s specific to the u es continuous bo spaced at 2-0-0 (is been designed ad nonconcurrent	sf (roof LL f (ground =1.15 Plat xp.; Ct=1 been cor for great flat roof lu h other lin ineer res) covers r se of this ttom chor oc. for a 10.0 with any	:: Lum DOL= snow); Pf=1 e DOL=1.15) .10 nsidered for the er of min roof oad of 11.5 p ve loads. ponsible for ain loading truss compo d bearing.	1.15 1.5 ; his live sf on nent.				
FORCES	(Ib) - Maximur Tension 0RD 1-2=0/22 2-3=	n Compression/Maximum =-110/70, 3-4=-46/38	11)	on the bottor 3-06-00 tall t	n chord in all area by 2-00-00 wide v	as where vill fit betv	a rectangle veen the bott	om				
BOT CHO WEBS	4-5=-14/33 DRD 2-6=-32/50, 5- 3-6=-237/186	-6=-30/40	12)	Provide mec bearing plate 2, 10 lb uplif	hanical connection capable of withs at joint 5, 68 lb u	s. on (by oth standing 5 uplift at joi	ers) of truss t 52 lb uplift at j nt 6 and 52 ll	o oint o				555 FT 1

NOTES

- 1) Unbalanced roof live loads have been considered for 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 Corner (3) -1-2-0 to 1-10-0, Exterior (2) 1-10-0 to 6-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- uplift at joint 2.
- 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 7.

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	1056 Serenity				
P02426-25225	PG01	Hip Girder	1	2	Job Reference (optional)	173382599			

Scale = 1:45.3

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:38 ID:k1SRe3z1fDnkfmE5OyY7btzJGxp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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)	9-3-0	5-4-12	3-10-4
4	3-10-4	1-6-8	3-10-4

Loading (psf) Spacing 2-0-0 CSI DEFL in (loc) I/defl L/d PLATES GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.09 Vert(LL) 0.01 8 >999 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.14 Vert(CT) -0.01 8-10 >999 180 TCDL 10.0 Rep Stress Incr NO WB 0.05 Horz(CT) 0.00 5 n/a n/a	Plate Offsets (X	(, Y): [3:0-3-0,0-2-0],	[4:0-3-0,0-2-0]												
BCLL 0.0* Code IRC2015/TPI2014 Matrix-MS BCDL 10.0 Weight: 97 lb FT = 20%	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 NO IRC2015	5/TPI2014	CSI TC BC WB Matrix-MS	0.09 0.14 0.05	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.01 -0.01 0.00	(loc) 8 8-10 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 97 lb	GRIP 244/190 FT = 20%	
 JUMBER TOP CHORD 2x4 SP No.2 307 CHORD 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 4) Wind: ASCE 7-10; Yull=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=30psf; h=25f; Cat. 1; Exp B; Fachosed; MWFRS (envelope) exterior area; cantilever left and right exposed; Lumber 0-0-0 currains, except 2-0-0 oc purims, (6-0-0 max); 3-4. 307 CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 2EACTIONS (izz) 2-0-30, 5=0-30. Max Varit 2 233 (1C 17) Max Vipilt 2142 (LC 12), 5=-142 (LC 13) Max Grav 2-e003 (LC 35), 5=-0033 STOCHORD 2: 4=-211/715, 7-8=-205699, 5-7=-207720 WEBS 3-8=-60235 (1C 25), 5=-00435 1) 2-pit trusts to be connected together with 10d (0.131×37) mails as follows: 2x4 - 1 row at 0-9-0 oc. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 1) 2-pit trusts to be connected as follows: 2x4 - 1 row at 0-9-0 c. 2) Provide mechanical connection (by others) of trusts to bearing plate applicit (1) 2, 5. 1) 3 Graphical purin representation of the purini along the top and/or the orientanicion of the purini along the top and/or the orientanic of the purini along the top and/or the orientanial on the purini along the top and/or	LUMBER OP CHORD 30T CHORD VEBS BRACING OP CHORD 30T CHORD 30T CHORD REACTIONS (M 50RCES 50P CHORD 30T CHORD VEBS 10TES 10 CHORD VEBS 10TES 10 CHORD VEBS 10 CHORD 10	2x4 SP No.2 2x6 SP No.2 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exc 2-0 oc purlins, exc 2-0 oc purlins (6-0 Rigid ceiling directly bracing. (size) 2=0-3-0, 5 Max Horiz 2=-33 (LC Max Uplift 2=-142 (Lf Max Grav 2=603 (LC (lb) - Maximum Com Tension 1-2=0/35, 2-3=-843/2 4-5=-848/262, 5-6=0 2-8=-211/715, 7-8=-2 3-8=-86/239, 3-7=-52 to be connected toget nails as follows: a connected as follows at 0-9-0 oc. ected as follows: 2x4 - e considered equally : oted as front (F) or bac ection. Ply to ply conn distribute only loads i avise indicated.	athing directly applied ept -0 max.): 3-4. applied or 10-0-0 oc 5=0-3-0 17) C 12), 5=-142 (LC 13 C 35), 5=603 (LC 35) pression/Maximum 261, 3-4=-703/236, //35 205/699, 5-7=-200/72 2/65, 4-7=-84/242 ther with 10d s: 2x4 - 1 row at 0-9-0 cows: 2x6 - 2 rows 1 row at 0-9-0 oc. applied to all plies, ck (B) face in the LO/ lections have been noted as (F) or (B), been considered for	4) d or 5) (6) (3) 7) (8) (10) (11) (12) (13) (14) (15) (10) (1)	Wind: ASCE Vasd=91mph II; Exp B; Enc cantilever lef right exposed DOL=1.60 pl TCLL: ASCE Plate DOL=1 psf (flat roof 3 Category II; E Unbalanced design. This truss ha load of 12.0 j overhangs ne Building Des verifying Rain requirements Provide aded) This truss ha chord live loa) * This truss ha chord live loa) * This truss ha on the bottom 3-06-00 tall b chord and ar) Provide mech bearing plate 2 and 142 lb) Graphical pu or the orienta bottom choro) "NAILED" inc (0.148"x3.25 DAD CASE(S) Dead + Snc	7-10; Vult=115mph ; TCDL=6.0psf; BC closed; MWFRS (et and right exposed d; porch left and rig ate grip DOL=1.60 7-10; Pr=20.0 psf (15); Pg=15.0 psf (snow: Lum DOL=1. Exp B; Partially Exp snow loads have b s been designed fc posf or 1.00 times fla on-concurrent with igner/Project engin in Load = 5.0 (psf) of s specific to the use quate drainage to p so been designed fc ad nonconcurrent with igner/Project engin in Load = 5.0 (psf) of s specific to the use quate drainage to p s been designed fc ad nonconcurrent with in all areas by 2-00-00 wide will y other members. hanical connection e at joint(s) 2, 5. hanical connection e apable of withsta uplift at joint 5. rlin representation ation of the purlin all dicates 3-10d (0.14 ") toe-nails per ND: Standard bw (balanced): Lum 15	n (3-sec CDL=3. nvelope I; end v ht expo (roof LL ground 15 Plat b.; Ct=1 een cor or great at roof k other live eer ress covers r e of this revent v for a live where I fit betv (by oth nding 1 does no long the 8"x3") of S guidli where Inc	ond gust) opsf; h=25ft; () exterior zor ertical left an sed; Lumber : Lum DOL=' snow); Pf=16 e DOL=1.15) .10, Lu=50-0- isidered for th er of min roof pad of 11.5 ps vel loads. sonsible for ain loading truss compor 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 42 lb uplift at to depict the s top and/or r 2-12d nes. rease=1.15, F	Cat. ne; d 1.15 5.5 ; 0 nis live sf on nent. j ds. opsf om o joint ize	Ur Cc	niform Lc Vert: 1-: ncentra Vert: 8=	Dads (lk 3=-43, ted Loz -112 (E	offt) 3-4=-53, 4-6=-43 ads (lb) 3), 7=-112 (B) H CA OFES SEA 0363 CA. G	2-5=-20 RO(1) L 22 E.F.R.R.	

May 13,2025

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	PJ01	Jack-Open	1	1	Job Reference (optional)	173382600

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries. Inc. Fri May 09 12:55:38 ID:6NwzsdyNHR7NXJwvCbgWAqzIZga-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:25.6

Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.07	Vert(LL)	0.00	4-7	>999	240	MT20	244/190	
Snow (Pf/Pg)	11.5/15.0	Lumber DOL	1.15		BC	0.03	Vert(CT)	0.00	4-7	>999	180			
TCDL	10.0	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCLL	0.0*	Code	IRC201	5/TPI2014	Matrix-MP									
BCDL	10.0											Weight: 8 lb	FT = 20%	
LUMBER			5)	Building Des	signer/Project en	ngineer res	oonsible for			-				
TOP CHORD	2x4 SP No.2			verifying Rai	in Load = 5.0 (ps	sf) covers r	ain loading							
BOT CHORD	2x4 SP No.2			requirement	s specific to the	use of this	truss compo	nent.						
BRACING			6)	This truss ha	as been designe	d for a 10.0) psf bottom							
TOP CHORD	Structural wood sheathing directly applied or chord live lo			e load nonconcurrent with any other live loads.										
	2-0-10 oc purlins.		7)	* This truss I	has been design	hed for a liv	e load of 20.0	Opst						
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	>	on the botto	m chord in all ar	eas where	a rectangle							

2-0-10

- Rigid ceiling directly applied or 10-0-0 oc bracing. **REACTIONS** (size) 2=0-3-0, 3= Mechanical, 4= 8) Mechanical 9) Max Horiz 2=44 (LC 16) 2=-24 (LC 16), 3=-16 (LC 16), 4=-9 Max Uplift (LC 13)
- 2=159 (LC 2), 3=43 (LC 2), 4=33 Max Grav (LC 7) FORCES (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=0/28, 2-3=-24/15 BOT CHORD 2-4=-14/16

NOTES

- 1) 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) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; 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
- Unbalanced snow loads have been considered for this 3) design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads.

- 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 16 lb uplift at joint 3, 24 lb uplift at joint 2 and 9 lb uplift at joint 4.

LOAD CASE(S) Standard



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	PJ02	Jack-Open	1	1	Job Reference (optional)	173382601

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:38 ID:6NwzsdyNHR7NXJwvCbgWAqzIZga-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:25.5

BOT CHORD

REACTIONS (size)

00010 - 112010													
Loading	(psf) S	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0 F	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	4-7	>999	240	MT20	244/190	
Snow (Pf/Pg)	11.5/15.0 L	umber DOL	1.15	BC	0.02	Vert(CT)	0.00	4-7	>999	180			
TCDL	10.0 F	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCLL	0.0*	Code I	IRC2015/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 8 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD	5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.												
BRACING TOP CHORD	Structural wood sheath	ning directly applied of	 This truss hat chord live load 	is been designe ad nonconcurrer	d for a 10.0 nt with any) psf bottom other live loa	ads.						

1-11-0

chord	live	load	non	concurrent	with	any	other	live	loa	ds

- This truss has been designed for a live load of 20.0psf 7) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections. 8)
- Provide mechanical connection (by others) of truss to 9) bearing plate capable of withstanding 24 lb uplift at joint 2, 8 lb uplift at joint 4 and 15 lb uplift at joint 3.

LOAD CASE(S) Standard

FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/28, 2-3=-22/14 BOT CHORD 2-4=-15/15 NOTES

1-11-0 oc purlins.

Max Horiz 2=42 (LC 16)

bracing.

Max Uplift

Max Grav

Rigid ceiling directly applied or 10-0-0 oc

Mechanical

(LC 13)

(LC 7)

2=0-3-0, 3= Mechanical, 4=

2=-24 (LC 16), 3=-15 (LC 16), 4=-8

2=156 (LC 2), 3=40 (LC 2), 4=32

- 1) 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) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; 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
- Unbalanced snow loads have been considered for this 3) design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads.



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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	PJ03	Jack-Open	1	1	Job Reference (optional)	173382602

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:38

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3-7-0



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2-1-10 2-7-10 2 0-4-3 8 ø Ŕ 4

2x4 =

Scale = 1:27.4

-

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 YES IRC2015/TPI2014	CSI TC BC WB Matrix-MP	0.15 0.12 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.01 -0.01 0.00	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 13 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD REACTIONS	nent. ads. Opsf om to joint											
TOP CHORD	(ib) - Maximum Com Tension 1-2=0/28, 2-3=-43/3 ⁻ 2-420/38	1										
 NOTES Wind: ASC Vasd=91nr II; Exp B; I and C-C E to 3-6-4 zc vertical lef forces & M DOL=1.60 TCLL: ASC Plate DOL psf (flat roo Category I Unbalance design. This truss load of 12. overhangs 	CE 7-10; Vult=115mph nph; TCDL=6.0psf; BCI Enclosed; MWFRS (en Exterior (2) -1-0-8 to 1-7 one; cantilever left and tit and right exposed;C-1 MWFRS for reactions sl 0 plate grip DOL=1.60 CE 7-10; Pr=20.0 psf (I =1.15); Pg=15.0 psf (g of snow: Lum DOL=1.1 II; Exp B; Partially Exp. ed snow loads have be has been designed for .0 psf or 1.00 times flat s non-concurrent with o	(3-second gust) DL=3.0psf; h=25ft; C velope) exterior zone 11-8, Interior (1) 1-11 right exposed; end C for members and hown; Lumber roof LL: Lum DOL=1 ground snow); Pf=11. 15 Plate DOL=115); ; Ct=1.10 en considered for thi r greater of min roof I t roof load of 11.5 psl ther live loads.	iat. e -8 .15 5 s ive f on						Contraction of the second seco		SEA 0363	ROCH AND

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity	
P02426-25225	PJ04	Jack-Open	1	1	Job Reference (optional)	173382603

-1-0-8

1-0-8

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

2-6-9

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:39 ID:aZUM3zz?2IFE9TV6mIBil2zIZgZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

3-4-13 <u>3-4-13</u> 6 Γ 3 M

3-4-13



3-4-13

Scale = 1:27.2

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-MP	0.14 0.11 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.01 -0.01 0.00	(loc) 4-7 4-7 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 13 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 Structural wood sh 3-4-13 oc purlins. Rigid ceiling directl bracing. (size) 2=0-3-0, Mechani Max Horiz 2=64 (LC Max Grav 2=206 (I (LC 7)	eathing directly applie y applied or 10-0-0 or 3= Mechanical, 4= cal C 16) C 16), 3=-32 (LC 16), C 13) LC 2), 3=82 (LC 2), 4=	5) ed or 7) c 8) 9) =60 LC	Building Des verifying Raii 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 3, 25 lb uplift DAD CASE(S)	igner/Project engin n Load = 5.0 (psf) is specific to the use is been designed for a sbeen designed for a been designed n chord in all areas by 2-00-00 wide will by other members. er(s) for truss to tr hanical connection is capable of withsts at joint 2 and 15 lt Standard	eer resp covers r. e of this or a 10.0 with any for a liv s where l fit betw uss conn (by oth anding 3 o uplift a	bonsible for ain loading truss compo 0 psf bottom other live loa e load of 20. a rectangle veen the bott nections. ers) of truss i 2 lb uplift at j t joint 4.	nent. ads. Opsf om to joint					
FORCES	(lb) - Maximum Co Tension 1-2=0/28, 2-3=-44/	mpression/Maximum 29											

BOT CHORD 2-4=-31/32

NOTES

- 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) -1-0-8 to 1-11-8, Interior (1) 1-11-8 to 3-4-1 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; 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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads.

SEAL 036322 MGINEER May 13,2025

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity				
P02426-25225	PJ05	Jack-Open	1	1	Job Reference (optional)	173382604			

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:39 ID:aZUM3zz?2IFE9TV6mIBli2zIZgZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:25.4

00010 - 112011												
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	0.07	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	11.5/15.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0							_	_		Weight: 8 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD	5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading 2x4 SP No.2 requirements specific to the use of this truss component. 6) This truss has been designed for a 10.0 psf bottom											

1-10-13

Structural	wood sheathing directly applied or
1-10-13 o Rigid ceili bracing.	c purlins. ng directly applied or 10-0-0 oc
(size)	2=0-3-0, 3= Mechanical, 4=
	Mechanical
Max Horiz	2=42 (LC 16)
Max Uplift	2=-24 (LC 16), 3=-15 (LC 16), 4=-8
	(LC 13)
Max Grav	2=155 (LC 2), 3=39 (LC 2), 4=31 (LC 7)
	Structural 1-10-13 o Rigid ceili bracing. (size) Max Horiz Max Uplift Max Grav

FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/28, 2-3=-22/14

BOT CHORD 2-4=-15/15

NOTES

- 1) 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) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; 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
- Unbalanced snow loads have been considered for this 3) design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads.

- is has been designed for a 10.0 chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2, 8 lb uplift at joint 4 and 15 lb uplift at joint 3.

LOAD CASE(S) Standard



818 Soundside Road Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	1056 Serenity				
P02426-25225	PJ06	Jack-Open	1	1	Job Reference (optional)	173382605			

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 12:55:39 ID:aZUM3zz?2IFE9TV6mIBli2zIZgZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:25.6

BOT CHORD

REACTIONS (size)

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	0.07	Vert(LL)	0.00	4-7	>999	240	MT20	244/190	
Snow (Pf/Pg)	11.5/15.0	Lumber DOL	1.15		BC	0.03	Vert(CT)	0.00	4-7	>999	180			
TCDL	10.0	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCLL	0.0*	Code	IRC20	15/TPI2014	Matrix-MP									
BCDL	10.0											Weight: 8 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD BRACING	2x4 SP No.2 5) Building Designer/Project engineer r 2x4 SP No.2 verifying Rain Load = 5.0 (psf) cover requirements specific to the use of th 6) 6) This truss has been designed for a 1						consible for ain loading truss compo) psf bottom	nent.						
TOP CHORD	Structural wood she 2-0-12 oc purlins.	athing directly applie	ied or	chord live lo 7) * This truss l	ad nonconcurrei nas been desigr	nt with any ned for a liv	other live loa e load of 20.0	ads. Opsf						

2-0-12

- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections. 8)
- Provide mechanical connection (by others) of truss to 9) bearing plate capable of withstanding 16 lb uplift at joint 3, 24 lb uplift at joint 2 and 9 lb uplift at joint 4.

LOAD CASE(S) Standard

FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/28, 2-3=-24/15 BOT CHORD 2-4=-14/16

bracing.

Max Uplift

Max Grav

NOTES

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

Rigid ceiling directly applied or 10-0-0 oc

Mechanical

(LC 13)

(LC 7)

Max Horiz 2=44 (LC 16)

2=0-3-0, 3= Mechanical, 4=

2=-24 (LC 16), 3=-16 (LC 16), 4=-9

2=159 (LC 2), 3=43 (LC 2), 4=33

- 2) 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
- Unbalanced snow loads have been considered for this 3) design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.5 psf on overhangs non-concurrent with other live loads.



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Edenton, NC 27932

