

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 24060222-01 178 Serenity-Roof-B327 A COP GLH

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Sanford, NC)).

Pages or sheets covered by this seal: I66914608 thru I66914639

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



July 18,2024

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. Mitch or trRENCO has not independently verified the applicability of the design parameters or the designs for any parameters and poperly incorporate these designs into the overall building design parameters?

Job	Truss	Truss Type Qty Ply 178 Serenity-Roof-B327 A COP GLI-		178 Serenity-Roof-B327 A COP GLH		
24060222-01	A	Common	6	1	Job Reference (optional)	166914608

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:04 ID:ysriNNSpFYpPvsIQK2kzJ8z6RFw-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Plate Offsets (X, Y): [2:Edge,0-0-11], [6:0-3-0,Edge], [10:0-3-0,0-1-12], [12:Edge,0-1-8]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing 2 Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES RC2018	/TPI2014	CSI TC BC WB Matrix-MSH	0.74 0.86 0.87	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.22 -0.48 0.07	(loc) 16-18 16-18 12	l/defl >999 >828 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 228 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x6 SP No.2 2x4 SP No.1 *Except 2x4 SP No.3 Left: 2x4 SP No.3 Structural wood sheat 4-0-10 oc purlins, et Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 1 Max Horiz 2=144 (LC Max Grav 2=1550 (L	* 17-15:2x4 SP No.2 athing directly applied of ccept end verticals. applied or 10-0-0 oc 20-21 2=0-5-8 18) 14), 12=-25 (LC 15) C 5), 12=1552 (LC 3)	2) or 3) 4)	Wind: ASCE Vasd=103mp II; Exp B; Ena and C-C Exte 2-7-10 to 14- (1) 20-9-8 to Zone; cantile and right exp MWFRS for grip DOL=1.6 TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design.	7-16; Vult=130mph h; TCDL=6.0psf; B losed; MWFRS (et rifor(22) -0-7-14 to 2-8, Exterior(22) -0-7-14 to 30-4-6, Exterior(22 rer left and right ex cosed;C-C for memt eactions shown; Lu i0 7-16; Pr=20.0 psf (L 15); Pf=20.0 psf (L 15); Pf=20.0 psf (L 1.10 show loads have be	(3-sec CDL=6 hvelope 2-7-10 4-2-8 tc 4-2-8 tc bers an umber 1 (roof LL um DC 3; Fully een cor	ond gust) .0psf; h=25ft) exterior zoo Interior (1) 20-9-8, Inte 6 to 33-7-14 end vertical d forces & DOL=1.60 pla : Lum DOL= L=1.15 Plate Exp.; Ce=0.1	; Cat. ne left ate 1.15 9; his					
FORCES	Max Grav 2=1550 (LC 5), 12=1552 (LC 3) (lb) - Maximum Compression/Maximum Tension RD 1-2=0/18, 2-3=-2830/61, 3-5=-2409/80, 5-6=-211/71, 6-7=-286/75, 7-9=-2226/73, 9-10=-2326/59, 10-11=0/21, 10-12=-1586/105			 This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 200.01b AC unit load placed on the bottom chord, 17-6-0 from left end, supported at two points, 5-0-0 apart. 									
BOT CHORD	2-19=-234/2460, 18- 16-18=0/1794, 14-16 12-13=-20/259	19=-57/2460, 3=0/1794, 13-14=0/201	7) 8) 5, 9)	This truss ha chord live loa * This truss h	s been designed fo d nonconcurrent w as been designed f	r a 10.0 ith any for a liv	be indicated. psf bottom other live loa e load of 20.1	ids. Opsf			S.C.	TH CA	RODIN
WEBS 3-19=0/271, 3-18=-753/293, 9-14=-282/267, 9-13=-224/17, 10-13=0/1784, 18-20=-37/922, 5-20=-13/965, 7-21=0/564, 14-21=-15/621, 20-22=-17/0, 21-22=-17/0, 16-22=0/89, 5-7=-1651/83 NOTES 1) Unbalanced roof live loads have been considered for this design.				n the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. I) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at [(s) 2 and 12. This connection is for uplift only and does not consider lateral forces. I) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. DBD CASE[6]. Standard									

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a trus 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 cludipace with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and russ systems, see **ANB/ITFI Quality** Griteria and **DBS-2** available form Truse Plate Institute (www.tpinst.org) and **BCSB Building Component 3afey Information** available form the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	A2	Common	6	1	Job Reference (optional)	166914609

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:05 ID:aEurK5ZD1vY33WKwaPWrLRz6RQ7-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.85 0.99 0.65	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.18 -0.35 0.08	(loc) 15-18 15-18 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 175 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP 2400F 2.0E *Except* 1-5,7-9:2x4 SP No.1 2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 - 1-6-0 Structural wood sheathing directly applied or 3-0-15 oc purlins, except end verticals. Rigid ceiling directly applied or 2-2-0 oc bracing. 1 Row at midpt 8-13, 4-13 (size) 2=0-5-8, 10= Mechanical Max Horiz 2=153 (LC 18) Max Upilt 2=-149 (LC 14), 10=-116 (LC 15) Max Grav 2=1472 (LC 5), 10=1405 (LC 3) (lb) - Maximum Compression/Maximum Tension 1-2=0/23, 2-4-2596/252, 4-5=-1767/267,			Wind: ASCE Vasd=103mp II; Exp B; Enn and C-C Exte to 14-2-8, Ex 20-9-8 to 29- cantilever left right exposec for reactions DOL=1.60 TCLL: ASCE Plate DOL=1 DOL=1.155; II Cs=1.00; Ct= Unbalanced design. This truss ha	d: ASCE 7-16; Vult=130mph (3-second gust) d=103mph; TOL=6,0ps; BOL=6.0ps; h=25ft; Cat. xp B; Enclosed; MWFRS (envelope) exterior zone C-C Exterior(2E) -0-10-8 to 2-5-0, Interior (1) 2-5-0 4-2-8, Exterior(2R) 14-2-8 to 20-9-8, Interior (1) 3-8 to 29-6-12, Exterior(2E) 29-6-12 to 32-10-4 zone; tilever left and right exposed; end vertical left and t exposed; C-C for members and forces & MWFRS teactions shown; Lumber DOL=1.60 plate grip =-1.60 L: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 to DOL=1.15; Pf=20.0 psf (lum DOL=1.15 Plate _=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 1.00; Cl=1.10 zulanced snow loads have been considered for this ign. s truss has been designed for greater of min roof live 1 of 12.0 psf or 1.00 times flat roof load of 20.0 psf on there are necessared united by the low low do								
FORCES	(lb) - Maximum Com Tension 1-2=0/23, 2-4=-2596 6-8=-1765/266, 8-9=	pression/Maximum 5/252, 4-6=-1767/267 2165/229,	, 6)	load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.									
BOT CHORD WEBS	2-15=-355/2258, 13- 11-13=-94/1885, 10- 9-11=-86/1747, 6-13 8-13=-506/195, 4-13	.15=-225/2258, .11=-36/170 !=-40/1055, !=-949/244, 4-15=0/3	93, 8)	* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. Refer to girder(s) for truss to truss connections.							ROUN		
NOTES 1) Unbalance this design	o-11123/118 ad roof live loads have n.	been considered for	9) 10 11 LC	Provide mecto bearing plate 10.) One H2.5A S recommende UPLIFT at jt(does not con) This truss is of International R802.10.2 ar DAD CASE(S)	anical connection capable of withsta impson Strong-Tie d to connect truss s) 2. This connecti- sider lateral forces designed in accord Residential Code s d referenced stand Standard	(by oth anding 1 e connec to beari on is for lance w sections dard AN	ers) of truss t 16 lb uplift at ctors ng walls due uplift only ar uplift only ar kth the 2018 R502.11.1 a ISI/TPI 1.	to to nd				SEA 0363 CAGINI	L 22 EREK Jon

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 cludge with possible personal injury and properly damage. For general guidance regarding the farbrication, storage, delivery, erection and bracing of trusses and russ systems, see **ANSI/TPI1 Quality** Griteria and **DSP2** zavilable form Truse Plate Institute (www.tpinst.org) and **BCSI Building Component Safey Information** available from the Structural Building Gromponent, Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	100044040	
24060222-01	A2GE	Common Supported Gable	1	1	Job Reference (optional)	166914610	
Carter Components (Sanford, NC), Sanford, NC - 27332,	Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:05					

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:05 ID:c9VqEHTKX3tTR4AsVHRVNAz6RSp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:61.8	1						I
Plate Offsets (X, Y): [2:0-2-8,0-3-5],	[32:0-3-0,0-3-0]					
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing 2- Plate Grip DOL 1. Lumber DOL 1. Rep Stress Incr YH Code IR	0-0 15 15 ES C2018/TPI2014	CSI TC 0.09 BC 0.06 WB 0.26 Matrix-MSH	DEFLinVert(LL)n/aVert(CT)n/aHorz(CT)0.00	(loc) l/defl L/d - n/a 999 - n/a 999 22 n/a n/a	PLATES GRIP MT20 244/190 Weight: 226 lb FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Left 2x4 SP No.3 Structural wood she 6-0-0 cc purlins, ex Rigid ceiling directly pracing. 1 Row at midpt (size) 2=33-0-0, 24=33-0-0, 24=33-0-0, 31=33-0-0, 34=33-0-0, 34=33-0-0, 24=33-0-0, 34=33-0-0, 24=33-0-0, 34=33-0-0, 24=33-0-0, 34=33-0-0, 24=33-0-0, 24=34-3, 24=34,	1-6-7 athing directly applied or cept end verticals. applied or 10-0-0 oc 12-31 22=33-0-0, 23=33-0-0, 0, 25=33-0-0, 26=33-0-0, 0, 28=33-0-0, 28=33-0-0, 0, 38=33-0-0, 38=33-0-0, 0, 38=33-0-0, 28=33-0-0, 0, 38=33-0-0, 28=33-0-0, 0, 28=36-0, 28=33-0, 0, 28=33-0-0, 28=33-0, 0, 38=33-0-0, 28=33-0, 0, 38=33-0, 38=33-0, 0, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1	FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	Max Grav 2=143 (LC 26), 23=143 (LC 37), 25=160 (LC 22), 27=175 (LC 22), 22=244 (LC 21), 34=175 (LC 22), 32=244 (LC 21), 36=161 (LC 21), 36=161 (LC 21), 36=161 (LC 21), 36=161 (LC 21), 38=165 (LC 21), 40=143 (LC 26), (Ib) - Maximum Compressi Tension 1-2=0/23, 2-3=-74/49, 3-4= 4-5=-109/123, 5-6=-95/141 7-9=-70/224, 9-10=-77/266 (11-12=-113/357, 12-13=-1 13-14=-96/317, 14-15=-77, 15-17=-58/224, 17-18=-40, 819=-37/134, 19-20=-36, 21-22=-43/8 2-33=-22/69, 38-39=-22/6 26-37=-22/69, 38-39=-22/6 25-26=-22/69, 24-25=-22/6 25-26=-22/69, 24-25=-22/6 22-38=-22/69, 24-25=-22/6 22-38=-22/69, 24-25=-22/6 25-26=-22/69, 24-25=-22/6 25-26=-22/69, 24-25=-22/6 25-26=-22/69, 24-25=-22/6 25-26=-22/69, 24-25=-22/6 25-26=-22/69, 24-25=-22/6 25-26=-22/69, 24-25=-22/6 21-3=-45/39, 11-32=-20 0-33=-118/844, 9-34=-135 6-36=-127/78, 5-37=-126/7 3-39=-115/101, 13-29=-20 14-28=-188/84, 15-27=-13 17-26=-127/78, 18-25=-12 19-24=-129/98, 20-23=-11 droof live loads have been of	22=65 (LC 28), 24=164 (LC 1), 26=160 (LC 1), 28=28 (LC 22), 31=209 (LC 33), 33=228 (LC 33), 33=228 (LC 36), 37=159 (LC 36), 38	 Wind: ASCE 7-11 Vasd=103mpi; 1 II; Exp B; Enclos and C-C Corner(to 142-8, Corne 20-9-8 to 29-6-0, cantilever left an right exposed;C- for reactions sho DOL=1-60 Truss designed only. For stude only. For stude onl	3: Vult=130mph (3-second gust) CDL=6.0psf, BCDL=6.0psf, h=25ft; Cat. d; MWFRS (envelope) exterior zone 3E) -0-10-8 to 22-50. Exterior(ZN) Corner(3E) 29-6-0 to 32-10-4 zone; dright exposed ; end vertical left and C for members and forces & MWFRS wn; Lumber DOL=1.60 plate grip for wind loads in the plane of the truss typosed to wind (normal to the face), ustry Gable End Details as applicable, db fulding designer as per ANS/TPI 1. 5: PF=20.0 psf (root LL: tum DOL=1.15 PF=20.0 psf (root LL: tum DOL=1.15 PF=20.0 psf (cum DOL=1.15 Plate 0; Rough Cat B; Fully Exp.; Ce=0.9; 0) w loads have been considered for this SEAL 036322 WGNEEE 0, GOLEE 0,
WARN Design v a truss s building is always fabricatic and BC	ING - Verify design paramete inili G - Verify design paramete alid for use only with MiTeki ystem. Before use, the build design. Bracing indicated is required for stability and to on, storage, delivery, erection SI Building Component Sa	ers and READ NOTES ON THIS. © connectors. This design is bas- ing designer must verify the app to prevent buckling of individua prevent collapse with possible n and bracing of trusses and tru fety Information available from	AND INCLUDED MITEK sed only upon paramete blicability of design para I truss web and/or chorr bersonal injury and prop ss systems, see ANSI n the Structural Building	REFERENCE PAGE MII-7473 rev. 1 rs shown, and is for an individual by meters and properly incorporate this d members only. Additional tempora perty damage. For general guidance TPI 1 Quality Criteria and DSB-22 g Component Association (www.sbc	/2/2023 BEFORE USE. ilding component, not is design into the overall any and permanent bracing regarding the available from Truss Plate acomponents.com)	Institute (www.tpinst.org)	TRENCO BIB Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	A2GE	Common Supported Gable	1	1	Job Reference (optional)	166914610

- 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 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 2, 40 lb uplift at joint 32, 46 lb uplift at joint 36, 31 bu plift at joint 34, 44 lb uplift at joint 35, 44 lb uplift at joint 36, 44 lb uplift at joint 37, 43 lb uplift at joint 28, 78 lb uplift at joint 39, 36 lb uplift at joint 29, 48 lb uplift at joint 28, 43 lb uplift at joint 27, 43 lb uplift at joint 28, 43 lb uplift at joint 27, 43 lb uplift at joint 28, 43 lb uplift at joint 27, 43 lb uplift at joint 23, and 57 lb uplift at joint 2.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:05 ID:c9VqEHTKX3tTR4AsVHRVNA26RSp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design in the overall building design. Bracing indicated is to prevent buckling of individual truss wee and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent colleage with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and trus systems, see AMSI/TH1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSB Building Component Safety Information available from the Structural Building Component Asociation (www.sbaccomponent.com)





Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:06 ID:Z?RrRUUawrsjRX0WcdE8aMz6RDJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





3cale = 1.07.4				
Plate Offsets (X, Y):	[2:0-3-13,0-0-1],	[14:0-5-0,0-3-0],	[28:0-3-8,Edge],	[31:0-4-0,0-3-0]

		1												
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	/TPI2014	CSI TC BC WB Matrix-MSH	0.76 0.76 0.31	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.25 0.09	(loc) 31-32 31-32 28	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190	
BCDL	10.0											weight. 213 b	F1 = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD	UMBER TOP CHORD 2x4 SP No.2 30T CHORD 2x4 SP No.2 30T CHORD 2x4 SP No.3 SUDER Left 2x4 SP No.3 1-6-0 SRACING TOP CHORD Structural wood sheathing directly applied or 3-0-3 oc purlins, except end verticals. 30T CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 27-28. WEBS 1 Row at midpt 14-31, 4-31 OINTS 1 Brace at J(5): 8,				25-28=0/618, 7-8=-4 (2-13=-119/31, 14-1 7-18=-57/21, 19-20 4-28=-264/117, 6-3 4-31=-689/158, 14- I-31=-650/206, 4-32 roof live loads have 7-16; Vult=130mph b; TCDL=6, 0psE	9, 1/70, Cat.	 10) * This truss has been designed for a live load of 20.0ps 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. 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 28. This connection is for uplift on and does not consider lateral forces. 21) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 							
WEBS JOINTS	1 Row at midpt 1 Brace at Jt(s): 8, 9 13 17 20 22	-20. 14-31, 4-31		II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-5-0, Interior (1) 2-5-0 to 14-2-8, Exterior(2R) 14-2-8 to 20-9-8, Interior (1) 20-9-8 to 30-7-0. Exterior(7E) 30-7-0 to 33-10-8 zone:					or the orientation of the purlin along the top and/or bottom chord. LOAD CASE(S) Standard					
REACTIONS	(size) 2=0-5-8, 2 Max Horiz 2=145 (LC Max Uplift 2=-137 (L Max Grav 2=1323 (L 28=1235	t and right exposed d;C-C for members shown; Lumber DO ned for wind loads in	sed ; end vertical left and sers and forces & MWFRS r DOL=1.60 plate grip ads in the plane of the truss											
FORCES	(lb) - Maximum Com	pression/Maximum		only. For stu	ds exposed to wind	(norm	al to the face)	, 				2000 DEL 1949	ENTS	
Torbe Tension Torp CHORD 1-2-0/23, 2-4=-2124/214, 4-6=-1531/230, 6-7=-389/127, 7-10=-375/107, 10-12=-408/73, 12-15=-438/51, 15-18=-426/41, 18-19=-449/0, 19-21=-478/0, 21-24=-483/0, 24-25=-416/11, 25-26=0/27, 25-27=-645/0, 6-8=-1320/231, 8-9=-1306/228, 9-13=-1328/237, 13-14=-1341/242, 14-17=-1758/241, 17-20=-1778/249, 20-22=-1814/260, 22-28=-1875/290 BOT CHORD 2-32=-278/1834, 29-32=-220/1834, 28-29=-38/1791, 27-28=-53/46			4) 8/0, 7, 5) 6) 7) 8) 9)	or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 µ overhangs nr All plates are Gable studs This truss ha chord live loa	alifed building desi 7-16; Pr=20.0 psf (15); Pr=20.0 psf (s=1.0; Rough Cat E 1.10 snow loads have be s been designed for osf or 1.00 times fla on-concurrent with o 2x4 MT20 unless c spaced at 2-0-0 oc. s been designed for d nonconcurrent wi	gner as roof LL um DC 3; Fully een cor r great t roof k t roof k ther lin other lin other wi r a 10.0	se as applicad s per ANS/ITP .: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9 hsidered for th er of min roof f poad of 20.0 ps ve loads. se indicated. D psf bottom other live load	is is f on ds.				SEA 0363	Rolling Control of Con	

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 cludge with possible personal injury and properly damage. For general guidance regarding the farbrication, storage, delivery, erection and bracing of trusses and russ systems, see **ANSI/TPI1 Quality** Griteria and **DSP2** zavilable form Truse Plate Institute (www.tpinst.org) and **BCSI Building Component Safey Information** available from the Structural Building Gromponent, Association (www.sbcacomponents.com)





WARNING - Verty design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MTek® connectors. This design is based only upon parameters 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 in to 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/TPH Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Asdery Information available form the Structural Building Component Asociation (www.sbaccomponent.com)



Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	B1	Common	6	1	Job Reference (optional)	166914613

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MITek Industries, Inc. Wed Jul 17 07:18:06 ID:DE5Yhhuboc7FTqi0oB8dWFz6RYk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



	7-10-12	15-6-0	23-1-4	30-6-8	
	7-10-12	7-7-4	7-7-4	7-5-4	
Scale = 1:59.8					

Plate Offsets (X, Y): [2:0-2-13,0-0-1], [10:Edge,0-7-4], [12:0-4-0,0-3-0]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.97 0.72 0.57	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.10 -0.23 0.07	(loc) 12-13 12-13 10	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 160 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	2x4 SP 2400F 2.0E No.2, 7-9:2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 - Structural wood she except end verticals Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 1 Max Horiz 2=135 (L Max Grav 2=1276 (I (Ib) - Maximum Com Tension 1-2=0/23, 2-4=-203 6-8=-1439/246, 8-9 9-10=-1152/163 2-13=-266/1750, 11. 10-11=-66/344 6-12=-28/777, 8-12= 4-12=-718/218, 4-13 ed roof live loads have n.	*Except* 1-5:2x4 SP .1 1-6-0 athing directly applied applied or 10-0-0 oc 8-12, 4-12 (0= Mechanical 3-18) (C 14), 10=-113 (LC 1 .C 21), 10=-113 (LC 1 .C 2	2) i, 5) 4) 22) 5) . 6) 7) 9, 87 8) 9) 10 11 LC	Wind: ASCE Vasd=103m; II; Exp B; Enn and C-C Exte to 12-5-7, Ex 18-6-9 to 27- cantilever left right exposec for reactions DOL=1.60 TCLL: ASCE Plate DOL=1 DOL=1.15; II CS=1.00; Ct= Unbalanced: design. This truss ha chord live log overhangs no This truss ha chord live log overhangs no This truss ha chord live log and f 12.0 g overhangs no This truss ha chord live log and f 12.0 g overhangs no This truss ha chord and an Refer to girdd Provide mech bearing plate 10. O ne H2.5A S recommende UPLIFT at jf(does not con) This truss is International R802.10.2 ar	7-16; Vult=130mpl h; TCDL=6.0psf; E closed; MWFRS 2 closed; MWFRS 2 iorio(2E) -0-10-8 to terior(2R) 12-5-7 tk 4-3, Exterior(2E) 2 t and right exposed (;C-C for members shown; Lumber DC 7-16; Pr=20.0 psf (15); Pf=20.0 psf (15); Pf	n (3-sec and a section of the sectio	cond gust) i.0psf; h=25ft;) exterior zor Interior (1) 3.04-12 zon vertical left an cress & MWFF) plate grip J.=1.15 Plate Exp.; Ce=0.5 Lum DOL= J.=1.15 Plate Exp.; Ce=0.5 sidered for th er of min roof aad of 20.0 py ve loads. D psf bottom other live load e load of 20.1 a rectangle veen the bottom vections. ers) of truss 1 13 lb uplift at ctors ing walls due r uplift only ar ith the 2018 R50211.1 at R50211.1 at R50211.1 at SI/TPI 1.	; Cat. ne 2-1 kt to this f live sf on ds. Opsf oom to to to to to and		A STATUTION OF STATES		SEA 0363	Revenue of the second of the s
												July	18,2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEX 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 wrift 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 permament 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/TPI Quality Criteria and DBS-12 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	178 Serenity-Roof-B327 A COP GLH	
24060222-01	B1GE Common Supported Gable 1		1	1	Job Reference (optional)	166914614
Carter Components (Sanford, NC), Sanford, NC - 27332,	Run: 8.73 S Jul 11 20)24 Print: 8.7	30 S Jul 11 2	2024 MiTek Industries, Inc. Wed Jul 17 07:18:06	Page: 1

ID:kEyumvGz1eadDrk1IGCRPHz6RZY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:57.9

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.08 0.07 0.21	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - 21	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 193 I	GRIP 244/190 b FT = 20%
FORCES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Left 2x4 SP No.3 – Structural wood sh 6-0-0 oc purlins, e: Rigid celling direct! bracing. (size) 2=30-6-8 23=30-6 23=30-6 23=30-6 33=30-6 33=30-6 33=30-6 33=30-6 23=30-6 23=30-6 23=30-6 23=30-6 23=30-6 23=30-6 23=30-6 23=30-6 23=30-6 23=30-6 23=30-6 33=30-6 23=30-6 33=30-6 23=30-6 32=32-10 (125=33)(12	1-6-7 anthing directly applies except end verticals. y applied or 10-0-0 oc 8, 21=30-6-8, 22=30-6 8, 24=30-6-8, 25=30- 8, 24=30-6-8, 25=30- 8, 34=30-6-8, 32=30- 8, 34=30-6-8, 35=30- C 18), 38=135 (LC 18 C 10), 22=-110 (LC 17 C 15), 22=-43 (LC 11 C 15), 24=-43 (LC 11 C 14), 32=-44 (LC 11 LC 14), 32=-44 (LC 11 LC 14), 32=-44 (LC 11 LC 14), 33=-32 (LC 11 LC 14), 32=-44 (LC 11 LC 14), 33=-32 (LC 11 LC 21), 22=166 (LC 11 LC 22), 27=228 (LC 21 LC 21), 32=165 (LC 11 LC 21), 34=165 (LC 11 LC 21), 34=165 (LC 11 LC 21), 34=165 (LC 11 LC 36), 38=135 (LC 33 npression/Maximum	BOT CHORD 4 or BOT CHORD -8,	12-20/23, 22-30 4-53-91/87, 5-6= 7-880/175, 8-10 11-122-96/264, 1: 14-15360/175, 11 16-171-38/84, 17. 19-201-107/45, 21 2-3721/105, 33 33-34321/105, 32 28-301-21/105, 22 26-277-21/105, 22 26-277-21/105, 22 24-253-21/105, 22 25-253-21/105, 22 26-273-21/105, 22 26-273-21/105, 22 27-233-21/105,	1/39, 13–4 1/1101, € 1–78/222 2/14–78 1/8–45/4 1/8–45/4 1/8–45/4 1/8–45/4 1/8–45/4 1/8–45/4 1/8–45/4 1/8–45/4 1/8–45/4 2/3=21 2/4=21 1/22=21	 1/23/70, 77=61/134, 1/134, 1/11-96/2222, 1/30, 1/30, 1/31, 1/31, 1/31, 1/31, 1/31, 1/31, 1/31, 1/31, 1/31, 3/37=112 3/31, 1/778, 0/100, 0.0psf; 1/35, 1/31, 3/37=112 3/31, 1/778, 0/100, 0.0psf; 1/35, 1/31, 3/37=112 3/30, 4/32, 2/31, 3/34, 2/34, 3/34, <l< td=""><td>264, //34, //18, //106, r r cat. te -2-1 x; d S</td><td> anty seems or c anty seems or c anty seems or c anty seems or c anty seems of c black or c c <lic< li=""> c <lic< li=""></lic<></lic<></td><td>Jas ubasi Jas dus and Standa LL: ASC le DOL= te DOL</td><td>utuds ei ruds ei ruds</td><td>A wind loads in the stry coable Enc. (Comparing the strength of the st</td><th>Inc plaine of the dass (normal to the face), I Details as applicable, iner as per ANSI/TPI 1. oof LL: Lum DOL=1.15 im DOL=1.15 Plate ; Fully Exp; Ce=0.9; en considered for this greater of min roof live roof load of 20.0 psf on ther live loads. In therwise indicated. In chord bearing. a 10.0 psf bottom th any other live loads. or a live load of 20.0 psf where a rectangle it between the bottom AL 322 NELEFIC</th></l<>	264, //34, //18, //106, r r cat. te -2-1 x; d S	 anty seems or c anty seems or c anty seems or c anty seems or c anty seems of c black or c c <lic< li=""> c <lic< li=""></lic<></lic<>	Jas ubasi Jas dus and Standa LL: ASC le DOL= te DOL	utuds ei ruds	A wind loads in the stry coable Enc. (Comparing the strength of the st	Inc plaine of the dass (normal to the face), I Details as applicable, iner as per ANSI/TPI 1. oof LL: Lum DOL=1.15 im DOL=1.15 Plate ; Fully Exp; Ce=0.9; en considered for this greater of min roof live roof load of 20.0 psf on ther live loads. In therwise indicated. In chord bearing. a 10.0 psf bottom th any other live loads. or a live load of 20.0 psf where a rectangle it between the bottom AL 322 NELEFIC
Continued on WARN Design v a truss s building is alway fabricati and BC	Page 2 NING - Verify design paramel valid for use only with MiTel system. Before use, the built design. Bracing indicated i s required for stability and to on, storage, delivery, erectio SI Building Component S	ters and READ NOTES ON 1 © connectors. This design ding designer must verify th s to prevent buckling of indi prevent collapse with poss on and bracing of trusses ar afety Information available	HIS AND INCLUDED MITE! s based only upon paramel e applicability of design par vidual truss web and/or cho bible personal injury and pro d truss systems, see ANS e from the Structural Buildin	K REFERENCE PAGE MII ters shown, and is for an i ameters and properly inco rd members only. Additio perty damage. For genee BI/TPI1 Quality Criteria an ng Component Association	-7473 rev. 1 ndividual bu proorate this nal tempora ral guidance nd DSB-22 n (www.sbc	/2/2023 BEFORE ilding components design into the c ary and permaner regarding the available from T acomponents.cor	USE. it, not overall nt bracing russ Plate m)	Institute (1	www.tpins	t.org)	818 Soundside Edenton, NC 2	e Road 27932

Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	B1GE	Common Supported Gable	1	1	Job Reference (optional)	166914614

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:06 ID:kEyumvGz1eadDrk1IGCRPHz6RZY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

 One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 21, 2, 31, 32, 33, 34, 35, 36, 37, 28, 27, 26, 25, 24, 23, and 22. This connection is for uplift only and does not consider lateral forces.
 This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Brancing indicated is to prevent buckling of individual truss web and/oc chord members only. Additional temporary and permanent brancing 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 brancing of trusses and truss systems, see **ANSI/TPI 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	178 Serenity-Roof-B327 A COP GLH	
24060222-01	с	Roof Special	4	1	Job Reference (optional)	166914615

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:06 ID:IXiJ0Luyki5W8bFrb88Afoz6iod-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



	9-6-14	18-0-4	21-2-8 ²¹⁻⁸⁻⁰
	9-6-14	8-5-6	3-2-4 0-5-8
Scale = 1:51.3			

Plate Offsets (X, Y): [2:0-4-1,Edge], [8:0-2-11,0-2-8], [11:0-5-4,0-2-8]

Loading TCLL (roof) Snow (Pf)	(psf) 20.0 20.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15		CSI TC BC	0.52 0.86	DEFL Vert(LL) Vert(CT)	in -0.17 -0.42	(loc) 11-13 11-13	l/defl >999 >610	L/d 240 180	PLATES MT20	GRIP 244/190
TCDL	10.0	Rep Stress Incr	YES		WB	0.65	Horz(CT)	0.18	10	n/a	n/a		
BCLL	0.0*	Code	IRC201	8/TPI2014	Matrix-MSH								
BCDL	10.0											Weight: 112 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.3 *Excep Left 2x4 SP No.3 * = Structural wood she 2-11-2 oc purlins, e Rigid ceiling directly	ot* 11-8:2x4 SP No.2 1-6-0 Pathing directly applie except end verticals. r applied or 10-0-0 oc	3) 4) d or 5) ; 6)	TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 J overhangs no This truss ha	7-16; Pr=20.0 psf (15); Pf=20.0 psf (I s=1.0; Rough Cat I :1.10 snow loads have b s been designed fc osf or 1.00 times fit on-concurrent with s been designed for	(roof LL Lum DC B; Fully een cor or great at roof k other lip or a 10.0	:: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 nsidered for the er of min roof bad of 20.0 ps /e loads. 0 psf bottom	1.15); nis live sf on					
REACTIONS	(size) 2=0-5-8, Max Horiz 2=-117 (L Max Uplift 2=-90 (LC Max Grav 2=949 (L)	10=0-5-8 .C 15) C 14), 10=-114 (LC 1 C 21), 10=971 (LC 22	6) This truss has been designed to a 10.0 psi bottom chord live load nonconcurrent with any other live loads. 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tail by 2-00-00 wide will fit between the bottom chord and any other members										
FORCES	(Ib) - Maximum Con	pression/Maximum	8)	Bearing at jo	int(s) 10 considers	paralle	to grain valu	е					
TOP CHORD	1-2=0/23, 2-4=-143 5-6=-1156/210, 6-7= 7-8=-3167/310, 8-9=	7/257, 4-5=-1118/205 =-3116/394, =0/27, 8-10=-1007/19	5, 9) 93	using ANSI/T designer sho One H2.5A S recommende	PI 1 angle to grain uld verify capacity Simpson Strong-Tie ed to connect truss	formul of bear conne to bear	a. Building ng surface. ctors ing walls due	to					
BOT CHORD	2-13=-139/1243, 11	-13=-83/1554,		UPLIFT at jt(s) 10 and 2. This c	onnecti	on is for uplift	only					
WEBS	4-13=-399/166, 5-13 6-13=-746/194, 6-17 7-11=-136/127, 8-17	3=-52/697, 1=-175/1529, 1=-176/2654	10) This truss is International R802.10.2 ar	designed in accord Residential Code s nd referenced stan	ance w sections	ith the 2018 R502.11.1 a	nd			a se	TH CA	Renting
NOTES			LC	DAD CASE(S)	Standard					1	2.4	ALL AND	M. Mar
 Unbalance this design Wind: ASC Vasd=103 II; Exp B; I and C-C E to 6-6-14, 12-6-14 to cantilever right exposi- for reactio DOL=1.60 	ad roof live loads have , CE 7-16; Vult=130mph mph; TCDL=6.0psf, B Enclosed; MWFRS (e ketroio(22) -0-10-8 to Exterior(22) -0 19-6-8, Exterior(22) -0 19-6-8, Exterior(22) -0 1eft and right exposed sed;C-C for members ns shown; Lumber DC)	been considered for (3-second gust) CDL=6.0psf, h=25ft; velope) exterior zon 2-1-8. Interior (1) 2-1 12-6-14, Interior (1) 19-6-8 to 22-6-8 zone ; end vertical left and and forces & MWFR: JL=1.60 plate grip	Cat. e -8 c; d S	JAD CASE(S)	Stanoaro							SEA 0363 SC A. G	L 22 ILBERT

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 cludge with possible personal injury and properly damage. For general guidance regarding the farbrication, storage, delivery, erection and bracing of trusses and russ systems, see **ANSI/TPI1 Quality** Griteria and **DSP2** zavilable form Truse Plate Institute (www.tpinst.org) and **BCSI Building Component Safey Information** available from the Structural Building Gromponent, Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	CGE	Roof Special Supported Gable	1	1	Job Reference (optional)	166914616

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:07 ID:IXiJ0Luyki5W8bFrb88Afoz6iod-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



	18-0-4	21-2-8 21-8-0	
	18-0-4	3-2-4 0-5-8	
Scale = 1:51.3			
Plate Offsets (X, Y): [2:0-2-8,0-0-5]			

						1											
Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP			
TCLL (roof)		20.0	Plate Grip DOL	1.15		TC	0.10	Vert(LL)	0.01	15-16	>999	240	MT20	244/190			
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.11	Vert(CT) -	0.01	15-16	>999	180					
TCDL		10.0	Rep Stress Incr	YES		WB	0.08	Horz(CT)	0.00	15	n/a	n/a					
BCLL		0.0*	Code	IRC201	8/TPI2014	Matrix-MSH											
BCDL		10.0											Weight: 113 lb	FT = 20%			
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Left 2x4 S Structura 6-0-0 oc Bioid coil	o.2 o.2 o.3 SP No.3 1 I wood she purlins, exi	1-7-7 athing directly applie cept end verticals. applied or 10-0-0 cr	Bi W d or Ni 1)	DT CHORD EBS DTES	2-27=0/54, 26-27=0/54, 25-26=0/54, 24-25=0/54, 23-24=0/54, 22-23=0/54, 21-22=0/54, 19-21=0/54, 18-19=0/54, 17-18=0/54, 16-17=0/52, 15-16=-7/68 7-23=-150/39, 6-24=-205/73, 5-25=-187/68, 4-26=-138/69, 3-27=-103/68, 8-22=-203/73, 9-21=-193/72, 10-19=-114/59, 11-18=-182/88, 12-16=-55/53					 10) * This truss has been designed for a live load of 20.0. on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the botto chord and any other members. 11) Bearing at joint(s) 15 considers parallel to grain valu using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 12) Provide mechanical connection (by others) of truss t bearing plate capable of withstanding 45 lb uplift at 17. 						
DOT CHOILD	bracing	ing unecuy	applied of 10-0-0 00	.,	this design.					13) One	e H2.5A	Simps	on Strong-Tie co	nnectors			
REACTIONS	 HORD Rigid celling directly applied or 10-0-0 corbracing. TIONS (size) 2=18-0-4, 15=0-5-8, 17=18-0-4, 18=18-0-4, 21=18-0-4, 22=19, 22=14, (LC 14), 22=-44, (LC 14), 22=-44, (LC 15), 22=244, (LC 22), 23=174, (LC 15), 24=245, (LC 21), 25=227, 22=174, (LC 15), 24=245, (LC 21), 25=227, 22=144, (LC 21), 25=227, 22=144, (LC 15), 24=245, (LC 21), 25=227, 22=144, (LC 21), 25=27, 22=144, (LC 15), 24=245, (LC 21), 25=227, 22=144, (LC 21), 25=27, 22=144, (LC 15), 26=17, 15, 25=10, 25=1					E 7-16; Vult=130mph (3-second gust) nph; TODL=6.0psf; BCDL=6.0psf; h=25ft; Cat. nclosed; MWFRS (envelope) exterior zone derior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 Exterior(2E) -0-10-8 to 12-6-14, Interior (1) 19-6-8, Exterior(2E) 19-6-8 to 12-6-8 zone; eft and right exposed; end vertical left and ed;C-C for members and forces & MWFRS is shown; Lumber DOL=1.60 plate grip gned for wind loads in the plane of the truss tuds exposed to wind (normal to the face), rd Industry Gable End Details as applicable, jualified building designer as per ANS/TPI 1. E 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate ; Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; t=1.10					UPLIFT at jt(s) 15, 2, 24, 25, 26, 27, 22, Ž1, 19, This connection is for uplift only and does not or lateral forces. 14) This truss is designed in accordance with the 21 International Residential Code sections R502, 10,2 and referenced standard ANSI/TPL1 LOAD CASE(S) Standard						
FORCES TOP CHORD	(lb) - Max Tension 1-2=0/23 4-5=-90/1 7-8=-116 10-11=-8 13-14=0/2	timum Com , 2-3=-45/5i 73, 5-6=-1 /234, 8-9=- 6/116, 11-1 27, 13-15=-	pression/Maximum 8, 3-4=-97/149, 02/197, 6-7=-116/23 102/190, 9-10=-88/1 2=-47/71, 12-13=-83 174/94	s been designed for greater of min roof live psf or 1.00 times flat roof load of 20.0 psf on on-concurrent with other live loads. 9 2x4 MT20 unless otherwise indicated. spaced at 2-0-0 oc. Is been designed for a 10.0 psf bottom ad nonconcurrent with any other live loads.					GINEE A. GILBERT July 18,2024								

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEX 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 wrift 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 permament 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/TPI Quality Criteria and DBS-12 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	178 Serenity-Roof-B327 A COP GLH	
24060222-01	DGE	Common Supported Gable	1	1	Job Reference (optional)	166914617
Carter Components (Sanford, NC), Sanford, NC - 27332,	Run: 8.73 S Jul 11 20	24 Print: 8.7	30 S Jul 11 2	2024 MiTek Industries, Inc. Wed Jul 17 07:18:07	Page: 1

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:07 ID:mUH0bgkx?JHgiBKEi6sHgIz6RWM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale	= 1:43.2
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Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MR	0.16 0.08 0.20	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - 12	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 87 lb	GRIP 244/190 FT = 20%		
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	in the second					Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BcDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 3-10-0, Corner(3R) 3-10-0 to 9-10-0, Exterior(2N) 9-10-0 to 11-6-8, Corner(3E) 11-6-8 to 14-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Cable End Details as applicable, or consult qualified building designer as per ANS/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (toof LL: Lum DOL=1.15 Plate DOL=1.15); Is=1-0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10					 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 20, 104 lb uplift at joint 12, 77 lb uplift at joint 17, 76 lb uplift at joint 18, 155 lb uplift at joint 19, 76 lb uplift at joint 15, 76 lb uplift at joint 14 and 144 lb uplift at joint 13. This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. LOAD CASE(S) Standard 					
FORCES	(lb) - Maxim Tension	num Com	pression/Maximum	-	load of 12.0 overhangs n	psf or 1.00 times fla on-concurrent with	at roof le other liv	oad of 20.0 ps /e loads.	fon			Å	TH CA	BOUL		
TOP CHORD	2-20=-146/9 3-4=-87/90, 6-7=-109/20	96, 1-2=0, , 4-5=-73/ 62, 7-8=-6	/39, 2-3=-139/129, 167, 5-6=-109/262, 58/167, 8-9=-69/72, =0/39, 10-12=-126/	71	 All plates are Gable require Truss to be f braced again 	e 2x4 M I 20 unless es continuous botto ully sheathed from ist lateral movement	otherwi om chor one fac nt (i.e. d	se indicated. d bearing. e or securely iagonal web).			4		2 FESS	and the second s		
BOT CHORD	19-10110% 19-20=-84/ 17-18=-84/ 13-14=-84/ 13-14=-84/ 6-16=-255/4 4-18=-169/ 7-15=-232/ 9-13=-112/	135, 10-11 135, 16-1 135, 14-1 135, 12-1 135, 12-1 135, 12-1 148, 3-19 124, 8-14 127			 10) Gable studs spaced at 2-0-0 oc. 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. 								L 22 REAL			
NOTES												5.5	11/1 A. O	TINT IN		





Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	DGR	Common Girder	1	2	Job Reference (optional)	166914618

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:07 ID:qvlXtQKgSNSj4jaf4vEm9dz6RVb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Plate Offsets (X, Y): [1:0-4-12,0-0-2], [7:0-6-11,0-0-2], [8:0-5-0,0-4-12]

Scale = 1:51.4

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(ps 20 20 10 0 10	sf) .0 .0 .0 .0* .0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.32 0.65 0.96	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.14 0.02	(loc) 8-11 8-11 1	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 176 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS SLIDER	2x4 SP No.2 2x6 SP 2400F 2 2x4 SP No.3 Left 2x6 SP No. 1-6-0	2.0E .2 1	-6-0, Right 2x6 SP N	4) o.2 5)	Wind: ASCE Vasd=103mp II; Exp B; Enc cantilever lef right exposed TCLL: ASCE	7-16; Vult=130mp bh; TCDL=6.0psf; E closed; MWFRS (e t and right exposed d; Lumber DOL=1. 7-16; Pr=20.0 psf	h (3-sed 3CDL=6 envelope d ; end v 60 plate (roof LL	cond gust) i.0psf; h=25ft e) exterior zon vertical left ar grip DOL=1. :: Lum DOL=	; Cat. ne; nd 60 1.15					
TOP CHORD	Structural wood 6-0-0 oc purlins Bigid ceiling din	l shea ectly :	athing directly applied	l or	Plate DOL=1 DOL=1.15); I Cs=1.00; Ct=	.15); Pf=20.0 psf (s=1.0; Rough Cat :1.10	Lum DC B; Fully	DL=1.15 Plate Exp.; Ce=0.9	ə 9;					
REACTIONS	(size) 1=0-5 Max Horiz 1=-13 Max Uplift 1=-42	5-8, 7 34 (L0 22 (L0	=0-5-8 C 35) C 12), 7=-404 (LC 13	6) 7)) 8)	 Outbalanced snow loads have been considered for this design. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf 									
FORCES	(lb) - Maximum Tension	Comp	pression/Maximum	9)	on the botton 3-06-00 tall b	n chord in all areas y 2-00-00 wide wil	where I fit betv	a rectangle veen the bott	om					
TOP CHORD BOT CHORD WEBS	1-3=-4069/441, 4-5=-3928/462, 1-8=-355/3126, 4-8=-509/4648,	3-4=- 5-7=- 7-8=- 3-8=-	-3931/462, -4052/440 -296/3113 -286/142, 5-8=-268/1	9) 40	9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces						194760.			
 NOTES 1) 2-ply truss to be connected together with 10d (0.131*x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated. 3) Unbalanced roof live loads have been considered for this design. 				1(11 12 LC \D 1)	I) This truss is. International R802.10.2 at 14-10dxt 1/2 max. starting connect truss.) Fill all nail ho DAD CASE(S) Dead + Snc Increase=1 Uniform Los Vert: 14- Concentrat Vert: 19= 22=-1198	designed in accorr Residential Code : di referenced stan Strong-Tie HTU2 (ses) to back face u les where hanger Standard be where hanger Standard to back face u di (b/ft) =-0, 4-7=-0, 9-1; di Loads (lb) -1198 (B), 20=-1118 (B), 23=-1198 (B)	dance w sections dard AN 6 (10-16 ent space left end of bottoo is in cor aber Inc 3=-20 98 (B), 2 98 (B), 2	ith the 2018 R502.11.1 a SI/TPI 1. Sid Girder, red at 2-0-0 c to 11-8-0 to n chord. ttact with lum rease=1.15, l 21=-1198 (B) 198 (B)	and oc ber. Plate		Western Andreas	A CARLON CONTRACTOR OF A CARLON OF	SEA 0363	22 L22 LBFR 100 118,2024

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 cludge with possible personal injury and properly damage. For general guidance regarding the farbrication, storage, delivery, erection and bracing of trusses and russ systems, see **ANSI/TPI1 Quality** Griteria and **DSP2** zavilable form Truse Plate Institute (www.tpinst.org) and **BCSI Building Component Safey Information** available from the Structural Building Gromponent, Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	EGE	Common Supported Gable	1	1	Job Reference (optional)	166914619
Carter Components (Sanford, NC), Sanford, NC - 27332,	Run: 8.73 S Jul 11 20	24 Print: 8.7	30 S Jul 11 2	2024 MiTek Industries, Inc. Wed Jul 17 07:18:07	Page: 1

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:07 ID:1SfXIVJYql6Slw6AgLBDoDz6RT1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale =	1:50.2
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Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 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	8/TPI2014	CSI TC BC WB Matrix-MR	0.28 0.15 0.38	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 12	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 99 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	3ER 1) Unbalanced this design. CHORD 2x4 SP No.2 2W SP No.2 2W S 2x4 SP No.3 2W SP No.3 II; Exp 8; E CING ChORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. and C-C C CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. and right ex 0-9-0, C 11-48, Cor and right ex CHORD (Sigid ceiling directly applied or 6-0-0 oc purlins, except end verticals. 51-31-6-0, 14=-13-6-0, 15=13-6-0, 19=13-6-0, 17=13-6-0, 18=13-6-0, 19=13-6-0, 20=13-6-0 31 Max Horiz 20=-211 (LC 12), 14=-79 (LC 15), 15=-73 (LC 16), 19=-294 (LC 11), 20=-319 (LC 10), 14=-790 (LC 21), 13=-280 (LC 10), 14=-200 (LC 21), 15=-727 (LC 22), 14=200 (LC 21), 15=-727 (LC 22), 14=200 (LC 21), 15=-727 (LC 22), 16=226 (LC 15), 17=272 (LC 21), 18=200 (LC 21), 19=376 (LC 12), 18=200 (LC 21), 19=376 (LC 12), 19=376 (LC 12), 19=376 (LC 12), 19=37				roof live loads have been considered for :7-16; Vult=130mph (3-second gust) ,ph; TCDL=6.0psf; BCDL=6.0psf; h=25f; Cat. closed; MWRS (envelope) exterior zone mer(3E) -0-10-8 to 2-1-8, Exterior(2N) 9-9-0 to rer(3E) 11-4 No 14-4-8 zone; cantilever left posed ; end vertical left and right exposed; C- ers and forces & MWFRS for reactions iber DOL=1.60 plate grip DOL=1.60 under for wind loads in the plane of the truss uds exposed to wind (normal to the face), rd Industry Gable End Details as applicable, ualified building designer as per ANSI/TPI 1. E 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; I=1.10 I snow loads have been considered for this as been designed for creater of mic reof live				 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 319 lb uplift at joint 20, 302 lb uplift at joint 12, 73 lb uplift at joint 17, 79 lb uplift at joint 18, 294 lb uplift at joint 19, 73 lb uplift at joint 15, 79 lb uplift at joint 14 and 280 lb uplift at joint 13. 14) This truss is designed in accordance with the 2018 International Residential Code sections R502, 11.1 and R802, 10.2 and referenced standard ANSI/TPI 1. LOAD CASE(S) Standard 					
FORCES	(lb) - Max	20=342 (L imum Com	C 13) pression/Maximum	0)	load of 12.0 overhangs n	osf or 1.00 times fl on-concurrent with	at roof lo other liv	ad of 20.0 ps e loads.	sfon				H CA	BONG
TOP CHORD	2-20=-19 3-4=-86/1 6-7=-126 9-10=-16	8/179, 1-2= 58, 4-5=-7 /361, 7-8=-7 2/168, 10-1	0/39, 2-3=-172/177, 3/270, 5-6=-126/361 78/270, 8-9=-80/158 1=0/39, 10-12=-190	7) 8) , 9)	All plates are Gable requir Truss to be f braced again	2x4 MT20 unless es continuous bott ully sheathed from ist lateral moveme	otherwi om chor one fac nt (i.e. d	se indicated. d bearing. e or securely iagonal web).			4		A D	all of
BOT CHORD	9-1010. 19-20=-1 17-18=-1 15-16=-1 13-14=-1 6-16=-37 4-18=-16 7-15=-23 9-13=-16	2/106, 10-1 11/102, 18- 11/102, 16- 11/102, 14- 11/102, 12- 7/61, 5-17= 8/152, 3-19 2/119, 8-14 7/146	19111/102, 19111/102, 15111/102, 13111/102, 13111/102, -232/119, 174/153, 168/151,	100 10 11 12	 Gable studs This truss ha chord live loa * This truss has on the bottor 3-06-00 tall h chord and ar 	spaced at 2-0-0 oc s been designed f ad nonconcurrent v has been designed n chord in all areas by 2-00-00 wide will by other members.	c. or a 10.0 vith any for a liv s where Il fit betv) psf bottom other live load e load of 20.0 a rectangle leen the botto	ds.)psf om		A REPARTMENT	A A A A A A A A A A A A A A A A A A A	SEA 0363	L 22 L L B E E R R K J J J B R K J J J B R K J J B R K J B R B B B B B B B B B B B B B B B B B

NOTES





Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	EGR	Common Girder	1	2	Job Reference (optional)	166914620

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:07 ID:QCiWCkeHS2khFeTgPxQLfPz6R9E-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:54.6			
Plate Offsets (X, Y):	[7:0-3-8,0-4-12],	[8:0-4-0,0-4-4],	[9:0-3-8,0-4-12]

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	0.56	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.61	Vert(CT)	-0.06	7-8	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO		WB	0.78	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC20	18/TPI2014	Matrix-MSH								
BCDL	10.0											Weight: 221 lb	FT = 20%
LUMBER			3) Unbalanced	roof live loads have	been	considered for		Co	oncentra	ted Lo	ads (lb)	
TOP CHORD	2x4 SP No.2			this design.						Vert: 7=	-1293	(B), 13=-1293 (B), 14=-1293 (B),
BOT CHORD	2x6 SP No.2		4) Wind: ASCE	7-16; Vult=130mph	1 (3-sec	ond gust)			15=-129	3 (B),	16=-1293 (B), 17	'=-1293 (B)
WEBS	2x4 SP No.3			Vasd=103mp	h; TCDL=6.0psf; B	CDL=6	.0psf; h=25ft;	Cat.					
BRACING				II; Exp B; En	closed; MWFRS (e	nvelope	e) exterior zon	e;					
TOP CHORD	Structural wood she	athing directly applie	d or	cantilever lef	and right exposed	; end \	ertical left and	t l					
	6-0-0 oc purlins, ex	cept end verticals.		right exposed	l; Lumber DOL=1.6	60 plate	grip DOL=1.6	50					
BOT CHORD	Rigid ceiling directly	applied or 10-0-0 oc	_										
	bracing.		5) TCLL: ASCE	7-16; Pr=20.0 pst	(roof LL	.: LUM DOL=1	.15					
REACTIONS	(size) 6=0-5-8, 1	0=0-5-8		Plate DOL-1	. 15), PI-20.0 pSI (L		Evp : Co=0.0						
	Max Horiz 10=-188 (LC 10)		Cs=1.00: Ct=	:1 10	5, i uny	Lxp., 06-0.5	,					
	Max Uplift 6=-430 (L	C 13), 10=-401 (LC 1	12) 6) Unbalanced	snow loads have b	en cor	sidered for th	is					
	Max Grav 6=4832 (L	C 6), 10=4522 (LC 5	5) Ŭ	design.									
FORCES	(lb) - Maximum Com	pression/Maximum	7) All plates are	MT20 plates unles	s other	wise indicated	1.					
	Tension		8) This truss ha	s been designed fo	r a 10.0) psf bottom						
TOP CHORD	1-2=-3908/390, 2-3=	-3210/385,		chord live loa	d nonconcurrent w	ith any	other live load	ds.					
	3-4=-3209/385, 4-5=	-3951/394,	9) * This truss h	as been designed	for a liv	e load of 20.0	psf					
DOT OUODD	1-10=-3987/372, 5-6	=-4022/375		on the bottor	n chord in all areas	where	a rectangle						
BOT CHORD	9-10=-182/247, 8-9=	-314/2954,		3-06-00 tall b	y 2-00-00 wide will	fit betv	veen the botto	m					
WERS	1 0- 260/2170 5 7-	-34/144		chord and an	y other members.								
WEBS	2-9=-109/1065 2-8=	-201/3103,	1	U) One H2.5A S recommended	impson Strong-Tie	conne	ctors	10				- THILLING	111 LTD
	3-8=-416/3784 4-8=	-999/197 4-7=-117/	1140	LIDLIET at it/	e) 10 and 6. This of	onnecti	ng wans uue	only			10	N'TH CA	BO
NOTES				and does not	consider lateral for	rces	on is for upint	Only			. S	Q11	Aller
1) 2-ply trues	s to be connected toget	ther with 10d	1	1) This truss is	designed in accord	ance w	ith the 2018			/	\sim	U. EESO	Of the second
(0.131"x3	") nails as follows:			International	Residential Code s	ections	R502.11.1 a	nd			1		Mall
Top chore	ds connected as follows	: 2x4 - 1 row at 0-9-0)	R802.10.2 ar	nd referenced stand	dard AN	ISI/TPI 1.			1	M	R . <	
oc.			1	Use Simpsor	Strong-Tie HTU26	6 (10-16	6d Girder,			Ē		CEV	
Bottom ch	nords connected as follo	ows: 2x6 - 2 rows		14-10dx1 1/2	Truss) or equivale	nt spac	ed at 2-0-0 o	;				JLA	
staggered	d at 0-7-0 oc.			max. starting	at 2-0-0 from the le	eft end	to 12-0-0 to			5		0363	22 🤅 🗉
Web conr	nected as follows: 2x4 -	1 row at 0-7-0 oc.		connect truss	s(es) to back face o	f bottor	n chord.				6		
All loads a	are considered equally	applied to all plies,	1	Fill all nail ho	les where hanger is	s in cor	itact with lumb	per.		1			
except if r	noted as front (F) or ba	ck (B) face in the LO	AD L	OAD CASE(S)	Standard						S 🔏	Nº SNOW	CERIA S
CASE(S)	section. Ply to ply conr	ections have been	1) Dead + Sno	w (balanced): Lum	ber Inc	rease=1.15, F	late			1	S. GIN	S
provided t	to distribute only loads	noted as (F) or (B),		Increase=1	15						1	CA A	II BUNN
unless of	nerwise indicated.			Uniform Loa	ads (lb/tt)	~~					10.6	1,	and the second second
				Vert: 1-3	-60, 3-5=-60, 6-10	=-20						Same Anna ann	40.0004
												July	10,2024

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. Brancing indicated is to prevent buckling of individual truss web and/oc chord members only. Additional temporary and permanent brancing 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 brancing of trusses and truss systems, see **ANSI/TPI 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	178 Serenity-Roof-B327 A COP GLH	
24060222-01	F	Common	5	1	Job Reference (optional)	166914621

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:07 ID:VNhUx16Vbr5kqTu5L_uT9rz6RTH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1





6-3-12	12-7-8	
6-3-12	6-3-12	1

Scale = 1:31.7									
Loading (psf) TCLL (roof) 20.0 Snow (Pf) 20.0 TCDL 10.0 BCLL 0.0* BCDL 10.0	Spacing 2- Plate Grip DOL 1. Lumber DOL 1. Rep Stress Incr YE Code IR	0-0 15 15 ES C2018/TPI2014	CSI TC 0.7 BC 0.4 WB 0.7 Matrix-MSH	75 Vert(LL) 33 Vert(CT) 40 Horz(CT)	in -0.07 -0.11 0.01	(loc) 6-12 6-12 4	l/defl L/ >999 24 >999 18 n/a n/	d PLATES 0 MT20 0 Weight: 45 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING TOP CHORD Structural wood she: 3-9-3 oc purlins. BOT CHORD Rigid ceiling directly bracing. REACTIONS (size) 2=0-3-0.4 Max Horiz 2=38 (LC Max Uplift 2=-203 (L Max Grav 2=651 (LC FORCES (b) - Maximum Com Tension TOP CHORD 2-6=-517/782, 4-6=-1 WEBS 3-6=-122/271 NOTES 1) Unbalanced roof live loads have this design. 2) Wind: ASCE 7-16; Vult=130mph Vasd=103mph; TCDL=6.0psf; Bd II; Exp B; Enclosed; MWFRS (en and C-C Exterior(ZE) -0-10-8 to to 3-3-12, Exterior(ZE) -0-10-8 to 10 -3-12, Exterior(ZE) -0-10-8 to 10 -3-12, Exterior(ZE) -0-10-8 to 10 -3-12, Exterior(ZE) -0-10-8 to 10 -3-3-12, Exterior(ZE) -0-10-8 to 10 -3-12, Exterior(ZE) -0-10-8 to 11, Exp B; Enclosed; MWFRS Lumber DOL=1-16, IP=20.0 psf (L) DOL=1.15); Is=1.0; Rough Cat E Cs=1.00; CI=1.10 4) Unbalanced snow loads have be design.	athing directly applied or applied or 8-0-7 oc 4=0-3-0 14) C 10), 4=-203 (LC 11) C 21), 4=651 (LC 22) ppression/Maximum 650, 3-4=-913/650, 517/782 been considered for (3-second gust) CDL=6.0psf, h=25ft; Cat. welope) exterior zone 2-1-8, Interior (1) 2-1-8 9-3-12,	 This truss ha load of 12.0 overhangs n This truss ha chord live loc This truss ha on the bottor One H2.5A 3 recommended UPLIFT at jill and does no This truss is International R802.10.2 a LOAD CASE(S) 	as been designed for gn psf or 1.00 times flat ro on-concurrent with othe as been designed for a and nonconcurrent with a has been designed for a and nonconcurrent with a you de will fit to you de will fit you de will fit to consider lateral forces designed in accordance Residential Code sect nd referenced standard Standard	eater of min roo of load of 20.0 p I rive loads. (0.0 psf bottom ny other live load of 20. ere a rectangle etween the bott nectors earing walls due tion is for uplift. e with the 2018 ons R502.11.1 a ANSI/TPI 1.	f live ssf on .0psf tom e to only and		A DEPARTMENT OF A DEPARTMENTA DEPARTMENT OF A DEPARTMENTA DEPARTA DEPARTA DEPARTA DEPARTA DEPARTA DEPARTA DEPARTA DEPARTA DEPARTA	SE4 0363	

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. Brancing 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/TPI Quality Criteria and DBS-12 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	178 Serenity-Roof-B327 A COP GLH	
24060222-01	FGE	Common Supported Gable	1	1	Job Reference (optional)	166914622
Carter Components (Sanford, NO), Sanford, NC - 27332,	Run: 8.73 S Jul 11 2) 24 Print: 8.7	30 S Jul 11 :	2024 MiTek Industries, Inc. Wed Jul 17 07:18:07	Page: 1

ID:NtPZCayMfrSanTObUl9Q75z6RTU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f











overhangs non-concurrent with other live loads.

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

10) This truss has been designed for a 10.0 psf bottom

chord live load nonconcurrent with any other live loads.

3-06-00 tall by 2-00-00 wide will fit between the bottom

bearing plate capable of withstanding 41 lb uplift at joint

2, 47 lb uplift at joint 8, 36 lb uplift at joint 13, 41 lb uplift at joint 14, 37 lb uplift at joint 11, 39 lb uplift at joint 10, 41 lb uplift at joint 2 and 47 lb uplift at joint 8.

11) * This truss has been designed for a live load of 20.0psf

on the bottom chord in all areas where a rectangle

12) Provide mechanical connection (by others) of truss to

B) Gable requires continuous bottom chord bearing.

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

chord and any other members.

		(0												0.010		
Loading		(pst)	Dista Crin DOI	2-0-0			0.07		in n/n	(IOC)	i/defi	L/d	PLATES	GRIP		
TCLL (root)		20.0	Plate Grip DOL	1.15			0.07	Vert(LL)	n/a	-	n/a	999	M120	244/190		
Show (Pr)		20.0	Lumber DOL	1.15		BC	0.04	Vert(CT)	n/a	-	n/a	999				
TCDL		10.0	Rep Stress Incr	YES		WB	0.04	Horz(CT)	0.00	8	n/a	n/a				
BOLL		0.0	Code	IRC2018	3/TP12014	Matrix-MSH							Mainte CAlle	FT - 00%		
BCDL		10.0											Weight: 51 lb	FT = 20%		
LUMBER				2)	Wind: ASCE	7-16: Vult=130mph	(3-sec	cond aust)		13) This	s truss is	s desia	ned in accordance	ce with the 2018		
TOP CHORD	2x4 SP N	0.2		,	Vasd=103mp	oh; TCDL=6.0psf; B	CDL=6	6.0psf; h=25ft;	Cat.	Inte	rnationa	al Resid	ential Code sect	tions R502.11.1 and		
BOT CHORD	2x4 SP N	lo.2			II; Exp B; En	closed; MWFRS (er	nvelope	e) exterior zon	e	R80	2.10.2 a	and ref	erenced standar	d ANSI/TPI 1.		
OTHERS	2x4 SP N	lo.3			and C-C Corner(3E) -0-10-8 to 2-3-12, Exterior(2N) LOAD CASE(S) Standard											
BRACING					2-3-12 to 3-3-12, Corner(3R) 3-3-12 to 9-3-12, Exterior											
TOP CHORD	Structura	al wood she	athing directly applied	l or	(2N) 9-3-12 to 10-3-12, Corner(3E) 10-3-12 to 13-6-0											
	6-0-0 oc	purlins.			zone; cantilever left and right exposed ; end vertical left											
BOT CHORD	Rigid ceil	ling directly	applied or 10-0-0 oc			and right exposed;C-C for members and forces &										
	bracing.					reactions shown, Lt	Inperi	JOL-1.60 pia	le							
REACTIONS	(size)	2=12-7-8,	8=12-7-8, 10=12-7-8	, 3)	Truss desig	ned for wind loads i	n the n	lane of the tru	22							
		11=12-7-8	3, 12=12-7-8, 13=12-7	7-8, 0)	only For sti	ids exposed to wind	l (norm	al to the face	100							
		14=12-7-8	3, 15=12-7-8, 19=12-7	-8	see Standard	d Industry Gable En	d Deta	ils as applicat	ole.							
	Max Horiz	2=38 (LC	18), 15=38 (LC 18)		or consult qu	alified building desi	gner a	s per ANSI/TF	ข 1.							
	Max Uplift	2=-41 (LC	5 10), 8=-47 (LC 11),	, 4)	TCLL: ASCE	7-16; Pr=20.0 psf (roof LL	.: Lum DOL=1	1.15							
		10=-39 (L	C 15), 11=-37 (LC 11 C 10), 14= 41 (LC 14), .	Plate DOL=1	.15); Pf=20.0 psf (L	um DC	DL=1.15 Plate								
		1530 (L 1541 (L	C 10), 14=-41 (LC 14 C 10), 10= 47 (LC 14),)	DOL=1.15);	s=1.0; Rough Cat E	3; Fully	Exp.; Ce=0.9	;							
	Max Grav	2-176 (L	C 10), 19-47 (LC 11) C 21) 8-176 (LC 22))	Cs=1.00; Ct=	=1.10										
	wax Glav	10=250 (L	C 22) 11=222 (I C 22)	2) 5)	Unbalanced	snow loads have be	een cor	nsidered for th	nis							
		12=139 (1	C 1) 13=222 (LC 21))	design.											
		14=250 (1	C 21), 15=176 (LC 2	" 6) 1).	This truss ha	is been designed fo	r great	er ot min roof	live							
		10 170 (1		.,,	load of 12.0	pst or 1.00 times fla	t roof le	bad of 20.0 ps	st on							

12-7-8

19=176 (LC 22) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/17, 2-3=-52/35, 3-4=-51/56, 4-5=-57/108, 5-6=-57/108, 6-7=-51/56, 7-8=-52/35, 8-9=0/17 BOT CHORD 2-14=-20/44, 13-14=0/44, 12-13=0/44, 11-12=0/44, 10-11=0/44, 8-10=-20/44

- WEBS 5-12=-97/46, 4-13=-187/141, 3-14=-192/120, 6-11=-187/141, 7-10=-192/120 NOTES
- 1) Unbalanced roof live loads have been considered for this design.

ANNIN CONTRACT **O**RTH Antonia Strategica SEA 0363 10 A. GILB The GIVEN July 18,2024

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Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	G	Monopitch	2	1	Job Reference (optional)	166914623

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:08 ID:2wnvx1AnUG3TGubNowWiwRz6gRC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1







Scale = 1.50	Sca	ale	=	1:36
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Scale - 1.50													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) Sp 20.0 Pla 20.0 Lur 10.0 Re 0.0* Cor 10.0	acing ate Grip DOL mber DOL op Stress Incr ade	2-0-0 1.15 1.15 YES IRC2018/TP	12014	CSI TC BC WB Matrix-MP	0.58 0.33 0.39	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.05 -0.10 0.02	(loc) 8-9 8-9 7	l/defl >999 >930 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 41 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 BRACING TOP CHORD X4 SP No.2 BRACING TOP CHORD Rigid ceiling. bracing. REACTIONS (size) 7= Max Grav 7= FORCES (b)- Maximu Tension TOP CHORD 2-9=-392/293 	and sheathin ins, except i directly appl Mechanical 113 (LC 11) -66 (LC 14), 456 (LC 21) m Compress 3, 1-2=0/19, 4-5=-8/0, 4-7 3, 7-8=-467(8) 3, 7-8=-467(8) 3, 7-8=-467(8) 10-8 to 2-1-8 0 to 3-0-0 z refrical left score 0 psf (Lun D psf (Lun D psf (Lun D psf (Lun D psf (Lun C	In girectly applied end verticals. lied or 8-8-2 oc 1, 9=-05-8) 9=-71 (LC 10) 9=-43 (LC 21) sison/Maximum 2-3=-1029/453, 7=-60/15 886, 6-7=00 33, 3-7=-960/534 econd gust) 6-0.psf, h=-25ft, C 9e) exterior zone 3, Interior (1) 2-1-8 cone; cantilever [end) 5 for reactions DOL=1.6 LL: Lum DOL=1.1 DOL=1.15 Plate Ily Exp.; Ce=0.9; sonsidered for this ater of min roof liv f load of 20.0 psf c live loads.	5 1 In christer of the second	s uruss ha prof live loa his truss h the bottom 66-00 tall b ord and ar fer to girdd aring palted e H2.5A S commende LIFT at jt(ss not con remational 02.10.2 ar CASE(S)	s been designed it di onocnocurrent w las been designed n chord in all areas y 2-00-00 wide will y other members r(s) for trubsers. PI 1 angle to grain uld verify capacity hanical connection capable of withsta simpson Strong-Tie d to connect truss s) 9. This connect isider lateral forces designed in accord Residential Code s hd referenced stand Standard	in a rud, ith any for a liv where I fit betw ss conr formula of beari (by oth noding 6 c connect to beari on is for ance w sections dard AN	I per bottom ther live load ther live load rectangle a rectangle a metangle mg surface. a Building mg surface. ars) of truss te lo buplit at jc tors mg walfs due uplit nuly an the the 2018 R502.11.1 at ISI/TPI 1.	ds. ppsf m po po po po to d d d d		West of the state			PO 22 L 22 L 11,00 L 11,2024
WARNING - Verify design Design valid for use only wil a truss system. Before use, building design. Bracing inc is always required for stabili fabrication, storage, deliver and BCSI Building Compu-	parameters and ith MiTek® conn , the building de dicated is to pre lity and to preven y, erection and I onent Safety In	d READ NOTES ON TH nectors. This design is seigner must verify the i event buckling of indivio nt collapse with possib bracing of trusses and nformation available	IIS AND INCLUD based only upon applicability of de dual truss web ar ole personal injur truss systems, s from the Structur	ED MITEK R parameters ssign parame nd/or chord n y and proper ee ANSI/TF ral Building C	FERENCE PAGE MII-7 shown, and is for an ind sters and properly incorp rembers only. Additions ty damage. For general PI Quality Criteria and component Association (473 rev. 1 lividual bu orate this al tempora guidance DSB-22 www.sbc	2/2023 BEFORE ilding component design into the o ry and permanen regarding the available from Tr acomponents.com	USE. t, not werall it bracing russ Plate I n)	nstitute (v	vww.tpinst	.org)	818 Soundside F Edenton, NC 275	ING BY ANITER Addition to ad 332

Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	G1	Half Hip	7	1	Job Reference (optional)	166914624

Run: 8.73 E May 9 2024 Print: 8.730 E May 9 2024 MiTek Industries, Inc. Thu Jul 18 16:47:53 ID:einn9QFMsQjQrPrP4TucSQz6gkT-nqxjEeld6eKB_fVhPouQRMKbXkqZuuqk6RG5Rfywng6 Page: 1







Scale = 1:38.4

Plate Offsets	late Offsets (X, Y): [2:0-2-14,0-2-8]													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MSH	0.60 0.33 0.35	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.03 -0.07 0.02	(loc) 9 9-10 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 42 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=100 II; Exp B; and C-C f left and r; exposed; ireactions DOL=1.46 (S) TCLL: AS Plate DOI DOL=1.15; CS=1.00;	 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wc 4-11-12 oc p 2-0-0 oc puril Rigid ceiling bracing. (lb/size) 7= Max Horiz 10 Max Uplift 7= Max Grav 7= (lb) or less ev 2-10=-543/37 3-11=-1232/6 9-10=-273/36 2-9=-394/89 5-7=-849/450 ced roof live load maph; TCDL=6. Enclosed; MWF Exterior(2E) -0- ght exposed ; ei CC 7-16; Pr=20 Shown; Lumber CSC 7-16; Pr=20. (b) =10, Roug Ct 1.0 	bood sheat urrlins, e iins (6-0. =524/ Met =95 (LC =96 (LC =96 (LC =542 (LC	athing directly applie except end verticals, -0 max.): 5-8, 5-6. applied or 7-5-2 oc schanical, 10=417/0. 2 11) 14), 10=-81 (LC 10) 2 38), 10=524 (LC 38 ax. Ten All forces 2 hen shown. =-1293/620, =-694/393, 5-8=-252 -626/1156, 7-8=-406 104/350, 3-8=-678/4 been considered for (3-second gust) DU=6.0psf, h=25ft; velope) exterior zom; call left and right orces & MWFRS for .60 plate grip roof LL: Lum DOL=1 um DOL=1.15 Plate ; Fully Exp.; Ce=0.9;	d or	 Unbalanced design. This truss h load of 12.0 overhangs r Provide ade This truss h chord live lo This truss n chord and a Refer to gird designer sh Provide met bearing plat This truss is internationa R802.10.2 z This truss is internationa R802.10.2 z Graphical pi or the orient bottom chor Hanger(s) o provided su lb down and design/selec Dead + Sn Increase=' Uniform Lo 	I snow loads have as been designed : psf or 1.00 times f non-concurrent with quate drainage to as been designed has been designed thas been designed m chord in all area by 2-00-00 wide w my other members Jer(s) for truss to tr point(s) 10 consider: TPI 1 angle to grain ould verify capacity chanical connection e capable of withs! Simpson Strong-TT led to connect truss (ts) 10. This conner isider lateral force ded to connect truss (ts) 10. This connect is designed in accor and referenced stan urlin representation ficient to support of 110 lb up at 64-4- ction of such conner y of others.) Standard low (balanced): Lut 1.15 bads (lb/ft)	been coo for great lat roof I n other if for a lo: with any s swhere uss conni s swhere s same n (by oth anding { in formul if hit betw s to bear to lo bear to lo bear dance w sections if adance w section de dance w adance adance a	sidered for the er of min roo obad of 20.0 p ve loads. water pondim 0 psf bottom 0 ther live loze e load of 20.0 a rectangle ween the bott nections. I to grain value a. Building ing surface. ers) of truss 80 lb uplift at ctors ing surface. ers) of truss 80 lb uplift at ctors ing walts due or uplift only ith the 2018 s R502.11.1 sl depict the to pand/or i) shall be ated load(s) ? chord. The vice(s) is the rease=1.15,	this flive sfon g. ads. Opsf tom ue to joint and size 221 221 Plate	Ca	Vert: 1-: oncentra Vert: 4=	2=-60, ted Lo 180	244-60, 5-61 ads (lb) OPT H CA OPT ESS SEA O363 OPT A. CO SEA O363	5, 9-10=-20, 7-9=-20 5, 9-10=-20, 7-9=-20 1, 9-10=-20, 7-
A														1111 111 1111 1111

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 permement bracing is always required for stability and to prevent localize perturbations be personal injury and properly damage. For general guidance regarding the fabrication, storage, lexivery, erector and bracing of trusses and truss systems, see **ANBITFI Quality** Greinet and DSB-2 available torm Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safey Information** available form the Structural Building Component Association (www.stcaccomponents.com)



Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	G1GE	Half Hip Supported Gable	1	1	Job Reference (optional)	166914625

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:08 ID:einn9QFMsQJQrPrP4TucSQz6gkT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1







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Scale = 1:36.4
```

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	0.10 0.03 0.04	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 9	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 36 lb	GRIP 244/190 FT = 20%			
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Structura 6-0-0 oc 2-0-0 oc Rigid ceil bracing.	lo.2 lo.3 lo.3 l wood she: purlins, exp purlins; 7-1 ling directly	athing directly applie æpt end verticals, a 0, 7-8. applied or 6-0-0 oc	2) ed or nd 3)	Wind: ASCE Vasd=103mp II; Exp B; Enn and C-C Cor to 3-4-4, Cor and right exp C for membe shown; Lumt Truss design only. For stu	7-16; Vult=130mpj h; TCDL=6.0psf; E closed; MWFRS (e ner(3E) -0-10-8 to ner(3E) 3-4-4 to 7- osed; end vertical rs and forces & Mi per DOL=1.60 plate ned for wind loads ds exposed to win loadust cohe E	h (3-sec BCDL=6 envelope 2-0-0, E 10-4 zo l left and WFRS f e grip D in the p d (norm	ond gust) .0psf; h=25ft; .) exterior zor xterior(2N) 2 ne; cantilevei I right expose DL=1.60 ane of the tru al to the face	; Cat. ne -0-0 · left ad;C- uss),	15) Bev sur 16) This Inte R80 17) Gra or t bot 18) Har pro Ib d	veled pla face with s truss is prnational 02.10.2 a uphical p he orient tom chor nger(s) c vided su lown and	te or si a truss design l Resid and refe urlin re tation c d. or other fficient 1 125 lb	him required to p chord at joint(s) 1 ned in accordanc lential Code sect erenced standard presentation doe f the purlin along connection devit to support conce o up at 6-4-4 on	rovide full bearing 11, 10, 9, 13, 12. we with the 2018 ions R502, 11.1 and 1 ANSI/TPI 1. is not depict the size if the top and/or ce(s) shall be antrated load(s) 236 top chord. The a divideo(b) the
REACTIONS	(size) Max Horiz Max Uplift Max Grav	9=8-0-0, 1 12=8-0-0, 14=95 (LC 9=-29 (LC 11=-69 (L 14=-47 (L 9=127 (LC 11=108 (L 13=193 (L	0=8-0-0, 11=8-0-0, 13=8-0-0, 14=8-0-0 211) 11), 10=-28 (LC 11 C 14), 13=-27 (LC 1 C 10) 2 37), 10=311 (LC 4 C 38), 12=194 (LC 2 C 38), 14=188 (LC 2)), 4), 3), 5) 38), 6)	see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha	 Consult qualified building designer as per ANSI/TP1 1. CLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.5 Plate DOL=1.15; ls=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Sa=1.00; Ct=1.10 DoL=1.15; ls=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Sa=1.00; Ct=1.10 Dhalanced snow loads have been considered for this designe for greater of min roof live ded f12.0 psf or 1.00 times flat roof load of 20.0 psf or 1.00 times flat roof load of 20.0 psf on 								
FORCES	(lb) - Max	kimum Com	pression/Maximum		overhangs no	on-concurrent with	other liv	e loads.	si on		Vert: 6=	-180		
TOP CHORD	2-14=-17 3-4=-46/ 7-10=-34 8-9=-117	3/191, 1-2= 108, 4-5=-4 3/203, 6-7= /79	0/27, 2-3=-32/62, 0/8, 5-6=-27/33, -264/142, 7-8=-11/2	7) 8) 9) 20, 10	All plates are Gable require Truss to be fi braced again	uate drainage to p 2x4 MT20 unless es continuous botto ully sheathed from ist lateral movements	orevent otherwi om chor one fac	vater ponding se indicated. d bearing. e or securely iagonal web)	g.			J.	ORTH CA	BA.
BOT CHORD	13-14=-1 11-12=-1 5-11=-10	53/107, 12- 53/101, 10- 3/86	13=-155/106, 11=-23/47, 9-10=-2	5/51, 11 5/51, 12) Gable studs) This truss ha	spaced at 2-0-0 oc s been designed fo	or a 10.0) psf bottom	de		6	ð	Z,	TUN
WEBS 3-13=-167/124, 4-12=-158/49, 7-9=-42/35, 4-11=-47/151 NOTES 1) Unbalanced roof live loads have been considered for this design.				85, 13 r 14	 a) * This truss h on the bottor 3-06-00 tall b chord and ar b) Provide mech bearing plate 14, 69 lb upli uplift at joint 	chord live load nonconcurrent with any other live loads. This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 14, 69 lb uplift at joint 11, 28 lb uplift at joint 10, 29 lb uplift at joint 19 and 27 lb uplift at joint 13. This truss to be a standard to the standar							L 22 LBERNAR	

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Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	н	Monopitch	6	1	Job Reference (optional)	166914626

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:08 ID:X_hcbChxDcqIIoSveVUtaUz6RjJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f









Scale = 1:31

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) Spacing 2-0-0 CSI DEFL in (loc) //def L/d PLATES 20.0 Plate Grip DOL 1.15 TC 1.00 Vert(LL) 0.29 3-8 >329 240 MT20 20.0 Lumber DOL 1.15 BC 0.84 Vert(CT) -0.39 3-8 >242 180 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.01 1 n/a n/a 10.0 Code IRC2018/TPI2014 Matrix-MP Matrix-MP Weight: 28 lb Weight: 28 lb												
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD NOTES 1) Wind: ASC Vasd=103 II; Exp B; I and C-CE and c; Cher DOL=1.60 DOL=1.51 Cs=1.00; (C) 3) Unbalance design. 4) This truss chord live	2x4 SP No.1 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she except end verticals Rigid ceiling directly bracing. (size) 1=0-3-0.5 Max Horiz 1=016 (L Max Orgini 1=-116 (L Max Grav 1=413 (LC (Ib) - Maximum Com 1=2=-126/88, 2=3=-2 1=-3=-169/206 ZE 7-16; Vult=130mph mph; TCDL=6 Opef; B Enclosed; MWFRS (er ixterior(ZE) 4=-0.4 to 7 :xposed; end vertical and right exposed; C=C WFRS for reactions s plate grip DDL=1.60 WFRS for reactions s plate grip DDL=1.60 ZE 7-16; PE=20.0 psf (==1.15; PI=20.0 psf (==1.15; PI=20.0 psf (==1.10; ls=1-0; Rough Cat E Ct=1.10 ad snow loads have be has been designed fo load nonconcurrent wi	athing directly applie applied or 9-6-6 oc 3=0-1-8 C 13) C 10), 3=-121 (LC 1(C 21), 3=405 (LC 21) pression/Maximum 97/207 (3-second gust) CDL=6.0psf; h=25ft; tvelope) exterior zono 0-0, Interior (1) 3-0-0 CDL=6.0psf; h=22ft; tvelope) exterior zono 0-0, Interior (1) 3-0-0 CDL=6.0psf; h=22ft; tvelope) exterior zono 0-0, Interior (1) 3-0-0 CDL=6.0psf; h=22ft; tvelope) exterior zono 0-0, Interior (1) 3-0-0 context (1) 3-0-0 con	 5) * This truss on the botto 3-06-00 tall chord and a 6) Bearing at i using ANSI, designer sh 8) Provide me bearing plat 9) One H2.5A. 0) UPLIFT at j and does m 10) This truss is Internationa R802.10.2 <i>i</i> LOAD CASE(S) 	has been designed m chord in all area: by 2-00-00 wide m or other members. e assumed to be: , init(s) 3 considers TPI 1 angle to grain ould verify capacity hanical connection e at joint(s) 3. Simpson Strong-Ti ed to connect truss (s) 1 and 3. This cc t consider lateral fi designed in accorr I Residential Code und referenced star) Standard	for a living swhere swhere li fit betw. Joint 3 S avarallel in formulation of bearing of bearing of bearing of bearing to bearing	e load of 20.0 a rectangle even the botto siP No.3 . o grain value a. Building ng surface. ers) of truss to tors ng walls due to is for uplift of th the 2018 R502.11.1 at ISI/TPI 1.	psf m to to nnly		A start which are a start of the start of th		SEA O363 Si CVG(N C A, C July	22 118,2024	
WARN	IING - Verify design paramete	ers and READ NOTES ON 1	THIS AND INCLUDED MITEK I	REFERENCE PAGE MII-7	'473 rev. 1	/2/2023 BEFORE	USE.				ENGINEER	ING BY	

WARNNO - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MILH/2473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTeX® connectors. This design is based only upon parameters show, 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, rection and bracing of trusses part thus systems, see **ANSITPTI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road Edenton, NC 27932

Page: 1

Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	H1	Monopitch Structural Gable	1	1	Job Reference (optional)	166914627
Carter Components (Sanford, NC), Sanford, NC - 27332,	Run: 8.73 S Jul 11 20	24 Print: 8.7	30 S Jul 11 2	2024 MiTek Industries, Inc. Wed Jul 17 07:18:08	Page: 1

3-0-0

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:08 ID:X_hcbChxDcqIIoSveVUtaUz6RjJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.2

Plate Offsets (X, Y): [1:0-0-5,I	Edgej												
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(i 2 2 1 1	psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	1-11-4 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MP	0.82 0.82 0.02	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.32 -0.47 0.01	(loc) 6-7 6-7 1	l/defl >295 >202 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 32 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Wind: AS(Vasd=103 II; Exp B; and c-C E 4-10-4, Ex and right e porch left. forces & M DOL=1.60 2) Truss des only. For see Stand or consult	2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural woo 6-0-0 oc puritin Rigid ceiling d bracing. (size) 1=0 Max Horiz 1=1 Max Upift 1=- Max Upift 1=-	od sheat jirectly)-3-0, 5 (113 (L(113 (L))))))))))))))))))))))))))))))))))))	athing directly applied rept end verticals. applied or 9-2-10 oc =0-1-8 ;13) C 10), 5=-117 (LC 10) 2 21), 5=392 (LC 21) pression/Maximum 3/68, 3-4=-43/72, 33/48, 5-6=-33/48 2/68 (3-second gust) CDL=6.0psf; h=25ft; (velope) exterior zone)-0, Interior (1) 3-0-0 (0-4 zone; cantilever eft and right exposed for members and nown; Lumber the plane of the trus (normal to the face), J Details as applicabl iner as per ANSI/TPI	3) 4) d or 5) 6) 7) 7) 8) 9) 10 11 11 11 Cat. 12 to fit left LC I; ss lee, 1.	TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. Gable studs: This truss ha chord live loc * This truss h on the bottor 3-06-00 tall b chord and ar Bearings are Bearing ato Bearing ato bearing plate) Ore H2.5AS recommende UPLIFT at](f and does nol UPLIFT at] and does nol D This truss is: International R802.10.2 ar DAD CASE(S)	7-16; Pr=20.0 psf (15); Pf=20.0 psf (s=10; Rough Cat 1.10 snow loads have b spaced at 2-0-0 oc spaced at 2-0-0 oc the down of the second second the down of the second second the down of the second second y 200-00 wide will y other members. assumed to be: , , , , , , , , , , , , , , , , , , ,	(roof LL Lum DC B; Fully veen cor), or a 10.0, with any for a liv swhere Il fit betw Joint 5 \$ swhere Il fit betw Joint 5 \$ or a lou.1 of bear (by oth to bear to bear to bear to bear to bear dance w sections; dance M	: Lum DOL= JL=1.15 Plat Exp.; Ce=0: asidered for t 0 psf bottom other live loc e load of 20. a rectangle veen the bott SP No.3 . o grain value a metangle ng surface. ers) of truss ctors ing walls duen in sfor uplift tith the 2018 R502.11.1 a ISI/TPI 1.	1.15 e 9; his ads. 0psf om to to to only and		A second s		SEA 0363	

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. Brancing indicated is to prevent buckling of individual truss web and/oc chord members only. Additional temporary and permanent brancing 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 brancing of trusses and truss systems, see **ANSI/TPI 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	178 Serenity-Roof-B327 A COP GLH	
24060222-01	H2	Monopitch Structural Gable	1	1	Job Reference (optional)	166914628

2-8-0

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:08 ID:nv1ri_avzKYzZiWeAl69NZz6RTz-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?

Page: 1





Scale = 1:29.7

Loading TCLL (roof) Snow (Pf)	(ps 20. 20.	f) 0 0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15		CSI TC BC	0.72 0.79	DEFL Vert(LL) Vert(CT)	in 0.21 -0.29	(loc) 6-7 6-7	l/defl >390 >280	L/d 240 180	PLATES MT20	GRIP 244/190
TCDL BCLL BCDL	10. 0. 10.	0 0* 0	Rep Stress Incr Code	YES IRC2018	3/TPI2014	WB Matrix-MP	0.02	Horz(CT)	0.00	1	n/a	n/a	Weight: 28 lb	FT = 20%
LUMBER TOP CHORD BEACING TOP CHORD BEACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Wind: AS Vasd=10 I; Exp B; and c;C 3-10-4, E and right DOL=1.6 DOL=1.6 Cs=1.00;	 2x4 SP No.2 2x4 SP No.3 2x4 set and S	shee ectly $I=0, f \in (LC Com1/2) (L') (L') (L') (L') (L') (L') (L') (L'$	athing directly applied applied or 10-00 cc i=0-1-8 13) C 10), 5=-105 (LC 10) 2 21), 5=352 (LC 21) pression/Maximum 1/65, 3-4=-40/67, 30/44, 5-6=-30/44 '55 (3-second gust) DDL=6.0psf; h=25ft; (velope) exterior zone ol, Interior (1) 3-0-0 10-4 zone; cantilever eft and right exposed of members and nown; Lumber at the plane of the trus (normal to the face), 10 Details as applicabl prer as per ANSI/TPI roof LL: Lum DOL=1.	4) 5) 6) 7) d or 8) 9) 10 11 12 12 Cat. to left ; ss e, 1. 15	Unbalanced design. Gable studs This truss ha chord live loa * This truss h chord and ar Bearing at jo using ANSI/1 designer sho) Provide mec bearing plate Done H2.5A S recommende UPLIFT at jt(and does no) This truss is International R802.10.2 at DAD CASE(S)	snow loads have i spaced at 2-0-0 o s been designed id nonconcurrent ias been designed n chord in all area y 2-00-00 wide w yy other members assumed to be-, y 2-00-00 wide w yy other members assumed to be-, p 2-00-00 wide w yy 2-00-00 wide w yy 2-00-00 wide w yy 2-00-00 wide w y 2-00-00 w y	been cor c. for a 10.4 if or a 10.4 if or a 10.4 if or a 10.4 if or a 10.4 or a 1	asidered for other live lo e load of 20 a rectangle ween the bot SP No.3. o o grain valu a. Building ng surface. res) of truss ctors ng walls du n is for upliff th the 2018 R502.11.1 SI/TPI 1.	this pads. 0.0psf ttom ee to nly and		Western Paulo Sterrer		SEA 0363	L22 118,2024
WAR Design a truss building is alway fabricat and BC	NING - Verify design par- valid for use only with N system. Before use, the g design. Bracing indica ys required for stability a tion, storage, delivery, er CSI Building Compone	iTek® buildi ted is nd to rectior	rs and READ NOTES ON T) connectors. This design is ng designer must verify the to prevent buckling of indiv prevent collapse with poss n and bracing of trusses an fety Information available	HIS AND IN s based only a applicability vidual truss v ible persona d truss syste e from the St	CLUDED MITEK R rupon parameters y of design parame veb and/or chord n l injury and proper rms, see ANSI/TF ructural Building C	EFERENCE PAGE MII- shown, and is for an ir ters and properly inco- nembers only. Addition ty damage. For gener. PI Quality Criteria an component Association	-7473 rev. 1 ndividual bu prporate this nal tempora al guidance nd DSB-22 n (www.sbc	2/2023 BEFOF ilding compone design into the ry and perman regarding the available from acomponents.c	RE USE. ent, not e overall nent bracing n Truss Plate com)	Institute (www.tpins	t.org)	818 Soundside F Edenton, NC 275	INC BY NCCO Address Athlate Road 322

Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V1	Valley	1	1	Job Reference (optional)	166914629

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:08 ID:GrzoG?sLG?tXDXYehm59Qqz6RYm-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1





11-4-2

Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.15		тс	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDI		10.0	Ren Stress Incr	YES		WB	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCU		0.0*	Code	IRC20	18/TPI2014	Matrix-MSH	0.10		0.00	Ũ		10.04		
BCDL		10.0		111020	10/11/12/014								Weight: 46 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N Structura 6-0-0 oc Rigid ceil bracing. (size) Max Horiz	0.2 0.2 0.3 I wood she purlins. ing directly 1=11-4-2, 7=11-4-2, 1=-107 (LC	athing directly applie applied or 6-0-0 oc 5=11-4-2, 6=11-4-2, 8=11-4-2, 13=11-4- C 10)	3 d or 5 2 7 8	 Truss desig only. For stu see Standar or consult qu TCLL: ASCE Plate DOL=[±] DOL=1.15); Cs=1.00; Ct Unbalanced design. Gable requir Gable studs This truss ha 	ned for wind load dis exposed to w d Industry Gable lailifed building di 7-16; Pr=20.0 ps Is=1.0; Rough Ca =1.10 snow loads have es continuous bo spaced at 4-0-0 i so been designed	s in the pl ind (norm End Deta esigner as of (roof LL f (Lum DC at B; Fully been cor ttom chor cc. f or a 10.0	ane of the tru al to the face; Is as applicat per ANSI/TF : Lum DOL=1 L=1.15 Plate Exp.; Ce=0.9 sidered for th d bearing.	iss),)de, PI 1. I.15 I,15				Troigin: 40 io	
FORCES	Max Grav	6=-126 (LC 13=-1 (LC 1=80 (LC 7=338 (LC	C 15), 8=-140 (LC 1/ ; 27) 13), 6=442 (LC 21), C 20), 8=432 (LC 20)	4), g	chord live los) * This truss l on the bottor 3-06-00 tall l chord and an	ad nonconcurrent has been designe m chord in all are by 2-00-00 wide w hy other members	with any d for a liv as where vill fit betw s.	other live load e load of 20.0 a rectangle reen the botto	ds.)psf om					
TOP CHORD	Tension 1-2=-136	/164, 2-3=-	152/167, 3-4=-210/1	63,	bearing plate 1, 1 lb uplift	e capable of withs at joint 5, 140 lb u	standing 7 uplift at joi	of truss to 0 lb uplift at jo nt 8, 126 lb u	o oint plift					
BOT CHORD	1-8=-54/4	6, 7-8=-12 0	/46, 6-7=-12/46,	1	at joint 6 and 1) This truss is	d 1 lb uplift at join designed in acco Residential Code	t 5. Irdance w	th the 2018	nd				TUTT I	4) TET
WEBS	3-7=-254	/20, 2-8=-4	31/247, 4-6=-427/23	7	R802 10 2 a	nd referenced sta	andard AN	SI/TPI 1	ilu			10	NºLA CA	APAN
NOTES					OAD CASE(S)	Standard						e de la constante de la consta	al	
 Unbalance this design Wind: AS(Vasd=103 II; Exp B; I and C-C E to 8-4-6, E and right e C for mem shown; Lu 	ed roof live I n. CE 7-16; Vu Bmph; TCDL Enclosed; N Exterior(2E) Exterior(2E) exposed ; er bers and fo umber DOL=	lt=130mph =6.0psf; B(IWFRS (en 0-0-5 to 3-1 8-4-6 to 11 nd vertical I orces & MW =1.60 plate	been considered for (3-second gust) CDL=6.0psf, h=25ft; velope) exterior zon 0-5, Exterior(2R) 3-0 -4-6 zone; cantilever eft and right expose (/FRS for reactions grip DOL=1.60	Cat. e -5 r left d;C-		Stanuaru							SE/ 0363	× 18.2024

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Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V2	Valley	1	1	Job Reference (optional)	166914630

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:08 ID:?Usr2Y2FtIY_pBJEDaKNjnz6RVy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale	=	1:32
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Scale = 1:32														
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MP	0.44 0.40 0.15	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 34 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORE BOT CHORE BOT CHORE BOT CHORE BOT CHORE REACTIONS FORCES TOP CHORE BOT CHORE BOT CHORE BOT CHORE BOT CHORE WEBS NOTES 1) Unbalanc this desig 2) Wind; AS Vasd=10 II; Exp B; and C-C to 5-11-1 cantileve for reacti DOL=1.6 3) Truss de only. For see Stan or consul	 2x4 SP N Structura 8:11-5 oc Stigid ceil bracing. (size) Max Horiz Max Uplift Max Grav (lb) - Max (lb) - Max Grav (lb) - Max Tension 1:2=:137. 1:4=:265. 2:4=:601. Ster rof live I n. CE 7-16; VU 3mph; TCDL Enclosed; No. Exterior(2E) 0. Exterior(2E) 0. Exterior(2E) 0. Signed for wr studs expos dard Industry t qualified bu 	o.2 o.3 I wood she pprlins. ing directly 1=8-11-5, 1=84 (LC 1=75 (LC (LC 21) imum Corr /341, 2-3=- /197, 3-4=- /273 oads have t=130mph =6.0psf; B WVFRS, B WVFRS, B WVFRS, B I VVFRS, D S, 5-11-10 it exposed members. J.umber DC ind loads in sed to wind / Gable En ilding design	athing directly applie applied or 6-0-0 oc 3=8-11-5, 4=8-11-5 11) 20), 3=-54 (LC 20), C 14) 20), 3=75 (LC 21), 4 pression/Maximum 137/341 265/197 been considered for (3-second gust) CDL=6.0psf; h=25ft; volcope; ketrior zon 0-5, Exterior(2R) 3-0 CDL=6.0psf; h=25ft; volcope; exterior zon 0-5, Exterior(2R) 3-0 LL=1.60 plate grip n the plane of the true (normal to the face) d Details as applicab gner as per ANS//TP	4 ed or 6 7 8 5 5 4 4 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 TCLL: ASCE Plate DOL=1 TCLL: ASCE Plate DOL=1 TCL=1.10; Ct Cs=1.00; Ct Gable requir Gable requir Gable studs This truss in chord live loc This truss in chord live loc This truss in the trust This truss in linternational R802.10.2 a CAD CASE(S) 	7-16; Pr=20.0 ps 1.15); Pf=20.0 ps 1.15); Pf=20.0 psf 1.10; Rough Cal 1.10; Snow loads have es continuous bot spaced at 4-0-0 o is been designed ad noncocurrent nas been designed ad noncocurrent nas been designed of y 0-00 wide with sta joint 3 and 113; designed in accor Residential Code dn d referenced stat Standard	f (roof LI (roof LI (Lum DC (Lum DC) (Lum DC) (L	: Lum DOL=' DL=1.15 Plate Exp.; Ce=0.5 hsidered for th d bearing. 0 psf bottom other live loa e load of 20.0 a rectangle even the botto ers) of truss t 41 lo uptif at j at joint 4. RSD0211.1 at SUTPI 1.	1,15 ;; ds. opsf oom ooint				SEA 0363 SACAL	100 22 11 11 11 11 11 11 11 11 11 11 11 11
	NING - Verify de	sian naramete	ers and READ NOTES ON				7473 rev. 1	12/2023 REFORE	USE				ENDINGE	DIMO RY





Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V3	Valley	1	1	Job Reference (optional)	166914631

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:09 ID:qeD6lc60S8J8Y6mOaqRnz2z6RVs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



6-6-8

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Scale = 1:28			1									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.20 0.21 0.07	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 24 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-68 oc purlins. Rigid ceiling directly bracing. (size) 1=6-6-8, Max Horiz 1=60 (LC Max Uplit 1=-5 (LC (LC 14) Max Grav 1=102 (L) 4=456 (L] (lb)- Maximum Con Tarcine	athing directly applied applied or 6-0-0 oc 3=6-6-8, 4=6-6-8 13) 21), 3=-5 (LC 20), 4= C 20), 3=102 (LC 21), 21) pression/Maximum	 5) Unbalanced design. 6) Gable requit 7) Gable studs 8) This truss he chord live lo 9) * This truss in chord live lo 3-06-00 tall 4) Provide mec 60 60 10) Provide mec 5 lb uplift at 11) This truss is International R802.10.2 a LOAD CASE(5) 	snow loads have I res continuous bott spaced at 4-0-0 o as been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide w ny other members, chanical connectioi e capable of withst joint 3 and 60 lb uj designed in accor Residential Code nd referenced star Standard	been cor tom chor c. for a 10.0 with any d for a liv is where ill fit betw n (by oth tanding 5 plift at joi 'dance w sections ndard AN	asidered for the d bearing. D psf bottom other live loac e load of 20.0 a rectangle ween the botto ers) of truss to i b uplift at join rt 4. ith the 2018 R502.11.1 at ISI/TPI 1.	is ds. psf m ont 1, nd					
TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=102 II; Exp 8; and C-C 1 exposed; members 3) Truss de only. For see Stand or consult 4) TCLL: AS Plate DOU DOL=1.12 Cs=1.00;	Tension 1-2=-88/187, 2-3=-E 1-4=-148/134, 3-4=- 2-4=-355/168 ed roof live loads have n. CE 7-16; Vult=130mpf 3mph; TCDL=6.0psf, B Enclosed; MWFRS (ec Xetrerio(2E) zone; cant end vertical left and ri and forces & MWFRS VOL=1.60 plate grip DC signed for wind loads is studs exposed to wind dard Industry Gable En qualified building desi studs exposed to wind dard Industry Gable En qualified building desi Studs exposed to wind dard Industry Gable En (c) E7-16; Pr=20.0 psf (L 5); Is=1.0; Rough Cat E C(=1.10	8/187 148/134 been considered for (3-second gust) CDL=6.0psf; h=25ft; (velope) exterior zone liever left and right ght exposed;C-C for for reactions shown; L=1.60 the plane of the trus (normal to the face), d Details as applicabl gner as per ANS/ITPI of LL: Lum DOL=1. um DOL=1.15 Plate 3; Fully Exp.; Ce=0.9;	Cat. 9 Is Ie, 1. 15								SEA 0363	ROLU DIE EERFRUN LU 22

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEX 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 wrift 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 permament 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/TPI Quality Criteria and DBS-12 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	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V4	Valley	1	1	Job Reference (optional)	166914632

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:09 ID:qoZoVBf5wxpKY?J2Sw9ekpzflC1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



4x5 =



2x4 II

Scale = 1:24.8							4-1-11			\neg			
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDI	(psf) 20.0 20.0 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/T	TPI2014	CSI TC BC WB Matrix-MP	0.05 0.08 0.03	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II; Exp Bi and C-C E exposed ; members Lumber Di 3) Truss des only. For see Stand or consult 4) TCLL: ASC	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 4-1-11 oc purlins. Rigid ceiling directly for a structural wood she 4-1-11 oc purlins. Rigid ceiling directly (size) 1=4-1-11, Max Horiz 1=-37 (LC (LC 14) Max Grav 1=79 (LC (LC 21) (b) - Maximum Com Tension 1-2=-72/76, 2-3=-72 1-4=-61/69, 3-4=-61 2-4=-156/67 ed roof live loads have n, 2E 7-16; Vult=130mph imph; TCDL=6.0psf; B Enclosed; MWFRS (er Exterior(2E) zone; canti end vertical left and rig and forces & MWFRS CU=1.60 plate grip DO signed for wind loads is studs exposed to wind lard Industry Gable Enn qualified building desig tuds exposed to wind lard Industry Gable Enn qualified building desig () Is=1.0; Pi=20.0 psf (L 5; Is=1.0; Rough Cat B Ct=1.10	athing directly applied applied or 6-0-0 oc 3=4-1-11, 4=4-1-11 :10) 4(), 3=-8 (LC 15), 4=- 20), 3=79 (LC 21), 4= pression/Maximum (76 69 been considered for (3-second gust) DDL=6.0psf, h=25ft; (welope) exterior zone lever left and right fit exposed;C-C for for reactions shown; L=1.60 the plane of the trus (normal to the face), d Details as applicabl gner as per ANS/ITP) of LL: Lum DDL=1. um DDL=1.15 Plate ; Fully Exp.; Ce=0.9;	5) L 6) C 7) C 8) T c 3 c 10) F -25 & b -25 & b	Jhbalanced Jable studs: Gable requirs Gable studs: This truss ha hord live local This truss ha thore of the truss ha on the bottor 9-06-00 tall the hord and ar Provide med bearing plated B lo uplift at j This truss is B lo uplift at j This truss is 802.10.2 at D CASE(S)	snow loads have I es continuous bott spaced at 4-0-0 or s been designed in onconcurrent ias been designec n chord in all area y 2-00-00 wide wi y other members. int 3 and 25 lb up designed in accor Residential Code di referenced star Standard	been corr c. c. for a 10.1 with any for a live s where s where in (by oth anding to (by oth anding to (by oth anding to (by oth and and the sections dance w sections dance w sections	nsidered for th d bearing.) psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss to Ib uplift at join nt 4. ISU/TPI 1.	is ds. psf m o tt 1, nd					BOARD AND AND AND AND AND AND AND AND AND AN

July 18,2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEX 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 wrift 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 permament 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/TPI Quality Criteria and DBS-12 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com) REN 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V5	Valley	1	1	Job Reference (optional)	166914633

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:09 ID:AfCji4WKk_AUC2bLvHz8jpz6RQA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:40.8

Scale = 1.40.6										
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf 20.0 20.0 10.0 0.0 10.0	 Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code 	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC 0.32 BC 0.12 WB 0.10 Matrix-MSH	DEFL in Vert(LL) n/a Vert(TL) n/a Horiz(TL) 0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 55 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 80T CHORD WIGI: ASC Vasd=103 II; Exp 8; E and C-C E 3-6-2, Ext 10-0-0, Ext and right e C for mem shown; Lut	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood (6-0-0 oc purlins. Rigid ceiling dire bracing. (size) 1=12- 6=12- 8=12- Max Upilift 1=-28 Max Upilift 1=-28 Max Upilift 1=-28 (lb) - Maximum C Tension 1-2=-134/109, 2- 4-5=-105/68 1-8=-40/82 3-7=-189/0, 2-8= d roof live loads ha E 7-16; Vult=130n mph; TCDL=6.0psi kterior(2E) 0-0-5 tc trior(2R) 3-6-2 to 9 etrior(2E) 0-0-5 tc xposed ; end vertic bers and forces & mber DOL=1.60 pi	Sheathing directly applied ctly applied or 10-0-0 or 11-11, 5=12-11-11, 11-11, 7=12-11-11, 11-11 (LC 10), 6=-142 (LC 15 5 (LC 14) (LC 21), 7=274 (LC 24), (LC 21), 7=274 (LC 21) (LC 20), 5=84 (LC 24), (LC 21), 7=274 (LC 21) (LC 20), 7=274 (LC 21) (LC 20), 7=274 (LC 21) (LC 20), 7=274 (LC 21), (LC 20), 5=84 (LC 24), (LC 20), 5=84 (LC 24), (LC 21), 7=274 (LC 24), (LC 21), 7=274 (LC 24), (LC 20), 5=84 (LC 24), (LC 20), 6=-142 (LC 24), (LC 21), 7=274 (LC 24), (LC 20), 6=-142 (LC 24), (LC 25), 7=274 (LC 25), (LC 25), 7=274 (LC 25), (L	 3) Truss desig only. For st see Standar or consult q 4) TCLL: ASC Plate DOL= DOL=1.15); Cs=1.00; Ct 5) Unbalanced design. 6) Gable requin 7) Gable studs 8) This truss h chord live lo 9) * This truss on the botto 306-00 tall chord and a 10) Provide mee bearing plat 11) This truss is internationa R802.10.2 a LOAD CASE(S) 	ned for wind loads in the p udds exposed to wind (norm d Industry Gable End Deta ualified building designer a E 7-16; PT=20.0 psf (toth L1 1.15); Pt=20.0 psf (toth L1 1.15); Pt=20.0 psf (toth L1 1.15); pt=20.0 psf (toth L1 1.10) snow loads have been cor- res continuous bottom choi spaced at 4-0-0 oc. as been designed for a 10. ad nonconcurrent with any has been designed for a 11 m chord in all areas where by 2-00-00 withstanding 2 that a connection (by oth e capable of withstanding 2 ilift at join 8 and 142 lb upli designed in accordance w I Residential Code section: ind referenced standard At 9 Standard	lane of the truss lane of the truss all to the face), iils as applicable, s per ANSI/TPI 1. :: Lum DOL=1.15 DL=1.15 Plate (Exp.; Ce=0.9; nsidered for this rd bearing. 0 psf bottom other live loads. e load of 20.0psf a rectangle ween the bottom eters) of truss to 28 lb uplift at joint ft at joint 6. thit the 2018 s R502.11.1 and VSI/TPI 1.				SEA 0363 0361 0363	
WARN Design va a truss sy building of is always fabricatio and BCS	ING - Verify design para alid for use only with Mi stem. Before use, the t lesign. Bracing indicate required for stability an n, storage, delivery, ere st Building Componen	meters and READ NOTES ON Tek® connectors. This design uilding designer must verify th di sto prevent buckling of ind d to prevent collapse with pos ction and bracing of trusses a t Safety Information availab	THIS AND INCLUDED MITEK R is based only upon parameters e applicability of design param ividual truss web and/or chord sible personal injury and prope nd truss systems, see ANSIT le from the Structural Building	REFERENCE PAGE MII-7473 rev s shown, and is for an individual bi leters and properly incorporate thi members only. Additional tempor rty damage. For general guidance PI1 Quality Criteria and DSB-22 Component Association (www.sbc	1/2/2023 BEFORE USE. uilding component, not s design into the overall ary and permanent bracing e regarding the available from Truss Plate acomponents.com)	Institute (w	vww.tpinst.	org)	818 Soundside F Edenton, NC 275	NCO Ashirkathara Goad 932

Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V6	Valley	1	1	Job Reference (optional)	166914634

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:09 ID:esm5vPXyVIILqCAXS_UNG0z6RQ9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

GRIP 244/190

FT = 20%





				L		1	0-6-14					ł
Scale = 1:36.5												
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCCL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MSH	0.55 0.49 0.24	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 40 lb
LUMBER TOP CHORD SOT CHORD DTHERS BRACING TOP CHORD BOT CHORD BOT CHORD FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=10-6-1 Max Horiz 1=99 (LC Max Uplift 1=-69 (LC Max Grav 1=99 (LC (LC 20) (lb) - Maximum Corr Tension 1-2=-136/434, 2-3=- 1-4=-201423, 3-4=- 2-4=-740/303	athing directly applied applied or 6-0-0 oc 4, 3=10-6-14, 4=10-6- 13) :21), 3=-69 (LC 20), C 14) 20), 3=79 (LC 21), 4= pression/Maximum 136/434 290/192	د ا or 14 14 14 114 114	4) TCLL: ASCE Plate DOL=1 DOL=1.15; Cs=1.00; Ct 5) Unbalanced design. 6) Gable requir 7) Gable studs: a) This truss ha chord live loc a) "This truss ha chord live loc a) "This truss ha chord live loc bearing plate 1, 69 lb uplift (1) This truss is: International R802.10.2 at CAD CASE(S)	7-16; Pr=20.0 ps 1.5); Pf=20.0 ps s=1.0; Rough Ca s=1.0; Rough Ca snow loads have as continuous bol spaced at 4-0-0 c s been designed d nonconcurrent as been designed d nonconcurrent as been designed n chord in all aree anical connectio capable of withs at joint 3 and 13(d referenced sta Standard	of (roof LL (Lum DC t B; Fully been cor tom chor ic. for a 10.1 with any d for a 10.1 with any d for a liv is where rill fit betv n (by oth tanding 6 D lb uplift dance w s sections ndard AN	.: Lum DOL= DL=1.15 Plate Exp.; Ce=0.5 nsidered for th d bearing. D psf bottom other live load e load of 20.0 a rectangle ween the bottom ween the bottom seificial discrete for the set is bup inft at j at joint 4. the the 2018 s. R502.11.1 a kSI/TPI 1.	I.15 ; ds. Dpsf pom point nd				
NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=103 II; Exp B; and C-C I to 7-7-3, I and right C for men shown; Lu	ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Bi Enclosed; MWFRS (er Exterior(2E) 0-0-5 to 3- Exterior(2E) 7-7-3 to 10 exposed; end vertical hobers and forces & MW mber DOL=1.60 plate	been considered for (3-second gust) CDL=6.0psf; h=25ft; C velope) exterior zone 0-5, Exterior(2R) 3-0- -7-3 zone; cantilever eft and right exposed; (FRS for reactions grip DOL=1.60	Cat. 5 left ;C-								Â	SE/ 036

 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.







Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V7	Valley	1	1	Job Reference (optional)	166914635

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:09 ID:IKj2z0KoemxLayU_7484GEz6RNr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





	1.00	-	

Scale = 1:30.7													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 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	8/TPI2014	CSI TC BC WB Matrix-MP	0.35 0.34 0.12	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 31 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD SO CHORD BOT CHORD IN Ibalancic Chord BOT CHORD II: Exp B: 1 and C-C E and right e c for mer shown; LU 3) Truss design or consult or consult or consult or consult	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 8-2-2 cc purlins. Rigid ceiling directly bracing. (size) 1=8-2-2, 3 Max Horiz 1=76 (LC Max Upilt 1=-37 (LC Max Grav 1=92 (LC (LC 20) (lb) - Maximum Com Teastropy (LC	athing directly applie applied or 6-0-0 oc 3=8-2-2, 4=8-2-2 11) 20), 3=37 (LC 20), 14) 20), 3=92 (LC 21), 4 pression/Maximum 115/291 225/176 been considered for (3-second gust) (3-second gust) CDL=6.0ps; h=25ft; tvelope) exterior zon 0-5, Exterior(2R) 3-0 4-6 zone; cantilever left and right expose (FRS for reactions grip DOL=1.60 n the plane of the tru (normal to the face) d Details as applicat gner as per ANSI/TF	4) 4) 5) 6) 7) 8) 9) 4=642 10) 11) 11) LO r Cat. 12 LO r Cat. 12 12 13 13 10 11) LO r 11) 11) 12 12 12 12 12 12 12 12 12 12	TCLL: ASCE Plate DOL=1 DOL=1.15); (1 CS=1.00; Ct Unbalanced design. Gable requin Gable studs This truss ha chord live loc thord and ar provide mec bearing plate 1, 37 lb upliff This truss is International R802.10.2 ai	7-16; Pr=20.0 ps 1.5); Pf=20.0 ps is=1.0; Rough Cal 1.10 snow loads have es continuous bot spaced at 4-0-0 o is been designed ad noncourrent in as been designed n chord in all area y 2-00-00 wide with at joint 3 and 94 designed in accor capable of withst at joint 3 and 94 designed in accor Residential Code dn d referenced stan Standard	f (roof LI (Lum DC L) (Lum DC L) B; Fully been cor tom chor c. for a 10.1 with any is where is where is where in (by oth lb uplift <i>a</i> dance w sections add add AN	: Lum DOL=' L=1.15 Plate Exp.; Ce=0.9 asidered for th d bearing. D psf bottom other live loae e load of 20.0 a rectangle ween the bott ers) of truss to '1b uptif at ju ti joint 4. K502.11.1 a ISJ/TPI 1.	1.15); ds. opsf om o oint nd		A STATEMAN AND A STAT		SEA OJESS SEA SEA SEA SEA SEA SEA SEA SEA SEA	
												The Contraint	TENITE,

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. Brancing 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/TPI Quality Criteria and DBS-12 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	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V8	Valley	1	1	Job Reference (optional)	166914636

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:09 ID:7U4JE3OZEciVIty7UKFUVUz6RNI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





5-9-5

										I		
(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.14 0.16 0.05	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 21 lb	GRIP 244/190 FT = 20%
2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 5-9-5 oc purlins. Rigid ceiling directly , bracing. (size) 1=5-9-5, 3 Max Horiz 1=-53 (LC Max Upiti 3=-4 (LC 1 Max Grav 1=97 (LC 2 (LC 20) (lb) - Maximum Com	athing directly applied applied or 6-0-0 oc =5-9-5, 4=5-9-5 12) (5), 447 (LC 14) 20), 3=97 (LC 21), 4= pression/Maximum	5) 6) 7) 8) or 9) 10 379 11	Unbalanced design. Gable requin Gable studs This truss ha chord live loc * This truss h on the bottor 3-06-00 tail b chord and ar) Provide mec bearing plate and 47 lb up) This truss is International R802.10.2 at	snow loads have es continuous bot spaced at 4-0-0 o is been designed ad nonconcurrent nas been designer n chord in all area y 2-00-00 wide y other members hanical connectio capable of withsi if at joint 4. designed in accor Residential Code d referenced stat	been cor tom chor ic. for a 10.0 with any d for a liv as where ill fit betw n (by oth tanding 4 rdance w sections ndard AN	usidered for th d bearing.) psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t lb uplift at joi (th the 2018 R502.11.1 a ISI/TPI 1.	ds. Dpsf om nt 3 nd					

LOAD CASE(S) Standard

BOT CHORD 1-4=-117/114, 3-4=-117/114 2-4=-286/137 WEBS NOTES

Scale = 1:26.7 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING TOP CHORD

FORCES

TOP CHORD

BOT CHORD

REACTIONS (size)

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2

(lb) - Maximum Tension

TCDL

BCLL

BCDL

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

1-2=-87/146, 2-3=-87/146

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

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10



Page: 1





Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V9	Valley	1	1	Job Reference (optional)	166914637

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:09 ID:AUqG_4VZIFI169OkIPyqFHzfICD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





2x4 💊

2x4 🍫

3-4-8	

Scale = 1:23.7		
Plate Offeets (X	V)·	12.0.2.8

Plate Offsets (X, Y): [2:0-	2-8,Edge]											
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.09 0.08 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 10 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP Ne BOT CHORD 2x4 SP Ne BACING TOP CHORD Structural 3-4-8 oc p BOT CHORD Rigid cells bracing. REACTIONS (size) Max Uplift Max Grav FORCES (b) - Max: Tension TOP CHORD 1-22-204/ BOT CHORD 1-204/ BOT CHORD 1-204/	o.2 o.2 wood she purlins. ing directly 1=3-4.8, : 1=-29 (LC 1=-11 (LC 1=-157 (LC imum Com 79, 2-3=-2 47 oads have It=130mph =6.0psf; 1 BWFRS (er 20.0 psf (L 20.0 psf (L) 20.0 psf (L 20.0 psf (L) 20.0 psf (L) 20	athing directly applie applied or 10-0-0 oc 3=3-4-8 10) 14), 3=-11 (LC 15) 2 20), 3=157 (LC 21) pression/Maximum 04/79 been considered for (3-second gust) CDL=6.0psf, h=25ft; tvelope) exterior zon (cDL=6.0psf, h=25ft; tvelope) exterior zon (16 second gust) CDL=6.0psf, h=25ft; tvelope) exterior zon (16 second gust) deven et and right ght exposed;C-C for for reactions shown; L=1.60 the face) d Details as applicab gner as per ANS/ITP d Details as applicab gner as per ANS/ITP of LL: Lum DOL=1 um DOL=1.15 Plate 3; Fully Exp.; Ce=0.9; sen considered for thi m chord bearing.	7) Gable stu 8) This truss chord ilw 9) * This trus on the bo 3-06-00 tr chord and 10) Provide n bearing p 1 and 11 11) This truss internatio R802.10. LOAD CASE Cat. e SS Sec. 11. .15 ; is	ds spaced at 4-0-0 has been designed load nonconcurren is has been design tom chord in all are any other member ischartical connecti ate capable of with b uplift at joint 3. is designed in acco and Residential Cod 2 and referenced st S) Standard	oc. I for a 10.1 t with any ed for a liv as where will fit betv s. on (by oth standing ' ordance w e sections andard AN	0 psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss te 1 lb uplift at jc ith the 2018 is R502.11.1 ar USI/TPI 1.	ds. psf m o int nd		A second second		SEA OSESS SEA SEA SEA SEA SEA SEA SEA SEA SEA	22 EEPER 11, BER 11, 8, 2024
WARNING - Verify der Design valid for use onl a truss system. Before i building design. Bracin is always required for st fabrication, storage, del and BCSI Building Co	sign parameter ly with MiTekt use, the build g indicated is tability and to livery, erectio component Sa	ers and READ NOTES ON ¹ © connectors. This design ing designer must verify th to prevent buckling of indi- prevent collapse with pose- n and bracing of trusses and fety Information available	THIS AND INCLUDED MITE is based only upon parame the applicability of design partividual truss web and/or cho sible personal injury and pri nd truss systems, see ANS le from the Structural Buildi	K REFERENCE PAGE M ters shown, and is for an ameters and properly inc rd members only. Additi operty damage. For gene I/TPI1 Quality Criteria a ng Component Association	II-7473 rev. 1 individual bu corporate this onal tempora eral guidance and DSB-22 on (www.sbc	/2/2023 BEFORE iliding components a design into the o ary and permanen e regarding the available from Tr acomponents.con	USE. ;, not verall t bracing uss Plate n)	Institute (v	vww.tpinst	t.org)	818 Soundside Edenton, NC 27	Ring By ANIER Athlate Road 932



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								13-0-8						
Scale = 1:26.7 Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	1-11-4 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.27 0.25 0.06	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 8	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 42 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD DTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N Structural 10-0-0 oc Rigid ceili bracing. (size) Max Horiz Max Uplift Max Grav	0.2 0.2 0.3 I wood sh purlins. ing directi 1=13-0-i 7=13-0-i 1=31 (Lt 1=31 (Lt 1=31 (Lt 1=-147 (t) 6=-770 (t) 8=472 (t)	eathing directly applie ly applied or 6-0-0 oc 8, 5=13-0-8, 6=13-0-8 2, 14) C 10), 5=-18 (LC 15), C 15), 8=-71 (LC 14) C 20), 5=147 (LC 21) C 20), 5=147 (LC 21) C 20), 7=133 (LC 21) C 20)	3) 4) d or 5) , 6) 7) 8) 8) 9)	Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); (Cs=1.00; Ct Unbalanced design. Gable studs This truss ha chord live loc * This truss ha chord live loc on the botton 3-06-00 tall t	left or wind load ds exposed to wi I Industry Gable i alfied building de 7-16; Pr=20.0 pp 1.5); Pf=20.0 pp 5-10; Rough C2 1.10 snow loads have as continuous bo spaced at 2-0-0 s been designed in onconcurrent tas been designed n chord in all are y 2-00-00 wide w	s in the pl nd (norm End Detaissigner as signer as sif (roof LL (Lum DC t B; Fully been cor- tor for a 10.0 with any d for a liv as where rill fit betw	ane of the tru al to the face Is as applical per ANSI/TF L=1.15 Plate Exp.; Ce=0.9 sidered for th d bearing. 0 psf bottom other live loa a load of 20.0 a rectangle recen the botto	uss), ble, Pl 1. 1.15 ; ; ; ; ds. Opsf om				Trogina vz iz	
FORCES	(lb) - Max Tension 1-2=-235/ 4-5=-235/	imum Co /258, 2-3=	mpression/Maximum =-25/206, 3-4=-25/206	10 <u>)</u>) Provide mec bearing plate 1, 18 lb uplift	hanical connection capable of withs at joint 5, 71 lb u	n (by oth tanding 1 plift at joi	ers) of truss t 4 Ib uplift at j nt 8 and 70 lb	o oint o					
BOT CHORD WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=103 II; Exp B; and C-C Q 3-1-12 to 9-8-0 to 1 cantilever right expo for reactic DOL=1.6(1-8206, 5-6206/ 3-7168/ ed roof live I n. CE 7-16; Vu mph; TCDL Enclosed; N. Corner(3E) C 3-8-0, Corne Jones Alexandright sed; C-C for nos shown; L	(213, 7-8= (213) (82, 2-8=- oads hav It=130mp; =6.0psf; IWFRS (c) -1-12 to 3 er(3R) 3-6 er(3E) 10- t expose members .umber D	-206/136, 6-7206/1 317/196, 4-6=-317/19 e been considered for h (3-second gust) BCDL=6.0psf, h=25ft; anvelope) exterior (20 3-1-12, Exterior(2) 3-0 to 9-8-0, Exterior(2 2-24 to 13-2-4 zonle; d : end vertical left and s and forces & MWFR; OL=1.60 plate grip	6 LC Cat. e N) 5 S) This truss is International R802.10.2 au AD CASE(S)	designed in acco Residential Codé di referenced sta Standard	rdance wi	th the 2018 R502,11.1 a SI/TPI 1.	nd		A statistical and the state of	and the second s	SEA 0363	

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 cludge with possible personal injury and properly damage. For general guidance regarding the farbrication, storage, delivery, erection and bracing of trusses and russ systems, see **ANSI/TPI1 Quality** Griteria and **DSP2** zavilable form Truse Plate Institute (www.tpinst.org) and **BCSI Building Component Safey Information** available from the Structural Building Gromponent, Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	178 Serenity-Roof-B327 A COP GLH	
24060222-01	V11	Valley	1	1	Job Reference (optional)	166914639

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Wed Jul 17 07:18:09 ID:XA6kT_M1aZnkgJTR2uk0mlzfICP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





							9-2-0						4
Scale = 1:25.5												1	-
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MSH	0.27 0.31 0.09	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 27 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II; Exp B; E and C-CE to 54-11, 1 left and rig exposed;C reactions 60 3) Truss des only. For s see Sonly. For s	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 9-2-0 oc purlins. Rigid ceiling directly bracing. (size) 1=9-3-8, (size) 1=9-3, (size) 1=9, (size) 1	athing directly applie applied or 6-0-0 oc 3=9-3-8, 4=9-3-8 14), 3=-6 (LC 20), 4 C 20), 3=81 (LC 21), C 1) pression/Maximum 171/325 290/189 been considered for (3-second gust) CDL=6,0ps; h=25ft; welope) exterior zon 0-0, Exterior(2R) 3-0 CDL=6,0ps; cantile cal left and right orces & MWRS for 1.60 plate grip h the plane of the tru (normal to the face) gner as per ANSI/TF	4 4 4 4 4 4 4 4 4 4 4 4 4 4	 TCLL: ASCE Plate DOL=⁻¹ DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable requir Gable studs This truss ha chord live loo This truss in on the botton 3-06-00 tall chord and al Provide mec bearing plat 1 One H2.5A s recommend UPLIFT at ji does not cor Beveled plat surface with This truss is International R802.10.2 a CAD CASE(S) 	7-16; Pr=20.0 ps 1.15; Pr=20.0 ps 1.15; Pr=20.0 ps 1.15; Pr=20.0 ps 1.10; Rough Ca 1.10 snow loads have es continuous bol as been designed ad nonconurrent has been designed ad nonconurrent in als been designed m chord in all aree capable of withs biff at joint 3. Simpson Strong-T ed to connect trus (s) 4. This connece to russ chord at joint designed in accor Residential Code truss chord at joint designed in accor Residential Code Standard	f (roof LL (Lum DC L (Lum DC L B; Fully) been cort tom choor to tom choor tom ch	L: Lum DOL=: DL=1.15 Plate (Exp.; Ce=0.9) Insidered for the rd bearing. 0 psf bottom other live load (e load of 20.0 a rectangle ween the botton arectangle ween the botton ters) of truss the ctors ing walls due r uplift only an ide full bearing with the 2018 s R502.11.1 a NSI/TPI 1.	I.15 is ds. lpsf m to d d				SEA 0363 SPC A. G	RC 22 LBER 18,2024
						7470						70	1012.0276

A WANING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PACE MII-747 rev. 1/2/2023 BEFORE USE. Design valid for use only with MTER& 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 bucking of individual truss web and/or chord members only. Additional temporary and permaments thrang 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/TPI 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.sbcacomponent.scm)



