

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 25030171-01 900 Serenity-Roof-B326 A CP TRAY 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: I72213077 thru I72213114

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

North Carolina COA: C-0844



Johnson, Andrew

March 25,2025

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLB8	Valley	1	1	Job Reference (optional)	172213077

2-4-14

2-4-14

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:05 ID:vFTOYoza1WjXT9L6tv8uVZzRQre-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-5-11

2-0-12

4-9-13

3

Page: 1

4x5 = 2 1-8-10 12 10 Г 2-0-5 0-0-4 Λ 2x4 🛚 2x4 🎣 2x4 💊 4-9-13

Scale = 1:26

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL		10.0	Rep Stress Incr	YES		WB	0.04	Horiz(TL)	0.00	4	n/a	n/a		
BCLL		0.0*	Code	IRC2021	I/TPI2014	Matrix-MP								
BCDL		10.0											Weight: 17 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No 2x4 SP No 2x4 SP No Structural 4-9-13 oc Rigid ceilin bracing. (size) Max Horiz	0.2 0.2 0.3 wood shea purlins. ng directly 1=4-9-13, 1=-43 (I C	athing directly applie applied or 6-0-0 oc 3=4-9-13, 4=4-9-13 10)	5) 6) 7) 8) d or 9) 10	Unbalanced design. Gable require Gable studs This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an) Provide mecl	snow loads have b es continuous botto spaced at 4-0-0 oc s been designed fo d nonconcurrent v as been designed n chord in all areas y 2-00-00 wide wil y other members. nanical connection	been cor com chor com a 10.4 vith any for a liv s where l fit betv (by oth	nsidered for the d bearing. D psf bottom other live loa e load of 20.0. a rectangle veen the botto ers) of truss t	his Ids. Dpsf om					
	Max Horiz 1=-43 (LC 10) Max Uplift 3=-7 (LC 15), 4=-33 (LC 14) Max Grav 1=88 (LC 20), 3=88 (LC 21), 4=292 (LC 20) Max Uplift at joint 4. LOAD CASE(S) Standard													
FORCES	(lb) - Maxi Tension	mum Com	pression/Maximum											
TOP CHORD BOT CHORD WEBS	1-2=-80/10 1-4=-82/8 2-4=-207/9	02, 2-3=-80 7, 3-4=-82/ 95	D/102 /87											
NOTES														
 Unbalanc this desig Wind: AS Vasd=100 II; Exp B; and C-C I exposed ; members Truss des only. For see Stand or consult TCLL: AS Plate DOI 	ed roof live k n. CE 7-16; Vul 3mph; TCDL= Enclosed; M Exterior(2E) z ; end vertical and forces & 00L=1.60 pla signed for wir studs expos dard Industry t qualified bui CCE 7-16; Pr= L=1.15; Pf=2	t=130mph =6.0psf; B0 WFRS (en cone; canti left and rig WFRS (en cone; canti left and rig te grip DO doads in ed to wind Gable En cilding desig =20.0 psf (L 20.0 psf (L	been considered for (3-second gust) CDL=6.0psf; h=25ft; velope) exterior zond lever left and right ht exposed;C-C for for reactions shown; L=1.60 the plane of the trus (normal to the face), d Details as applicab ner as per ANS/TPP roof LL: Lum DOL=1 m DOL=1.15 Plate	Cat. s le, 11. 15								J.K.	SEA 4584	ROLLAN L
DOL=1.15 Cs=1.00;	5); Is=1.0; Rc Ct=1.10	bugh Cat B	; Fully Exp.; Ce=0.9;									111	PREW J	OHNSUIT

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



818 Soundside Road Edenton, NC 27932

Junin Junin March 25,2025

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLD6	Valley	1	1	Job Reference (optional)	172213078

2-5-11

2-5-11

Carter Components (Sanford, NC), Sanford, NC - 27332,

2-1-0

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:06 ID:CgVkHRtdMZAuzhaXm9_U1OzRQqT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-7-4

2 - 1 - 9

4x5 = 2

4-11-6

4-11-6

Page: 1

12 10 Г 1-9-5 3 0-0-4 4 2x4 🥠 2x4 🛚 2x4 💊

Scale = 1:26.2

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	() 2 1 1	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 IRC202	21/TPI2014	CSI TC BC WB Matrix-MP	0.09 0.11 0.04	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: 18 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural word 4-11-6 oc purior Rigid ceiling of bracing. (size) 1=4 Max Horiz 1=4 Max Uplift 3=5 Max Grav 1=4 (LC 	od shea lins. directly 4-11-6, 44 (LC -7 (LC 1 89 (LC 2 221)	athing directly applie applied or 6-0-0 oc 3=4-11-6, 4=4-11-6 13) 5), 4=-35 (LC 14) 20), 3=89 (LC 21), 4	5 6 7 8 ed or 9 1 1 1	 Unbalanced design. Gable requiri Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and at bearing plate and 35 lb upl OAD CASE(S) 	snow loads have es continuous bc spaced at 4-0-0 s been designed an conconcurren nas been designe n chord in all are yy 2-00-00 wide v hanical connecti c capable of withs ift at joint 4. Standard	be been cor octom chor oc. If for a 10.0 t with any ed for a live as where will fit betw s. on (by oth standing 7	sidered for the d bearing.) psf bottom other live load e load of 20.0 a rectangle veen the botthers) of truss i lb uplift at jo	his ads. Opsf om to sint 3					
FORCES	(lb) - Maximur Tension	m Com	pression/Maximum											
TOP CHORD BOT CHORD WEBS	1-2=-82/108, 2 1-4=-87/91, 3 2-4=-218/101	2-3=-82 -4=-87/	2/108 91											
NOTES 1) Unbalance this desig 2) Wind: AS Vasd=103 II; Exp B; and C-C I exposed	ed roof live loads n. GE 7-16; Vult=13 3mph; TCDL=6.0 Enclosed; MWF Exterior(2E) zone : end vertical left	s have 30mph Dpsf; BC RS (en e; cantil	been considered for (3-second gust) DL=6.0psf; h=25ft; velope) exterior zon lever left and right ht exposed:C-C for	Cat. e							6	Lul X	ORTH CA	ROUT

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

members and forces & MWFRS for reactions shown;

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

Summer 1. . SEAL 45844 1111111111 March 25,2025

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



Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLB7	Valley	1	1	Job Reference (optional)	172213079

3-7-5

3-7-5

Carter Components (Sanford, NC), Sanford, NC - 27332,

Loading

TCDL

BCLL

BCDL

WFBS

NOTES

1)

2)

3)

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 12:40:05 ID:vFTOYoza1WjXT9L6tv8uVZzRQre-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

> 4x5 =2

> > 10

9

6-10-8

3-3-3



3-0-5 12 10 Г 3 4 2x4 ı 3x5 🖌 3x5 💊 7-2-10 Scale = 1:29.1 2-0-0 CSI DEFL l/defl L/d PLATES GRIP (psf) Spacing in (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.26 Vert(LL) n/a n/a 999 MT20 244/190 Snow (Pf) 20.0 1 15 BC Lumber DOL 0.26 Vert(TL) n/a n/a 999 10.0 Rep Stress Incr YES WB 0.09 Horiz(TL) 0.00 4 n/a n/a 0.0 Code IRC2021/TPI2014 Matrix-MP 10.0 Weight: 27 lb FT = 20%TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 LUMBER 4) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 2x4 SP No.3 Cs=1.00; Ct=1.10 OTHERS Unbalanced snow loads have been considered for this 5) BRACING desian. Structural wood sheathing directly applied or TOP CHORD Gable requires continuous bottom chord bearing. 6) 7-2-10 oc purlins. 7) Gable studs spaced at 4-0-0 oc. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc 8) This truss has been designed for a 10.0 psf bottom bracing. chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf **REACTIONS** (size) 1=7-2-10, 3=7-2-10, 4=7-2-10 9) Max Horiz 1=-67 (LC 10) on the bottom chord in all areas where a rectangle 1=-17 (LC 21), 3=-17 (LC 20), Max Uplift 3-06-00 tall by 2-00-00 wide will fit between the bottom 4=-73 (LC 14) chord and any other members. Max Grav 1=105 (LC 20), 3=105 (LC 21), 10) Provide mechanical connection (by others) of truss to 4=530 (LC 20) bearing plate capable of withstanding 17 lb uplift at joint FORCES (lb) - Maximum Compression/Maximum 1, 17 lb uplift at joint 3 and 73 lb uplift at joint 4. Tension LOAD CASE(S) Standard TOP CHORD 1-2=-88/228, 2-3=-88/228 1-4=-178/151, 3-4=-178/151 BOT CHORD 2-4=-419/199Unbalanced 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 Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 4-2-14, Exterior(2E) 4-2-14 to 7-2-14 zone; cantilever left and right exposed ; end vertical left and right SEAL exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 45844 DOL=1.60 Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable or consult qualified building designer as per ANSI/TPI 1. minin March 25,2025 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall bilding design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) 818 Soundside Road and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com) Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	1	
25030171-01	VLD5	Valley	1	1	Job Reference (optional)	172213080	

3-8-2

3-8-2

Carter Components (Sanford, NC), Sanford, NC - 27332,

2-9-5

3-1-0

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:05 ID:CgVkHRtdMZAuzhaXm9_U10zRQqT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

7-0-1

3-4-0

3

3x5 💊



4x5 =

7-4-3



Scale = 1:29.3

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 IRC202	1/TPI2014	CSI TC BC WB Matrix-MP	0.27 0.27 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	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 7-4-3 oc purlins. Rigid ceiling directly bracing. (size) 1=7-4-3, Max Horiz 1=68 (LC Max Uplift 1=-19 (LC 4=-76 (LC Max Grav 1=105 (LI 4=545 (LI (lb) - Maximum Con Tension 1-2=-92/236, 2-3=-9	eathing directly applie y applied or 6-0-0 oc 3=7-4-3, 4=7-4-3 (11) (21), 3=-19 (LC 20), (24) (20), 3=105 (LC 21) (20) (20) (20) (22) (2) (4) 5) ed or 6) 7) 8) 9)), 10	TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. Gable requiri Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar)) Provide mec bearing plate 1, 19 lb uplift DAD CASE(S)	7-16; Pr=20.0 psf (15); Pf=20.0 psf (ls=1.0; Rough Cat =1.10 snow loads have b es continuous both spaced at 4-0-0 oc s been designed fad nonconcurrent v has been designed n chord in all areas by 2-00-00 wide wil y other members. hanical connection capable of withstat at joint 3 and 76 ll Standard	(roof LL Lum DC B; Fully been cor om chor c. or a 10.0 with any for a liv s where Il fit betw a (by oth anding 1 b uplift a	:: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9 isidered for th d bearing. D psf bottom other live load o other live load o other live load o f 20.0 a rectangle veen the botto ers) of truss to 9 lb uplift at jc t joint 4.	.15 ; is Js. psf m o					
BOT CHORD WEBS	1-4=-184/155, 3-4=- 2-4=-432/204	-184/155											
NOTES													
1) Unbalance this design	ed roof live loads have n.	been considered for	r										inin,

- 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) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 4-4-8, Exterior(2E) 4-4-8 to 7-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.

SEAL 45844 MGINEEP, 60



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Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	PBA2	Piggyback	2	4	Job Reference (optional)	172213081

5-11-7

5-11-7

Carter Components (Sanford, NC), Sanford, NC - 27332,

0-11-1

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:04

Page: 1 ID:m2dQdjvppkexqPVgwg5aZPzRCX1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 12-9-15 11-10-14 0-11-1 5-11-7 4x5 =



Cool		1.04	
SUd	ie =	1	1.52

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 IRC2021/TP	I2014	0.07 0.03 0.02 ISH	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 15	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190 ET = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=11-10- 8=11-10- 10=11-10 Max Horiz 2=52 (LC (LC 15), ' Max Grav 2=86 (LC (LC 22), S	eathing directly applie r applied or 10-0-0 oc 14, 6=11-10-14, 14, 9=11-10-14, 1-14 18) C 15), 6=-4 (LC 11), 8 10=-87 (LC 14) 1), 6=86 (LC 1), 8=4 9=302 (LC 21), 10=42	4) Wi Va II; an 3- to ca rig for DC 5) Tr or se e=-87 6) TC 23 DC 23 Cs	ind: ASCE 7-16; Vult: isd=103mph; TCDL= Exp B; Enclosed; MV d C-C Exterior(2E) 0 11-0, Exterior(2R) 3-1 10-5-13, Exterior(2E) ntilever left and right ht exposed; C-C for n reactions shown; Lu DL=1.60 uss designed for wind ly. For studs expose e Standard Industry (consult qualified buils; LL: ASCE 7-16; Pr=2i ate DDL=1.15); Is=1.0; Rot =1.00; Ct=1.10	=130mph (3-sec 6.0psf; BCDL=6 WFRS (envelope -4-3 to 3-4-3, Inf 11-0 to 9-11-0, II) 10-5-13 to 13-f exposed ; end \v nembers and for imber DOL=1.60 d loads in the pli ed to wind (norm Gable End Deta ding designer as 20.0 psf (roof LL 0.0 psf (Lum DC ugh Cat B; Fully	cond gust) .0psf; h=25ft; exterior zor ereiror (1) 3-4- interior (1) 9-1 5-13 zone; reertical left an cees & MWFR plate grip ane of the tru al to the face ils as applical s per ANSI/TF .: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9	; Cat. ne 3 to 11-0 AS Ss), bble, PI 1. 1.15 9;				wegnit. 100 ib	11-2076
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) 4-ply trus: Top chord follows: 2 Bottom ct follows: 2 2) All loads a except if f CASE(S) provided unless ott	 (ib) - Maximum Con Tension 1-2=0/17, 2-3=-53/4 4-5=-123/96, 5-6=-3 2-10=-8/47, 9-10=-2 4-9=-215/91, 3-10=- s to be connected toge ds connected with 10d x4 - 1 row at 0-9-0 oc. are considered equally noted as front (F) or ba section. Ply to ply com to distribute only loads herwise indicated. 	npression/Maximum 5, 3-4=-123/96, 13/45, 6-7=0/17 1/46, 8-9=-2/46, 6-8=- 375/198, 5-8=-375/1 ther as follows: (0.131"x3") nails as 0d (0.131"x3") nas	7) 01 de 8) Th loz ov 8/47 9) Ga 98 10) Ga 98 10) Ga 11) Th ch 12) * T on as 3-(ch 13) N// AD	is truss has been det ad of 12.0 psf or 1.00 erhangs non-concurr able requires continue able studs spaced at is truss has been det ord live load nonconc 'his truss has been d the bottom chord in 06-00 tall by 2-00-00 ord and any other me A	s have been cor signed for greatu times flat roof k rent with other lin ous bottom chor 4-0-0 oc. signed for a 10.0 current with any lesigned for a liv all areas where wide will fit betw embers.	er of min roof pad of 20.0 pe ve loads. d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto s Connection	live sf on ds. Opsf om		Continue	to a	SEA 4584	ROLL HA

Unbalanced roof live loads have been considered for 3) this design.

Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

YEW JOHNS March 25,2025



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

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	PBA	Piggyback	2	1	Job Reference (optional)	172213082

3-5-8

Scale = 1:31.5

TCLL (roof)

, ч

-4-3

(psf)

20.0

Spacing

Plate Grip DOL

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:04 ID:RPY8AW_GFKIcY3mFoYebvHzRQqK-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f

12-9-15 11-10-14 -0-11-1 5-11-7 0-11-1 0-11-1 5-11-7 5-11-7 4x5 = 5 12 6 Г 6 4 23 24 ba. 25 22 3 7 0 8 14 13 12 11 10 3x5 = 3x5 = 11-10-14 2-0-0 CSI DEFL l/defl L/d PLATES GRIP in (loc) 1.15 TC 0.08 Vert(LL) n/a n/a 999 MT20 244/190 BC 1 15 0.04 Vert(CT) n/a n/a 999 YES WB 0.04 Horz(CT) 0.00 8 n/a n/a IRC2021/TPI2014 Matrix-MSH Weight: 52 lb FT = 20%Wind: ASCE 7-16; Vult=130mph (3-second gust) LOAD CASE(S) Standard 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-3 to 3-4-3, Interior (1) 3-4-3 to 3-11-0, Exterior(2R) 3-11-0 to 9-11-0, Interior (1) 9-11-0 to 10-5-13, Exterior(2E) 10-5-13 to 13-5-13 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

Snow (Pf) 20.0 Lumber DOL TCDL 10.0 Rep Stress Incr BCLL 0.0 Code BCDL 10.0 LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 2x4 SP No.3 OTHERS BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. REACTIONS (size) 2=11-10-14, 8=11-10-14, 10=11-10-14, 11=11-10-14, only. For studs exposed to wind (normal to the face), 12=11-10-14, 13=11-10-14, see Standard Industry Gable End Details as applicable, 14=11-10-14 or consult qualified building designer as per ANSI/TPI 1. Max Horiz 2=52 (LC 18) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) Max Uplift 2=-9 (LC 15), 8=-12 (LC 15), Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate 10=-45 (LC 15), 11=-47 (LC 15), DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 13=-47 (LC 14), 14=-46 (LC 14) Cs=1.00; Ct=1.10 Max Grav 2=125 (LC 21), 8=125 (LC 22), 5) Unbalanced snow loads have been considered for this 10=240 (LC 22), 11=243 (LC 22), design. 12=143 (LC 22), 13=243 (LC 21), 6) This truss has been designed for greater of min roof live 14=240 (LC 21) load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on FORCES (Ib) - Maximum Compression/Maximum overhangs non-concurrent with other live loads. Tension All plates are 2x4 MT20 unless otherwise indicated. TOP CHORD 1-2=0/17, 2-3=-46/33, 3-4=-56/49, Gable requires continuous bottom chord bearing. 8) 4-5=-64/107, 5-6=-64/107, 6-7=-56/42, Gable studs spaced at 2-0-0 oc. 9) 7-8=-30/26, 8-9=0/17 This truss has been designed for a 10.0 psf bottom 10)BOT CHORD 2-14=-9/58, 13-14=-9/58, 12-13=-9/58, chord live load nonconcurrent with any other live loads. 11-12=-9/58, 10-11=-9/58, 8-10=-9/58 11) * This truss has been designed for a live load of 20.0psf WFBS 5-12=-102/0, 4-13=-207/121, 3-14=-183/88, on the bottom chord in all areas where a rectangle 6-11=-207/121, 7-10=-183/88 3-06-00 tall by 2-00-00 wide will fit between the bottom NOTES chord and any other members. Unbalanced roof live loads have been considered for 1) 12) N/A this design

> See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Page: 1

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Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	PBA1	Piggyback	18	1	Job Reference (optional)	172213083

1)

2)

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 12:40:04 ID:Cx19sF4HMnJTVINoGDnTDzzRQqC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



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818 Soundside Road

Edenton, NC 27932

mm March 25,2025

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	H01	Monopitch Supported Gable	2	1	Job Reference (optional)	172213084

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:03 ID:kX6Xm09JsM8Rk_RkgNonK3zRRGV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:45.8

Plate Offsets (X, Y): [2:Edge,0-0-14], [2:0-2-5,Edge], [10:0-0-8,0-1-8]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psi 20. 20. 10. 0. 10.) S D P D L D R D* C	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC202	21/TPI2014	CSI TC BC WB Matrix-MSH	0.99 0.35 0.24	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.07	(loc) - - 17	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 68 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS WEDGE BRACING TOP CHORD BOT CHORD JOINTS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Ex 2x4 SP No.3 Left: 2x4 SP No. Structural wood 6-0-0 oc purlins, Except: 9-5-0 oc bracing Rigid ceiling dire bracing. 1 Brace at Jt(s): (size) 2=100 14=10 Max Horiz 2=180 Max Uplift 2=3 (14=-1 Nax Grav 2=1 (I 13=13 15=22 17=87	scept* { 3 3 : 12-17 ctly ap 18 1-0, 12)-1-0, 1 -1-0, 1 -1-0, 1 -1-0, 1 -1-0, 1 -1-0, 1 -1-0, 1 -1-0, 1 -1,	B-12:2x4 SP No.2 and directly applied ot end verticals. pipled or 6-0-0 oc 2=10-1-0, 13=10-1- 5=10-1-0, 16=10-7 0) 1, 12=-69 (LC 21), 10), 15=-155 (LC 1 14) 12=34 (LC 10), 1), 14=172 (LC 1), 21), 16=234 (LC 2) 21)	1 or 2 -0, 3 -0, 4 (-0, 4 (-0, -0, -0)	OTES) Wind: ASCE Vasd=103mg II; Exp B; End and C-C Cor to 16-0-0 zor vertical left a forces & MW DOL=1.60 pl) Truss design only. For stu see Standard or consult qu) TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design.) This truss ha load of 12.0 g overhangs no All plates are) Gable studs 3) This truss ha chord live los	7-16; Vult=130mpl bh; TCDL=6.0psf; E closed; MWFRS (e her(3E) -0-10-8 to : her(3E) -0-10-8 to : FRS for reactions : ate grip DOL=1.60 ed for wind loads in ds exposed to wind loads for wind loads in ds exposed to wind loads for wind loads in solutions of the second solution of the seco	n (3-sec 3CDL=6 nvelope 2-0-0, E nd right -C for r shown; n the pl d (norm nd Deta igner a: (roof LL um DC B; Fully een cor or great at roof le other li other with or a 10.1	cond gust) .0psf; h=25ft exterior 20; xterior (2N) 2 exposed; er nembers and Lumber ane of the tru al to the face ills as applica s per ANSI/T :: Lum DOL= DL=1.15 Plate Exp.; Ce=0. asidered for t er of min rooi bad of 20.0 p ve loads. se indicated. D psf bottom	(; Cat. ne 2-0-0 nd I uss)), bble, PI 1. 1.1.15 9 9; his f live usf on				WTH CA	ROLIN	
FORCES	(lb) - Maximum (Tension	Compre	ession/Maximum	9) * This truss h	as been designed	for a liv	e load of 20.	0psf		U		inter	nan	V
TOP CHORD BOT CHORD WEBS	1-2=0/17, 2-3=-6 4-5=-584/421, 5 8-9=-624/628, 9 12-17=0/0, 8-17; 2-16=-380/356, 14-15=-380/356 12-13=-380/356 3-16=-144/0, 4-1 7-13=-35/60, 17; 10-18=-800/661	665/417 7=-529 -10=-62 =-368/3 15-16= 13-14 5=-138 -18=-79 9-18=	7, 3-4=-664/425, 9/403, 7-8=-532/47 24/695, 10-11=-45, 305 380/356, =-380/356, 5/227, 5-14=-163/1 91/645, 25/25	74, /0, 1 1 151, L u	 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. 10) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface. 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 12. LOAD CASE(S) Standard 									E.P. SOLUTION	

March 25,2025



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Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	H02	Monopitch	6	1	Job Reference (optional)	172213085

Loading

TCDL

BCLL

BCDL

WEBS

WEDGE

FORCES

WEBS

NOTES

1)

2)

LUMBER

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 12:40:04 ID:nLPVeuW3K4TytrtY3ILLguzRRHK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



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Edenton, NC 27932

WWWWWWWWW

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLB6	Valley	1	1	Job Reference (optional)	172213086

4-9-11

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:05 ID:vFTOYoza1WjXT9L6tv8uVZzRQre-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4x5 =

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9-7-6

9-3-4

4-5-9

2 10 3

9-7-6

3x5 💊

Page: 1



3x5 🛷



Scale = 1:33.2

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 IRC202	1/TPI2014	CSI TC BC WB Matrix-MSH	0.45 0.42 0.18	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: 37 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood sl 9-7-6 oc purlins. Rigid ceiling direc bracing. (size) 1=9-7-6 Max Horiz 1=90 (L Max Horiz 1=90 (L Max Uplift 1=-49 (I 4=-108 Max Grav 1=95 (L (LC 21) (lb) - Maximum Co Tension	Peathing directly applie ly applied or 6-0-0 oc , 3=9-7-6, 4=9-7-6 C 11) .C 21), 3=-49 (LC 20), (LC 14) C 20), 3=95 (LC 21), 4 mpression/Maximum	4) 5) ed or 6) 7) 8) 9) , 4=771 10	TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. Gable require Gable studs: This truss ha chord live loa * This truss ha chord and ar 9) Provide mech bearing plate 1, 49 lb uplite	7-16; Pr=20.0 psf .15); Pf=20.0 psf (s=1.0; Rough Cat .1.10 snow loads have b es continuous bott spaced at 4-0-0 of been designed n chord in all areas y 2-00-00 wide wi y 2-00-00 wide wi y other members. nanical connectior capable of withsta at joint 3 and 108 Standard	f (roof LL (Lum DC B; Fully been cor com chor c. or a 10.0 with any f for a liv s where Il fit betw h (by oth anding 4 Ib uplift	L: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 Insidered for the d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botth ers) of truss 1 9 lb uplift at j at joint 4.	1.15 e 9; his dds. Opsf om to joint					
TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 II; Exp B; I and C-C E to 6-7-11, left and rig exposed;C reactions s DOL=1.60 3) Truss desi only. For see Stand or consult	1-2=-114/372, 2-3 1-4=-243/172, 3-4 2-4=-636/271 ed roof live loads hav CE 7-16; Vult=130mj mph; TCDL=6.0psf; Enclosed; MWFRS (ixterior(2E) 0-0-5 to Exterior(2E) 0-0-5 to Ex	=-114/372 =-243/172 te been considered for th (3-second gust) BCDL=6.0psf; h=25ft; envelope) exterior zon 3-0-5, Exterior(2R) 3-0 o 9-7-11 zone; cantile tical left and right forces & MWFRS for =1.60 plate grip in the plane of the trus in d Details as applicat signer as per ANSI/TF	r Cat. ne)-5 ever ss s, ole, PI 1.		Standard					Continue	A STATE OF THE STA	SEA 4584	ROLATION

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March 25,2025

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLD4	Valley	1	1	Job Reference (optional)	172213087

4-10-8

4-10-8

Carter Components (Sanford, NC), Sanford, NC - 27332,

3-9-5

0-0-4

12 10 Г

4-1-0

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:05 ID:kUxM45s?bF21LX?KCRTFVAzRQqU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

9-4-14

4-6-6

9-9-0

Page: 1

9 10 3 ٣ 4 2x4 🛛 3x5 💊 3x5 🍫 9-9-0

4x5 = 2 个

Scale = 1:33.4

Loadin TCLL Snow TCDL BCLL BCDL	ng (roof) (Pf)		(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 IRC202	1/TPI2014	CSI TC BC WB Matrix-MSH	0.46 0.44 0.19	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: 37 lb	GRIP 244/190 FT = 20%
LUMB TOP C BOT C OTHE BRAC TOP C BOT C REAC	ER CHORD CHORD RS ING CHORD CHORD TIONS	2x4 SP N 2x4 SP N 2x4 SP N Structura 9-9-0 oc j Rigid ceil bracing. (size) Max Horiz Max Uplift Max Grav	o.2 o.2 o.3 I wood she burlins. ing directly 1=9-9-0, 3 1=-91 (LC 1=-52 (LC 4=-111 (L 1=94 (LC LC 20)	athing directly applie applied or 6-0-0 oc 3=9-9-0, 4=9-9-0 2 10) 2 21), 3=-52 (LC 20), C 14) 20), 3=94 (LC 21), 4	4) 5) d or 6) 7) 8) 9) =788 10	TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct Unbalanced design. Gable requir Gable studs This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar)) Provide mec backing plate	7-16; Pr=20.0 ps 15); Pf=20.0 ps is=1.0; Rough Ca 1.10 snow loads have es continuous bo spaced at 4-0-0 (s been designed ad nonconcurrent nas been designed n chord in all are: by 2-00-00 wide v by other members hanical connectic	sf (roof LL (Lum DC at B; Fully been cor ttom chor DC. for a 10.0 with any d for a liv as where sas where s. on (by oth	:: Lum DOL=1 I)L=1.15 Plate Exp.; Ce=0.9 d bearing. D psf bottom other live load e load of 20.00 a rectangle veen the botto ers) of truss to	.15 ; is ds. psf m					
FORC	ES	(lb) - Max Tension	imum Corr	pression/Maximum		1, 52 lb uplift	at joint 3 and 11	1 lb uplift	at joint 4.	oint					
TOP C BOT C WEBS	HORD	1-2=-117/ 1-4=-249/ 2-4=-650/	/382, 2-3=- /175, 3-4=- /275	117/382 249/175		JAD CASE(S)	Standard								
1) Ur	nbalance	ed roof live l	oads have	been considered for										mun	<u>ни.</u>
thi 2) Wi Va II; an to an C sh	s design ind: ASC asd=103 Exp B; id C-C E 6-9-5, E id right e for mem own; Lu	n. CE 7-16; Vu Bmph; TCDL Enclosed; M Exterior(2E) exposed ; en bers and fo unber DOL=	It=130mph =6.0psf; B IWFRS (er 0-0-5 to 3- 6-9-5 to 9- nd vertical prces & MW =1.60 plate	(3-second gust) CDL=6.0psf; h=25ft; ivelope) exterior zono 0-5, Exterior(2R) 3-0 9-5 zone; cantilever I left and right exposed /FRS for reactions grip DOL=1.60	Cat. e -5 eft l;C-								tia	SEA	ROLL Bigkins L
3) Tri on se or	uss des Ily. For e Stand consult	igned for wi studs expos lard Industry qualified bu	nd loads in sed to wind / Gable En illding desi	the plane of the trus (normal to the face), d Details as applicab gner as per ANSI/TP	s le, l 1.								N. A.	NOREW J	EEP. ONIN

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818 Soundside Road Edenton, NC 27932

.10 minin March 25,2025

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	J01	Common	5	1	Job Reference (optional)	172213088

8-7-8

Carter Components (Sanford, NC), Sanford, NC - 27332,

4-5-5

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:04 ID:yPXMLbyKekkHSiWSIZLGINzRR58-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

17-0-8

12-9-11

Page: 1



Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLB5	Valley	1	1	Job Reference (optional)	172213089

6-0-2

6-0-2

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8 73 S Feb 19 2025 Print: 8 730 S Feb 19 2025 MiTek Industries Inc. Fri Mar 21 12:40:05 ID:vFTOYoza1WjXT9L6tv8uVZzRQre-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

> 4x5 = 3

11-8-1

5-8-0

Page: 1

GRIP

244/190

2x4 II 2x4 II 13 14 2 4 5 8 7 6 2x4 II 2x4 II 2x4 II 3x5 🛷 3x5 🔊 12-0-3 CSI DEFL l/defl L/d PLATES in (loc) TC 0.31 Vert(LL) n/a 999 MT20 n/a BC 0.12 Vert(TL) n/a n/a 999 WB 80.0 Horiz(TL) 0.00 5 n/a n/a Matrix-MSH Weight: 50 lb FT = 20%3) Truss designed for wind loads in the plane of the truss or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Unbalanced snow loads have been considered for this

- 7)

- * This truss has been designed for a live load of 20.0psf 9) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 1, 6 lb uplift at joint 5, 139 lb uplift at joint 8 and 136 lb uplift at joint 6.
- 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 bilding design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



5

⁴-8-4

12 10 Г

5-0-5

- only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable,
- Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate Cs=1.00: Ct=1.10
- 5) desian.
 - 6) Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom 8)
 - chord live load nonconcurrent with any other live loads.



4-5=-88/63 BOT CHORD 1-8=-32/75, 7-8=-31/73, 6-7=-31/73, 5-6=-31/73 WEBS 3-7=-172/0. 2-8=-401/220. 4-6=-401/220

20)

Rigid ceiling directly applied or 10-0-0 oc

7=12-0-3, 8=12-0-3

1=114 (LC 11)

1=12-0-3, 5=12-0-3, 6=12-0-3,

1=-34 (LC 10), 5=-6 (LC 11),

6=-136 (LC 15), 8=-139 (LC 14)

NOTES

FORCES

TOP CHORD

Scale = 1:39.1 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

REACTIONS (size)

bracing.

Max Horiz

Max Uplift

Max Grav

Tension

TOP CHORD BOT CHORD

TCDL

BCLL

BCDL

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 9-0-8, Exterior(2E) 9-0-8 to 12-0-8 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

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLD3	Valley	1	1	Job Reference (optional)	172213090

6-0-14

6-0-14

2x4 II

2

8

2x4 II

12 10 Г

3x5 🖌

13

Carter Components (Sanford, NC), Sanford, NC - 27332,

4-9-5

0-0-4

5-1-0

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:05 ID:kUxM45s?bF21LX?KCRTFVAzRQqU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

 $\begin{array}{c}
11-9-11 \\
5-8-12 \\
0-4-2
\end{array}$ $\begin{array}{c}
4x5 = \\
3 \\
4x5 = \\
3 \\
7 \\
2x4 \\
7 \\
2x4 \\
12-1-13
\end{array}$ $\begin{array}{c}
12-1-13 \\
5 \\
2x4 \\
3x5 \\
12-1-13
\end{array}$

Scale	- 1	1.30	3	

Loading		(psf)	Spacing	2-0-0		CSI	0.24	DEFL	in r/r	(loc)	l/defl	L/d	PLATES	GRIP
Spow (Df)		20.0	Flate Grip DOL	1.15			0.31	Vert(LL)	n/a	-	n/a	999	W120	244/190
		20.0	Lumber DOL Bon Stropp Inor	1.15 VES			0.12		11/a	-	n/a	999		
RCU		0.0*	Codo	123	1/TDI2014	Motrix MSH	0.08	110112(11)	0.00	5	II/a	11/a		
BCDL		10.0	Code	INCZUZ	1/1712014	IVIAUIX-IVIOI I							Weight: 50 lb	FT = 20%
LUMBER			•	3)	Truss desigr	ed for wind loads	in the pl	ane of the tru	SS					
TOP CHORD	2x4 SP N	0.2		,	only. For stu	uds exposed to wi	nd (norm	al to the face),					
BOT CHORD	2x4 SP N	0.2			see Standar	d Industry Gable I	End Deta	ils as applica	ble,					
OTHERS	2x4 SP N	0.3			or consult qu	alified building de	esigner a	s per ANSI/TI	PI 1.					
BRACING				4)	TCLL: ASCE	7-16; Pr=20.0 ps	sf (roof Ll	.: Lum DOL=	1.15					
TOP CHORD	Structura	l wood shea	athing directly applie	ed or	Plate DOL=1 DOL=1.15);	l.15); Pf=20.0 psf ls=1.0; Rough Ca	(Lum DC t B; Fully	DL=1.15 Plate Exp.; Ce=0.9	e Ə;					
BOT CHORD	Rigid ceil	ina directly	applied or 10-0-0 or		Cs=1.00; Ct	=1.10								
	bracing.			5)	Unbalanced	snow loads have	been cor	nsidered for the	his					
REACTIONS	(size)	1=12-1-13	3, 5=12-1-13, 6=12-1	I-13, o	design.									
	. ,	7=12-1-13	3, 8=12-1-13	· 6)	Gable requir	es continuous boi	ttom choi	d bearing.						
	Max Horiz	1=-115 (L	C 12)	()	Gable studs	spaced at 4-0-0 t	ic.	0 nof hottom						
	Max Uplift	1=-33 (LC	10), 5=-5 (LC 11),	0)	chord live lo	as been designed	with onv	othor live log	de					
		6=-136 (L	C 15), 8=-140 (LC 1	4) a)	* This trues I	as been designe	d for a liv	e load of 20 i	ius. Inef					
	Max Grav	1=94 (LC	25), 5=73 (LC 24), 6	6=434	on the hottor	n chord in all area	as where	a rectandle	5951					
		(LC 21), 7 20)	=261 (LC 21), 8=43	4 (LC	3-06-00 tall I	by 2-00-00 wide w	/ill fit betv	veen the bott	om					
FORCES	(lb) - Max	timum Com	pression/Maximum	10) Provide med	hanical connection	n (by oth	ers) of truss t	to					
TOP CHORD	1-2=-117	/101 2-3=-	216/116 3-4=-216/1	16	bearing plate	e capable of withs	tanding 3	33 lb uplift at j	oint					
	4-5=-91/6	33	2.0,0, 0 1- 210,1	,	1, 5 ID UPIIT	at joint 5, 140 lb u	ipiiπ at jo	int 8 and 136	D					
BOT CHORD	1-8=-32/7	'9, 7-8=-32/	74, 6-7=-32/74.			Oten dend								
	5-6=-32/7	74		LO	JAD CASE(S)	Standard							mun	1111
WEBS	3-7=-174	/0, 2-8=-39	7/217, 4-6=-397/217	,									I'' H CA	Rall
NOTES												N	allow	
1) Unbalance	ed roof live l	loads have	been considered for	r								her.	O'.EESS	Idia A

- Unbalanced roof live loads have been considered for this design.
 Wind: ASCE 7-16; Vult=130mph (3-second gust)
- 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) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 9-2-2, Exterior(2E) 9-2-2 to 12-2-2 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - WARNING Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPI1 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

W JON March 25,2025

SEAL

45844

Storman Storman

Summing.

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLB4	Valley	1	1	Job Reference (optional)	172213091

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 12:40:05 ID:CKtcSNrINSSyGdaBHoyY5SzRQro-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

GRIP

Weight: 62 lb

244/190

FT = 20%



LUMBER		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	Structural 6-0-0 oc p	wood sheathing directly applied or purlins.
BOT CHORD	Rigid ceili bracing.	ng directly applied or 6-0-0 oc
REACTIONS	(size)	1=14-5-0, 5=14-5-0, 6=14-5-0,
		7=14-5-0, 8=14-5-0
	Max Horiz	1=-137 (LC 10)
	Max Uplift	1=-24 (LC 10), 6=-154 (LC 15), 8=-157 (LC 14)
	Max Grav	1=123 (LC 25), 5=99 (LC 24), 6=454 (LC 21), 7=403 (LC 24), 8=454 (LC 20)
FORCES	(lb) - Max Tension	imum Compression/Maximum
TOP CHORD	1-2=-152/ 4-5=-121/	140, 2-3=-177/118, 3-4=-177/112, 105

10.0

BOT CHORD 1-8=-59/126, 7-8=-59/100, 6-7=-59/100, 5-6=-59/100 WEBS 3-7=-223/0, 2-8=-374/196, 4-6=-374/195

NOTES

Scale = 1:43.4 Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL

BCDL

- Unbalanced roof live loads have been considered for 1) this design. 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) 0-0-5 to 3-2-13, Interior (1) 3-2-13 to 4-2-13, Exterior(2R) 4-2-13 to 10-2-13, Interior (1) 10-2-13 to 11-2-13, Exterior(2E) 11-2-13 to 14-5-5 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
- Unbalanced snow loads have been considered for this 5) desian.
- 6) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc. 7)
- This truss has been designed for a 10.0 psf bottom 8)
- chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf
- 9) 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. 10) Provide mechanical connection (by others) of truss to
- bearing plate capable of withstanding 24 lb uplift at joint 1, 157 lb uplift at joint 8 and 154 lb uplift at joint 6.

LOAD CASE(S) Standard



818 Soundside Road

Edenton, NC 27932

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Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLD2	Valley	1	1	Job Reference (optional)	172213092

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:05 ID:Th_ZgqfOm8nUgyqbk?jKoVzRQuc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

14-6-10 7-3-5 14-2-8 7-3-5 6-11-3 4x5 = 3 2x4 II 2x4 II 13 14 5-9-5 6-1-0 2 4 12 10 Г 5 -0-0 *********** 8 15 7 16 6 2x4 II 2x4 II 2x4 II 3x5 🍫 3x5、 14-6-10

Scale = 1:43.7

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 IRC202	21/TPI2014	CSI TC BC WB Matrix-MSH	0.31 0.16 0.15	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 63 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood s 6-0-0 oc purlins. Rigid ceiling direc bracing. (size) 1=14-6 7=14-6 Max Horiz 1=138 Max Uplift 1=-24 & 8=158 Max Grav 1=124 & 6=456 & 8=456 (lb) - Maximum C Tension 1-2=-153/145, 2-: 4-5=-121/110	heathing directly applie tty applied or 6-0-0 oc -10, 5=14-6-10, 6=14- -10, 8=14-6-10 (LC 11) LC 10), 6=-156 (LC 15 (LC 24) (LC 25), 5=99 (LC 24) (LC 20) ompression/Maximum 3=-173/121, 3-4=-173/	3 ed or 5 6-10, 6 7 5), 8 5), 9 1), 1 111, 1	 Truss design only. For stu see Standaru or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable studs This truss ha chord live loa * This truss ha on the bottor 3-06-00 tall t chord and ar Provide mec bearing plate 1, 159 lb upl CAD CASE(S) 	hed for wind load: Jds exposed to w d Industry Gable Jalified building d 7-16; Pr=20.0 ps Is=1.0; Rough Ca =1.10 snow loads have es continuous bc spaced at 4-0-0 as been designed ad nonconcurren nas been designed ad nonconcurren has been designed been designed has been designed	s in the pl ind (norm End Deta esigner a: sf (roof Ll f (Lum DC at B; Fully been con too. I for a 10. t with any d for a liv as where with any ill fit bett s, with BC on (by oth standing 2 56 lb upli	ane of the tru lal to the face ils as applica s per ANSI/T .: Lum DOL= DL=1.15 Plate Exp.; Ce=0.1 nsidered for t rd bearing. 0 psf bottom other live loa te load of 20. a rectangle veen the bott CDL = 10.0ps ers) of truss t 24 lb uplift at j ft at joint 6.	ss ble, Pl 1. 1.15 9; his ds. Dpsf com o oint				-	
WEBS NOTES	1-8=-61/127, 7-8: 5-6=-61/101 3-7=-227/0, 2-8= ed roof live loads ba	61/101, 6-7=-61/101, 375/197, 4-6=-375/190 ve been considered fo	6 or	(-)						(. Int	ORTH CA	ROLIA

- Unbalanced root live loads have been considered this design.
 Wind: ASCE 7-16; Vult=130mph (3-second gust)
- Vind: AOCL 710, Vitte 150mph (3-second gdst) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-3-10, Interior (1) 3-3-10 to 4-3-10, Exterior(2R) 4-3-10 to 10-3-10, Interior (1) 10-3-10 to 11-3-10, Exterior(2E) 11-3-10 to 14-6-14 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - WARNING Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate link design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSUTPI1 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)



March 25,2025

SEAL

45844

Annonin

818 Soundside Road Edenton, NC 27932

Summer

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLB3	Valley	1	1	Job Reference (optional)	172213093

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 12:40:04

Page: 1

GRIP

244/190



this design. Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-5-3, Exterior(2R) 5-5-3 to 11-5-3, Interior (1) 11-5-3 to 13-10-2, Exterior(2E) 13-10-2 to 16-10-2 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

Scale = 1:50.5 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

WEBS

NOTES

1)

TOP CHORD

BOT CHORD

TCDL

BCLL

BCDL



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Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLD1	Valley	1	1	Job Reference (optional)	172213094

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:05 ID:?VRASUfm0qfd3oFPBHC5FHzRQud-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:50.8														
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 IRC202	1/TPI2014	CSI TC BC WB Matrix-MSH	0.39 0.18 0.42	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 76 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood sheat 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=16-11-6 8=16-11-6 Max Horiz 1=161 (LC Max Uplift 1=-58 (LC 9=-190 (LI Max Grav 1=83 (LC (LC 25), 8 24)	athing directly applie applied or 6-0-0 oc 5, 5=16-11-6, 6=16-1 5, 9=16-11-6 2 11) 10), 6=-184 (LC 15 C 14) 35), 5=1 (LC 25), 6= =657 (LC 24), 9=51	3) 4) 4d or 5) 1 ^{1-6,} 6) 7)), 8) 9) 6 (LC	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 requir Gable studs This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa this truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa	ed for wind loads ids exposed to wind d Industry Gable E lalified building de 7-16; Pr=20.0 psf (s=1.0; Rough Ca =1.10 snow loads have es continuous bot spaced at 4-0-0 o is been designed ad nonconcurrent has been designed ad nonconcurrent has been designed an chord in all area by 2-00-00 wide wide wide wide wide wide wide wide	in the plind (norm End Deta signer as f (roof LL (Lum DC t B; Fully been cor tom chor c. for a 10.0 with any d for a liv is where ill fit betw BC	ane of the tru al to the face ils as applica s per ANSI/TI :: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 nsidered for the d bearing. D psf bottom other live loa e load of 20.0 a rectangle ween the bottt. DL = 10.0psf	ss), ble, Pl 1. 1.15 2; his ds. Dpsf						
TOP CHORD BOT CHORD	(ib) - Maximum Com Tension 1-2=-105/376, 2-3=-2 4-5=-144/307 1-9=-201/77, 8-9=-20	23/323, 3-4=-1/302, 01/75, 6-8=-201/75,	10 L0	 Provide mec bearing plate 1, 190 lb upl DAD CASE(S) 	hanical connectio e capable of withs ft at joint 9 and 18 Standard	n (by oth tanding 5 34 lb uplit	ers) of truss t i8 lb uplift at j it at joint 6.	o oint					111.	
WEBS NOTES 1) Unbalance this design 2) Wind: AS(Vasd=103 II; Exp B; and C-C E 5-6-0, Ext 13-7-3, Ex and right of C for men shown; Lu	3-8=-476/0, 2-9=-394 ed roof live loads have n. CE 7-16; Vult=130mph Bmph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior(2E) 0-0-5 to 3- erior(2R) 5-6-0 to 11-6- xterior(2R) 13-7-3 to 16 exposed ; end vertical I nbers and forces & MW umber DOL=1.60 plate	4/222, 4-6=-394/220 been considered for (3-second gust) CDL=6.0psf; h=25ft; velope) exterior zon 0-5, Interior (1) 3-0-5 -0, Interior (1) 11-6-0 -7-3 zone; cantileve eft and right expose (FRS for reactions grip DOL=1.60	Cat. e 5 to) to r left d;C-							Comme		SEA 4584	ROLL LL IA EEERSO OHNSII	11-2 Manualian

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March 25,2025

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLB2	Valley	1	1	Job Reference (optional)	172213095

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 12:40:04 ID:yJIn_UX?VSBe9dbBmLUS1zzRQsC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

19-2-10



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

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	E01	Common Supported Gable	1	1	Job Reference (optional)	172213096

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:03 ID:onyrICEMWITAUsFxYbXALJy7LR6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



17-6-0

Scale = 1:53.1 e Offsets (X Plat

Plate Offsets ((X, Y): [8:0-2-8,Edge]													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing1-1Plate Grip DOL1.1Lumber DOL1.1Rep Stress IncrYECodeIRC	1-4 5 5 S C2021	/TPI2014	CSI TC BC WB Matrix-MR	0.18 0.11 0.15	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 16	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 130 I	GRIP 244/190 b FT = 205	%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing.	eathing directly applied or cept end verticals. / applied or 6-0-0 oc	BC	T CHORD	27-28=-98/172, 2/ 25-26=-98/172, 2/ 23-24=-98/172, 2/ 21-22=-98/172, 1/ 18-19=-98/172, 1/ 16-17=-98/172 7-23=-141/22, 9-2 5-25=-167/114, 4 3-27=-124/148, 1/ 11-19=-167/114, 1 13-17=-111/144	6-27=-98 4-25=-98 2-23=-98 9-21=-98 7-18=-98 22=-141/2 -26=-150 0-21=-18 12-18=-1	/172, /172, /172, /172, /172, /172, 22, 6-24=-181/ /120, 1/127, 50/120,	127,	8) Gat 9) Trus brac 10) Gat 11) This cho 12) * Th 3-00 cho 13) Pro	ble requi ss to be ced aga ble studs s truss h rd live lo he botto 6-00 tall rd and a	res col fully sl inst late s space as bee bad nor has be bom cho by 2-0 iny oth	ntinuous bottor neathed from o eral movement ad at 2-0-0 oc. n designed for nconcurrent wil een designed for drd in all areas 0-00 wide will f er members.	a chord bear ne face or se (i.e. diagona a 10.0 psf b h any other l or a live load vhere a recta it between th	ing. ecurely al web). ottom live loads. of 20.0psf angle he bottom
REACTIONS	(size) 16=17-6-1 19=17-6-1 23=17-6-1 26=17-6-1 Max Horiz 28=209 (I Max Uplift 16=-135 (18=-70 (L 21=-84 (L 25=-77 (L 27=-231 (I 21=214 (I 23=136 (I 25=206 (I 27=233 (I	0, 17=17-6-0, 18=17-6-0, 0, 21=17-6-0, 22=17-6-0, 0, 24=17-6-0, 25=17-6-0, 0, 27=17-6-0, 28=17-6-0, LC 13), 17=-215 (LC 15), LC 15), 19=-77 (LC 15), .C 15), 24=-83 (LC 14), .C 14), 26=-69 (LC 14), (LC 14), 28=-187 (LC 12) LC 15), 17=200 (LC 12), LC 21), 17=200 (LC 22), LC 22), 22=136 (LC 22), LC 21), 24=214 (LC 21), LC 21), 28=261 (LC 11)	NC 1) 2) 3)	TES Unbalanced this design. Wind: ASCE Vasd=103m II; Exp B; Er and C-C Co to 5-9-0, Co to 15-4-8, C left and right exposed;C-(reactions sh DOL=1.60 Truss design only. For st	roof live loads ha 57-16; Vult=130m ph; TCDL=6.0psf; iclosed; MWFRS imer(3E) -0-10-8 ter mer(3E) 5-9-0 to orner(3E) 15-4-8 ter t exposed; end vec C for members an own; Lumber DOI ned for wind loads uds exposed to wind	ve been ph (3-sec BCDL=6 (envelope o 2-1-8, E 11-9-0, E til-9-0, E ertical left d forces L=1.60 pl s in the pl ind (norm	considered for 5.0psf; h=25ft; a) exterior zon Exterior(2N) 2- xterior(2N) 11: zone; cantilev and right & MWFRS for ate grip ane of the trus and to the face)	Cat. e 1-8 -9-0 er s	logical de la construction de la construcción de la	ring pla 135 lb u ft at join t 27, 84 plift at jo CASE(S	plift at t 25, 69 lb uplif bint 18 Star	ble of withstan joint 16, 83 lb i 9 lb uplift at joint t at joint 21, 77 and 215 lb upli ndard	A point is a point of the point	uplift at joint 24, 77 lb uplift at oint 19, 70
FORCES TOP CHORD	(b) - Maximum Com Tension 2-28=-168/112, 1-2= 3-4=-116/115, 4-5=- 6-7=-104/251, 7-8=- 9-10=-104/251, 10- ⁻ 12-13=-90/87, 13-14 14-16=-142/80	e0/38, 2-3=-204/166, 92/94, 5-6=-76/160, -76/166, 8-9=-76/166, 11=-72/160, 11-12=-69/73 4=-185/126, 14-15=0/38,	4) ' 5) 6) 7)	see Standar or consult qi TCLL: ASCE Plate DOL= DOL=1.15); Cs=1.00; Ct Unbalanced design. This truss ha load of 12.0 overhangs n All plates ar	d Industry Gable I Jalified building de E7-16; Pr=20.0 ps 1.15); Pf=20.0 ps Is=1.0; Rough Ca =1.10 snow loads have as been designed psf or 1.00 times Ion-concurrent wite a 2x4 MT20 unles	End Deta esigner a: of (roof LI (Lum DC t B; Fully been cor for great flat roof I h other Ii s otherwi	ills as applicab s per ANSI/TP .: Lum DOL=1 DL=1.15 Plate r Exp.; Ce=0.9 Insidered for th er of min roof oad of 20.0 ps ve loads. ise indicated	le, I 1. .15 s ive f on		V	The second se	SE 458 SREW	AL 44 VEER	Multiman Arit

March 25,2025

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Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	D02	Common Girder	1	2	Job Reference (optional)	172213097

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:03 ID:ahvaep5BsMWascBuTkn6buzRAib-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1	:59.2
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Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.43	DEFL Vert(LL)	in -0.10	(loc) 14-15	l/defl >999	L/d 240	PLATES MT20	GRIP 244/190	
Snow (Pt)	20.0	Lumber DOL	1.15		BC	0.57	Vert(CT)	-0.17	14-15	>999	180			
	10.0	Codo				0.92	HOIZ(CT)	0.04	10	n/a	n/a			
BCDI	10.0	Code	160202	.1/1712014	Wath A-WOIT							Weight: 487 lb	FT - 20%	
DODE	10.0	1			I .							Wolght. for it		
LUMBER TOP CHORD BOT CHORD WEBS SLIDER	2x8 SP 2400F 2.0E 2x12 SP 2400F 2.0E 2x4 SP No.3 *Excep 5-14:2x4 SP No.2 Left 2x4 SP No.3 1-6-0	⊑ t* 13-6:2x4 SP No.1, 1-6-0, Right 2x4 SP №	1) , No.3	 2-ply truss to (0.131"x3") n Top chords o staggered at Bottom chord staggered at Web connect 	be connected toge ails as follows: connected as follow 0-9-0 oc. ds connected as fol 0-5-0 oc. ted as follows: 2x4	ether wi vs: 2x8 - llows: 2: - 1 row	th 10d 2 rows x12 - 6 rows at 0-9-0 oc,		10) Use 14-' 4-4- of b 11) Use 26-' spa	e Simpso 10dx1 1/ 12 from ottom ch e Simpso 10dx1 1/ ced at 2	on Stro /2 Trus the le nord. on Stro /2 Trus -0-0 of	ong-Tie HTU210 ss, Single Ply Gi ft end to connec ong-Tie HTU28 (ss, Single Ply Gi c max. starting a	(32-10dx1 1/2 rder) or equiva t truss(es) to b 20-16d Girder, rder) or equiva at 6-4-12 from t	Girder, lent at ack face lent
BRACING				Except mem	ber 5-14 2x4 - 1 ro	w at 0-5	-0 oc, membe	er	end	to 16-4	-12 to	connect truss(e	 to back face 	of
TOP CHORD	Structural wood she 5-11-12 oc purlins.	athing directly applie	d or 2)	3-16 2x4 - 2 All loads are	considered equally	0-2-0 od / applied	c. d to all plies,	חאר	12) Fill a	om chor all nail h	d. oles w	/here hanger is i	n contact with	lumber.
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 oc	;	CASE(S) see	tion. Ply to ply con	nection	s have been	JAD	prov	vided su	fficient	t to support cond	ce(s) shall be centrated load(s) 8867 The
REACTIONS	(size) 1=(0-5-8 0-6-2), 10 Max Horiz 1=-176 (L Max Grav 1=14865	+ bearing block), (rec)=0-5-8 .C 10) (LC 21), 10=10712 (I	ą. 3) LC 6)	unless other 2x12 SP 240 attached to e nails spaced	wise indicated. 0F 2.0E bearing bl ach face with 6 ro 3" o.c. 24 Total fas	ock 12" ws of 10	long at jt. 1 Dd (0.131"x3" per block. Be	') aring	des resp LOAD (ign/sele consibilit	tion o ty of ot Sta	of such connection thers. ndard	on device(s) is	the
FORCES	(lb) - Maximum Corr Tension	pression/Maximum	4	is assumed t Unbalanced	o be SP 2400F 2.0 roof live loads have	E. e been o	considered fo	or	Inc	crease=	1.15 bads (I	b/ft)		10, 1 late
TOP CHORD	1-3=-15578/0, 3-4=- 5-6=-9492/0, 6-7=-9 8-10=-12158/0	14258/0, 4-5=-12125 463/0, 7-8=-11050/0	5/0, , 5)	this design. Wind: ASCE Vasd=103mp	7-16; Vult=130mpl bh; TCDL=6.0psf; E	h (3-sec 3CDL=6	ond gust) .0psf; h=25ft;	; Cat.	Co	Vert: 1-6 oncentra	6=-60, ted Lo	6-10=-60, 17-2 ads (lb)	I=-20	
BOT CHORD	1-16=0/10988, 15-1 14-15=0/11862, 13- 10-11=0/9123	6=0/10988, 14=0/9117, 11-13=0/	/9123,	II; Exp B; En cantilever lef right exposed	closed; MWFRS (e t and right exposed d; Lumber DOL=1.6	nvelope I ; end v 60 plate	e) exterior zor rertical left an grip DOL=1.	ne; id 60		\wedge		WITH CA	AROLI	4
WEBS	6-13=0/10728, 7-13 8-12=-1103/0, 8-11= 4-15=-208/3373, 5-1 3-16=-421/1446, 3-1	=-1571/0, 7-12=0/29 =0/1625, 4-14=-4425/ 14=0/5105, 5-13=-31; 15=0/2222	18, /101, 6 <u>)</u> 89/0,	TCLL: ASCE Plate DOL=1 DOL=1.15);	7-16; Pr=20.0 psf .15); Pf=20.0 psf (I s=1.0; Rough Cat	(roof LL Lum DC B; Fully	.: Lum DOL= L=1.15 Plate Exp.; Ce=0.9	1.15 9 9;		U	lin	NAME SE	2 Min	in
NOTES			7) 8) 9)	Cs=1.00; Ct= Unbalanced design. This truss ha chord live loa This truss h on the bottor 3-06-00 tall b	1.10 snow loads have b s been designed fo d nonconcurrent w has been designed n chord in all areas y 2-00-00 wide wil	een cor or a 10.0 vith any for a liv where I fit betw	asidered for th) psf bottom other live loa e load of 20.0 a rectangle veen the botto	his Ids. Opsf om		1111W	Number of	458 458 VOREW	IEER IOHNSO	A. C.
				choru and af	iy outer members.							Marc	h 25.2025	

Continued on page 2

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



818 Soundside Road Edenton, NC 27932

March 25,2025

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	D02	Common Girder	1	2	Job Reference (optional)	172213097
Carter Components (Sanford, NC	Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:03				Page: 2	

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:03 ID:ahvaep5BsMWascBuTkn6buzRAib-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Vert: 14=-1893 (B), 16=-5499 (B), 27=-1897 (B), 28=-1893 (B), 29=-1893 (B), 30=-1893 (B), 31=-1893 (B), 32=-1893 (B)

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Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	D01	Common Supported Gable	1	1	Job Reference (optional)	172213098

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:03 ID:8F2D?hHuvW?rb9K6OMb_Y2zRQrE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



18-6-0

Scale = 1:56.9

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

Loading TCLL (roof) Snow (Pf) TCDL 3CLL 3CDL	(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 IRC2027	1/TPI2014	CSI TC BC WB Matrix-MR	0.21 0.12 0.20	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 14	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 127 lb	GRIP 244/190 FT = 20%	6
LUMBER TOP CHORD SOT CHORD WEBS DTHERS BRACING FOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, exi Rigid ceiling directly bracing. (size) 14=18-6-(21=18-6-(24=18-6-(24=18-6-(Max Uplift 14=-50 (L 17=-47 (L 21=-115 (23=-168 (Max Grav 14=190 (L 17=172 (L 19=224 (L 21=253 (L) 21=253 (L) 21=25	athing directly applied cept end verticals. applied or 6-0-0 oc), 15=18-6-0, 17=18-6), 19=18-6-0, 20=18-6), 22=18-6-0, 23=18-6) LC 12) C 11), 15=-163 (LC 1 C 15), 18=-116 (LC 1 LC 14), 22=-46 (LC 1 LC 14), 22=-46 (LC 1 LC 22), 15=221 (LC 22 .C 22), 18=253 (LC 22 .C 22), 20=224 (LC 2 .C 22), 20=224 (LC 2 .C 22), 22=172 (LC 2)	WI 1) 1 or 2) 5-0, 5-0, 5-0, 5), 5), 5), 2), 4), 3) 0) 6), 2), 4), 3) 0) 1) 1) 2)	EBS 6 4 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2-20=-185/8, 8-19= -22=-142/93, 3-23 -18=-213/163, 10- 1-15=-168/168 roof live loads have 7-16; Vult=130mpl h; TCDL=6.0psf; E closed; MWFRS (e ner(3E) -0-10-8 to 5 ner(3E) -0-10-8 to 5 ner(3E) -0-10-8 to 5 -2-12, Corner(3E) c and right exposed (;C-C for members shown; Lumber DC shown; Lumber DC shown; Lumber DC ds exposed to wind l Industry Gable Er alified building des 7-16; Pr=20.0 psf (I s=10; Rough Cat	-185/7, =-174/1 17=-14: been of GCDL=6 n(3-sec GCDL=6 nvelope 2-3-4, E -2-12, I 16-2-12 I; end v and for DL=1.60 L=1.60 L=1.60 L=1.60 L=0.00 L	5-21=-213/16 60, 3/91, considered for ond gust) .0psf; h=25ft; .0psf; h=	52, r c Cat. ne -3-4 d c S s s s S), ble, PI 1. 1.15 - 	12) * Th on ti 3-06 chor 13) Prov beau 24, { uplif joint 15. LOAD C	is truss he botto -00 tall of and a ride me tring plat 50 lb up t at join 18, 47 :ASE(S	has b m chc by 2-C ny oth chanic e cappa lift at j t 22, 1 lb upli) Sta	een designed for ord in all areas wi 00-00 wide will fit her members. al connection (by able of withstand oint 14, 115 lb up 68 lb uplift at join ft at joint 17 and ndard	a live load of iere a rectar between the others) of f ng 69 lb up lift at joint 2 t 23, 116 lb 163 lb uplift	of 20.0psf ngle e bottom truss to lift at joint 21, 46 lb uplift at at joint
FORCES TOP CHORD BOT CHORD	23=226 (L (lb) - Maximum Com Tension 2-24=-168/63, 1-2=0 3-4=-105/90, 4-5=-9 6-7=-94/171, 7-8=-9 9-10=-77/117, 10-11 12-13=0/39, 12-14=- 23-24=-106/187, 20- 19-20=-106/187, 15- 17-18=-106/187, 15- 14-15=-106/187	22 25), 24=205 (LC 27) pression/Maximum)/39, 2-3=-164/140, 2/118, 5-6=-116/235, 4/171, 8-9=-116/235, -90/72, 11-12=-152/ -155/47 -23=-106/187, -21=-106/187, -19=-106/187, -17=-106/187,	5) 5) (117, 7) 8) 9) 10 11	Cs=1.00; Ct= Unbalanced s design. This truss ha load of 12.0 p overhangs no All plates are Gable require Truss to be fi braced again) Gable studs s) This truss ha chord live loa	1.10 snow loads have b s been designed for ssf or 1.00 times fit on-concurrent with 2x4 MT20 unless es continuous botto IIIy sheathed from st lateral movement spaced at 2-0-0 oc s been designed for d nonconcurrent w	een cor or great at roof k other lin otherwi om chor one fac on fac or a 10.0	asidered for the er of min roof pad of 20.0 ps ve loads. se indicated. d bearing. e or securely iagonal web). D psf bottom other live load	his live sf on		Contraction of the second se	J.	SEA 4584 SEA SA SA SA SA SA SA SA SA SA SA SA SA SA	L 14 EER.S	Annun annun

March 25,2025

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TRENCO A Mittek Affiliate

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	VLB1	Valley	1	1	Job Reference (optional)	172213099

10-9-11

Carter Components (Sanford, NC), Sanford, NC - 27332

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 12:40:04 ID:uRu6rMLa1rImrJyJNhjxxpzRQsR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

21-3-4

Page: 1



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

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	G01	Monopitch	5	1	Job Reference (optional)	172213100

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:03 ID:PdAAD85_ICJN?UaWrZNnF5zRQu2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:64.6

Plate Offsets (X, Y):	[2:0-2-0,0-1-8],	[3:0-4-0,0-3-4]
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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 IRC2021	/TPI2014	CSI TC BC WB Matrix-MSH	0.95 0.67 0.39	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.12 -0.20 -0.01	(loc) 7-8 7-8 7	l/defl >999 >923 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 106 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Wind: ASC Vasd=103 II; Exp B; I and C-C E to 12-11-8 cantilever exposed;C (reactions s DOL=1.60 2) TCLL: ASC Plate DOL	2x4 SP No.1 *Excep 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep Structural wood shee 2-2-0 oc purlins, exi Rigid ceiling directly bracing. 1 Row at midpt (size) 7= Mecha Max Horiz 9=273 (LC Max Uplift 7=-221 (L Max Grav 7=831 (LC (lb) - Maximum Com Tension 1-2=0/27, 2-4=-677// 4-7=-328/122, 2-9=- (lb) - Maximum Com Tension 1-2=0/27, 2-4=-677// 4-7=-328/122, 2-9=- 3-8=0/313, 3-7=-768 CE 7-16; Vult=130mph mph; TCDL=6.0psf; BK Enclosed; MWFRS (en Enclosed; MWFRS (en Enclosed; MWFRS (en Enclosed; MWFRS (en CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L =1.15); Pf=20.0 psf (L	t* 1-3:2x4 SP No.2 t* 4-7:2x4 SP No.2 athing directly applie cept end verticals. applied or 10-0-0 or 4-7, 3-7 nical, 9=0-5-8 C 14) C 14) C 5), 9=754 (LC 5) pression/Maximum 119, 4-5=-12/0, 655/84 135/603, 6-7=0/0 k/250, 2-8=0/486 (3-second gust) CDL=6.0psf; h=25ft; velope) exterior zon 2-1-8, Interior (1) 2-1 to 15-11-8 zone; ; end vertical left proces & MWFRS for I.60 plate grip roof LL: Lum DOL=1	4) 5) ed or 6) 5 7) 8) LO Cat. re I-8	This truss ha load of 12.0 overhangs n This truss ha chord live loa * This truss h on the bottor 3-06-00 tall th chord and ar Refer to gird Provide mec bearing plate 7. AD CASE(S)	Is been designed f pof or 1.00 times fl on-concurrent with is been designed f ad nonconcurrent v has been designed in chord in all areas by 2-00-00 wide wi by other members, er(s) for truss to tru- hanical connection e capable of withsta Standard	or greate at roof k other liv or a 10.0 with any I for a liv s where II fit betw with BC uss conr n (by oth anding 2	er of min roof aad of 20.0 p re loads.) psf bottom other live load e load of 20.1 a rectangle veen the bott DL = 10.0ps nections. ers) of truss : 21 lb uplift at	f live sf on dds. 0psf om f. to t joint			()	SEA 4584	ROLING	annan ann ann ann ann ann ann ann ann a
Cs=1.00; (3) Unbalance design.	Ct=1.10 ed snow loads have be	en considered for th	is								111	OREW J	OHNSUI	

March 25,2025

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

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	C01	Half Hip	4	1	Job Reference (optional)	172213101

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:02 ID:Je5w06f8goBW?T4xbCQ60Kyfk?K-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:71.5		
Plate Offsets (X, Y):	[2:0-3-1,0-0-1],	[8:0-1-12,0-1-8]

		-												
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 IRC202 ²	1/TPI2014	CSI TC BC WB Matrix-MSH	0.83 0.62 0.79	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.14 0.03	(loc) 8-9 8-9 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 148 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BBACING TOP CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Wind: AS Vasd=100 I; Exp 8; and C-C F to 17-4-4, vertical le MWFRS 1 grip DOL= 2) TCLL: AS Plate DOI	2x4 SP No.2 2x4 SP No.3 *Excep 2x6 SP No.2 Left 2x4 SP No.3 1 Structural wood shee 4-8-11 oc purlins, e Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 8 Max Horiz 2=387 (LC Max Uplift 2=-49 (LC Max Grav 2=954 (LC (lb) - Maximum Com Tension 1-2=0/23, 2-4=-1437 6-7=-166/102, 7-8=- 2-11=-399/1321, 9-1 8-9=-159/721 4-11=0/263, 4-9=-68 6-8=-1026/227 CE 7-16; Vult=130mph Bmph; TCDL=6.0psf; Bt Enclosed; MWFRS (er Exterior(2E) -0-10-8 to : Exterior(2E) -0-10-8 to : Exterior(2E) -17-4-4 to ft exposed; C-C for mer for reactions shown; Lu =1.60 CE 7-16; Pr=20.0 psf (L	t* 7-8:2x4 SP No.2 1-6-0 athing directly applie xcept end verticals. applied or 10-0-0 oc 7-8, 6-8 3-0-5-8 C 14) (14), 8=-342 (LC 14) C 14), 8=-342 (LC 14), 8=-342 (LC 14) C 14), 8=-342 (LC 14	3) 4) 5) 6) 7) 8) 9) 9) 1) 2 1) 2 1) 2 2 2 1) 2 2 2 2 2 2 2 2	Unbalanced design. This truss ha load of 12.0 overhangs n All plates are This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and an One H2.5A S recommendé UPLIFT at ju and does no Hanger(s) ou provided suf Ib down and design/selec responsibility DAD CASE(S) Dead + Snu Increase=1 Uniform Lo Vert: 1-7 Concentrat Vert: 8=-	snow loads have b as been designed f psf or 1.00 times fl on-concurrent with a 3x5 MT20 unless as been designed fad nonconcurrent to has been designed in chord in all area: by 2-00-00 wide wi hy other members, Simpson Strong-Ti ed to connect truss (s) 8 and 2. This cc t consider lateral for other connection ficient to support c 128 lb up at 20-7- tion of such connect of others. Standard bw (balanced): Lur .15 ads (lb/ft) =-60, 8-13=-20 ed Loads (lb) 747	opeen cor or great at roof lo other liv or a 10.0 with any l for a 10.1 with any l for a liv s where s where to bear onnection orces. device(s oncentra 0 on boo ction de	sidered for t er of min roof pad of 20.0 p (e loads. se indicated.) psf bottom other live loa e load of 20.1 a rectangle veen the bott DL = 10.0ps tors ing walls due n is for uplift) shall be ited load(s) 7 tom chord. T vice(s) is the rease=1.15,	his f live sf on ads. Opsf om f. e to only 752 The Plate			LUR THE	SEA 4584	BOLINE AND AND AND AND AND AND AND AND AND AND	Annunun in

- vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate 2) DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

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818 Soundside Road Edenton, NC 27932

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March 25,2025

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	C02	Half Hip	1	1	Job Reference (optional)	172213102

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:03 ID:EGq646Pbf2EXC6nWIJzpaiyfjwU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:71	.3		
			-

coading (CLL (rol) (ps) 200 Part (sp) Part (sp) 200 Spacing Part (sp) 200 2-0-0 Part (sp) 200 CSI 115 DEFL TC in (loc) Vieth (L) Vert (L) 0.08 Vieth (L) Vert (L) 0.08 Vieth (L) Vert (L) 0.08 Vieth (L)	Plate Offsets (X, Y): [1:0-5-1,Edge],	[7:0-1-12,0-1-8]												
 LUMER TOP CHORD 244 SP No.3 244 SP No.3 = taccept 6-7:244 SP No.3 244 SP No.3 = 1-6-0 SRCING SRCING TOP CHORD Ar-1 op units, except end verticals SRCING CHORE Ar-1 op units, and Dire 2-0-0 wide units connection is for upilt only and does not consider lateral forces. SRCING CHORE Ar-2-26503 SRCING CHORE AR-10-319/1286, r-3-1018/227 SRCING CHORE Ar-2-26503 SRCING CHORE AR-10-319/1286, r-3-1018/227 SRCING CHORE AR-10-32-0, Infer OI 13-2-0 1107-410-40-40-40-40-40-40-40-40-40-40-40-40-40	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 IRC2021	1/TPI2014	CSI TC BC WB Matrix-MSH	0.82 0.63 0.75	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.14 0.03	(loc) 7-8 7-8 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 146 lb	GRIP 244/190 FT = 20%	
March 25 2025	LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Wind: AS(Vasd=103 II; Exp 8; and C-C E 17-4-4, Ex members Lumber D 2) TCLL: AS Plate DOL DOL=1.15 Cs=1.00; (2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep 2x6 SP No.2 Left 2x4 SP No.3 - 1 Structural wood shea 4-7-1 oc purlins, exc Rigid ceiling directly bracing. 1 Row at midpt (size) 1=0-3-8, 7 Max Horiz 1=370 (LC Max Uplift 1=-30 (LC Max Uplift 1=-30 (LC Max Grav 1=900 (LC (lb) - Maximum Com Tension 1-3=-1401/30, 3-5=-4 6-7=-265/93 1-10=-405/1286, 8-1 7-8=-159/716 3-10=0/254, 3-8=-65 5-7=-1018/227 CE 7-16; Vult=130mph imph; TCDL=6.0psf; BC Enclosed; MWFRS (en Exterior(2E) 17-4-4 to 20 and forces & MWFRS OL=1.60 plate grip DO CE 7-16; Pr=20.0 psf (LI =1.15); Pf=20.0 psf (LI =1.15); Pf=20.0 psf (LI =1.10	t* 6-7:2x4 SP No.2 I-6-0 athing directly applie cept end verticals. applied or 10-0-0 oc 6-7, 5-7 7-0-5-8 2 14) 3 14), 7=-342 (LC 14) 2 5), 7=1714 (LC 20) pression/Maximum 812/0, 5-6=-162/100, 0=-319/1286, 8/185, 5-8=0/624, (3-second gust) CDL=6.0psf; h=25ft; velope) exterior zone 2-0, Interior (1) 3-2-0 +4-4 zone;C-C for for reactions shown; L=1.60 roof LL: Lum DOL=1 um DOL=1.15 Plate b; Fully Exp.; Ce=0.9;	3) 4) 5) d or 6) 7) 1) LC 1) 1) Cat. e to	Unbalanced design. This truss ha chord live loa * This truss f on the bottor 3-06-00 tall b chord and ar One H2.5A S recommende UPLIFT at jt(and does noi Hanger(s) or provided suff lb down and design/selec responsibility DAD CASE(S) Dead + Sno Increase=1 Uniform Loa Vert: 1-6 Concentrato Vert: 7=-	snow loads have b s been designed for id nonconcurrent w has been designed in chord in all areas y 2-00-00 wide will by other members, simpson Strong-Tie d to connect truss s) 7 and 1. This co consider lateral for other connection of cicient to support co 129 lb up at 20-7-1 tion of such connect of others. Standard ww (balanced): Lurr 15 adds (lb/ft) =-60, 7-12=-20 ad Loads (lb) 747	een cor or a 10. <i>i</i> th any for a liv s where to bear nnectio crces. device(s oncentra 0 on bo ction de	sidered for the sidered for the loss of the live lose e load of 20.0 a rectangle veen the bottom DL = 10.0 psi tors ing walls due in is for uplift of the side load(s) 7 torm chord. The vice(s) is the rease=1.15, here are side load for the	his dds. Dpsf om f. to only 752 The Plate		Continues		SEA 4584	ROUTE	, Zumminger

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	B02	Common Girder	1	2	Job Reference (optional)	172213103

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:02 ID:iFFKd9_s5HOVK9vBFwqTAGzRAMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:75.4			0010	0.00	
Plate Offsets (X, Y):	[1:Edge,0-2-5], [3:0-0-12,0-1-12],	[11:0-4-0,0-7-8],	[12:0-8-0,0-2-0]	, [13:0-8-0,0-3-	0]

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.29	DEFL Vert(LL)	in -0.08	(loc) 12-13	l/defl >999	L/d 240	PLATES MT20	GRIP 244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.34	Vert(CT)	-0.16	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	NO		WB	0.95	Horz(CT)	0.02	9	n/a	n/a		
BCLL	0.0*	Code	IRC2021	/TPI2014	Matrix-MSH								
BCDL	10.0											Weight: 479 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD	2x6 SP No.2 2x10 SP 2400F 2.0E		1)	2-ply truss to (0.131"x3") n Top chords c	be connected toge ails as follows: connected as follow	ether wi s: 2x6 ·	th 10d · 2 rows		10) LG cor Thi	T2 Simps nect trus s connec	son St ss to b ction is	rong-Tie connect earing walls due for uplift only an	ors recommended to to UPLIFT at jt(s) 9. d does not consider
WEBS	2x4 SP No.2			Staggered at	0-9-0 0C.	0.000.2	10 2 1000		11)	Simpor	S. Stra		0 10d Cirdor
WEDGE	Left: 2x4 SP No.3			stangered at		10WS. Z	x10-210ws		1/1	10dv1 1	/2 True	s Single Ply Gir	der) or equivalent
BRACING TOP CHORD	Structural wood sheat	athing directly applied	d or	Web connect Except mem	ted as follows: 2x4 ber 2-13 2x4 - 2 rov	- 1 row vs stag	at 0-9-0 oc, gered at 0-7-	0 oc,	spa	iced at 2 to 15-1	-0-0 oc 0-0 to	c max. starting at connect truss(es)	2-0-0 from the left to back face of
BOT CHORD	Rigid ceiling directly	applied or 6-0-0 oc	2)	member 3-12 All loads are	2 2x4 - 1 row at 0-7- considered equally	-0 oc. applie	d to all plies,		bot 12) Use	tom chor e Simpso	[.] d. on Stro	ng-Tie LUS26 (4	-10d Girder, 3-10d
WEBS	1 Row at midot	5-9	,	except if note	ed as front (F) or ba	ick (B)	face in the LC	DAD	[′] Tru	ss, Singl	le Ply (Girder) or equival	ent at 17-10-0 from
REACTIONS	(size) 1=0-5-8, 7 Max Horiz 1=-227 (L	'=0-7-12, 9=0-5-8 C 35)	2)	CASE(S) sec provided to d unless otherv	E(S) section. Ply to ply connections have been ded to distribute only loads noted as (F) or (B), is otherwise indicated. Thus, only if a subscription of equivalent at (F) or the subscription of eq								back face of bottom 0-16d Girder,
	9=-722 (L	C 12), 7=-209 (LC 12 C 13)	^{2),} 3)	Unbalanced this design.	roof live loads have	been o	considered fo	or	14- ma	10dx1 1/ x. startin	/2 Trus a at 19	s) or equivalent s -10-0 from the le	spaced at 2-0-0 oc aft end to 21-10-0 to
	Max Grav 1=8363 (L 9=11648 (.C 5), 7=679 (LC 19). (LC 6)	, 4)	Wind: ASCE	7-16; Vult=130mph	n (3-sec	cond gust)	Cat	cor 14) Fill	nect trus	ss(es)	to back face of be	ottom chord.
FORCES	(lb) - Maximum Com Tension	pression/Maximum		II; Exp B; End	closed; MWFRS (er	nvelope	e) exterior zor	ne; ne;	15) LG	T2 Hurric	cane ti	es must have two	studs in line below
TOP CHORD	1-2=-9914/224, 2-3= 3-4=-4644/202, 4-5=	-7502/211, -4588/219, 5-6=-66/ [^]	182,	right exposed	d; Lumber DOL=1.6	50 plate	grip DOL=1.	60	LOAD	CASE(S)) Sta	ndard	ш.
BOT CHORD	6-7=-154/503 1-13=-246/7510, 12- 11-12=-146/5754, 9- 8-9=-165/77, 7-8=-3	13=-246/7510, 11=-24/1717, 16/57	5)	TCLL: ASCE Plate DOL=1 DOL=1.15); I	7-16; Pr=20.0 psf (.15); Pf=20.0 psf (L s=1.0; Rough Cat B	(roof LL Lum DC 3; Fully	.: Lum DOL= 0L=1.15 Plate Exp.; Ce=0.9	1.15 9 9;		\wedge	Certif	OR FESS	ROLIN
WEBS	2-13=-48/3318, 2-12 3-12=-149/5505, 3-1 4-11=-181/5497, 5-1 5-9=-6639/232, 6-9=	=-2569/179, 1=-4474/268, 1=-101/3899, -278/313, 6-8=-548/ ²	6) 7) 17	Unbalanced design. This truss ha	snow loads have be s been designed fo	een cor or a 10.0	nsidered for th) psf bottom	his		U	EV2	SEA	L
NOTES			8) 9)	* This truss h on the botton 3-06-00 tall b chord and an One H2.5A S recommende UPLIFT at jt(and does not	as been designed in a chord in all areas by 2-00-00 wide will by other members, to simpson Strong-Tie d to connect truss is s) 1 and 7. This con consider lateral for	for a liv where fit betw with BC conne- to bear nnectio rces.	e load of 20.0 a rectangle veen the botto DL = 10.0psf ctors ing walls due n is for uplift of	om f. to only		11110	N. M. M.	4584	EER.ON

March 25,2025



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Job	Truss	Truss Type		Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	B02	Common Girder		1	2	Job Reference (optional)	172213103
Carter Components (Sanford, NC	C), Sanford, NC - 27332,	R	un: 8.73 S Feb 19 2	2025 Print: 8.	730 S Feb 1	9 2025 MiTek Industries, Inc. Fri Mar 21 12:40:02	Page: 2

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:02 ID:iFFKd9_s5HOVK9vBFwqTAGzRAMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-4=-60, 4-7=-60, 14-17=-20 Concentrated Loads (lb)

Vert: 10=-1868 (B), 13=-1877 (B), 12=-1877 (B),

8=-839 (B), 21=-1877 (B), 22=-1877 (B), 23=-1877 (B), 24=-1868 (B), 25=-1868 (B), 26=-839 (B),

27=-875 (B)

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Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	B01	Common	1	1	Job Reference (optional)	172213104

10-9-2

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:02 ID:Nseaq6A9EjNfxKX1O6yXnly7LSU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



	. 8-9-0	17-2-12	18-1-7 23-2-0 17-3-4 ₂₁₋₇₋₀ 22-9-12	
	8-9-0	8-5-12	0-0-8 3-5-9 1-2-12	
Scale = 1:76.3			0-10-3 0-4-4	
Plate Offsets (X, Y): [2:0-7-7,Edge], [24:0-0-0,0-0-10]				

Plate Offsets	(X, Y): [2:0-7-7,Edge],	[24:0-0-0,0-0-10]												
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 IRC202	21/TPI2014	CSI TC BC WB Matrix-MSH	0.37 0.57 0.51	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.07 -0.16 0.02	(loc) 18-19 23-31 17	l/defl >917 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 173 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD JOINTS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep 6-20:2x4 SP No.2 2x4 SP No.3 Left 2x6 SP No.2 Structural wood she 5-5-4 oc purlins, ex Rigid ceiling directly bracing. 1 Brace at Jt(s): 24, 25, 27 (size) 2=0-5-8, - Max Horiz 2=265 (LC	t* 17-15:2x6 SP No.2, 1-6-0 athing directly applied cept end verticals. applied or 10-0-0 oc 17=0-3-8, 21=0-5-8 C 13)	1 2 , l or 3	 Unbalanced this design. Wind: ASCE Vasd=103m; II; Exp B; En and C-C Exti to 8-7-0, Exti to 21-0-8, Ex left and right exposed;C-C reactions sh DOL=1.60 Truss design only. For stu see Standard or consult qu TCLL: ASCE 	roof live loads hav 7-16; Vult=130mp oh; TCDL=6.0psf; closed; MWFRS (e erior(2E) -0-10-8 tc erior(2E) 21-0-8 t erior(2E) 21-0-8 t exposed; end ver c for members and own; Lumber DOL end for wind loads i uds exposed to wind d Industry Gable E ialified building des 7-16; Pr=20.0 psf	e been h (3-sec BCDL=6 anvelope 2-1-8, 14-7-0, I o 24-0-{ tical left forces =1.60 pl in the pl d (norm nd Deta signer a (roof L	considered fc cond gust) 5.0psf; h=25ft 9) exterior zoo Interior (1) 2- nterior (1) 4- 3 zone; cantile and right & MWFRS fo ate grip ane of the tru hal to the face ils as applica s per ANSI/TI -: Lum DOL=	; Cat. ne 1-8 -7-0 ever r sss :), ble, PI 1. 1.15						
FORCES	Max Grav 2=853 (LC 21=753 (L (lb) - Maximum Com	C 21), 17=446 (LC 22) LC 22) pression/Maximum	ý, 5	DOL=1.15); Cs=1.00; Ct=) Unbalanced	IS: (1), FI=20.0 psi (Is=1.0; Rough Cat =1.10 snow loads have b	B; Fully	Exp.; Ce=0.	9; his						
TOP CHORD	1-2=0/34, 2-4=-911/ 6-7=-332/144, 7-8=- 9-11=-301/119, 11-1 12-13=-203/16, 13-1 14-15=-345/1, 15-16 2-23=-214/696, 21-2	79, 4-6=-760/90, 315/186, 8-9=-280/15 12=-323/75, 4=-293/12, 5=0/42, 15-17=-343/0 23=-41/499.	3, 7 8	 design. This truss ha load of 12.0 overhangs n All plates are Gable studs This truss ba 	as been designed f psf or 1.00 times fl on-concurrent with 2 2x4 MT20 unless spaced at 2-0-0 oc s been designed f	or great at roof l other li otherwic.	er of min roof oad of 20.0 p ve loads. se indicated.	f live sf on		C	e.	ORICE CA	ROLINE	
WEBS	20-21=-11/617, 19-2 18-19=-37/231, 17-1 4-23=-237/181, 21-2 6-26=-463/113, 25-2 24-25=-413/70, 24-2 27-28=-419/70, 20-2	20=-37/231, 18=-37/231 28=-541/345, 26=-468/121, 27=-407/54, 28=-471/86, 265, 100,100,100,100,100,100,100,100,100,10	1	 chord live loa This truss h on the bottor 3-06-00 tall h chord and ar One H2.5A \$ 	ad nonconcurrent v nas been designed n chord in all areas by 2-00-00 wide wi ny other members. Simpson Strong-Tie	with any for a liv s where Il fit betv e conne	other live load re load of 20.0 a rectangle veen the botto	ads. Opsf om		THILD.		SEA 4584	L	
NOTES	23-24=-69/89, 6-23= 7-26=-31/42, 9-24=- 12-28=-382/221, 13-	=0/345, 8-25=-128/164 184/31, 11-27=-81/63 -19=-20/49, 14-18=-65	+, , 5/82 L	recommende UPLIFT at jt(and does no OAD CASE(S)	ed to connect truss (s) 2 and 21. This of t consider lateral for Standard	to bear connecti orces.	ing walls due on is for uplif	to t only			111	March	25,2025	

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



Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A05	Attic Girder	1	4	Job Reference (optional)	172213105

							10	n veie	Terrice (up	lional)			
Carter Compone	ents (Sanford, NC), Sanfo	rd, NC - 27332,		Run: 8.73 S Feb	19 2025	Print: 8.730 S F	Feb 19 202	25 MiTe	k Industries	, Inc. Fi	i Mar 21 12:39:58	Р	age: 1
				ID:VIY0g5gMUgw 28-	OZRyxiE	SXYItzRA_f-RfC	C?PsB70H	q3NSgF	PqnL8w3ul1	TXbGKV	VrCDoi7J4zJC?f		
	-0-10-8 5-7-13	11-0-3 13-6-7	17-8-0 16-2-4, 20-7-	25-10-14 5,23-3-2	,31	32-9-4 -6-0	39-7-1	0	46-	-5-3	53-0-8		
	0-10-8 5-7-13	5-4-5 2-6-4	2-7-13 2-11-	5 2-7-13 2-7-13 2-	7-13 2-	11-5	6-10-6	6	6-9	9-9	6-7-5		
			1-5-12x16=	I-1-0 ⊢⊣		1-3-4 4x8		FAS	STEN TRU	SS TO	BEARING FOR		
			6×8 ≠	2x4 4x8= 4x5=	= 2x4 II	12x16=		WH	ILE PERM	ITTING	NO UPWARD		
Т		81				13		MO	VEMENT (OF THE	BEARING.		
		10 2x4 J	48	49 4650 51	52	53	\sim						
		64 4	£	6x8= 5x6=	6x8=			8x	10				
_		4x5 = 55	^\\					V	158				
-0 8		3 54		-14							4x5.		
÷	518 4			9-1			/	//		\sim	<u> </u>		
	1 2												
										/		4001	
	5-10						/	-					
1	- ⊥ 40 g	4443 42 60	61 4162 38	37 36 34 32 31 2 35 33 30	<u>9 2165</u> ∠ 2673	2524 22	642	0 1	9		18 18	1. 1. 1. 1. 1. 1. 1. 1. 1. 	
	4x5=	6x8= 4x8=	4x5 II 2x4 II	2x4 II 2x4 II	3x8=	5x8=	MT20H	S 3x12	=		6x8=		•
		4x6=	12x16= 3	x5= 3x5= 2x4 II	3	x5=		3	3x5=				
			8x10=	3x8= 3x6∥ 34x9≠ 3x5= 3	5. x5=	3×8=							
			18-7-4	5	x6=	2x4 u							
			18-5-8	1-4-12 24-2-4 26-11	30 8 29-9-)-4-832-9-4 -032-6-8 ⁸⁸ =							
	5-7-13	6-6-0 11-0-3 15-	9-11 20-0	-0 22-9-825-6-122	8-4-4 3	31-1-12 <u>3</u>	37-1-8	39-7-10	0 46-	-5-3	53-0-8		
Scale = 1:102.4	5-7-13	0-10-3 4-6-3 4-9	9-9 0-7-5 0-1-12 2-0-8 1	1-4-12 1-4-8 1	-4-12 0	-7-8 0-2-12	4-4-4	2-6-2	6-9	9-9	6-7-5		
	[7:0-8-0,0-3-4]	, [12:0-10-8,0-2-12], [14:0-	5-0,0-4-8], [17:Ed	be ,0-5-10], [18:0-3-8	<u>2</u> 1 4 3,0-2-12],0[222:0-3-4,0	-2-8], [28	3:0-3-0,	,0-3-0], [38	8:0-4-1	2,Edge], [41:0-8	-0,0-4-12],	
Plate Offsets (X, Y): [44:0-3-8,0-3-0	0]											
Loading	(psf)	Spacing 2-0	-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL 1.1	5	тс	0.90	Vert(LL)	-0.50	38-41	>786	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL 1.1	5	BC	0.97	Vert(CT)	-0.75	37-39) >521	180 n/a	MT20HS	187/143 244/190	
BCLL	0.0*	Code IRC	S C2021/TPI2014	Matrix-MSH	0.90	Attic	-0.25	22-40	>786	360	IVIT TOPIS	244/190	
BCDL	10.0							-			Weight: 2038 II	b FT = 20%	
LUMBER			BOT CHORD	44-45=-135/447.42	2-44=-74	46/12300.		1) 4-	plv truss to	o be co	onnected togeth	er with 10d	
TOP CHORD	2x6 SP No.2 *Excep	ot* 5-7:2x4 SP No.1		41-42=-859/16424,	35-41=	-691/17026,		(0	.131"x3")	nails a	s follows:		
BOT CHORD	2x4 SP No.1 *Excep	ot* 43-38,43-45:2x6 SP		33-35=0/18312, 30	-33=0/1 -2727	8937, 6/15568		To	op chords	conne	cted as follows:	2x6 - 2 rows	
	2400F 2.0E	NO.2, 20-25.2X4 SP		21-24=-796/12213,	19-21=	-801/16246,		Bo	ottom chor	rds cor	nected as follow	vs: 2x6 - 2 rov	vs
WEBS	2x4 SP No.3 *Excep	ot* 13-21:2x6 SP 2400F		18-19=-744/15345,	17-18=	-116/2119,		sta	aggered a	t 0-9-0	oc, 2x4 - 1 row	at 0-7-0 oc.	aa 0v0
	2.0E, 6-46,45-2,41-4 No 2 44-2 17-16 18	47,41-6,46-13:2x6 SP 8-16:2x4 SP No 2		39-40=-463/400, 37	/-39=-48 36=-28	34/352, 38/0.		2	eb connec rows stage	cted as	at 0-9-0 oc. Exce	row at 0-9-0	oc, 2x6 - 1-47 2x6
OTHERS	2x4 SP No.3	10.224 01 10.2		32-34=-3460/0, 31-	32=-34	60/0,		- 3	B rows sta	ggerec	l at 0-4-0 oc, me	mber 6-41 2>	6 - 2
BRACING				29-31=-3460/0, 26-	29=-23	04/11, 334/2811		ro At	ws stagge	ered at $1/2$ "	0-4-0 oc. diam bolts (AST	M A-307) in 1	ho
TOP CHORD	Structural wood she	eathing directly applied or	WEBS	3-44=-5379/378, 3-	42=-24	3/5005,		ce	enter of the	e mem	ber w/washers a	it 4-0-0 oc.	
	2-0-0 oc purlins (6-0	0-0 max.): 7-12.		4-42=-738/165, 5-4	1=-143	/1775,		2) Al	l loads are	e consi	dered equally ap	plied to all pl	ies,
BOT CHORD	Rigid ceiling directly	/ applied or 2-2-0 oc		21-22=-702/6462, 1 6-48=-11396/734, 4	13-22=-: 18-49=-	533/7444, 10999/710.		ex C/	(Cept if not ASE(S) se	ted as	front (F) or back Plv to plv conne	(B) face in tr	e LOAD een
JOINTS	1 Brace at Jt(s): 49.			49-50=-11217/674,	50-51=	-11256/676,		pr	ovided to	distrib	ute only loads no	oted as (F) or	(B),
	50, 51, 52, 40, 26,			51-52=-16199/977,	52-53=	-12725/800,		a) Ur	less other	rwise ii I roof li	ndicated.	oon consider	nd for
DEACTIONS	37, 29, 34	21-029 45 059		40-41=-669/7654, 6	6-40=-54	44/8799,		thi	is design.		ve iuaus liave D		50 101
REACTIONS	Max Horiz 45=-192	, ∠ 1=0-3-0, 49=0-9-8 (LC 10)		7-48=-152/2425, 8-	49=-51	7/66,			-				
	Max Uplift 17=-453	(LC 12), 21=-5416 (LC		9-50=-135/2511, 10	53=-21	08/56, 0/3528.					munn	11111	
	45), 45=- Max Gray 17-9309	702 (LC 12)		22-24=0/2232, 38-4	40=0/27	17, 23-24=-6	618/0,				TH CA	RO!"	12
	45=11962	2 (LC 46)		38-39=-599/0, 24-2 37-38=-951/52 26-	6=-219	9/0, 939_35-37=0)/1803		Γ	12	ON EESS	ic: N	11
FORCES	(lb) - Maximum Con	npression/Maximum		27-28=-844/13, 35-	36=-95	9/22,				N	yang	ZUN	
TOP CHORD	1 ension 1-2=0/24 2-3=-1374	51/804 3-4=-17677/1059		27-29=-306/163, 34	4-35=-12	26/263, 14_30-31-51	12/0				·Q.	× .	1
	4-6=-18994/1151, 6	6-7=-5812/482,		32-33=-320/10, 7-4	9=-454	5/252,	12/0,		=		SEA	L	
	7-8=-3051/527, 8-9=	=-3048/525,		9-49=-4572/360, 9-	51=-51	05/312,			Ξ	:	4584	44	Ξ
	9-10=-3045/710, 10 11-12=-1646/1592.	12-13=-4646/432,		10-52=-2495/281, 1	12-52=- 5-19=-1	5632/326, 42/1131			Ξ				1
	13-15=-18211/1130	, 15-16=-17291/899,		14-21=-406/499, 5-	42=-25	04/138,				- 7	·	-a.is	23
	2-45=-11768/721, 1	6-1/=-9139/483		15-18=-968/147, 16	6-18=-6	56/13277				1	GIN	EF	5
			NOTES							1	REW	OHN	
			NOTED								Thinn 1	minin	

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

REN CO

818 Soundside Road Edenton, NC 27932

March 25,2025

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A05	Attic Girder	1	4	Job Reference (optional)	172213105

Run: 8 73 S. Feb 19 2025 Print: 8 730 S Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 12:39:58

ID:VIY0g5gMUgwQZRyxiBXYItzRA_f-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

Carter Components (Sanford, NC), Sanford, NC - 27332,

- 4) 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; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) 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
- Unbalanced snow loads have been considered for this design.
- 7) 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.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are MT20 plates unless otherwise indicated.
- 10) All plates are 2x4 MT20 unless otherwise indicated.11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.
 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
- chord and any other members, with BCDL = 10.0psf.
 13) Ceiling dead load (5.0 psf) on member(s). 6-48, 48-49, 49-50, 50-51, 51-52, 52-53, 13-53; Wall dead load (5.0psf) on member(s).13-22, 6-40
- 14) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 39-40, 37-39, 36-37, 34-36, 32-34, 31-32, 29-31, 28-29, 26-28, 23-26, 22-23
- 15) Bearings are assumed to be: , Joint 17 SP No.1 .
- 16) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5416 lb uplift at joint 21.
- 17) LGT4-SDS3 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 45. This connection is for uplift only and does not consider lateral forces.
- 18) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 20) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 21) LGT4 Hurricane ties must have four studs in line below the truss.
- 22) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 608 lb down and 52 lb up at 28-8-4, and 9100 lb down and 774 lb up at 16-1-4 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.
- 23) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (lb/ft) Vert: 1-2=-60, 2-7=-60, 7-12=-60, 12-16=-60, 17-45=-20, 22-40=-30, 6-48=-10, 48-49=-10, 46-49=-10, 46-50=-10, 50-51=-10, 51-52=-10, 52-53=-10, 13-53=-10 Drag: 13-22=-10, 40-47=-10, 6-47=-10 Concentrated Loads (lb)
 - Vert: 41=-4881 (F), 63=-326 (F)

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



Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A03T	Piggyback Base	3	1	Job Reference (optional)	172213106

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:39:57 ID:OFJFx3IDTxFbWWzrBXohbzzRCTM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Continued on page 2

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A MiTek Affilia 818 Soundside Road

Edenton, NC 27932

March 25,2025

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A03T	Piggyback Base	3	1	Job Reference (optional)	172213106
Carter Components (Sanford, NC	C), Sanford, NC - 27332,	Run: 8.73 S F	Feb 19 2025 Print: 8	.730 S Feb 1	9 2025 MiTek Industries, Inc. Fri Mar 21 12:39:57	Page: 2

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:39:57 ID:OFJFx3IDTxFbWWzrBXohbzzRCTM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A04T	Piggyback Base	2	1	Job Reference (optional)	172213107

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:39:58 Page: 1 ID:DGN6a6f8caCKWpHw1clz1BzRCZx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 2-3-12 -0-10-8 19-5-4 31-6-0 7-9-12 17-8-0 24-7-0 29-8-12 38-11-7 13-3-12 45-7-6 53-3-0 7-7-10 5-6-0 5-1-12 6-7-15 5-6-0 4-4-4 7-5-7 5-1-12 0-10-8 1-9-4 1-9-4 2-3-12 4x5= 6x8= 6x8= 2x4 II 4x5= 6 39 840 9 10 6¹² 8x10 🞜 31 5 4x5 🎜 30 29 8x10👟 37 ³⁸ 5x8= ¹¹41 2x4= 284 4 11-8-0 11-2-8 42 36 11-8-0 5x6 💋 2x4 II 35 5x8 ዾ 12 3 43 2 4-10-4 4-10-4 Ò Ġ ι<u>΄</u> 22 20 25 ⊠ 14 4x5= 18 47 15 48 6x8= 19 44 45 171646 49 4x6= 6x8= 4x5= 6x8= 2x4 🛛 6x8= 8x10= 3x5 " 4x5= 3x5 II 2x4= 2x4 II 2x4= 4x5= 29-1-029-8-12 2-5-8 19-5-4 37-5-0 37-7-3 45-6-0 45-7-6 53-3-0 7-9-12 13-2-0 24-7-0 0-1-6 2-5-8 5-4-4 6-3-4 7-8-4 0-2-3 7-10-13 7-7-10 5-4-4 5-1-12 4-6-0 0-7-12 Scale = 1:94.5 Plate Offsets (X, Y): [5:0-5-0,0-4-8], [11:0-5-0,0-4-8], [15:0-5-0,0-4-8], [19:0-4-0,0-2-8], [21:0-2-8,0-3-4], [23:0-5-8,0-3-0] CSI PLATES GRIP Loading (psf) Spacing 2-0-0 DEFL in (loc) l/defl L/d Plate Grip DOL TCLL (roof) 20.0 1.15 тс 0.62 Vert(LL) -0.32 19-20 >999 240 MT20 244/190 BC Snow (Pf) 20.0 Lumber DOL 1.15 0.97 Vert(CT) -0.50 18-19 >999 180 TCDL 10.0 Rep Stress Incr YES WB 0.91 Horz(CT) 0.14 13 n/a n/a

BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH			
BCDL	10.0						Weight: 500 lb FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS	2x6 SP No.2 2x6 SP No.2 *Exce 2x4 SP No.3 *Exce 21-6,19-6,9-16,16- No.2, 25-2:2x6 SP	ept* 24-3,5-20:2x4 SP ept* 10,15-10,19-7:2x4 SP No.2	BOT CHORD	24-25=-20/36, 23-24=0/26 22-23=-240/1962, 21-22=- 20-21=-26/102, 5-21=-487 19-20=-59/232, 18-19=0/2 14-16=-90/2202, 13-14=-3	3-23=-1130/127, 193/2917, '169, 417, 16-18=0/2417, 33/1271	 This truss has bee load of 12.0 psf or overhangs non-cc 200.0lb AC unit lo from left end, supp Provide adequate 	en designed for greater of min roof live r 1.00 times flat roof load of 20.0 psf on oncurrent with other live loads. ad placed on the bottom chord, 24-7-0 ported at two points, 5-0-0 apart. drainage to prevent water ponding.
BRACING TOP CHORD	Structural wood sh 3-11-11 oc purlins, 2-0-0 oc purlins (3	eathing directly applie except end verticals,	WEBS d or and	4-21=-211/137, 19-21=0/2 6-21=-271/1137, 6-19=-29 16-27=-832/233, 27-30=-8 9-30=-804/238, 10-16=-21	155, 2/537, 21/241, /1309,	 8) All plates are 2x4 9) This truss has been chord live load no 10) * This truss has been chord live load no 	MT20 unless otherwise indicated. en designed for a 10.0 psf bottom nconcurrent with any other live loads. een designed for a live load of 20.0psf
BOT CHORD	Rigid ceiling direct bracing. Except:	ly applied or 2-2-0 oc		11-15=0/612, 11-14=-2325 12-14=-458/257, 10-15=-3	/258, 66/8, 78/260	on the bottom cho 3-06-00 tall by 2-0	ord in all areas where a rectangle 00-00 wide will fit between the bottom
1 Row at midp WEBS	ot 5-21 1 Row at midpt	6-19, 16-30, 10-15, 19-29, 26-27		7-29=-467/266, 4-22=-275, 23-25=-110/203, 2-23=-17	/80, 3-22=-5/1051, 6/2258,	11) Refer to girder(s)12) Provide mechanic	for truss to truss connections. cal connection (by others) of truss to
WEBS JOINTS	2 Rows at 1/3 pts 1 Brace at Jt(s): 29 30, 31	11-14),		26-28=-67/38, 27-28=-67/3 29-31=-44/87, 30-31=-151, 7-31=-299/750, 8-31=-305	/8, 18-28=0/35, /38, /98, 9-31=-274/850	bearing plate capa 13. 13) One H2.5A Simps	able of withstanding 198 lb uplift at joint son Strong-Tie connectors
REACTIONS	(size) 13= Met 25=0-5- Max Horiz 25=-187 Max Uplift 13=-198 25=-152 Max Grav 13=859 25=2211	chanical, 14=0-5-8, 8 (LC 12) (LC 14), 14=-380 (LC (LC 14), 14=2516 (LC (LC 43), 14=2516 (LC 5 (LC 37)	NOTES 1) Unbalance this design 15), 2) Wind: ASC Vasd=103 39), II; Exp B; E and C-C E	d roof live loads have been E 7-16; Vult=130mph (3-sed nph; TCDL=6.0psf; BCDL=6 inclosed; MWFRS (envelope kterior(2E) -0-8-6 to 4-7-9, Ir	considered for cond gust) i.0psf; h=25ft; Cat. exterior zone nterior (1) 4-7-9 to	recommended to UPLIFT at jt(s) 14 only and does not	connect truss to bearing walls due to and 25. This connection is for uplift to consider lateral forces.
FORCES	(lb) - Maximum Co	mpression/Maximum	10-1-10, E 39-2-5 to 4	xterior(2R) 10-1-10 to 39-2-5 7-11-2, Exterior(2E) 47-11-2	5, Interior (1) 2 to 53-3-0 zone;	(NV)	with think
TOP CHORD	1-2=0/25, 2-3=-22 4-6=-3298/330, 6- 7-8=-3107/435, 8- 9-10=-2481/231, 1 12-13=-1480/444,	14/177, 3-4=-3368/222 7=-2497/230,)=-3107/435, 0-12=-2653/513, 2-25=-2357/201	 cantilever I right expose and forces DOL=1.60 3) TCLL: ASC Plate DOL= DOL=1.15 Cs=1.00; C 4) Unbalance design. 	ett and right exposed ; end 1 ed; porch right exposed;C-C & MWFRS for reactions sho plate grip DOL=1.60)> 7-16; Pr=20.0 psf (roof LI =1.15); Pf=20.0 psf (Lum DC ; Is=1.0; Rough Cat B; Fully :=1.10 d snow loads have been cor	ertical left and for members wn; Lumber .: Lum DOL=1.15 L=1.15 Plate Exp.; Ce=0.9; nsidered for this	Printer Print	SEAL 45844

March 25,2025

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Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A04T	Piggyback Base	2	1	Job Reference (optional)	172213107
Carter Components (Sanford, NC	c), Sanford, NC - 27332,	Run: 8.73 S Feb 1	2025 Print: 8	730 S Feb 1	9 2025 MiTek Industries, Inc. Fri Mar 21 12:39:58	Page: 2

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:39:58 ID:DGN6a6f8caCKWpHw1clz1BzRCZx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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



Job		Truss		Truss Type		Qty	Ply	900 S	erenity-Roof	-B326 /	A CP TRAY GL	н
25030171-0)1	A06		Attic Girder		1	4	Job R	eference (op	otional)		172213108
Carter Compone	ents (Sanford, NC	c), Sanford	d, NC - 27332,		Run: 8.73 S Feb 19	2025 Print: 8	730 S Feb 1	9 2025 N	/iTek Industrie	s, Inc. Fi	ri Mar 21 12:39:59	Page: 1
-	0 <u>-10-8 5-7-</u> 0-10-8 5-7-	1 <u>3</u> 13	<u>11-0-3</u> 13-6 5-4-5 2-5- ⁻	17-8-0 -0_16-2-420-7- 4 2-8-41-5-122-11- 12x16= 6x8 ≠ 7	22-10-14 25-10-14 5-25-10-14 5-27-13 2-7-13 2-7- 1-1-0 12x16= 4x5= 8 9 580	11 <u>31-6-0</u> 13 2-11-5 12 11	32-9-4 1-3-4 4x8 x16= 12	<u>39-7-1</u> 6-10-	0 FASTEN TR THE UPLIFT WHILE PER MOVEMEN	46-5 6-9- USS TC REAC ^T MITTING	-3 -9 D BEARING FOR TION SHOWN G NO UPWARD E BEARING.	53-6-0 7-0-13
11-8-0	5x8 = 1 2 46 = 4x5 II	4x 3 45 6x8	6^{12} 4 65 = 66 65 644 43 61 8 = 4x8 =	8x10 = 6 5 48 48 62 4253 39 4x5 = 3	Image Image <th< td=""><td>28 26 2 28 26 2 29 27 2 3x8=</td><td>13 19 5 22 5×8=</td><td>64 MT2</td><td>8x10s 1459 21 20 20HS 3x8 =</td><td>60</td><td>4x5\$ 16 19</td><td>4x5≈ 17 18₀ ₫ ₫ 6x8=</td></th<>	28 26 2 28 26 2 29 27 2 3x8=	13 19 5 22 5×8=	64 MT2	8x10s 1459 21 20 20HS 3x8 =	60	4x5\$ 16 19	4x5≈ 17 18₀ ₫ ₫ 6x8=
Scale = 1:94.2	<u>5-7-</u> 5-7-	<u>13 6-</u> - 13 0-1	4x6= 6-0 <u>11-0-3 18</u> 10-3 4-6-3 4	12x16= 8x10= 20-0- 18-5-8 2: 5-9-11 16-5-0 18-7-4 H-9-9 0-7-5 0-1-12 2-0-8 1	3x8= 3x5= 3x5 4x6 II 0 1-4-12 24-2-4 26-15 22-9-8 25-6-12 28 1-4-12 1-4-8 1-4 -4-12 1-4-12 1-4-12	= 5x6 WB 3x5= 29-9-0, 29-7-8 3 -4-4 31-1-1 -120-1-81 1-3-4	= 6x8= 32-9-4 2-6-8 2 37 -4-12 4 0-2-12	7-6-8 -9-4	3x5= 39-7-10 2-1-2	<u>46-5</u> 6-9-	-3 -9	53-6-0 7-0-13
Plate Offsets (X, Y): [7:0-8-0),0-3-4],	[9:0-8-0,0-2-4], [12:0	-10-8,0-2-12], [18:Edg	é,0-2-4], [23:0-3-8,0-2-8	3], [28:0-3-0	f,0-3-0], [39	9:0-4-12	2,Edge], [42:0	0-8-0,0	-4-12], [45:0-3-8	3,0-3-0]
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 NO IRC2021/TPI2014	CSI TC C BC C WB C Matrix-MSH	0.93 DEFI Vert(0.72 Vert(0.87 Horz Attic	- LL) -0. CT) -0. (CT) 0. -0.	in (.49 39 .73 39 .21 .24 23	loc) l/defl)-42 >803)-42 >532 18 n/a 3-41 >812	L/d 240 180 n/a 360	PLATES MT20HS MT20 Weight: 2017	GRIP 187/143 244/190 Ib FT = 20%
LUMBER				BOT CHORD	45-46=-123/440, 43-4	5=-731/120	74,	1)	4-ply truss	to be co	onnected togeth	ner with 10d
TOP CHORD BOT CHORD WEBS	2x6 SP No.2 2.0E 2x4 SP 2400 SP No.2, 44 2400F 2.0E 2x4 SP No.3 46-2,42-47,6	*Except F 2.0E * 46:2x6 \$ *Except -42,6-51	t* 7-5:2x4 SP 2400F 'Except* 28-23,28-41 SP No.2, 44-39:2x6 S t* I,51-13:2x6 SP No.2,	:2x4 }P	42-43=-832/16073, 36 34-36=0/17880, 31-34 29-31=0/16739, 25-29 22-25=-772/12128, 20 19-20=-741/15543, 18 40-41=-1028/0, 38-40 37-38=-2921/0, 35-37	-42=-684/1 =0/17942, =-151/1433 -22=-780/1 -19=-741/1 =-1102/0, =-2921/0,	7253, 34, 6089, 5543,		(0.131"x3") Top chords staggered a Bottom cho staggered a Web conne 3 rows stag	nails a conne at 0-9-0 ords cor at 0-9-0 ected as gered a	s follows: cted as follows: oc, 2x4 - 1 row nected as follo oc, 2x4 - 1 row s follows: 2x4 - 2 at 0-4-0 oc, Exc	2x6 - 2 rows r at 0-9-0 oc. ws: 2x6 - 2 rows r at 0-9-0 oc. 1 row at 0-9-0 oc, 2x6 - cept member 6-42 2x6 -
others Slider Bracing	13-22:2x6 SI 2x4 SP No.3 Right 2x4 SF	P 2400F P No.3	2.0E, 45-2:2x4 SP N 1-6-0	webs	33-35=-3019/0, 32-33: 30-32=-3019/0, 26-30: 24-26=-370/3083, 23- 3-45=-5311/373, 4-43:	=-3019/0, =-1178/736 24=-370/30 =-700/162,	, 83 7	2)	2 rows stagg rows stagg Attach BC v center of th	gered a ered at w/ 1/2" e mem	at 0-4-0 oc, mer 0-9-0 oc. diam. bolts (AS ber w/washers a	mber 13-22 2x6 - 2 TM A-307) in the at 4-0-0 oc.
TOP CHORD BOT CHORD	Structural we 6-0-0 oc pur 2-0-0 oc pur Rigid ceiling	ood shea lins, exc lins (6-0- directly	athing directly applied cept end verticals, an -0 max.): 7-12. applied or 6-0-0 oc	l or d	41-42=-617/7143, 6-4 22-23=-712/6595, 13-2 6-48=-10655/685, 48-3 50-52=-11090/661, 52	1=-530/871 23=-513/72 50=-10276/ -53=-15532	7, 29, 663, 2/928,	2)	except if no CASE(S) so provided to	e consi oted as ection. distribu	front (F) or back Ply to ply conne ute only loads n	k (B) face in the LOAD ections have been oted as (F) or (B),
JOINTS	bracing. 1 Brace at J 51, 52, 53, 4 35, 30, 26	t(s): 50, 1, 38,			49-53=-12560/771, 15 2-45=-673/12777, 15- 16-19=-11/162, 16-20 15-22=-640/213, 3-43	-49=-1299 20=-220/18 =-132/757, =-237/4930	, 4,	3)	Unbalanced this design.	d roof li	ve loads have b	been considered for
REACTIONS FORCES	(size) 18 46 Max Horiz 46 Max Uplift 18 47 Max Grav 18 46 (lb) - Maximu Tension 7-83002/5	B= Mech S=0-5-8 S=-190 (I B=-420 (I S=-420 (I S=-420 (I S=-420 (I S=-11746 Jacobian Comp 28 8-9-	anical, 22=0-5-8, LC 10) LC 12), 22=-5361 (LC 83 (LC 12) LC 46), 22=792 (LC (LC 46) pression/Maximum -3089/526	2 12),	'-48=-147/2364, 12-4' 8-50=-471/64, 9-51=-1 10-52=-109/92, 11-53 12-53=-5376/307, 10- 9-52=-4653/281, 9-50 7-50=-4773/262, 39-4 39-41=0/286, 38-39= 36-38=0/1265, 36-37= 35-36=-160/340, 34-33 33-34=-116/0, 31-32=	y=-204/345 20/2271, =-268/67, 53=-2531/2 =-4233/347 D=-446/0, 859/135, 671/19, 5=-22/133, -558/0, 30-1	1, 78, , 31=0/1422,		C	A.V.	ORTH CA	AROLINA ROLINA AL
	9-10=-3727/ 11-12=-1715 13-15=-1775 16-18=-1769 1-2=0/24, 2- 4-6=-18564/	20, 0-3= 713, 10- 5/1441, 1 53/1087, 97/900, 2 3=-1349 1120, 6-	11=-1715/1441, 12=13=-4561/424, 15-16=-17925/1006, 2-46=-11550/702, 7/782, 3-4=-17366/10 7=-5994/479	NOTES 032,	29-30=-818/0, 28-29= 25-26=-1725/0, 24-25: 5-42=-124/1475, 5-43:	-7 30/19, 26 =-569/0, 23 =-2258/111	-23=0/2285 -25=0/1636	ə, 6,	Ē	Philade	458 NGIN NEW Marc	44 ICHN901111 ICHN9011111 th 25,2025

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

RENCO

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A06	Attic Girder	1	4	Job Reference (optional)	172213108

Run: 8 73 S. Feb 19 2025 Print: 8 730 S. Feb 19 2025 MiTek Industries. Inc. Fri Mar 21 12:39:59

ID:pGeZvt1?lwruiNEY_xH4fkzRAp7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

Carter Components (Sanford, NC), Sanford, NC - 27332,

- 4) 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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) 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
- Unbalanced snow loads have been considered for this design.
- 7) 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.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are MT20 plates unless otherwise indicated.
- 10) All plates are 2x4 MT20 unless otherwise indicated.11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.
 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
- chord and any other members, with BCDL = 10.0psf.
 13) Ceiling dead load (5.0 psf) on member(s). 6-48, 48-50, 50-51, 51-52, 52-53, 49-53, 13-49; Wall dead load (5.0psf) on member(s).6-41, 13-23
- 14) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 40-41, 38-40, 37-38, 35-37, 33-35, 32-33, 30-32, 28-30, 26-28, 24-26, 23-24
- 15) Refer to girder(s) for truss to truss connections.
- 16) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 420 lb uplift at joint 18 and 5361 lb uplift at joint 22.
- 17) LGT4-SDS3 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 46. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 19) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 20) LGT4 Hurricane ties must have four studs in line below the truss.
- 21) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 9100 lb down and 774 lb up at 16-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 22) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 7-12=-60, 12-18=-60, 46-54=-20, 23-41=-30, 6-48=-10, 48-50=-10, 50-51=-10, 51-52=-10, 52-53=-10, 49-53=-10, 13-49=-10, 1-2=-60, 2-7=-60 Drag: 41-47=-10, 6-47=-10, 13-23=-10 Concentrated Loads (lb)

Vert: 42=-4881 (F)

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



Job		Truss		Truss Type			Qty	Ply	900 Serenity-Root	-B326 A	A CP TRAY G	LH
25030171-01	1	A09		Attic Supported G	Bable		1	1	Job Reference (or	otional)		172213109
Carter Componen	nts (Sanford, NC	C), Sanford	d, NC - 27332,		Ru ID:	n: 8.73 E Dec 5 2 8kdnaNVfrXv7X5i	2024 Print: 8. JovJ26tzRBE	730 E Dec 5 2-xz0AaCsP	2024 MiTek Industries /WBIINs3vJuM8e kv7	, Inc. Tue L0HHBaa	e Mar 25 14:36:2 aScLJCzXXE9	20 Page: 1
	9.4	0	16.2.4	17-8-020 7 5	<u></u>	28-6-1 25-10-14	1 3	2-10-7	46.2.12			52 6 0
F	8-4-	·0	7-10-4	1-5-122-11-5	2-7-13	2-7-13 2-7-13	3 2-11-5	 1-4-7	13-5-6		<u> </u>	7-2-3
				6x8= 4x8 ≠	4	x8= 4x5=	62	6x8≈ ≪8=				
Т				11	12 1	13 8114	15	16 17				
			4x6 = 12	9 69	71 7	2 74	73 7		3 19 4x6 .			
			6 ¹⁴ 0 5 80		5x8= 5	ix6 II 4x5 II	5x8=		20 21 ₈₂	2		
0-8-	2	78 ⁴⁷⁹								8323	24	
₹ 3×	5 2 ³		⊠						×		25	840
1 • [f												27
5-10												
00 🖾 3x	5 6 7 66	5 65	64 63 62 6	60 59 56 55 5	583 52 S	50 49 47 4	46 443 41	39 38	37 36 35 34	33	32 31	30 29
			3	x6= 5x8 II 3 3x8=	3x8= 3 3x5=	3x5= 3x5= 3 3x5=	3x8= 3x 3x5=	8= 5x8 II	3x6=			4x5=
	0.4	0	10.11.0	17-9-12 3x5= 16-5-0 20-7	-4 23-4-	-12 26-11-8 25-6-12 28-4	29- <u>318-</u> 0 29-9-0 32 -4 31-1-1	32-9-4 2-6-8	<u> </u>	0 0 40		50.0.0
+	8-4-	·0 ·0	5-7-0	2-3-4 1-4-12 0-2-12 1 4	1-4-12	2-2-0 12 1-4-12	1-4-12 1-	$\frac{2}{4-12}$ $\frac{37}{4-12}$	9-4 4	<u>8-9-5</u>	+	7-2-3
$\frac{\text{Scale} = 1:90.9}{\text{Plate Offsets (X)}}$	(, Y): [7:0-2-6	6,Edge],	[11:0-5-13,0-3-6], [16	<u>1-4-12</u> :0-6-0,0-3-8], [40:Edg	ge,0-2-4]	1-4 , [46:0-3-0,0-3-0	12 1-3-12 0], [58:Edge	6,0-2-12 6,0-2-4], [72	:0-2-8,0-2-8]			
Loading		(psf)	Spacing	2-0-0	csi		DEF	L	in (loc) l/defl	L/d	PLATES	GRIP
TCLL (roof) Snow (Pf)		20.0 20.0	Plate Grip DOL Lumber DOL	1.15 1.15	TC BC	0 0).44 Vert().11 Vert(LL) -0. CT) -0.	01 10 >999 01 10 >999	240 180	MT20	244/190
TCDL BCLL		10.0 0.0*	Rep Stress Incr Code	YES IRC2021/TPI2014	WB Matr	0 ix-MSH	0.65 Horz	(CT) 0.	02 28 n/a	n/a		
BCDL		10.0						0 (1 0 15)			Weight: 504	FT = 20%
TOP CHORD	2x6 SP No.2				Max Up	30=-29 (LC 32= 41 (LC	(14), 29=-9 (15), 31=-4 (15), 22=4	9 (LC 15), 7 (LC 15),	TOP CHORD	1-68=- 3-78=-	88/57, 1-2=-6 65/168, 4-78= 72/222 5 80-	3/38, 2-3=-55/112, -58/174, 4-79=-81/212, - 100/260, 6, 80-, 04/267
WEBS	2x4 SP No.2 2x4 SP No.3	Except	t* 10-59,17-39:2x6 SF	5		34=-44 (LC 37=-49 (LC	15), $35=-415$), $35=-415$), $38=-1$	5 (LC 15), 32 (LC 15),		6-7=-1 9-10=-	20/303, 7-8=- 115/375 10-1	119/313, 8-9=-135/359, 1=-903/328
OTHERS	2x4 SP No.3	72-10.23	4 3F NU.2			39=-46 (LC 60=-127 (LC	10), 59=-1 10), 59=-1 C 38), 62=-	3 (LC 10), 50 (LC 14).		11-12= 13-81=	=-2147/593, 12 =-2804/764, 14	2-13=-2147/593, 4-81=-2804/764.
TOP CHORD	Structural w	ood shea	athing directly applied	or		63=-45 (LC 65=-44 (LC	14), 64=-4 14), 66=-3	3 (LC 14), 7 (LC 14),		14-15= 16-17=	=-2132/593, 15 =-894/327, 17-	5-16=-2132/593, 18=-121/375,
	2-0-0 oc pur Pigid ceiling	lins (4-1-	-8 max.): 11-16.	1	Max Gra	67=-76 (LC av 28=160 (LC	14), 68=-2 27), 29=2	0 (LC 15) 37 (LC 43),		18-19= 20-21=	-143/366, 19- -105/275, 21-	20=-131/322, 82=-106/270,
BOT CHORD	bracing, Ex	cept: cing: 48-	-51			30=147 (LC 32=149 (LC	22), 31=1 22), 33=1	65 (LC 39), 72 (LC 43),		22-82= 23-83=	111/265, 22- 94/224, 23-2	83=-88/230, 4=-102/205,
WEBS	1 Row at mi	dpt	10-58, 17-40, 18-38, 19-37, 9-60, 8-62			34=219 (LC 37=208 (LC	; 43), 35=2 ; 43), 38=1	35 (LC 43), 13 (LC 49),		24-25= 26-84=	=-122/182, 25- =-147/150, 26-	84=-141/160, 27=-170/134,
JOINTS	1 Brace at J 72, 73, 74, 5	t(s): 71, 55, 52,	, ,			39=1110 (L 45=369 (LC	C 38), 42= 20), 48=3	333 (LC 20) 19 (LC 20),	3	27-28=	=-220/127	
REACTIONS (47, 44 (lb/size) 28	3=123/53	3-6-0, 29=235/53-6-0,			51=319 (LC 56=330 (LC	(20), 53=3 (20), 59=1 (47), 62=2	58 (LC 20), 119 (LC 38) 22 (LC 41)	3			
	30 32)=147/53 2=149/53	3-6-0, 31=165/53-6-0, 3-6-0, 33=161/53-6-0,			63=242 (LC 65=181 (LC	(41), 62=2 (41), 64=2 (41), 66=1	31 (LC 41),				1.0.07
	34 37	4=160/53 7=126/53	3-6-0, 35=169/53-6-0, 3-6-0, 38=-22/53-6-0,	FORCES	(lb) N	67=164 (LC	41), 68=1	22 (LC 21)			"TH C	ARO
	39	9=916/53 5=138/53	3-6-0, 42=156/53-6-0, 3-6-0, 48=121/53-6-0,	TORGES	Tensio	n n	16331011/11/18	Aimaim	(N	ORIEES	Elon N
	5	1 = 121/53 6 = 149/53	3-6-0, 53=135/53-6-0, 3-6-0, 59=930/53-6-0,						C	NA	in the second	
	6	3=170/53 5=157/53	3-6-0, 62=142/33-6-0, 64=160/53-6-0, 64=160/53-6-0, 66=163/53-6-0, 65=163/53-6-0, 65=160,								SE	AL
r	67 Max Horiz 68	7=152/53 3=-221 (I	3-6-0, 68=115/53-6-0 _C 15)								. 458	344
		(- /							E.PA		FER ON
										14	REM	IOHNS
											minin	mmm



RENCO

818 Soundside Road Edenton, NC 27932

March 25,2025

Job		Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-0)1	A09	Attic Supported Gable	1	1	Job Reference (optional)	172213109
Carter Compone	ents (Sanford, NC	C), Sanford, NC - 27332,	Run: 8.73 E Dec 5 2	2024 Print: 8.7	730 E Dec 5 2-xz0AqCsP	2024 MiTek Industries, Inc. Tue Mar 25 14:36:20	Page: 2
BOT CHORD	67-68=-96/2 65-66=-96/2 63-64=-96/2 59-60=-96/2 53-56=-52/1 48-51=-56/1 43-45=-48/1 39-42=-82/2 37-38=-87/2 35-36=-87/2 33-34=-87/2 31-32=-87/2 29-30=-87/2 57-58=-11/9 52-54=-30/1 49-50=-39/1 46-47=-31/1	12, $66-67=-96/212$, 12, $64-65=-96/212$, 12, $62-63=-96/212$, 12, $60-61=-96/212$, 12, $56-59=-104/213$, 40, $51-53=-32/126$, 04, $45-48=-32/125$, 39, $42-43=-48/139$, 00, $38-39=-87/212$, 12, $34-35=-87/212$, 12, $34-35=-87/212$, 12, $32-33=-87/212$, 12, $30-31=-87/212$, 12, $30-31=-87/212$, 12, $32-33=-87/212$, 12, $32-33=-87/212$, 12, $30-31=-87/212$, 12, $30-31=-87/212$, 14, $50-52=-39/108$, 08, $47-49=-39/108$, 12, $44-46=-30/115$, $41-44=-17$	 Bottom chord live load (40.0 psf) a chord dead load (5.0 psf) applied of 55-57, 54-55, 52-54, 50-52, 49-50, 41-44, 40-41 Bearings are assumed to be: , Joir crushing capacity of 425 psi. N/A Graphical purlin representation do or the orientation of the purlin alon bottom chord. Attic room checked for L/360 defle LOAD CASE(S) Standard 	nd addition only to room 47-49, 46- at 28 User E es not depic g the top ar ction.	2-x20AgCSP al bottom n. 57-58, 47, 44-46, Defined Defined	wwbiins3yJuw66_ky/LuhhbaaScLJC2XXE9	
WEBS	$\begin{array}{r} 40\text{-}41\text{=-}11/8\\ 5\text{-}64\text{=-}191/7\\ 27\text{-}29\text{=-}177/\\ 10\text{-}58\text{=-}1090\\ 17\text{-}40\text{=-}1092\\ 19\text{-}37\text{=-}168\\ 22\text{-}34\text{=-}179/\\ 24\text{-}32\text{=-}112/\\ 6\text{-}63\text{=-}201/8\\ 2\text{-}67\text{=-}128/1\\ 41\text{-}42\text{=-}202/\\ 48\text{-}49\text{=-}218/\\ 69\text{-}71\text{=-}37/6\\ 72\text{-}74\text{=-}441/\\ 70\text{-}73\text{=-}42/6\\ 11\text{-}69\text{=-}24/1\\ 13\text{-}72\text{=-}128/\\ 11\text{-}69\text{=-}24/1\\ 13\text{-}72\text{=-}125/\\ 13\text{-}74\text{=-}65/1\\ 16\text{-}73\text{=-}327/\\ 53\text{-}55\text{=-}120/\\ 47\text{-}48\text{=-}100/\\ 42\text{-}44\text{=-}112/\\ \end{array}$	4 6, 25-31=-123/79, 26-30=-11 ⁻¹ 180, 58-59=-1090/31, 5/109, 39-40=-1083/62, 3/151, 18-38=-74/171, 77, 20-35=-195/80, 77, 23-33=-131/78, 72, 9-60=-84/167, 8-62=-183/3, 1, 4-65=-142/83, 3-66=-121/1 43, 56-58=-91/14, 56-57=-203 0, 45-46=-181/0, 53-54=-181/1 0, 50-51=-218/0, 10-69=-39/6 38, 71-72=-441/2725, 2725, 73-74=-447/2725, 27, 17-70=-44/635, 9, 16-70=-27/20, 12-71=-256/ 1558, 13-71=-654/189, 52, 14-73=-715/182, 1553, 55-56=-118/22, 0, 52-53=-121/0, 51-52=-100/1 0, 45-47=-118/0, 44-45=-125/2 20, 40-42=-103/10	1/94, 80, 14, 3/0, 0, 44, 67, 3,				
 NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103; II; Exp B; E and C-C C 5-5-15 to 1 Exterior(2) 36-10-3, E 48-1-13 to MWFRS f6 grip DOL= 3) Truss des only. For s see Stand, or consult 4) TCLL: ASC Plate DOL DOL=1.15 Cs=1.00; C 5) Unbalance design. 6) Provide ad 7) All plates at 8) Gable stud 9) This truss chord live 10) * This truss on the bott 3-06-00 tal chord and 	ed roof live loa CE 7-16; Vult= mph; TCDL=6 Enclosed; MW corner(3E) 0-1. 12-3-13, Corne N) 23-3-2 to 29 ixterior(2N) 36 53-6-0 zone;(or reactions sh 1.60 studs exposed ard Industry G qualified build CE 7-16; Pr=20 .); Is=1.0; Roug CE 1.10 ed snow loads dequate draina are 2x4 MT20 ds spaced at 2 has been desi load nonconct s has been de tom chord in a II by 2-00-00 v	ds have been considered for 130mph (3-second gust) .0psf; BCDL=6.0psf; h=25ft; C FRS (envelope) exterior zone -12 to 5-5-15, Exterior(2N) er(3R) 12-3-13 to 23-3-2, 5-10-14, Corner(3R) 25-10-14 -10-3 to 48-1-13, Corner(3E) C-C for members and forces 8 iown; Lumber DOL=1.60 plate I loads in the plane of the truss I to wind (normal to the face), able End Details as applicable ing designer as per ANSI/TPI .0.0 psf (Lot DOL=1.15 Plate gh Cat B; Fully Exp.; Ce=0.9; have been considered for this rige to prevent water ponding. unless otherwise indicated. -0-0 oc. igned for a 10.0 psf bottom urrent with any other live loads signed for a live load of 20.0p II areas where a rectangle vide will fit between the botton mbers	Cat. to 5 5 5 5 5 5 5 5 5 5 5				

11) Ceiling dead load (5.0 psf) on member(s). 10-69, 69-71, 71-72, 72-74, 73-74, 70-73, 17-70; Wall dead load (5.0psf) on member(s).10-58, 17-40

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



Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A08	Attic	6	1	Job Reference (optional)	172213110



FORCES	(lb) - Maximum Compression/Maximum Tension	31-32=-307/177, 30-31=-355/12, 26-27=0/1522, 24-26=-1401/0, 23-24=0/2101
TOP CHORD	5-6=-2972/412, 6-7=-2972/412, 7-8=-3601/537, 8-9=-2737/426, 9-10=-2737/426, 10-11=-1773/186, 11-13=-4095/106, 13-14=-4666/103, 1-41=-2958/58, 1-2=-3909/28, 2-4=-4057/44, 4-5=-2133/163	 19-23=-2162/0 NOTES 1) Unbalanced roof live loads have been considered for this design.

.101 munn March 25,2025

SEAL

5844

ontinued on page 2 WARNING

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



818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A08	Attic	6	1	Job Reference (optional)	172213110

- * 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.
- Ceiling dead load (5.0 psf) on member(s). 4-43, 42-43, 42-44, 44-45, 45-46, 46-47, 11-47; Wall dead load (5.0psf) on member(s).4-37, 11-20
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 36-37, 34-36, 33-34, 31-33, 29-31, 28-29, 26-28, 25-26, 23-25, 21-23, 20-21
- 11) Refer to girder(s) for truss to truss connections.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection. LOAD CASE(S) Standard

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:01 ID:1d5INYb_SnpjqifH0e1reGzRBHO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

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



Job		Truss		Truss Type	Qty	,	Ply	900 S	300 Serenity-Roof-B326 A CP TRAY GLH						
25030171-0	1	A07		Attic		1		1	loh R	Job Reference (optional)					
Carter Compone	nts (Sanford, NC	C), Sanford	l, NC - 27332,		Run: 8.73 S Feb 19	2025 P	Print: 8.7	30 S Feb 19	9 2025 N	liTek Industrie:	s, Inc. Fr	i Mar 21 12:4	40:00	Page: 1	
				20-7-	ID:1d5INYb_Snpjqift 28-6	H0e1re0 5-11	GzRBHC	D-RfC?PsB7	70Hq3N	SgPqnL8w3ul1	TXbGKW	rCDoi7J4zJ0	C?f		
-(0-10-8	8-4-0	16-2-	4 17-8-0	23-3-2 23-3-2	3	31-6-0	-10-7	39-4-1	4	46-3-	13	53-6-0		
0	-10-8	0-4-0	7-10-	4 1-5-122-11- 6x8=	5 2-7-15 2-7-15 2-7	-13 2	2-11-01	-4-7 6x8 _€	0-0-7		6-10-	14	7-2-3		
				4x8 ≠	4x8= 4x5=	10	6x	8=							
Т			612	5				12							
			4x6 = 4x5 = 61 _	44	43 45 46	47	48	3	<u> </u>	53 _{8x10} ,					
			4×3 ±		5x8=	5x8=	= 3x	6 1		1354					
0-		ł	59		4						55				
11-8	578	58			9-1-				.//			4x5:	* 4		
	1 ²		A A A A A A A A A A A A A A A A A A A										56		
0-0					E E E E E E E E E E		2							45	
5	42			38 37 35	39 32 30 29 27		24 22					8			
Ν	MT18HS 3x10 =		41 57 5x8=	40 39 36 4x6= $4x6=$ $3x5$	33 31 28 = 3x5= 3x8=	25 5x10=	23 20 =	2119		18 17 3x6=		16		5x8=	
				5x8 II	3x10= 5x6 4x5		4x8=	12210=		8x10=					
				5x8 = 17-9-12	3x5= 3x8	3= 6_ 29	3x6= -10 ₇ 0 ₇ 1	32 -9-4							
	, ;	8-4-0	13-11-0	16-5-0 20- 16-2-4 19-2-8	7-4 23-4-12 26-11-8 22-0-0 25-6-12 28	3 ⁻ 29-9	9-0 32 31-1-12	-6-8 2 37	7-6-8	39-4-14	46-3-	13	53-6-0	1	
Scale = 1:93.6		8-4-0	5-7-0	2-3-4 1-4 0-2-12	-12 1-4-12 1-4-12 1-4-12 2-2-0 1-	1-4- 4-12 0	12 1-4	4-12 ⁴ 0-2-12	-9-4	1-10-6	6-10-	14	7-2-3		
Plate Offsets (2	[2:0-2-1 X, Y): [38:Edg	12,0-2-0] ge,0-2-4]	, [6:0-5-8,0-3-0], [11:0 , [41:0-3-8,0-2-8])-5-8,0-3-0],11 <u>3-0-5</u> 20	,0-4-8], [15:Edge,0-0-7], [17:0	0133122	0-3-4], [19	:0-6-12	2,0-3-0], [26:0	0-3-0,0-	3-0], [28:0-	·3-8,0-1-8],		
Loading		(psf)	Spacing	2-0-0	CSI		DEFL		in (l	oc) l/defl	L/d	PLATES	GRIP		
TCLL (roof)		20.0	Plate Grip DOL	1.15	TC BC	0.97	Vert(Ll	L) -0.4	47 31 77 31	-33 >833	240 180	MT20 MT18HS	244/19	0	
TCDL		10.0	Rep Stress Incr	YES	WB	0.94	Horz(C	T) 0.	15	15 n/a	n/a	WITTOILO	244/13	0	
BCLL BCDL		0.0* 10.0	Code	IRC2021/1PI2014	Matrix-MSH		Attic	-0.3	32 21	-38 >604	360	Weight: 4	54 lb FT = 2	0%	
LUMBER				BOT CHORD	41-42=-107/220, 39-4	1=0/34	431,		2)	Wind: ASCI	E 7-16;	Vult=130m	ph (3-second	gust)	
TOP CHORD	2x6 SP No.2) F 2 0F *	Excent* 26-21 40-42*	2x4	36-39=0/3347, 33-36= 28-31=0/6100, 25-28=	=0/518 =0/480	34, 31-3)4. 20-2	3=0/6303 5=0/1822	,	Vasd=103m II: Exp B: E	nph; TC nclosec	DL=6.0psf : MWFRS	; BCDL=6.0ps (envelope) ext	f; h=25ft; Cat. terior zone	
Bot offorte	SP No.1, 18	-23,26-3	8:2x4 SP No.2		19-20=-2299/0, 17-19	=-210	04/0, 0/4069		,	and C-C Ex	terior(2	E) -0-8-2 to	0 4-8-2, Interio	r (1) 4-8-2 to	
WEBS	2x4 SP No.3	*Except	* 5-39,12-19:2x6 SP		37-38=-1135/0, 35-37	'=-113	35/0,			23-3-2 to 25	5-10-14	, Exterior(2	25-10-14 to R) 25-10-14 to	o 36-10-3,	
	No.2, 41-2,45-12,2	20-21,36-	.38,45-5,36-35,35-33,	33-	30-32=-3176/0, 29-30	=-312 =-317	3/0, 6/0,			53-6-0 zone	e; cantil	ever left an	id right expose	ed ; end	
	32,32-31,28- No.2, 21-17:	27,27-29 2x4 SP I	5,25-24,24-20:2x4 SP No.1		27-29=-3176/0, 24-27 22-24=0/3300, 21-22=	'=-690/ =0/330)/956,)0			forces & M	and rig NFRS f	nt exposed or reaction	;C-C for memb s shown; Lum	bers and ber	
	Right: 2x4 S	P No.3		WEBS	3-41=-681/82, 13-17= 14-17=-578/208, 14-1	-267/9 6=0/24	96, 247,		3)	DOL=1.60 p TCLL: ASC	plate gr E 7-16;	ip DOL=1.6 Pr=20.0 p	60 sf (roof LL: Lui	m DOL=1.15	
TOP CHORD	Structural w	ood shea	athing directly applied	or	38-39=-47/336, 5-38=	0/119	10, 16/1140			Plate DOL=	=1.15); İ ∶ls=1 0	of=20.0 psf	(Lum DOL=1)	.15 Plate · Ce=0 9 [.]	
	2-10-3 oc pu 2-0-0 oc pur	lins (3-9-	ericais, ar 8 max.): 6-11.	IO	2-41=0/3476, 5-44=-2	083/5	4,	, o	4)	Cs=1.00; C	t=1.10	laada haya	boon conside	rad for this	
BOT CHORD	Rigid ceiling bracing.	directly	applied or 2-2-0 oc		43-44=-2008/54, 43-4	7-48=-15	-2471/0	o, ,	4)	design.	1 Show	loads nave	been conside	red for this	
WEBS JOINTS	1 Row at mid	dpt t(s): 43	12-47, 13-21, 3-39		12-48=-2567/0, 7-43= 8-45=0/62, 9-46=0/13	-138/1 1, 10-4	122, 6-4 47=-17	14=0/354, 0/78,	5)	This truss h load of 12.0	ias bee) psf or	n designed 1.00 times	for greater of flat roof load of	min roof live of 20.0 psf on	
	45, 46, 47, 3	35, 32,			11-48=0/450, 20-21=0 36-37=-230/0, 20-22=)/2699 =-352/0	9, 36-38 0, 25-26	3=0/1559, 6=-320/0,	6)	overhangs Provide ade	non-cor equate	ncurrent wit drainage to	th other live loa	ads. r ponding.	
REACTIONS	(size) 15	5= Mecha	anical, 19=0-5-8,		33-34=-185/0, 28-29= 13-21=-579/324 3-39	-533/0	0, 30-31)/379	I=-2/95,	- /			"TH	CARO	11,	
	42 Max Horiz 42	2=0-5-8 2=-190 (l	_C 12)		17-21=0/5329, 6-43=- 8-43=-876/124, 8, 46	342/12	277,			/	1.11	R	Sain 1	Nº1	
	Max Grav 15	5=2298 ()), 42=30	LC 48), 19=1793 (LC		11-47=-314/1438, 9-4	7=-92	23/118,				ER?	in	-	vein	
FORCES	(lb) - Maximi	um Com	pression/Maximum		30-30=-1294/0, 33-35 32-33=-303/181, 31-3	=0/10 2=-36	i5∠, 33/11,					· Y c			
TOP CHORD	1 ension 6-7=-2981/4	11, 7-8=	-2981/411,		27-28=0/1529, 25-27= 20-24=-2165/0	=-1405	5/0, 24-2	25=0/2106	6,	Ξ			5844	1 E	
	8-9=-3607/5 10-11=-2740	36, 9-10)/425, 11	=-2740/425, -12=-1776/184,	NOTES	NOTES									1.1	
	12-14=-4116 2-42=-2999/	6/100, 14 91, 1-2≓	-15=-4686/98, 0/22, 2-3=-3961/16	this design	 Unbalanced roof live loads have been considered for this design. 						- 7	. ENI	ER.	2	
	3-5=-4084/3	8, 5-6=-2	2144/162								14	ORFI	NE LINE	o IIII	
												1111	JOF	N.	
												М	arch 25,20	25	

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



Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A07	Attic	1	1	Job Reference (optional)	172213111

- 7) All plates are MT20 plates unless otherwise indicated.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.
 10) * 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.
 11) Ceiling dead load (5.0 psf) on member(s). 5-44, 43-44, 43-45, 45-46, 46-47, 47-48, 12-48; Wall dead load (5.0psf) on member(s).5-38, 12-21
- 12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 37-38, 35-37, 34-35, 32-34, 30-32, 29-30, 27-29, 26-27, 24-26, 22-24, 21-22
- 13) Refer to girder(s) for truss to truss connections.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:40:00 ID:1d5INYb_SnpjqifH0e1reGzRBHO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

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



Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A01	Piggyback Base Supported Gable	1	1	Job Reference (optional)	172213112

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:39:56 ID:HvYYHe4LpHmiz2Dld9nw5TzRQov-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



53-3-0 21-9-0



Scale = 1:94.5

Loading		(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)		20.0	Plate Grip DOL	1.15	IC	0.13	Vert(LL)	n/a	-	n/a	999	M120	244/190		
Snow (Pf)		20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999				
TCDL		10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	33	n/a	n/a				
BCLL		0.0*	Code	IRC2021/TPI2014	Matrix-MSF	1									
BCDL		10.0										Weight: 546 lb	FI = 20%		
LUMBER					Max Grav 34=	=419 (LC 1), 3	35=81 (LC 13	3),	BOT CH	IORD	61-62	=-81/150, 60-61=	=-81/150,		
TOP CHORD	2x6 SP N	0.2			36=	=197 (LC 41),	37=152 (LC	59),			59-60	=-81/150, 58-59=	:-81/150,		
BOT CHORD	2x6 SP N	0.2			38=	=174 (LC 45),	39=221 (LC	45),			57-58	=-81/150, 56-57=	=-81/150,		
WEBS	2x4 SP N	0.3			40=	=230 (LC 45),	42=229 (LC	45), 45)			55-56	=-81/150, 53-55=	81/150,		
OTHERS	2x4 SP N	o.3 *Excep	t* 	-	43	=230 (LC 43), =100 (LC 40)	44=217 (LC	· 45), · 40)			52-53	=-01/150, 51-52=	- 91/150,		
	49-17,48-	18,47-19,4	6-20,44-22,50-16,51-1	5,	40=	=199 (LC 40), -217 (LC 40)	47=220 (LC	(40), (40)			48-49	=-81/150, 49-50= 81/150 47-48-			
	52-14,53-	12:284 5P	INO.2			=217 (LC 40), =217 (LC 40)	51=220 (LC	: 40), : 40)			46-47	47=-81/150, 47-48=-81/150, 47=-81/150, 44-46=-81/150			
BRACING	O 1 1 1 1 1 1 1		a da baran alƙara a da sa ana ƙwal		52=	=199 (LC 40).	53=218 (LC	43).			43-44	=-81/150, 42-43=			
TOP CHORD	Structura	i wood shea	atning directly applied	or	55=	=234 (LC 43),	56=233 (LC	43),			40-42	=-81/150, 39-40=	=-81/150,		
	2-0-0 00 0	ourline (10-	$0_0 \text{ max} > 13_21$		57=	=233 (LC 43),	58=233 (LC	43),			38-39	=-81/150, 37-38=	=-81/150,		
	Rigid ceil	ing directly	applied or 6-0-0 oc		59=	=199 (LC 43),	60=150 (LC	58),			36-37=-81/150, 35-36=-81/150,				
Der enerte	bracing.	ing anoony			61=	=257 (LC 51),	62=133 (LC	58)		34-35	=-81/150, 33-34=	81/150			
WEBS	1 Row at	midpt	17-49, 18-48, 19-47,	FORCES	(lb) - Maximu	m Compressio	on/Maximum	l .							
			20-46, 22-44, 23-43,		Tension										
			24-42, 16-50, 15-51,	TOP CHORD	2-62=-245/19	1, 1-2=0/23, 2	2-3=-100/91,								
			14-52, 12-53, 11-55, 9	-56	3-4=-74/121,	4-5=-48/115,	5-6=-58/156	,							
REACTIONS	(size)	33=53-3-0), 34=53-3-0, 35=53-3-	·0,	6-7=-75/201,	7-8=-90/246,	8-9=-106/29	1,							
		36=53-3-0), 37=53-3-0, 38=53-3·	·0,	9-11=-124/33	83 13-14-14	4/307, 40/380								
		39=53-3-0	0, 40=53-3-0, 42=53-3-	·0,	14-15=-140/3	80 15-16=-14	40/380								
		43=53-3-0), 44=53-3-0, 46=53-3-	·0,	16-17=-140/3	80, 17-18=-14	40/380.								
		47=03-3-0), 48=53-3-0, 49=53-3-	·0, 0	18-19=-140/3	80, 19-20=-14	40/380,						1775		
		53-53-3-0), 51=53-3-0, 52=53-3-	·0, ·0	20-21=-140/3	80, 21-22=-14	46/383,						illin.		
		57=53-3-0) 58=53-3-0 59=53-3-	0	22-23=-144/3	87, 23-24=-12	24/338,					TH UA	Roith		
		60=53-3-0), 61=53-3-0, 62=53-3·	·0	24-25=-106/2	91, 25-27=-90	0/246,				1.5	A	ANIA		
	Max Horiz	62=-186 (LC 12)		27-28=-75/20	1, 28-29=-59/	/160,			- []	3.2	NAFER	Min la an		
	Max Uplift	34=-66 (L	C 14), 35=-170 (LC 15),	29-30=-63/13	57, 30-31=-71/	/112,			U.	~~~	it.			
		36=-15 (L	C 14), 37=-50 (LC 15)	,,	31-32=-124/1	00, 32-33=-1	34/117			8		· 4	N 1 E		
		38=-42 (L	C 15), 39=-44 (LC 15)									SEA	L 1 E		
		40=-43 (L	C 15), 42=-46 (LC 15)							-		450			
		43=-52 (L	C 15), 47=-29 (LC 11)							=		4584	+4 : :		
		48=-28 (L	C 11), 49=-25 (LC 10)							-			1. 5		
		50=-28 (L	C 11), 51=-29 (LC 10) C 14) 56- 46 (LC 14)								- 0	·	a:23		
		5713 (L	C (14), 30 = -40 (LC (14)) C (14), 58 = -44 (LC (14))								21	VANGIN	EELON		
		59=-46 (L	C(14) = 60 = -22 (C(14))								11	Op.	"INS,"		
		61=-137 (LC 14). 62=-88 (LC 15)							100	1, SW .	OHIM		
			,, .= (10	/								- minu	unit.		

March 25,2025



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

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A01	Piggyback Base Supported Gable	1	1	Job Reference (optional)	172213112
Carter Components (Sanford NC) Sanford NC - 27332	Run: 8 73 S. Feb 19 2	2025 Print: 8	730 S Eeb 1	9 2025 MiTek Industries Inc. Eri Mar 21 12:39:56	Page: 2

ID:HvYYHe4LpHmiz2Dld9nw5TzRQov-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Carter Components (Sanford, NC), Sanford, NC - 27332,

WEBS 17-49=-176/57, 18-48=-177/62, 19-47=-180/61, 20-46=-159/6, 22-44=-177/2, 23-43=-190/87, 24-42=-189/81, 25-40=-190/77, 27-39=-181/77, 28-38=-132/77, 29-37=-125/77, 30-36=-138/78, 31-35=-65/120, 32-34=-244/137, 16-50=-177/62, 15-51=-180/61, 14-52=-159/1, 12-53=-178/0, 11-55=-194/87, 9-56=-193/81, 8-57=-193/77, 7-58=-194/77. 6-59=-157/77. 5-60=-115/91. 4-61=-186/159, 3-62=-226/263

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-8-6 to 4-7-0, Exterior(2N) 4-7-0 to 12-4-2, Corner(3R) 12-4-2 to 22-11-14, Exterior(2N) 22-11-14 to 26-2-2, Corner(3R) 26-2-2 to 36-7-0, Exterior(2N) 36-7-0 to 47-11-2, Corner(3E) 47-11-2 to 53-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) 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
- Unbalanced snow loads have been considered for this 5) design.
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated. 8)
- 9) Gable requires continuous bottom chord bearing.
- 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.
- * This truss has been designed for a live load of 20.0psf 12) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

13) N/A

14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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Page: 2

Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A03	Piggyback Base	5	1	Job Reference (optional)	172213113

11-8-0

Run: 8,73 S Feb 19 2025 Print: 8,730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:39:57 ID:OFJFx3IDTxFbWWzrBXohbzzRCTM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8 19-5-4 31-6-0 8-11-12 17-8-0 24-7-0 29-8-12 38-11-7 45-7-6 53-3-0 8-11-12 8-8-4 5-1-12 5-1-12 7-5-7 6-7-15 7-7-10 0-10-8 1-9-4 1-9-4 4x5= 6x8= 6x8= 4x5= 5 34 735 8 9 6 4x8 ≠ Ľ, 4 6¹² 2 8x10 5x8= ¹⁰36 33 3 Ð 37 <u>11-8-0</u> 11-2-8 32 31 11 5x10 🞜 38 2 1 4-10-4 4-10-4 2-10-0 9 9 0-5-8 0-5-8 ல் ம் 21 ষ ĕ 20 39 19 4018 41 17 42 1643 14 45 46 13 15 44 4x5= 5x10= 4x6= 4x5= 8x10= 8x10= 4x5= 8-11-12 <u>19-5-4</u> 32-9-8 24-7-0 29-8-12 37-6-14 45-7-6 53-3-0 7-7-10 8-11-12 10-5-8 5-1-12 5-1-12 3-0-12 4-9-6 8-0-8 Scale = 1:94.5 Plate Offsets (X, Y): [2:0-4-14,0-2-8], [10:0-5-0,0-4-8], [14:0-5-0,0-4-8], [16:0-5-0,0-4-8] 2-0-0 CSI DEFL L/d PLATES GRIP Loading (psf) Spacing in (loc) l/defl 20.0 тс 244/190 TCLL (roof) Plate Grip DOL 1.15 0 72 Vert(LL) -0.35 18-20 >999 240 MT20

Snow (Pf) TCDL		20.0 10.0	Lumber DOL Rep Stress Incr	1.15 YES	1/TPI2014	BC WB Matrix-MSH	0.88 0.98	Vert(CT) Horz(CT)	-0.53 0.11	18-20 12	>728 n/a	180 n/a	1120	211/100			
BCDL		10.0	Code		1/11/2014	Widdinx-WiOI I							Weight: 470 lb	FT = 20%			
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD	2x6 SP N 2x6 SP N 2.0E 2x4 SP N 20-2,6-18 No.2 Right: 2x4 Structura 3-1-4 oc 2-0-0 oc	lo.2 lo.2 *Excep lo.3 *Excep 3,8-16,20-5, 4 SP No.3 Il wood shea purlins, exp purlins, exp	t* 16-14:2x6 SP 240(t* 21-2:2x6 SP No.2, 18-5,16-9,14-9:2x4 S athing directly applied pept end verticals, an -7 max.): 5-9.	W DF SP d or id N(1)	EBS	2-20=-63/2672, 22-25=-474/253, 16-23=-864/226, 8-26=-827/232, 5-20=-272/480, 10-14=-918/319, 10-13=-222/799, 22-24=-38/54, 22; 25-27=-25/40, 26; 6-27=-296/722, roof live loads his	18-22=-489 6-25=-460 23-26=-84 3-20=-817/ 5-18=0/904 9-14=-189 11-13=-33 3-24=-38/5 6-27=-131/ 3-27=-283/ ave been of	9/243, 9/257, 18/235, 329, 1, 9-16=-92/9 30/236, 4, 17-24=0/4 27, 7-27=-25 812 considered for	938, 11, 57/88, pr	 * Thorn to the second se	is truss he botto 5-00 tall rd and a er to girr vide me ring plat + H2.5A ommeno LIFT at j a and do	has be om cho by 2-0 any oth der(s) f chanic te capa Simps led to o t(s) 21 es not	een designed for a rd in all areas who 0-00 wide will fit b er members, with for truss to truss c al connection (by able of withstandir on Strong-Tie cor connect truss to b and 15. This com consider lateral for	a live load of are a rectan between the BCDL = 10 onnections. others) of tr ing 29 lb uplin nectors earing walls nection is fo proces.	f 20.0psf gle bottom .0psf. uss to ft at joint due to r uplift		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.				this design. Wind: ASCE	nph (3-sec	ond gust)		or the orientation of the purlin along the top and/or								
WEBS	1 Row at	midpt	18-25, 16-26, 5-20, 9 22-23	9-16,	Vasd=103m II; Exp B; En	oh; TCDL=6.0ps closed; MWFRS	f; BCDL=6 (envelope	.0psf; h=25ft) exterior zor	; Cat. ne	bott	om cho CASE(S	rd.) Stai	ndard				
JOINTS	1 Brace a 26, 27	at Jt(s): 25,			and C-C Exterior(2E) -0-8-6 to 4-7-9, Interior (1) 4-7-9 to 10-1-10, Exterior(2R) 10-1-10 to 39-2-5, Interior (1)												
REACTIONS	26, 27 (size) 12= Mechanical, 15=0-3-8, 21=0-5-8 Max Horiz 21=-187 (LC 12) Max Uplift 12=-29 (LC 14), 15=-198 (LC 15), 21=-170 (LC 14) Max Grav 12=2089 (LC 47), 15=852 (LC 39), 01 cores (LC 97) (LC 39),				 39-2-5 to 47-11-2, Exterior(2E) 47-11-2 to 53-3-0 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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; 						A WORKERSKOW						
FORCES	(lb) - Max Tension	kimum Com	pression/Maximum	4)	Cs=1.00; Ct= Unbalanced	=1.10 snow loads have	e been cor	sidered for th	his		U		wound	-	-		
TOP CHORD	Tension 1-2=0/25, 2-3=-3226/217, 3-5=-3342/411, 5-6=-2713/224, 6-7=-3232/430, 7-8=-3232/430, 8-9=-2696/223, 9-11=-4171/305, 11-12=-4214/194, 2-21=-2411/219				design.) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.) 200.0lb AC unit load placed on the bottom chord, 24-7-0								4	WILLIN			
BOT CHORD	2-21=-2411/219 20-21=-132/276, 18-20=-26/2497, 17-18=-2/2590, 15-17=-2/2590, 13-15=-46/3134, 12-13=-88/3645				All plates are chord live loa	a supported at two quate drainage to 2x4 MT20 unle as been designed ad nonconcurren	o prevent v ss otherwi d for a 10.0 it with anv	vater ponding se indicated.) psf bottom other live loa	g. ads.			The state	NOREW JO	ER	A LAND		

in and a south March 25,2025

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



Job	Truss	Truss Type	Qty	Ply	900 Serenity-Roof-B326 A CP TRAY GLH	
25030171-01	A04	Piggyback Base	1	1	Job Reference (optional)	172213114

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Fri Mar 21 12:39:58 ID:DGN6a6f8caCKWpHw1clz1BzRCZx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8 19-5-4 31-6-0 8-11-12 17-8-0 24-7-0 29-8-12 38-11-7 45-7-6 53-3-0 0-10-8 5-1-12 7-7-10 8-11-12 8-8-4 1-9-4 5-1-12 1-9-4 7-5-7 6-7-15 4x5= 6x8= 6x8= 4x5= 5 6 33 734 8 9 4x8 ≠ 4 6¹² 26 24 8x10👟 5x8= 10₃₅ 32 3 11-8-0 11-2-8 36 11-8-0 31 30 11 5x10 🚽 37 2 1 2-10-0 4-10-4 4-10-4 0-5-8 0-5-8 0-5-8 20 7 8 ⊠ 13 19 38 18 3917 40 16 41 1542 43 14 44 45 4x5 II 4x5= 5x10= 5x6= 4x5= 8x10= 8x10= 4x5= 45-7-6 0-1-6 8-11-12 19-5-4 24-7-0 29-8-12 37-7-3 45-6-0 53-3-0 8-11-12 10-5-8 5-1-12 5-1-12 7-10-7 7-10-13 7-7-10

Scale = '	1:94.5
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Plate Offsets (X, Y): [2:0-4-14,0-2-8], [10:0-5-0,0-4-8], [14:0-5-0,0-4-8], [15

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	0.70	Vert(LL)	-0.41	17-19	>999	240	MT20	244/190			
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.99	Vert(CT)	-0.60	17-19	>911	180					
TCDL		10.0	Rep Stress Incr	YES		WB	0.87	Horz(CT)	0.09	12	n/a	n/a	-				
BCLL		0.0*	Code	IRC202	1/TPI2014	Matrix-MSH							-				
BCDL		10.0											Weight: 469 lb	FT = 20%			
LUMBER				W	EBS 2	2-19=-55/2613. 17-	21=-46	8/312.		10) * Th	is truss	has b	een desianed for	a live load of 2	0.0psf		
TOP CHORD	2x6 SP No.2					21-24=-457/317, 6-	24=-44	3/319,		on t	he botto	m cho	ord in all areas wi	nere a rectangle	e '		
BOT CHORD	2x6 SP No.2					15-22=-863/241, 22	2-25=-8	55/249,		3-06	5-00 tall	by 2-0	0-00 wide will fit	between the bo	ottom		
WEBS	2x4 SP No.3	*Except	* 20-2:2x6 SP No.2	,	8	8-25=-836/246, 9-1	5=-29/1	395,		cho	rd and a	ny oth	er members, wit	h BCDL = 10.0	psf.		
	19-2,6-17,15	-8,15-9,	14-9,19-5,17-5:2x4	SP	ę	9-14=-352/52, 10-1	4=0/56	5,		11) Ref	er to giro	der(s)	for truss to truss	connections.			
	No.2					10-13=-2213/265, 1	11-13=-	455/258,		12) Pro	vide me	chanic	al connection (b	/ others) of trus	s to		
BRACING					3	3-19=-817/329, 5-1	9=-283	/531,	7/50	bea	ring plat	e capa	able of withstand	ing 211 lb uplift	t at joint		
TOP CHORD	Structural wo	ood shea	athing directly applie	ed or		0-1/=-00/800,21-2	3=-37/5 - 50/01	25 26- 160	//30, ///2	12.		C:	on Chrone Tio or				
	3-2-8 oc purl	lins, exc	ept end verticals, a	nd	-	7-26-264/87 8-26	283/8	, 23-20=-109	//43, 11/741	T3) Une	HZ.3A	of to	connect trues to	hneciors	ue to		
	2-0-0 oc purl	lins (3-8-	-11 max.): 5-9.	N	отге •	20= 20+/07, 0 20	- 200/0	742, 0 20= 0	11/741	LIPLIET at it(s) 20 and 13. This connection is for unlift							
BOT CHORD	Rigid ceiling	directly	applied or 2-2-0 oc	1)	Ulebalancod	roof live loads have	a boon	considered fr	or	only	and do	es not	consider lateral	forces.	apint		
WERS	1 Pow of mic	dint .	17 24 15 25 0 14	را 5 10	this design	14) Gra	phical p	urlin re	epresentation do	es not depict th	e size						
WEBS	I KOW at Inic	Jpr ,	5-17 21-22, 9-14,	2)	Wind ASCF	7-16. Vult=130mp	h (3-sec	cond aust)		or th	ne orient	ation	of the purlin alon	g the top and/o	r		
WEBS	2 Rows at 1/	3 pts	10-13	-,	Vasd=103mr	6.0psf: h=25ft	bott	om chor	d.								
JOINTS	1 Brace at Jt	t(s): 24.			II; Exp B; Enclosed; MWFRS (envelope) exterior zone						ASE(S)	Sta	ndard				
	25, 26				and C-C Exte	erior(2E) -0-8-6 to 4	4-7-9, İr	, nterior (1) 4-7	7-9 to								
REACTIONS	(size) 12	2= Mecha	anical, 13=0-5-8,		10-1-10, Exte	erior(2R) 10-1-10 to	o 39-2-5	5, Interior (1)									
	20)=0-5-8			39-2-5 to 47-	11-2, Exterior(2E)	47-11-2	2 to 53-3-0 zo	one;								
	Max Horiz 20)=-187 (L	_C 12)		cantilever lef	t and right exposed	; end	vertical left ar	nd								
	Max Uplift 12	2=-211 (L	_C 14), 13=-386 (LC	C 15),	right exposed	d; porch right expo	sed;C-C	for member	ſS					11.			
	20)=-154 (L	_C 14)			ato grip DOI -1.60		own, Lumber						in the			
	Max Grav 12	2=896 (L	C 37), 13=2413 (LC	; 39), 3)		7-16' Pr-20 0 psf	(roof LI		-1 15		_		IN THUS	ROUN			
	20)=2303 (LC 37)	5)	Plate DOI =1	15) Pf=20.0 psf () =1 15 Plate	-1.15 e			7.	A	A. Alat			
FORCES	(lb) - Maximu	um Com	pression/Maximum		DOL=1.15):	Is=1.0: Rough Cat	B: Fully	Exp.: Ce=0.	9:			12	in the	Anna	in		
		0 0450	140E 0 E 007E/000	`	Cs=1.00; Ct=	=1.10	, . ,	,	- ,					4.			
TOP CHORD	I-Z=0/20, Z-3	3=-3159/	2195, 3-5=-3275/388 2195/440	9, 4)	Unbalanced	snow loads have b	een cor	nsidered for t	this		-				1		
	7-83185/44	10 8-9-	-2599/234		design.								SEA	NL 🗄	=		
	9-11=-2806/5	538. 11-	12=-1552/470.	5)	This truss ha	is been designed fo	or great	er of min roo	f live		-	:	150	1.4 :	=		
	2-20=-2365/2	214	,		load of 12.0	pst or 1.00 times fla	at roof lo	oad of 20.0 p	ost on		1		4084	+4	-		
BOT CHORD	19-20=-131/2	273, 17-	19=0/2415,	0	overhangs n	on-concurrent with	other liv	ve loads.	4 7 0		-	1			E		
	16-17=0/2503, 13-16=-101/2503,				200.010 AC 0	Ib AC unit load placed on the bottom chord, 24-7-0						in aiti					
	12-13=-357/1	1335		7)	Provide ader	, supported at two	revent	o-u-u aparı. water nondin	a			11	VANGIN	EENO	2		
				()		Juale urainaye lu p	revent					1	UN				

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

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

chord live load nonconcurrent with any other live loads.

YEW JOHN

March 25,2025

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