

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 23120143-01 127 Serenity-Roof-B326 A GLH COP 4BR

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: I62903199 thru I62903235

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

North Carolina COA: C-0844



January 9,2024

Gilbert, Eric

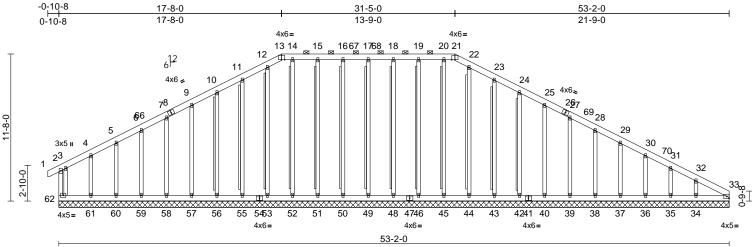
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. 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	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A01	Piggyback Base Supported Gable	1	1	I62 Job Reference (optional)	2903199

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:07 ID:HvYYHe4LpHmiz2Dld9nw5TzRQov-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

53-2-0

Page: 1



Scale = 1:91.4

00010 - 1.31.4													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CS TC BC WI Ma	;	0.12 0.05 0.21	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc) - - 33	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 545 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS	52-14,53-12:2x4 SP	15-20,44-22,50-16,51- No.2,)-0,0-0,0-0,0-0,0-0,0-0	,	Max U	35=-2 37=-4 39=-4 42=-4 46=-2 49=-2 51=-2 56=-4	8 (LC 15), 3 (LC 15), 4 (LC 15), 6 (LC 15), 9 (LC 11), 5 (LC 10), 8 (LC 10), 8 (LC 10), 6 (LC 14),	34=-96 (LC 36=-47 (LC 38=-44 (LC 40=-43 (LC 43=-51 (LC 48=-28 (LC 50=-28 (LC 55=-53 (LC 57=-43 (LC	15), 15), 15), 15), 11), 11), 14), 14),	TOP CH	HORD	3-4=-7 6-7=-9 10-11: 12-13: 14-15: 16-17: 18-19: 20-21:	=-145/332, 11-12 =-161/380, 13-14 =-151/376, 15-16 =-151/376, 17-18 =-151/376, 19-20 =-151/376, 21-22	9, 5-6=-81/150, /240, 9-10=-129/285, 2=-162/381, 4=-151/376, 3=-151/376, 3=-151/376, 2=-151/376, 2=-161/380,
BRACING TOP CHORD		eathing directly applied cept end verticals, and 0-0 max.): 13-21.		Max G	60=-2 62=-3 67av 33=13	7 (LC 14), 3 (LC 15), 34 (LC 27)	59=-45 (LC 61=-116 (LC 63=-36 (LC , 34=217 (LC	C 14), 14) C 55),			24-25 27-28 29-30	=-162/381, 23-24 =-129/285, 25-27 =-97/199, 28-29= =-106/152, 30-31	7=-113/240, 93/176, I=-119/129,
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 oc				(),	36=164 (LC 4 38=172 (LC 4	,,			31-32:	=-140/107, 32-33	i=-184/114
WEBS	T-Brace:	m end distance.			42=22 44=21 46=22 49=21 51=22 53=21 56=23 58=23	29 (LC 43) 11 (LC 43) 20 (LC 38) 16 (LC 38) 20 (LC 38) 20 (LC 38) 14 (LC 41) 33 (LC 41) 32 (LC 41)	, 40=230 (LC , 43=231 (LC , 45=192 (LC , 48=218 (LC , 50=218 (LC , 52=192 (LC , 55=235 (LC , 57=233 (LC , 59=188 (LC 61=180 (LC	2 43), 2 38), 2 38), 2 38), 2 38), 2 38), 2 38), 2 41), 2 41), 2 41),					
REACTIONS	36=53-2-(39=53-2-(43=53-2-(46=53-2-(50=53-2-(53=53-2-(57=53-2-(57=53-2-(2-0, FORCES 2-0, 2 -0, 2-0, 2-0, 2-0, 2-0, 2-0,	(lb) - Tens	62=17 Maximum (2 (LC 1),	61=130 (LC 4 63=134 (LC 2 on/Maximum	27)		4		SEA 0363	L 22 EER.H LL BELLIN

January 9,2024

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, recetion and bracing of trusses and truss systems, see **ANSI/TP1 Quility Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



Job		Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-0	I	A01	Piggyback Base Supported Gable	1	1	Job Reference (optional)	162903199
Carter Componer	ts (Sanford, NC	C), Sanford, NC - 27332,				1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:07 PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f	Page: 2
BOT CHORD	59-60=-87/1 57-58=-87/1 52-53=-87/1 52-53=-87/1 52-53=-87/1 45-46=-87/1 43-44=-87/1 43-44=-87/1 43-44=-87/1 38-39=-87/1 38-39=-87/1 38-39=-87/1 17-49=-176/ 19-46=-180/ 22-44=-171/ 24-42=-189/ 27-39=-181/ 29-37=-120/ 31-35=-113/ 16-50=-178/ 10-56=-193/	81, 60-61=-87/181, 81, 58-59=-87/181, 81, 55-57=-87/181, 81, 55-55=-87/181, 81, 59-50=-87/181, 81, 49-50=-87/181, 81, 49-48=-87/181, 81, 42-43=-87/181, 81, 32-43=-87/181, 81, 37-38=-87/181, 81, 37-38=-87/181, 81, 35-36=-87/181, 81, 35-36=-87/181, 81, 35-36=-87/181, 81, 35-36=-178/62, 60, 20-45=-152/14, 10, 23-43=-191/88, 81, 25-40=-190/77, 77, 30-36=-121/80, 103, 32-34=-149/155, 62, 15-51=-180/60, 81, 9-57=-193/77, 7-58=-192/78, 81, 9-57=-192/90, 4-61=-120/16, 81, 9-57=-192/90, 4-61=-120/16, 81, 9-57=-193/77, 7-58=-192/78, 81, 9-57=-193/78, 81, 9-57=-193/78, 81, 9-57=-193/78, 81, 9-57=-193/78, 81, 9-57=-192/78, 81, 9-57=-193/78, 81, 9-57=-193/78, 81, 9-57=-193/78, 81, 9-57=-193/78, 81, 9-57=-193/78, 81, 9-57=-193/78, 81, 9-57=-192/18, 81, 9-57=-193/78, 81, 9	 15) Graphical purlin representation di or the orientation of the purlin alo bottom chord. 16) Warning: Additional permanent al truss system (not part of this com always required. LOAD CASE(S) Standard 88, 77, 	bes not dep ng the top a nd stability t	ict the size nd/or pracing fo	8	

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) -0-9-14 to 4-6-8, Exterior(2N) 4-6-8 to 12-4-3, Corner(3R) 12-4-3 to 22-11-13, Exterior (2N) 22-11-13 to 26-1-3, Corner(3R) 26-1-3 to 36-6-8, Exterior(2N) 36-6-8 to 47-10-3, Corner(3E) 47-10-3 to 53-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), 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
- 5) Unbalanced snow loads have been considered for this 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.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.

9) Gable requires continuous bottom chord bearing.

- 10) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 62, 25 lb uplift at joint 49, 28 lb uplift at joint 48, 29 lb uplift at joint 46, 51 lb uplift at joint 43, 46 lb uplift at joint 42, 43 lb uplift at joint 40, 44 lb uplift at joint 39, 44 lb uplift at joint 38, 43 lb uplift at joint 37, 47 lb uplift at joint 56, 28 lb uplift at joint 50, 28 lb uplift at joint 51, 53 lb uplift at joint 55, 46 lb uplift at joint 56, 43 lb uplift at joint 57, 44 lb uplift at joint 58, 45 lb uplift at joint 59, 27 lb uplift at joint 60, 116 lb uplift at joint 61, 36 lb uplift at joint 33.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

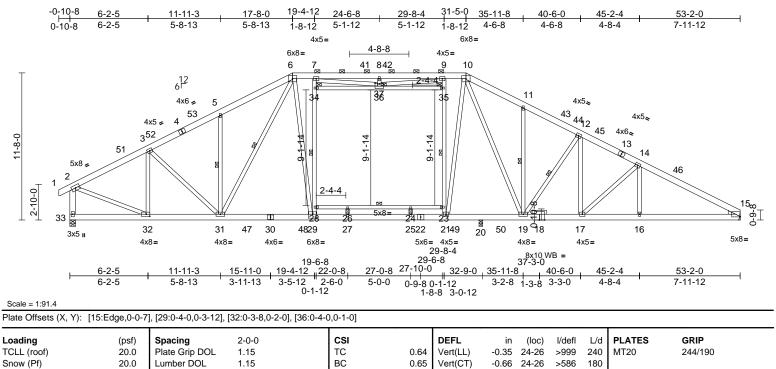
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A03	Piggyback Base	8	1	I62903200 Job Reference (optional)	

Continued on page 2

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:11 ID:OFJFx3IDTxFbWWzrBXohbzzRCTM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



TCDL BCLL	20.0 10.0 0.0*	Rep Stress Incr Code	YES IRC2018/TPI2014	BC 0.05 Ver(C1) -0.06 24-26 >366 160 WB 0.85 Horz(CT) 0.10 15 n/a n/a Matrix-MSH
BCDL	10.0			Weight: 503 lb FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS WEDGE BRACING TOP CHORD BOT CHORD	No.2 2x4 SP No.3 *Excep 2-32:2x4 SP No.2 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood she 3-3-2 oc purlins, ex 2-0-0 oc purlins (3-5	applied or 10-0-0 oc	WEBS	$\begin{array}{llllllllllllllllllllllllllllllllllll$
WEBS	1 Row at midpt	5-31, 11-19, 12-19, 6 29-34, 21-35	-31,	35-36=-124/16, 36-37=-31/5, 8-37=-221/83, 7-37=-346/652, 9-37=-294/825, 0 21 - 024
JOINTS	1 Brace at Jt(s): 34, 35, 36		NOTES	10-21=0/1411 only and does not consider lateral forces. 13) This truss is designed in accordance with the 2018
	33=0-5-8 Max Horiz 33=-187 Max Uplift 20=-198 Max Grav 15=2251 37), 33=2 (lb) - Maximum Con Tension 6-7=-2920/122, 7-8: 8-9=-3296/330, 9-11 10-11=-3273/209, 1 12-14=-3751/109, 1	(LC 12) (LC 15), 33=-116 (LC - (LC 45), 20=1009 (LC 2651 (LC 35) npression/Maximum =-3232/324,]=-2899/120, 1-12=-3263/144, 4-15=-4061/100, 2=0/28, 2-3=-2976/118	this design 2) Wind: AS(Vasd=103 Cat. II; Ex zone and 4-5-15 to Interior (1 53-2-0 zon and forces DOL=1.60 3) TCLL: AS Plate DOI DOL=1.16 Cs=1.00;	CE 7-16; Vult=130mph (3-second gust) Bmph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; p; B; Enclosed; MWFRS (envelope) exterior C-C Exterior(2E) -0-9-14 to 4-5-15, Interior (1) 10-1-12, Exterior(2R) 10-1-12 to 38-11-4,) 38-11-4 to 47-10-3, Exterior(2E) 47-10-3 to ne; end vertical left exposed; C-C for members s & MWFRS for reactions shown; Lumber D plate grip DDL=1.60 CE 7-16; Pr=20.0 psf (roof LL: Lum DDL=1.15 =-1.15); Pf=20.0 psf (Lum DDL=1.15 Plate 5); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;

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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A03	Piggyback Base	8	1	Job Reference (optional)	162903200
Carter Components (Sanford, No	C), Sanford, NC - 27332,	Run: 8.63 S Nov 1	2023 Print: 8.	630 S Nov 1	2023 MiTek Industries, Inc. Mon Jan 08 09:18:11	Page: 2

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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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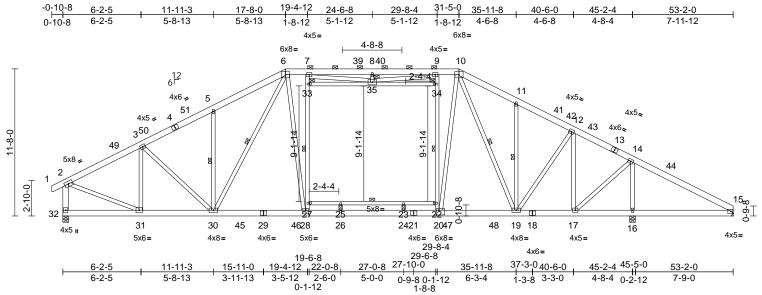


Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A04	Piggyback Base	3	1	I62903201 Job Reference (optional)	

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818 Soundside Road Edenton, NC 27932



Scale = 1:91.4

Continued on page 2

Plate Offsets (X, Y): [20:0-2-8,0-4-8], [28:0-3-0,0-3-8]

Loading	(ps	sf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20	'	Plate Grip DOL	1.15		TC	0.63	Vert(LL)	-0.33	. ,	>999	240	MT20	244/190
Snow (Pf)	20		Lumber DOL	1.15		BC	0.64	Vert(CT)	-0.59	23-25	>911	180	_	
TCDL	10		Rep Stress Incr	YES		WB	0.99	Horz(CT)	0.09	15	n/a	n/a		
BCLL		.0*	Code)18/TPI2014	Matrix-MSH		()						
BCDL	10												Weight: 500 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD	2x6 SP No.2 *E 2400F 2.0E, 27 2x4 SP No.3 *E 2-31:2x4 SP No Structural wood 3-10-10 oc purl	-22:2 Except 5.2 d shea	t* 32-2:2x6 SP No.2 athing directly applie except end verticals,	SP d or	WEBS	31-32=-113/225, 30 31-32=-113/225, 30 20-24=0/2873, 19-2 17-19=-81/2143, 16 15-16=-334/1326, 2 23-25=-76/34, 22-2 25-26=-209/0, 23-2 14-16=-2328/328, 2 3-31=-806/99, 3-30 6-30=-306/594, 14-	28=0/28 20=0/25 3-17=-3 25-27=- 3=-76/3 4=-245 2-31=-3 =0/512	73, 24-26=0/2 64, 34/1326, 76/34, 44 /0, /2621, , 5-30=-592/20		load ove 6) 200 fror 7) Pro 8) All 9) Thi cho	d of 12.0 erhangs r).0lb AC n left end vide ade plates ar s truss h ord live lo	psf or non-co unit loa d, supp quate re 2x4 as bee pad nor	1.00 times flat ro ncurrent with oth ad placed on the ported at two poir drainage to prev MT20 unless oth an designed for a nconcurrent with	bottom chord, 24-6-8 nts, 5-0-0 apart. ent water ponding. erwise indicated.
BOT CHORD	2-0-0 oc purlins Rigid ceiling dir bracing. Excep 6-0-0 oc bracin	ectly ot:	applied or 10-0-0 oc			12-17=-1110/146, 1 11-19=-468/168, 10 27-28=-550/251, 27	2-19=-)-19=-5 '-33=-5	25/780, 67/0, 05/274,		on 3-0 chc	the botto 6-00 tall ord and a	m cho by 2-0 iny oth	rd in all areas wh 0-00 wide will fit er members, with	here a rectangle between the bottom h BCDL = 10.0psf.
WEBS	1 Row at midpt	Ĩ	5-30, 6-30, 11-19, 1 28-33, 20-34	0-19,	:	7-33=-490/270, 20- 22-34=-861/245, 9-	34=-84	0/242,	105	12) Pro	vide me	chanic		others) of truss to
JOINTS	1 Brace at Jt(s) 34, 35	: 33,			;	6-28=0/1154, 33-35 8-35=-234/82, 7-35	=-320/6	98,	35,	join	it 15.			ng 195 lb uplift at
REACTIONS	(size) 15=	Mech	anical, 16=0-5-8,			9-35=-294/814, 10-	20=0/1	807					on Strong-Tie co	
	32=0)-5-8			NOTES									bearing walls due to
	Max Horiz 32=-				,	roof live loads have	e been	considered for						nection is for uplift
			LC 14), 16=-302 (LC	15),	this design.	T 40) (400	(0			Oni	y and do	es not		loices.
	Max Grav 15=9		C 14) .C 35), 16=2635 (LC .LC 35)		Vasd=103m Cat. II; Exp E	7-16; Vult=130mpl ph; TCDL=6.0psf; E 3; Enclosed; MWFF	8CDL=6 RS (env	6.0psf; h=25ft; elope) exterior				SI.	consider lateral f	ROUT
FORCES		Com	pression/Maximum			C Exterior(2E) -0-9- -1-12, Exterior(2R)			(1)			× ·	C. FESS	Oil Pro
TOP CHORD	8-9=-3210/337, 10-11=-2820/22 12-14=-2435/22	, 9-10 28, 11 23, 14 0, 1-2	=-2817/126, -12=-2803/135, -15=-1543/447, =0/28, 2-3=-2892/97		Interior (1) 3 53-2-0 zone; vertical left a forces & MW DOL=1.60 p 3) TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct=	8-11-4 to 47-10-3, I ; cantilever left and ind right exposed;C /FRS for reactions : late grip DOL=1.60 5-7-16; Pr=20.0 psf I.15); Pf=20.0 psf I.15); Rf=20.0 psf I.15); Rf=20.0 psf (I Is=1.0; Rough Cat	Exterior right ex -C for r shown; (roof LI Lum DC B; Fully	(2E) 47-10-3 tr posed ; end nembers and Lumber :: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9;	.15		Contraction of the second seco		SEA 0363	EER. NUMERICAL

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)

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

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15) 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	127 Sereni	tv-Roof-B326	A GLH COP 4BR	
23120143-01	A05		Attic Girder		1	4		nce (optional)		162903202
Carter Components (Sanford, NC), Sanfor	rd, NC - 27332,		Run: 8.63 S Nov 1	2023 Print: 8					Page: 1
			17.0.0	ID:VIY0g5gMUgwQ		RA_f-RfC?PsB	70Hq3NSgPq	nL8w3ulTXbGK	WrCDoi7J4zJC?f	
	0-10-8 5-7-5)-6-1 23-2-625-10-10		32-10-8 I-5-0	39-4-9		46-3-2	52-11-8
C)-10-8 5-7-5	5-1-13 2	2-8-2 2-8-7 1-6-4 2- 10x12	10-1 ′ 2-8-5 ′ 2-8-5 ′ ≉	2-8-5 2-	10-1 1-5-8 4x8	6-6-1	6	6-10-9	6-8-6
			6x8 ≠	2x4 II 4x8= 2x	<4 n	12x16=	,			
22 -2 -9 -2 -9 -1 -9 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1			8x10 = 6			12 13	}			
		12 ^{2x4}	5	42 446 4	4 4 4 4	47	\searrow	8x10≈		
		6 ¹² 4 53		5x6= 6x	12=			1455		
11-8-0 11-2-8 11-2-8		3 ⁵²		9-1-14				5	56	
	5x6 ≠			9-1					15	
	1 2			1-2-0						
2-10-0										
	40 🔄 MT20HS 8x12 🔳	39 38 37	57 58 365 3 4 3	2 <u>- 30 28 26</u> 3 31 29 27	2523 24 60	22 20 219	61	18	17	
		5x8= 4x6= 4x8=	= 12x16= 6x8=	6x10= 3x6 II 2x4 II	3x6=	12x16		4x6=	8x10=	
			18-8-1 16-10-4	4	n 7-15	32-10 32-7-12	-8			
	<u> </u>	8-2-4 10-9-3 2-6-15 2-6-15	<u>15-9-3</u> 16-4-8 5-0-1 0-7-5	21-2-9 23-8-8	30-1-1 5-15 2-5-1	<u> </u>	4 <u>39-4-9</u> 6-6-1		46-3-2 5-10-9	<u>52-11-8</u> 6-8-6
Scale = 1:94.1			0-5-12 1-10-	1-5-8 7		0-1-8 0-1-4	Ļ			
Plate Offsets (X, Y		8], [7:0-7-8,Edge], [12: 4], [42:0-4-4,0-3-0], [46		,0-4-8], [16:Edge,0-1-5	5], [17:0-5-0),0-4-8], [21:0)-8-0,0-5-0],	[34:0-3-4,Edg	ge], [35:0-8-0,0-4-1	12],
Loading	(psf)	Spacing	2-0-0	CSI	DEF		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		0.98 Vert 0.60 Vert	. ,		>999 240 >703 180	MT20 MT20HS	244/190 187/143
TCDL BCLL	10.0 0.0*	Rep Stress Incr Code	NO IRC2018/TPI2014	WB Matrix-MSH	0.97 Horz Attic	z(CT) 0.	11 16 18 21-35	n/a n/a >999 360		
BCDL	10.0								Weight: 2098 lb	FT = 20%
LUMBER TOP CHORD 2x	6 SP No.2 *Excer	ot* 5-7:2x4 SP No.2	TOP CHORD	1-2=0/27, 2-3=-13807 4-6=-18871/1132, 6-7				y truss to be c	connected togethe	r with 10d
BOT CHORD 2x	6 SP 2400F 2.0E		6	7-8=-5352/647, 8-9=- 9-10=-4443/719, 10-2		19,		31"x3") nails a chords conne	as follows: ected as follows: 2	x6 - 2 rows
SF	P No.2 4 SP No.3 *Excep			11-12=-2508/499, 12 13-15=-18319/1104,					0 oc, 2x4 - 1 row a nnected as follows	
6-3		6-6,46-13:2x6 SP No.2	2, BOT CHORD	2-40=-11725/713 39-40=-122/292, 37-3			stag	gered at 0-9-0	0 oc, 2x4 - 1 row a	
WEDGE Rig	ght: 2x4 SP No.3		201 0.101.2	36-37=-850/16344, 3 31-33=-405/17353, 2	3-36=-714/	14204,	0-4-	0 oc, Except r	member 36-45 2x6	6 - 3 rows staggered at rows staggered at
		athing directly applied		27-29=0/19486, 24-2 20-24=-375/14901, 1	7=-55/1814	18,	0-9-	0 oc, 2x4 - 1 r	ow at 0-9-0 oc. diam. bolts (ASTI	
2-	0-0 oc purlins (6-0		d	16-18=-243/4912, 32 30-32=-2919/0, 28-30	-35=-1101/0		cen	ter of the mem	ber w/washers at idered equally ap	4-0-0 oc.
	gid ceiling directly acing. Except:	applied or 10-0-0 oc		26-28=-3783/0, 25-26 22-25=-2400/0, 21-22	6=-3783/0,	c	exc	ept if noted as	front (F) or back ((B) face in the LOAD
)-0-0 oc bracing: 2 Brace at Jt(s): 35,		WEBS	35-36=-615/7326, 6-3	35=-530/85 ⁻	19,	prov	vided to distrib	Ply to ply connect oute only loads not	
41 REACTIONS (size	l, 42, 43, 44 e) 16=20-5-6	8, 17=20-5-8, 18=20-5	5-8,	19-21=-665/7236, 13 14-18=-8009/468, 15	-17=-7038/4	424,	3) Unb			en considered for
,		8, 40=0-5-8, 49=20-5-		32-33=-853/0, 33-35= 31-32=0/1907, 29-30	=0/907, 20-	-22=-1495/0,		design.	mun	1111
	x Uplift 16=-151 ((LC 13), 17=-324 (LC (LC 13), 19=-10327 (L	<i>,,</i>	24-25=-683/0, 22-24= 9-41=-35/825, 8-42=-	9/586,				TH CA	RO
		693 (LC 12), 49=-151		11-43=-2225/171, 10 15-18=-392/7575, 20	-21=0/2263	3,		(i)	OFFESS	A Vier
Мах	k Grav 16=3016	(LC 46), 17=7173 (LC 174 (LC 46), 19=1030		14-19=-374/7115, 6-4 42-48=-10190/645, 4	1-42=-1091	7/642,				N. E
		40=11884 (LC 46),	5	41-44=-10917/642, 4 43-47=-13758/858, 1	3-47=-1415	53/879,		Ē	SEA	• –
) - Maximum Com	pression/Maximum		4-37=-759/157, 5-37= 3-39=-5294/376, 3-37	7=-242/4856	6,			03632	22
Te	ension			2-39=-701/13207, 12 9-42=-2105/238, 12-4				Contraction of the	· · · ·	A
				28-29=-220/0, 26-27= 5-36=-128/2019, 7-48	,	0,		111	A NGINE	ERIN
				7-42=-2411/115, 11-4 9-44=-3355/207					A. G	ILDUN
										y 9,2024

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)

818 Soundside Road Edenton, NC 27932

ENGINEERING BY

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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A05	Attic Girder	1	4	Job Reference (optional)	162903202

Run: 8.63 S. Nov. 1.2023 Print: 8.630 S.Nov. 1.2023 MiTek Industries. Inc. Mon. Jan 08.09:18:14

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 4x5 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, 42-48, 41-42, 41-44, 43-44, 43-47, 13-47; Wall dead load (5.0psf) on member(s).6-35, 13-21
- 14) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 32-35, 30-32, 28-30, 26-28, 25-26, 22-25, 21-22
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10327 lb uplift at joint 19.
- 16) N/A

17) N/A

- 18) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) N/Ă

- 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 28-7-12, and 9100 lb down and 774 lb up at 16-0-12 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 (Ib/ft) Vert: 1-2=-60, 2-7=-60, 7-12=-60, 12-16=-60, 40-49=-20, 21-35=-30, 6-48=-10, 42-48=-10, 41-42=-10, 41-46=-10, 44-46=-10, 43-44=-10, 43-47=-10, 13-47=-10

- Drag: 35-45=-10, 6-45=-10, 13-21=-10
- Concentrated Loads (lb)

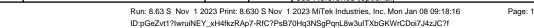
```
Vert: 36=-4881 (F), 60=-326 (F)
```

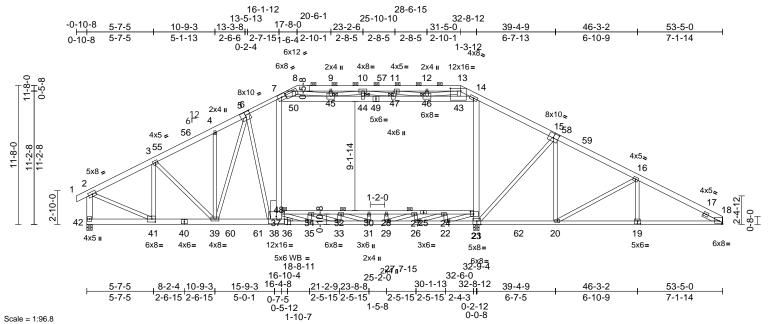
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A06	Attic Girder	1	4	I62903 Job Reference (optional)	3203

Continued on page 2





	[5:0-5-0,0-5-0], [8:0-9-4,0-1-12], [13:0-10-8,0-2-12], [15:0-5-0,0-4-8], [18:Edge,0-2-4], [19:0-3-0,0-3-0], [21:0-4-0,Edge], [23:0-3-4,0-2-8], [37:0-8-0,0-4-12],
Plate Offsets (X, Y):	: [41:0-3-8,0-3-0]

Fiale Oliseis (A, T). [41.0-3-8,0-3-0	, 										
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 IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.94 0.71 0.87	DEFL Vert(LL) Vert(CT) Horz(CT) Attic	-0.73 0.21	(loc) 35-38 35-38 18 23-37	>532 n/a	L/d 240 180 n/a 360	PLATES MT20 Weight: 2009	GRIP 244/190 9 lb FT = 20%
LUMBER TOP CHORD	2x6 SP No.2 *Excep	ot* 5-8:2x4 SP 2400F		41-42=-127/434, 39 38-39=-806/16069	35-38=	-784/13849,		(0.1	131"x3")	nails a	onnected toge is follows:	
BOT CHORD	25-23,25-37:2x4 SP	No.2, 40-42:2x6 SP	,	33-35=-337/16866, 29-31=0/18038, 26 22-26=-211/13855,	-29=0/1 , 20-22=	6338, -756/16053,		sta Bot	ggered a ttom cho	at 0-9-0 rds cor) oc, 2x4 - 1 ro nnected as foll	s: 2x6 - 2 rows ow at 0-9-0 oc. lows: 2x6 - 2 rows
WEBS	No.2, 40-36:2x6 SP 2x4 SP No.3 *Excep 42-2,7-38,48-38,49- 14-21:2x6 SP 2400F	ot* 7,49-14:2x6 SP No.2		18-20=-718/15525, 32-34=-2709/0, 30- 28-30=-3125/0, 27- 24-27=-1458/723, 2	-32=-31 -28=-31	25/0, 25/0,		We 0-4	eb conne I-0 oc, E:	cted as ccept n	s follows: 2x6 nember 38-48	w at 0-9-0 oc. - 2 rows staggered at 2x6 - 3 rows staggered - 2 rows staggered at
OTHERS SLIDER BRACING	2x4 SP No.3 Right 2x4 SP No.3		WEBS	37-38=-690/7934, 21-23=-707/6501, 15-20=-203/194, 10	14-23=-	503/7222,		Atta	ach BC v	v/ 1/2"	ow at 0-9-0 oc diam. bolts (A ber w/washers	STM A-307) in the
TOP CHORD	Structural wood she 5-10-15 oc purlins, 2-0-0 oc purlins (6-0	except end verticals		30-31=-160/10, 28- 35-37=0/3509, 32- 31-32=-94/441, 22-	-29=-38 33=-482	1/0, 34-35=-84 2/0, 33-34=0/1		éexo	cept if no	ted as	front (F) or ba	applied to all plies, ick (B) face in the LOAE nections have been
BOT CHORD	Rigid ceiling directly bracing. Except: 10-0-0 oc bracing: 2	applied or 10-0-0 or	c	26-27=-821/0, 24-2 13-43=-192/3352, 9-45=-491/57, 12-4	10-44=-	123/2381,	,	unl	ess othe	rwise i	ndicated.	noted as (F) or (B), been considered for
JOINTS	1 Brace at Jt(s): 37, 44, 45, 46, 47			16-20=-133/748, 22 15-21=-653/214, 7- 45-50=-9334/598, 4	-50=-97	11/621,		this	s design.			
	42=0-5-8 Max Horiz 42=-184 (Max Uplift 18=-407 (LC 12), 21=-5346 (L 671 (LC 12) (LC 46), 21=778 (LC		44-47=-10628/617, 43-46=-12562/763, 5-39=-2558/130, 4 3-39=-235/4941, 3 2-41=-653/12740, 4 10-45=-4582/341,	, 46-47= , 14-43= -39=-58 -41=-53 8-45=-5 10-47=-	-15316/892, -13142/795, 2/164, 43/364, 641/303, 4771/280,			4	IT IT	ORTH C	AROUN
FORCES	(lb) - Maximum Com Tension	· /		13-46=-5478/306, 8-50=-137/2045, 6-							SE	AL
TOP CHORD	1-2=0/28, 2-3=-1344 4-6=-18787/1093, 6- 7-8=-6795/521, 8-9= 9-10=-3052/521, 10- 11-12=-1499/1776, 1 3-14=-4279/403, 1- 16-18=-17673/875, 2	-7=-18557/1088, =-3060/520, -11=-3686/695, 12-13=-1499/1776, 4-16=-17885/1059,	_{1003,} NOTES								036	NEER. K

January 9,2024



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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A06	Attic Girder	1	4	I6 Job Reference (optional)	62903203

Run: 8.63 S. Nov. 1.2023 Print: 8.630 S.Nov. 1.2023 MiTek Industries. Inc. Mon. Jan 08.09:18:16

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 3x5 MT20 unless otherwise indicated.10) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.
 11) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) Ceiling dead load (5.0 psf) on member(s). 7-50, 45-50, 44-45, 44-47, 46-47, 43-46, 14-43; Wall dead load (5.0psf) on member(s).7-37, 14-23
- 13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 34-37, 32-34, 30-32, 28-30, 27-28, 24-27, 23-24
- 14) Refer to girder(s) for truss to truss connections.
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 407 lb uplift at joint 18 and 5346 lb uplift at joint 21.
- 16) LGT4-SDS3 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 42. This connection is for uplift only and does not consider lateral forces.
- 17) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 15-11-0 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: 1-2=-60, 2-8=-60, 8-13=-60, 13-18=-60,
- 42-51=-20, 23-37=-30, 7-50=-10, 45-50=-10, 44-45=-10, 44-49=-10, 47-49=-10, 46-47=-10,
- 44-45=-10, 44-49=-10, 47-49=-10, 46-47 43-46=-10, 14-43=-10

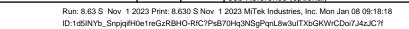
Drag: 37-48=-10, 7-48=-10, 14-23=-10

Concentrated Loads (lb) Vert: 38=-4881 (F)

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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A07	Attic	1	1	Job Reference (optional)	



Page: 1

					20-6-1		28-6-15	32-8-12		131N5gPqnL8w	JUIIADGKV	VICD0I7J4ZJC	<u>/</u> T	
-0- 0-	-10-8 	8-4-0 8-4-0		16-1-12 7-9-12	17-8-0	23-2-625-10		31-5-0 2-10-1	<u> </u>		46-3-2		53-5-0 7-1-14	
Ū	10 0				6x8=			1-3-12 4x8						
					4x8 ≠ 5	$4x5 = 2x4 \parallel 6 \qquad 7 \qquad 5^4$	4x5= 4x5 4558 9 ⊠⊠ ⊠	= 6x8= 10						
Т			6 ¹²		4				1					
			8x10 🞜			44 43	46 4405		\searrow	8x10 .				
			3 ^{52⁵³}		2x4 II 4	4x8 II	4x5 II 3x6 4x	= 3x6 II 8 II		56257	7			
11-8-0		5	1			9-1-14					58	4x5		
Ę	5x8 ≠	50				9-1			A/			13		
1	2			<i>\</i> ₹							/		59	
2-10-0								_ ≊ ° /						14 - 0-
3	39 🛓 ———————————————————————————————————		38	60 37	36 34 35 33	32 30 29 31 28	27 2523 26 24	219 ^o 218		17 16				
M	T18HS 3x10	=	5x8=	4x6=		3x8= 5x8=		2129 2108 3x6= 12x16	6 =	3x6=		2x4 u		5x8=
					5x8= 3x8=	3x5= 3x5= 3x6=	5x8= 3x8= 3x6	5x8=		6x10=				
					18-8-11 16-4-8	254-12	27-7-15	32-8-1 0- 5×1 9=	2					
	 	<u>8-4-0</u> 8-4-0			1-12 21-2 -12 2-4-3 2-5	2-9,23-8-8	29-1	0-0 <u>32-6-0</u>	<u>37-6-0</u> 4-9-4	39-4-9	<u>46-3-2</u> 6-10-9		<u>53-5-0</u> 7-1-14	
Scale = 1:93.8		1-2-12 0-2-0	1 [3:0-5-0 0-		0-2-12 0-3-0], [10:0-5-8	1-5	-8	0-3-13 0-2-12					2 Edgel	
Plate Offsets ([21	:0-3-8,0-2-8], [22:0-2-2,0)-1-8], [24:0-3-	8,0-2-8], [25:0-3									
Loading		(psf)	Spacing	2-0-	·0	CSI		DEFL	in	(loc) l/d	efl L/d	PLATES	GRIF)
TCLL (roof) Snow (Pf)		20.0 20.0	Plate Grip Lumber D0			TC BC	0.97 0.99		-0.48 -0.77	29-32 >8 29-32 >5		MT20 MT18HS	244/ [.] 244/ [.]	
TCDL		10.0	Rep Stress	Incr YES	3	WB	0.93	B Horz(CT)	0.14	14 r	n/a n/a		,	
BCLL BCDL		0.0* 10.0	Code	IRC	2018/TPI2014	Matrix-MS	ы	Attic	-0.35	20-36 >5	68 360	Weight: 45	3 lb FT =	20%
LUMBER					BOT CHORD		5/0, 32-34=-3					; Vult=130m		
TOP CHORD BOT CHORD			t* 14-17,37-2	22:2x4 SP		25-27=-321	5/0, 27-29=-3 5/0, 21-25=-1	305/739,		Cat. II; E	Exp B; End	CDL=6.0psf; closed; MWF	RS (envelo	pe) exterior
WEBS		.0E, 37-39:2 No.3 *Excep	x4 SP No.1 t* 4-35,11-18	3:2x6 SP			2036, 38-39≕ 3320, 33-35=(4, Interior (1) 11-10, Interior
			-4:2x4 SP No 1-24,25-26,2				18, 28-31=0/6 03, 19-24=0/	6229, 26-28=0 1393,	0/6113,					-14 to 53-5-0 nd vertical left
WEDGE	2x4 SP N		,,	,			4/0, 16-18=-2 33, 14-15=-5			0		;C-C for mer ons shown:		orces & L=1.60 plate
BRACING	-				WEBS	3-38=-653/7		2/292, 4-36=0/		grip DO	L=1.60			um DOL=1.15
TOP CHORD	2-10-14	oc purlins,	except end v	ly applied or rerticals, and		12-16=-258		/244, 4-42=-20		Plate D	OL=1.15);	Pf=20.0 psf); Rough Ca	(Lum DOL=	1.15 Plate
BOT CHORD			-13 max.): 5 applied or 1			43-46=-170	4/1222, 45-46	6=-1911/441,		Cs=1.00); Ct=1.10			• • •
		Except: bracing: 35	-38			2-38=0/337		2/37, 26-27=-3	394/0,	design.				lered for this
		c bracing: 1 bracing: 16				31-34=0/15	54, 28-32=-40			load of '	12.0 psf or	1.00 times f	lat roof load	of min roof live I of 20.0 psf on
WEBS		c bracing: 2					,)32/0, 21-24=(529, 5-42=0/2	0/2977, 95,	overhan 6) Provide	adequate	ncurrent wit	prevent wat	oads. er ponding.
JOINTS	1 Brace	at Jt(s): 43,	5-55, 12-20				79, 6-44=-432 114, 10-45=-2					drainage to	CARO	111
REACTIONS	44, 45, 4 (size)	14= Mech	anical, 18=0	-5-8,		8-46=-245/6	65, 9-46=-139 110, 13-16=-5	/830,			and the	ORTH	s a	IN'L
	Max Horiz	39=0-5-8 39=-189 (LC 12)			3-35=-148/3	350, 19-20=0/ 36, 12-20=-58	/3892,			40		12	A.
			C 15), 39=-3 (LC 46), 18=				1339, 6-43=-1				Ξ.	S	EAL	Ξ.
		38), 39=2	998 (LC 36)		NOTES 1) Unbalanc	ed roof live loa	ads have beer	n considered f	for			03	6322	
FORCES	Tension		pression/Ma		this desig	n.					E.			
TOP CHORD	5-6=-287	72/339, 6-7=		00/104,							THE REAL PROPERTY OF STREET, ST	S.ENG	NEER	43
		91/494, 8-9= 718/358, 10-	=-3499/484, •11=-1709/12	27,							11	CA	GILB	Enn
	11-13=-3 2-39=-28		-14=-4287/33	3,									min	о х
												Jai	nuary 9,2	2024
Continued on	page 2													

818 Soundside Road Edenton, NC 27932

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

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A07	Attic	1	1	I629032 Job Reference (optional)	04

- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom
- chord and any other members, with BCDL = 10.0psf. 10) Ceiling dead load (5.0 psf) on member(s). 4-42, 42-44, 43-44, 43-46, 45-46, 41-45, 11-41; Wall dead load (5.0psf) on member(s).4-36, 11-20
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 34-36, 32-34, 29-32, 27-29, 25-27, 21-25, 20-21
- 12) Refer to girder(s) for truss to truss connections.
 13) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 39 and 18. This connection is for uplift only and does not consider lateral forces.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 16) Attic room checked for L/360 deflection.

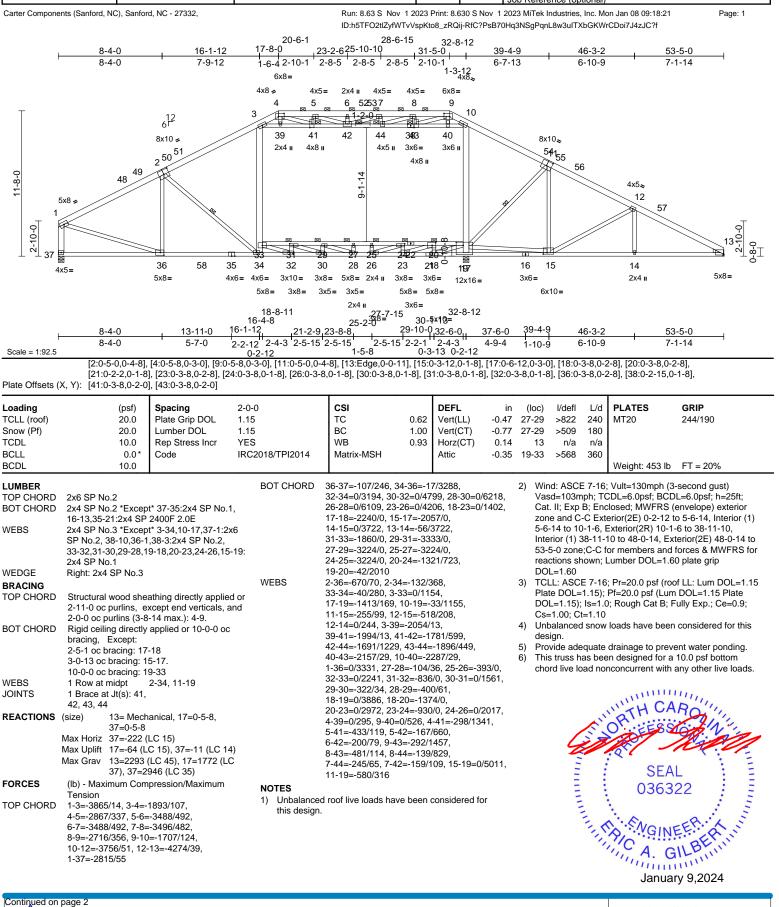
LOAD CASE(S) Standard

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:18 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	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A08	Attic	6	1	I62903205 Job Reference (optional)	



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 overal 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)

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A08	Attic	6	1	Job Reference (optional)	162903205

- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Ceiling dead load (5.0 psf) on member(s). 3-39, 39-41, 8) 41-42, 42-44, 43-44, 40-43, 10-40; Wall dead load (5.0psf) on member(s).3-33, 10-19
- Bottom chord live load (40.0 psf) and additional bottom 9) chord dead load (5.0 psf) applied only to room. 31-33, 29-31, 27-29, 25-27, 24-25, 20-24, 19-20
- 10) Refer to girder(s) for truss to truss connections. 11) One H2.5A Simpson Strong-Tie connectors
- recommended to connect truss to bearing walls due to UPLIFT at jt(s) 37 and 17. This connection is for uplift only and does not consider lateral forces.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Run: 8.63 S. Nov. 1.2023 Print: 8.630 S.Nov. 1.2023 MiTek Industries. Inc. Mon. Jan 08.09:18:21 ID:h5TFO2tlZyfWTvVspKto8_zRQij-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 PCB Building Component Science Michael Component Advancing Component Advancing Component Advancing and PCB and Component Advancing Component Compone and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A09	Attic Supported Gable	1	1	Job Reference (optional)	162903206

20120110 0	/////				JC	b Reference (opt	tional)	
Carter Compone	ents (Sanford, NC), Sanford, NC - 2733	32,					Inc. Mon Jan 08 09:18:2	23 Page: 1
			ID:8kdnain			3NSgPqnL8w3u11X	bGKWrCDoi7J4zJC?f	
	16-1-12	17-8-0 ₂₀₋₆	5-1 23-2-6 25-10-	28-6-15 10 , 31-5-	32-8-12 0		53-5-0	1
ł	16-1-12	1-6-4 2-10			1''		20-8-4	
		6x8=			1-3-12 ^{4x8} ≈			
	10	4x8 =		4x5= 4x5=	6x8=			
Т	12 6	10 9	11 12 7879		15 16			
	8)	(10= 8			17	10 10		
	6	7 67	69 68 5x6 II 5x8=	71 6760 4x5 u 3x6=	65	18 4x6		
	5 ⁷⁷			5x6 II		10208121	92	
11-8-0	75 476					18208121	22	
							23	
1	3x5 2 4							825
o i								26
2-10-0								278-
⊥ ∾⊥ 64								
3	Bx5 II 63 62 61 60 5	9 58 5 7 6 55 52	50 49 40			36 35 34 33	32 31 30	29 28
		3x6= 5x8 u 3x5: 3x5		3x5= 3x6= x5= 3x5= 3x5		3x6=		4x5=
		16-4-8	= 3x3= 3	27-7-15 3x6m 8x	= D 3 -0000 (0			
	13-11-0	16-1-12,18-8-11 ₂	25-2-(۱-2-9 ₋ 23-8-8	29-10-0,3	2-6-0 ₁₁ 37-6-0		53-5-0	
	13-11-0		-5-15 2-5-151-5-8		2-4-3		15-11-0	
Scale = 1:90.8	X, Y): [6:0-5-0,0-4-8], [10:0-5-8,		dae 0-2-31 [54·Edd					
iale Olisels (A, 1). [0.0-3-0,0-4-0], [10.0-3-0,	J-3-0], [13.0-3-0,0-3-0], [39.L	uge,0-2-3], [34.Eu	Je,0-2-2], [00.0-2	-11,0-1-8]			
oading	(psf) Spacing		CSI		EFL in	(loc) l/defl	L/d PLATES	GRIP
CLL (roof) now (Pf)	20.0 Plate Gri 20.0 Lumber		TC BC		ert(LL) n/a ert(TL) n/a	- n/a - n/a	999 MT20 999	244/190
CDL	10.0 Rep Stre	ess Incr YES	WB	0.62 Ho	oriz(TL) 0.02	27 n/a	n/a	
BCLL BCDL	0.0* Code 10.0	IRC2018/TPI201	4 Matrix-MSH				Weight: 504	b FT = 20%
	1010		Max Linit 00	80 (1 C 1 4) 20	480 (1 0 45)	BOT CHORD		
LUMBER	2x6 SP No.2			=-89 (LC 14), 29= =-17 (LC 14), 31=	· /·		63-64=-79/168, 62-6 61-62=-79/168, 60-6	
BOT CHORD	2x4 SP No.2 *Except* 35-27,57			=-43 (LC 15), 33= =-45 (LC 15), 36=			59-60=-79/168, 58-5 56-58=-79/168, 55-5	
VEBS	2400F 2.0E, 57-64:2x4 SP No. 2x4 SP No.3 *Except* 9-55,16-			=-124 (LC 38), 38			53-55=-85/183, 51-5	
THERE	SP No.2, 16-66,66-9:2x4 SP N	0.2		=-115 (LC 38), 58 =-50 (LC 14), 60=			49-51=-57/117, 47-4 44-47=-58/112, 41-4	
DTHERS	2x4 SP No.3 *Except* 0-0,0-0,0-0,0-0,0-0:2x4 SP	F No.2(flat)	61=	-47 (LC 14), 62=	-28 (LC 14),		38-41=-80/140, 37-3	8=-78/164,
				=-119 (LC 14), 64 =538 (LC 24), 29=			36-37=-78/164, 34-3 33-34=-78/164, 32-3	
OP CHORD	Structural wood sheathing dire 6-0-0 oc purlins, except end v		30=	=215 (LC 6), 31=*	164 (LC 49),		31-32=-78/164, 30-3	1=-78/164,
	2-0-0 oc purlins (4-2-4 max.): 1	10-15.		=177 (LC 37), 33= =234 (LC 43), 36=	· /·		29-30=-78/164, 28-2 27-28=-78/164, 52-5	9=-78/164, 4=-16/38, 50-52=-21/50,
OT CHORD	Rigid ceiling directly applied or bracing. Except:	6-0-0 00	37=	=142 (LC 49), 38=	=1161 (LC 38),			=-14/38, 45-46=-14/38,
	10-0-0 oc bracing: 39-54 T-Brace: 2x4 SPF N	10.0.54		=327 (LC 20), 44= =230 (LC 20), 49=	· /·		40-45=-22/54, 39-40	=-19/51
VEBS		No.2 - 9-54, ·37, 18-36,	51=	=301 (LC 20), 53=	=330 (LC 20),			
	8-56, 7-58 Fasten (2X) T and I braces to			=1134 (LC 38), 56 =228 (LC 41), 59=				
	of web with 10d (0.131"x3") na	ils, 6in		=223 (LC 41), 61= =164 (LC 56), 63=				
	o.c., with 3in minimum end dist Brace must cover 90% of wel			=104 (LC 56), 65= =100 (LC 50)	=200 (LC 47),			1111.
OINTS	1 Brace at Jt(s): 68,	FORCES		m Compression/N	laximum		WH C	ARO
EACTIONS	69, 70, 71 (cizo) 27-53 5 0 28-53 5	-0 29-53-5-0 TOP CHOI	Tension RD 1-2=-53/118, 3	2-3=-37/99, 3-4=-	-52/127.		R	Sin Latin
EACTIONS	(size) 27=53-5-0, 28=53-5 30=53-5-0, 31=53-5	-0, 23 - 33 - 3 - 0,	4-5=-70/149,	5-7=-107/211, 7-8			S DEES	Ma la
	33=53-5-0, 34=53-5			, 9-10=-926/239, 439, 11-12=-280()/569.	U		1 an c
	37=53-5-0, 38=53-5 44=53-5-0, 47=53-5		12-13=-2800/	569, 13-14=-2724	4/564,	Ξ	: SE	AL 🗄 🗄
	51=53-5-0, 53=53-5	-0, 55=53-5-0,		436, 15-16=-812/ 78, 17-18=-123/2		=	036	• •
	56=53-5-0, 58=53-5 60=53-5-0, 61=53-5		18-19=-109/2	46, 19-21=-89/22	2,		: 000	
	63=53-5-0, 64=53-5			9, 22-23=-52/176 3, 24-25=-69/135			A. A.	All S
	Max Horiz 64=-222 (LC 15)		25-26=-156/1	23, 26-27=-142/1			MGI	VEEPA
			1-64=-66/91				CA	GILBE
							(Innin	GILBL
							Janu	ary 9,2024

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)



Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	A09	Attic Supported Gable	1	1	I6 Job Reference (optional)	62903206

ID:8kdnaNVfrXy7X5iJovJ26tzRBB2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Run: 8.63 S. Nov. 1.2023 Print: 8.630 S.Nov. 1.2023 MiTek Industries. Inc. Mon. Jan 08.09:18:23

Page: 2

WEBS	$\begin{array}{l} 54\text{-}55\text{=-}1090/1, 9\text{-}54\text{=-}1078/106,\\ 38\text{-}39\text{=-}1116/28, 16\text{-}39\text{=-}1101/123,\\ 48\text{-}49\text{=-}115/0, 46\text{-}47\text{=-}115/0, 52\text{-}53\text{=-}171/0,\\ 53\text{-}54\text{=-}57/22, 50\text{-}51\text{=-}147/0, 51\text{-}52\text{=-}13/11,\\ 49\text{-}50\text{=-}11/13, 40\text{-}41\text{=-}173/0, 44\text{-}45\text{=-}148/0,\\ 40\text{-}44\text{=-}3/15, 45\text{-}47\text{=-}10/17, 15\text{-}65\text{=-}48/11,\\ 9\text{-}67\text{=-}16/694, 67\text{-}69\text{=-}15/688,\\ 68\text{-}69\text{=-}279/2058, 68\text{-}71\text{=-}412/2714,\\ 70\text{-}71\text{=-}276/1982, 65\text{-}70\text{=-}11/565,\\ 16\text{-}65\text{=-}13/579, 10\text{-}67\text{=-}15/15,\\ 12\text{-}68\text{=-}256/65, 11\text{-}69\text{=-}470/113,\\ 14\text{-}70\text{=-}483/114, 15\text{-}70\text{=-}281/1498,\\ 13\text{-}71\text{=-}239/66, 14\text{-}71\text{=-}148/778,\\ 13\text{-}68\text{=-}66/182, 39\text{-}41\text{=-}27/17,\\ 10\text{-}69\text{=-}279/1447, 11\text{-}68\text{=-}145/779,\\ 17\text{-}37\text{=-}86/159, 18\text{-}36\text{=-}176/71,\\ 19\text{-}34\text{=-}194/69, 21\text{-}33\text{=-}177/67,\\ 22\text{-}32\text{=-}128/68, 23\text{-}31\text{=-}118/69,\\ 24\text{-}30\text{=-}144/52, 25\text{-}29\text{=-}31/163,\\ 26\text{-}28\text{=-}346/91, 8\text{-}56\text{=-}87/150, 7\text{-}58\text{=-}187/70,\\ 6\text{-}59\text{=-}199/74, 5\text{-}60\text{=-}183/61, 4\text{-}61\text{=-}145/69,\\ \end{array}$	LOAD CASE(S)	Standard
	6-59=-199/74, 5-60=-183/61, 4-61=-145/69, 3-62=-120/62, 2-63=-168/118		

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 Exterior(2E) 0-2-12 to 5-6-14, Interior (1) 5-6-14 to 10-1-6, Exterior(2R) 10-1-6 to 38-11-10, Interior (1) 38-11-10 to 48-0-14, Exterior(2E) 48-0-14 to 53-5-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; 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.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) Ceiling dead load (5.0 psf) on member(s). 9-67, 67-69, 68-69, 68-71, 70-71, 65-70, 16-65; Wall dead load (5.0 psf) on member(s).9-54, 16-39
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 64, 1 lb uplift at joint 38, 124 lb uplift at joint 37, 46 lb uplift at joint 36, 45 lb uplift at joint 34, 44 lb uplift at joint 33, 43 lb uplift at joint 32, 49 lb uplift at joint 31, 17 lb uplift at joint 30, 189 lb uplift at joint 29, 89 lb uplift at joint 28, 115 lb uplift at joint 56, 45 lb uplift at joint 58, 50 lb uplift at joint 59, 37 lb uplift at joint 60, 47 lb uplift at joint 61, 28 lb uplift at joint 62 and 119 lb uplift at joint 63.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 16) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 17) Attic room checked for L/360 deflection.

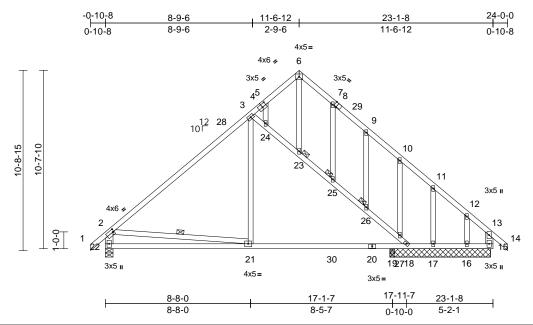
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	B01	Common Structural Gable	1	1	Job Reference (optional)	162903207

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:26 ID:bYvcELrthF7aR0JRUaUJmAzRQt4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:68.7 Plate Offsets (X, Y): [2:0-0-12,0-2-0], [4:0-3-0,0-2-4], [8:0-2-0,Edge]

Loading TCLL (roof) Snow (Pf) TCDL BCLL	(psf) 20.0 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES	3/TPI2014	CSI TC BC WB Matrix-MSH	0.83 0.73 0.48	DEFL Vert(LL) Vert(CT) Horz(CT)		(loc) 19-21 21-22 15	l/defl >999 >935 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0	Code		5/11/2014	Matrix-INIOT							Weight: 165 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x6 SP No.2 *Excep No.3, 3-18:2x4 SP N 2x4 SP No.3	lo.2			3-21=0/425, 3-24= 23-25=-618/192, 22 26-27=-644/210, 11 6-23=-110/195, 5-2 7-25=-164/82, 9-26 11-17=-166/108, 12 2-21=-181/416	5-26=-6 3-27=-74 4=-110/ 5=-11/26	53/214, 40/268, 149, , 10-27=-286	,	on t 3-0 cho	the botto 6-00 tall	om cho by 2-0	rd in all areas wh 0-00 wide will fit l	a live load of 20.0psf ere a rectangle oetween the bottom I BCDL = 10.0psf.
TOP CHORD BOT CHORD	Structural wood she 4-8-11 oc purlins, e Rigid ceiling directly bracing.	xcept end verticals.	1)	Unbalanced this design.	roof live loads have 7-16; Vult=130mp			r	Ínte	rnationa	I Resid	ned in accordanc dential Code sect erenced standarc	ions R502.11.1 and
WEBS JOINTS		2-21	2)	Vasd=103m Cat. II; Exp I	ph; TCDL=6.0psf; E B; Enclosed; MWFF C Exterior(2E) -0-1	BCDL=6 RS (env	.0psf; h=25ft; elope) exterio	or	LOAD	CASE(S) Stai	ndard	
	(size) 15=6-0-0, 18=6-0-0, Max Horiz 22=-273 (Max Uplift 16=-216 (18=-298 (Max Grav 15=570 (L 17=289 (L 19=539 (L	LC 15), 17=-55 (LC LC 14), 22=-46 (LC LC 22), 16=82 (LC 1 LC 25), 18=368 (LC LC 23), 22=890 (LC 5	15), 14) 3), 3)	(1) 14-6-12 t zone; end ve members an Lumber DOI Truss desig only. For stu see Standar	12, Exterior(2R) 8- co 21-0-0, Exterior(2 ertical left and right di forces & MWFRR =1.60 plate grip Di ned for wind loads uds exposed to win d Industry Gable Er jalified building des	2E) 21-0 expose S for rea OL=1.60 in the pl d (norm nd Deta	-0 to 24-0-0 d;C-C for ctions shown) ane of the tru al to the face Is as applical	; ıss), ble,					D-111
FORCES	(lb) - Maximum Com Tension 1-2=0/42, 2-3=-882/ 5-6=-353/167, 6-7=- 9-10=-474/47, 10-11	78, 3-5=-395/167, 341/123, 7-9=-367/5 =-367/1, 11-12=-340)/44, 5)	TCLL: ASCE Plate DOL= DOL=1.15); Cs=1.00; Ct	E 7-16; Pr=20.0 psf 1.15); Pf=20.0 psf (Is=1.0; Rough Cat	(roof LL Lum DC B; Fully	Lum DOL= L=1.15 Plate Exp.; Ce=0.9	1.15);		4	111	CHART ST	
BOT CHORD	12-13=-454/70, 13-1 13-15=-461/37 21-22=-408/730, 19- 18-19=-45/672, 17-1 16-17=-32/262, 15-1	-21=-45/672, 8=-32/262,	(15, 6) 7)	design. This truss ha load of 12.0 overhangs n All plates are Truss to be f	as been designed for psf or 1.00 times fli- on-concurrent with e 2x4 MT20 unless fully sheathed from nst lateral movemen	or greate at roof lo other liv otherwi one fac	er of min roof bad of 20.0 p ve loads. se indicated. e or securely	live sf on				SEA 0363	EP C
				Gable studs) This truss ha	spaced at 2-0-0 oc as been designed fo ad nonconcurrent v	or a 10.0) psf bottom						ULBE

- braced against lateral movement (i.e. diagonal web). 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

818 Soundside Road Edenton, NC 27932

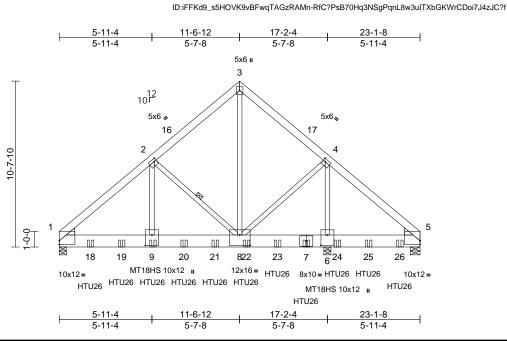
January 9,2024

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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	B02	Common Girder	1	2	Job Reference (optional)	162903208

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Page: 1



Scale = 1:73.9	0 11 1	0.1.0	0.0	• • •
Plate Offsets (X, Y): [1:Edge,0-2-13], [2:0-1-12,0-2-0], [4:0-1-12	2,0-2-0], [5:Edge,0-2-13	3], [6:0-8-0,0-5-0], [8:0	-8-0,0-8-0], [9:0-8-0,0-	5-0]

Loading TCLL (roof) Snow (Pf)	(psf) 20.0 20.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15		CSI TC BC	0.31 0.36	DEFL Vert(LL) Vert(CT)	in -0.09 -0.16	(loc) 8-9 8-9	l/defl >999 >999	L/d 240 180	PLATES MT20 MT18HS	GRIP 244/190 244/190	
TCDL BCLL BCDL	10.0 0.0* 10.0	Rep Stress Incr Code	NO IRC201	8/TPI2014	WB Matrix-MSH	0.77	Horz(CT)	0.02	6	n/a	n/a	Weight: 429 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) 2-ply truss (0.131"x3" Top chords staggered Bottom ch staggered	2x6 SP No.2 2x10 SP 2400F 2.0E 2x4 SP No.2 Left: 2x6 SP No.2 Right: 2x6 SP No.2 Structural wood she 4-9-13 oc purlins. Rigid ceiling directly bracing. 1 Row at midpt	athing directly applie applied or 6-0-0 oc 2-8 5=0-7-8, 6=0-5-8 C 9) C 13) C 5), 5=658 (LC 19) (LC 6) pression/Maximum 016/0, 3-4=-5021/0, '514, 6-8=-300/0, 10/0, 3-8=0/5959, i49/0 ther with 10d s: 2x6 - 2 rows ows: 2x10 - 3 rows	3) d or 4) 5) 7) 8) 9) 10 11	except if note CASE(S) see provided to c unless other Unbalanced this design. Wind: ASCE Vasd=103m Cat. II; Exp E zone; cantile and right exp DOL=1.60 TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct Unbalanced design. All plates are The Fabricat 16% This truss ha chord live loa 0) * This truss f on the bottor 3-06-00 tall t chord and ar 0) One H2.5A S recommende UPLIFT at jt(does not cor 2) This truss is International	considered equall ed as front (F) or b ction. Ply to ply co distribute only load wise indicated. roof live loads hav 7-16; Vult=130mp oh; TCDL=6.0ps; 3; Enclosed; MWF ver left and right e posed; Lumber DC 57-16; Pr=20.0 ps; 1.15); Pf=20.0 ps	Arack (B) nnection s noted re been BCDL=6 BCDL=6 RS (env xposed bL=1.60 bl (1-sec BCDL=6 RS (env xposed bL=1.60 bl (1-sec BCDL=6 BCDL=6 RS (env xposed bL=1.60 bl (1-sec BCDL=6 RS (env xposed bL=1.60 bl (1-sec BCDL=6 RS (env xposed bL=1.60 bl (1-sec BCDL=6 RS (env xposed bL=1.60 bl (1-sec BCDL=6 RS (env xposed bl (1-sec BCDL=6 RS (env to bl (1-sec BCDL=6 RS (env to bl (1-sec to bl (1-sec	face in the LC s have been as (F) or (B), considered fo cond gust) .considered fo cond gust) .considered for end vertical plate grip .: Lum DOL= $^{-1}$ L=1.15 Plate Exp.; Ce=0.9 msidered for the wise indicate 16%, joint 6 = 0 psf bottom other live load e load of 20.0 a rectangle veen the botto ctors ing walls due r uplift only an ith the 2018 s R502.11.1 a	or Jor left 1.15 2); d. ds. Dpsf om to nd	11- ma cor 14) Uss 11- spa enc bot 15) Fill LOAD 1) Di In Ui	10dx1 1 x. startir unect tru e Simpson 10dx1 1 aced at 2 d to 21-1 tom cho all nail H CASE(S ead + Sr crease= niform L Vert: 1- oncentra Vert: 7= 19=-19 22=-19 (B), 26=	/2 Trus g at 2- ss(es) on Stroro /2 Trus 2-0-0 or 0-0 to - rd. now (ba si) Stat now (ba si) Stat si) St	Ing-Tie HTU26 (2 ss) or equivalent : 0-0 from the left it to back face of b ing-Tie HTU26 (2 ss, Single Ply Girr connect truss(es) there hanger is in ndard alanced): Lumber b/ft) 3-5=-60, 10-13= ads (lb) (B), 9=-1910 (B), 2/ 23=-1910 (B), 2/	20-10d Girder, spaced at 2-0-0 end to 15-10-0 t ottom chord. 20-10d Girder, der) or equivaler 17-10-0 from th 1 to back face of a contact with lur r Increase=1.15, -20 , 18=-1910 (B), 1=-1910 (B), 1=-884 (B), 25=-	to nt left f mber. , Plate
													n/ 9 2024	

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January 9,2024

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	C01	Half Hip	4	1	I629032 Job Reference (optional)	209

Scale = 1:82.9

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:27 ID:Je5w06f8goBW?T4xbCQ60Kyfk?K-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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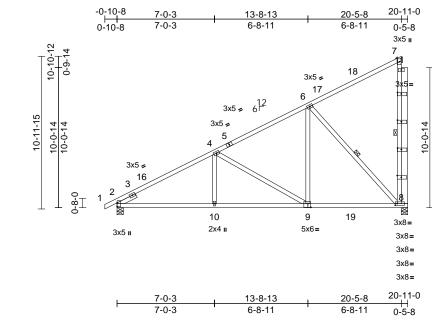


Plate Offsets (X, Y):	[2:0-3-1,0-0-1], [8:0-1-12,0-1-8], [8:0-3-8,0-1-7], [8:0-3-4,0-1-5], [8:0-3-6,0-1-6], [8:0-3-5,0-1-6], [9:0-2-8,0-3-4]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.95 0.68 0.67	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.08 -0.13 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 SLIDER BRACING TOP CHORD BOT CHORD WEBS FORCES TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.3 *Except 11-8:2x6 SP No.2 Left 2x4 SP No.3 - 1 Structural wood shea 4-9-0 oc purlins, exc Rigid ceiling directly a bracing. 1 Row at midpt 7 (size) 2=0-5-8, 8 Max Horiz 2=386 (LC Max Uplift 2=-48 (LC Max Grav 2=948 (LC (Ib) - Maximum Comp Tension 1-2=0/23, 2-4=-1361/ 6-7=-164/105, 7-8=-2	-6-0 athing directly applie tept end verticals. applied or 10-0-0 oc 7-8, 6-8 =0-5-8 14) 14), 8=-343 (LC 14) 5), 8=1731 (LC 21) pression/Maximum /28, 4-6=-813/0, 7/1/93 0=-317/1163	4) 5) d or 6) 7) 8) 9)	design. This truss ha load of 12.0 overhangs n This truss ha chord live loa * This truss ha on the bottoor chord and ar One H2.5A S recommende UPLIFT at jtt and does no This truss is International R802.10.2 a Hanger(s) or provided suf Ib down and		or great lat roof I o ther li o ther li o r a 10. with any I for a liv s where II fit betv with BC e conne to bear onnectio onces. dance w sections dard AN device(s oncentra- 8 on bo	er of min rooi pad of 20.0 p (e loads.) psf bottom other live loa e load of 20. a rectangle veen the bott DL = 10.0ps ctors ng walls due n is for uplift ith the 2018 R502.11.1 a (SI/TPI 1.) shall be ted load(s) 7 ttom chord.	f live sf on ads. Opsf om f. e to only and 747 The					ROY
Vasd=10 Cat. II; Ex zone and 2-1-8 to 1 end vertic MWFRS grip DOL 2) TCLL: AS Plate DO	CE 7-16; Vult=130mph (3mph; TCDL=6.0psf; BC qp B; Enclosed; MWFRS C-C Exterior(2E) -0-10- 7-3-12, Exterior(2E) 17- ral left exposed; C-C for r for reactions shown; Lun =1.60 SCE 7-16; Pr=20.0 psf (ru L=1.15); Pf=20.0 psf (Lu 5); Is=1.0; Rough Cat B;	DL=6.0psf; h=25ft; (envelope) exterior 8 to 2-1-8, Interior (-3-12 to 20-3-12 zon members and forces nber DOL=1.60 plat oof LL: Lum DOL=1 Im DOL=1.15 Plate	1) ie; s & e .15	Increase=1 Uniform Lo Vert: 1-7	ads (lb/ft) =-60, 8-12=-20 ed Loads (lb)	nder Inc	rease=1.15,	riate		A STITLES		SEA 0363	• –



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

Cs=1.00; Ct=1.10

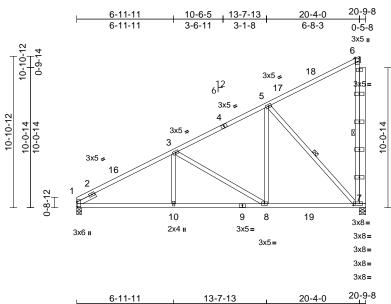


G minin January 9,2024

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	C02	Half Hip	1	1	Job Reference (optional)	162903210

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:27 ID:EGq646Pbf2EXC6nWIJzpaiyfjwU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



	6-11-11	13-7-13	20-4-0	H	
	6-11-11	6-8-3	6-8-3	0-5-8	
Scale = 1:82.9				000	
Plate Offsets (X, Y): [1:0-4-1,0-0-5], [7:0-1-12,0-1-8]					

			-										
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.80	Vert(LL)	-0.08	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.61	Vert(CT)	-0.13	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES		WB	0.65	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018	3/TPI2014	Matrix-MSH		. ,						
BCDL	10.0											Weight: 146 lb	FT = 20%
LUMBER			3)	Unbalanced	snow loads have b	been co	nsidered for t	his					
TOP CHORD	2x4 SP No.2		- /	design.									
BOT CHORD	2x4 SP No.2		4)		e 3x5 MT20 unless	otherw	ise indicated.						
WEBS	2x4 SP No.3 *Excep	t* 6-7·2x4 SP No 2	5)		as been designed f								
WEB0	11-7:2x6 SP No.2	A 0 1.2X1 01 110.2,	- /		ad nonconcurrent w			ads.					
SLIDER		Left 2x4 SP No.3 1-6-0 6) * This truss has been designed for a live load of 20.0psf											
	, an the bettern shared in all areas where a restangle												
TOF CHORD	STORD Structural wood sheating directly applied of												
	4-7-14 of pullins, except end venticals.												
DOT CHORD	recommended to connect truce to bearing wells due to												
WERS	blacing.												
	and does not consider lateral forces												
	CTIONS (SIZE) 1=0-4-0, 7=0-5-8 8) This truss is designed in accordance with the 2018												
	,	,	,	International	Residential Code	section	s R502.11.1 a	and					
				R802.10.2 a	nd referenced stan	dard Al	NSI/TPI 1.						
	,		9)	Hanger(s) or	r other connection	device(s	s) shall be						
FORCES	(lb) - Maximum Com	pression/Maximum	,	provided suf	ficient to support co	oncentr	ated load(s)	747					
	Tension			b down and	129 lb up at 20-8-	4 on bo	ttom chord.	The					
TOP CHORD	1-3=-1330/28, 3-5=-	798/0, 5-6=-159/102,	,	design/selec	tion of such conne	ction de	vice(s) is the	•					
	6-7=-265/95			responsibility	y of others.								
BOT CHORD	1-10=-408/1133, 8-1	0=-316/1133,	LC										111
	7-8=-156/655		1)			nber Inc	rease=1.15	Plate				N''LL CA	DUL
WEBS	3-10=0/258, 3-8=-57	70/185, 5-8=-2/579,	•,		```							N'TH UA	HOM
	5-7=-940/226										~	A STEE	in start
NOTES					()					/	51	FEE	Prinsin
	CE 7-16; Vult=130mph	(3-second gust)			,						Ŵ		121/1
					()							ie -	
				vent. 7=	747					-		CEA	1 1 2
	, , ,	(I)								=	:		• -
			-C							1	:	0363	22 : =
										-	1		1 2
			,								-	1	1 2
			15								1	·	Airi
											25	GIN	EFRANS
											1	10	BEN
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Wind: ASC Vasd=103 Cat. II; Exp zone and (3-0-0 to 17 for membe Lumber DC 2) TCLL: ASC Plate DOL	Left 2x4 SP No.3 1 Structural wood she 4-7-14 oc purlins, e Rigid ceiling directly bracing. 1 Row at midpt (size) 1=0-4-0, 7 Max Horiz 1=370 (LC Max Uplift 1=-29 (LC Max Grav 1=896 (LC (Ib) - Maximum Com Tension 1-3=-1330/28, 3-5=- 6-7=-265/95 1-10=-408/1133, 8-1 7-8=-156/655 3-10=0/258, 3-8=-57 5-7=-940/226	athing directly applie xcept end verticals. applied or 10-0-0 oc 6-7, 5-7 7=0-5-8 C 14) C 14), 7=-343 (LC 14) C 5), 7=1717 (LC 20) pression/Maximum 798/0, 5-6=-159/102, 10=-316/1133, 70/185, 5-8=-2/579, (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior to 3-0-0, Interior (1) 2-4 to 20-2-4 zone;C RS for reactions show DL=1.60 roof LL: Lum DOL=1 um DOL=1.15 Plate	7) 8) 9) LC 1) -C wn; .15	* This truss on the botton 3-06-00 tall Chord and au One H2.5A S recommendu UPLIFT at jt and does no This truss is International R802.10.2 a Hanger(s) on provided suff B down and design/selec responsibility AD CASE(S) Dead + Sm. Increase=1 Uniform Lo Vert: 1-6	has been designed m chord in all areas by 2-00-00 wide will ny other members, Simpson Strong-Tit ed to connect truss (s) 7 and 1. This cc t consider lateral fc designed in accord Residential Code nd referenced stan r other connection of ficient to support cc 129 lb up at 20-8- tion of such conne y of others. Standard ow (balanced): Lun .15 ads (lb/ft) ==60, 7-12=-20 ed Loads (lb)	for a list s where II fit bett with BC e conne to bear onnectio orces. dance w sections dard AI device(s oncentra 4 on bo	re load of 20. a rectangle ween the bott CDL = 10.0ps tors ing walls due n is for uplift with the 2018 s R502.11.1 a NSI/TPI 1. s) shall be ated load(s) 7 ttom chord. vice(s) is the	Opsf fom f. e to only and 747 The				SEA 0363	• -

- 3-0-0 to 17-2-4, Exterior(2E) 17-2-4 to 20-2-4 zone;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); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 2) Cs=1.00; Ct=1.10

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

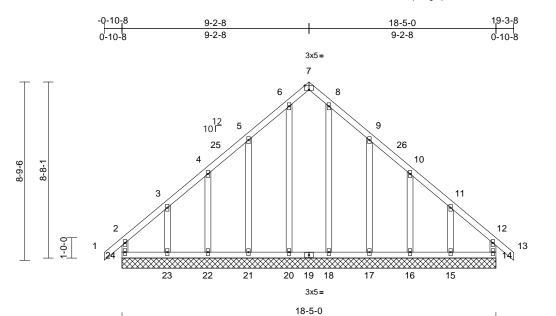


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mmm January 9,2024

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	D01	Common Supported Gable	1	1	I62 Job Reference (optional)	2903211

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:28 ID:8F2D?hHuvW?rb9K6OMb_Y2zRQrE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale =	= 1:56.8

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Plate Grip DOL1.7Lumber DOL1.7Rep Stress IncrYE	15 ES	/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: 126 lb	GRIP 244/190 FT = 20%
	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. (size) 14=18-5-(21=18-5-(24=18-5-(24=18-5-(Max Horiz 24=224 (L Max Uplift 14=-50 (L 21=-114 (23=-168 (Max Grav 14=189 (L 16=173 (L 18=225 (L 21=253 (L	applied or 6-0-0 oc), 15=18-5-0, 16=18-5-0,), 18=18-5-0, 20=18-5-0,), 2=18-5-0, 23=18-5-0,)	NO 1) 2)	TES Unbalanced this design. Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-C (2N) 2-2-12 t Exterior(2N) 19-3-8 zone; vertical left at forces & MW DOL=1.60 pl Truss design only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1	5-20=-185/8, 8-18= 1-22=-133/94, 3-23: 1-17=-213/162, 10- 1-15=-155/167 roof live loads have 7-16; Vult=130mph bh; TCDL=6.0psf; B; c Enclosed; MWFR C Corner(3E) -0-10 o 6-2-8, Corner(3R 12-2-4 to 16-2-4, C cantilever left and nd right exposed; C FRS for reactions s ate grip DOL=1.60 ned for wind loads i ds exposed to wind alloustry Gable Er allfied building desi 7-16; Pr=20.0 psf (L s=1.0; Rough Cat {	=-159/1 16=-13 be been of (3-sec CDL=6 (S (env- -8 to 2-) 6-2-8 corner(3 right ex- -C for n shown; n the p d (norm d Deta igner as igner as (croof LL	59, 3/92, considered fo cond gust) 0.0psf; h=25ft; elope) exterio 2-12, Exterior 2-12, Exterior to 12-2-4, 3E) 16-2-4 to posed ; end nembers and Lumber lane of the tru al to the face) ills as applicat s per ANSI/TF L: Lum DOL=' DL=1.15 Plate	r pr), ble, Pl 1. 1.15	on 3-0 chc 13) Prc bea 24, upl joir 15. 14) Thi Inte R8	the botto 6-00 tall ord and a vvide me aring plat 50 lb up ift at joint t 17, 47 s truss is ernationa	m choi by 2-0 iny oth chanica e capa lift at jo t 22, 16 lb uplif a desig il Resic and refe	rd in all areas wh 0-00 wide will fit er members. al connection (by bile of withstandi bint 14, 114 lb up 58 lb uplift at join t at joint 16 and 7 ned in accordance dential Code sect erenced standard	between the bottom r others) of truss to ng 69 lb uplift at joint lift at joint 21, 47 lb t 23, 116 lb uplift at 163 lb uplift at joint ce with the 2018 tions R502.11.1 and
FORCES TOP CHORD BOT CHORD	(lb) - Maximum Com Tension 2-24=-167/63, 1-2=0 3-4=-104/90, 4-5=-9 6-7=-91/169, 7-8=-9	pression/Maximum //39, 2-3=-165/140, 2/115, 5-6=-114/233, 1/169, 8-9=-114/233, =-89/71, 11-12=-153/116 154/47 23=-106/187, 21=-106/187, 18=-106/187,	6) ^{5,} 7) 8) 9) 10)	 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. 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. All plates are 2x4 MT20 unless otherwise indicated. Gable requires continuous bottom chord bearing. Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web). Gable studs spaced at 2-0-0 oc. This truss has been designed for a 10.0 psf bottom 								in min	EER. K

January 9,2024

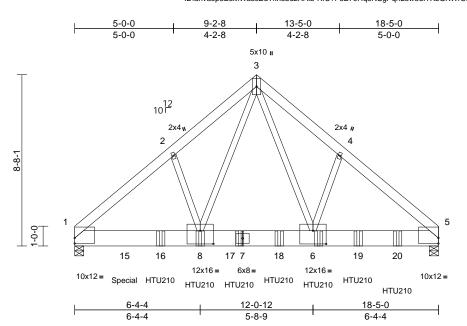


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3) 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type Qty			127 Serenity-Roof-B326 A GLH COP 4BR				
23120143-01	D02	Common Girder	1	3	Job Reference (optional)	162903212			

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:28 ID:ahvaep5BsMWascBuTkn6buzRAib-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:58.3 Plate Offsets (X, Y): [1:Edge,0-3-5], [5:Edge,0-3-5], [6:0-8-0,0-8-0], [8:0-8-0,0-8-0]

). [1.Edge,0.0.0]	[0.Luge,0 0 0], [0.0	0-0,0-0-0]	, [0.0-0-0,0-0-0	را 								
(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 IRC2018	8/TPI2014	CSI TC BC WB Matrix-MSH	0.36 0.71 0.88	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.10 -0.17 0.02	(loc) 8-14 8-14 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 497 lb	GRIP 244/190 FT = 20%
4 SP No.3 *Except ructural wood she 0-0 oc purlins. gid ceiling directly acing. e) 1=0-5-8, 1 (Grav 1=14904) - Maximum Com nsion 4=-12415/0, 4-5=- 3=-14155/0 3=0/10914, 6-8=0 3=-203/298, 3-8=(6=-113/298) e connected toge nnected with 10d rows staggered a connected with 10d row at 0-9-0 oc. onsidered equally as front (F) or ba on. Ply to ply conu tribute only loads se indicated.	It* 8-3,6-3:2x4 SP No athing directly applie applied or 10-0-0 oc 5=0-5-8 C 11) (LC 21), 5=10832 (LC pression/Maximum 12577/0, 1-2=-14250 /7243, 5-6=0/9539 /10778, 3-6=0/6817, ther as follows: (0.131*x3") nails as at 0-9-0 oc. impson SDS 1/4 x 4- staggered at 0-4-0 c (0.131*x3") nails as applied to all plies, ck (B) face in the LO nections have been noted as (F) or (B),	2 d or 5) 6) 7) (0, 8) 9) 10 1/2 12 AD	Vasd=103m Cat. II; Exp E zone; cantile and right exp DOL=1.60 TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha chord live loa * This truss for on the bottor 3-06-00 tall £ chord and ar This truss is International R802.10.2 ai 0) Use Simpson 14-10dx1 1/2 spaced at 2- end to 16-4- bottom chore 1) Fill all nail ho 2) Hanger(s) or provided suff lb down and design/selec responsibility DAD CASE(S) Dead + Snc Increase=1 Uniform Lo: Vert: 3-5	bh; TCDL=6.0psf; 1 B; Enclosed; MWFI ver left and right e posed; Lumber DO 7-16; Pr=20.0 psf (15); Pf=20.0 psf (15); Pf=2	BCDL=6 RS (env xposed L=1.60 4 (roof LL Lum DC B; Fully been cor or a 10.0 with any for a liv s where Il fit betw with BC dance w sections dard AN 10 (32-' Girder) g at 4-4 es) to ba is in cor device(so on centre on bott ction de	.0psf; h=25ft elope) exteric e end vertical olate grip .: Lum DOL= L=1.15 Plate Exp.; Ce=0.9 usidered for th 0 psf bottom other live loa e load of 20.1 a rectangle veen the bott DL = 10.0psi ith the 2018 R502.11.1 a ISI/TPI 1. 10d Girder, or equivalent 4 from the leack face of tact with lum) shall be ted load(s) 8 om chord. Ti vice(s) is the	or left 1.15 99; his ods. Opsf om f. and t ft bber. 8833 he		15=-548	87 (B), 20 (B),	161904 (B) 18 201900 (B) SEA 0363	=-1900 (B),
	(psf) 20.0 20.0 20.0 10.0 0.0* 10.0 0.0* 10.0 20.0 10.0 10.0 20.0 10.0 20.0 10.0 20.0	$\begin{array}{c} (psf)\\ 20.0\\ 20.0\\ 10.0\\ 20.0\\ 10.0\\ 0.0^*\\ 10.0\\ \end{array} \begin{array}{c} \text{Plate Grip DOL}\\ \text{Lumber DOL}\\ \text{Rep Stress Incr}\\ \text{Code}\\ \end{array}$	(psf) Spacing 2-0-0 20.0 Plate Grip DOL 1.15 20.0 Plate Grip DOL 1.15 10.0 0.0* Code IRC201 10.0 0.0* Code IRC201 10.0 0.0* Code IRC201 10.0 10.0 Code IRC201 10.0 10.0 Code IRC201 10.0 10.0 Code IRC201 10.0 SP No.2 Code IRC201 10.0 SP No.3 *Except* 8-3,6-3:2x4 SP No.2 4) 10 SP 2400F 2.0E 4 SP No.3 *Except* 8-3,6-3:2x4 SP No.2 uctural wood sheathing directly applied or 10-0-0 c 5) 5) ofd ceiling directly applied or 10-0-0 c 6 6 Grav 1=180 (LC 11) 6) 6 7) Grav 1=180 (LC 11) 6) 7) 9 =-14155/0 -=1455/0 8 9 =0/10914, 6-8=0/7243, 5-6=0/9539 8 20/10914, 6-8=0/7243, 5-6=0/9539 =-203/298, 3-8=0	(psf) 20.0 20.0 20.0 20.0 Plate Grip DOL Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code2-0-0 1.15 IN10.0 0.0* 10.0(A) Wind: ASCE Vasd=103mg Cat. II; Exp 2 vasd=103mg Cat. II; Exp Cat. II; Exp 2 vasd=103mg Cat. II; Exp 2 vasd=103mg Cat. II; Exp DOL=1.60 5) TCLL: ASCE Plate DOL=1 2 one; cantile and right exp DOL=1.60 5) TCLL: ASCE Plate DOL=1 DOL=1.60 5) TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct= 0) 1 =0-5-8, 5=0-5-8 Horiz 1=180 (LC 11) Grav 1=14904 (LC 21), 5=10832 (LC 6) 9. Maximum Compression/Maximum nsion B=-124155/0 B=-203/298, 3-8=0/10778, 3-6=0/8817, B=-1241520 B=-203/298, 3-8=0/10778, 3-6=0/8817, B=-203/298, 3-8=0/10778, 3-6=0/8817, B=-203/298, 3-8=0/10778, 3-6=0/8817, B=-203/298, 3-8=0/10778, 3-6=0/8817, B=-203/298, 3-8=0/10778, 3-6=0/8817, B=-	20.0 20.0 20.0Plate Grip DOL Lumber DOL Rep Stress Incr NO Code1.15 BC WB Watrix-MSH 0.0^* 0.0^* 10.0 CodeIRC2018/TPI2014Watrix-MSH 0.0^* 0.0^* CodeIRC2018/TPI2014Watrix-MSH 0.0^* 10.0 CodeIRC2018/TPI2014Watrix-MSH 0.0^* 10.0 CodeIRC2018/TPI2014Watrix-MSH 0.0^* 10.0 CodeIRC2018/TPI2014Watrix-MSH 0.0^* 10.0 CodeIRC2018/TPI2014Watrix-MSH 0.0^* 10.0 CodeIRC2018/TPI2014Wind: ASCE 7-16; Vut=130mp Vasd=103mph; TCDL=6.0psf; 1 Cat. II; Exp B; Enclosed; MWFI Cone; cantilever left and right e and right exposed; Lumber DO DOL=1.60 0.0^* 10.0^* DoL=1.15; Pf=20.0 psf Plate DOL=1.15; Pf=20.0 psf Plate DOL=1.15; Pf=20.0 psf Plate DOL=1.15; Pf=20.0 psf DOL=1.60 0.0^* $1=124150, 4-5=-12577/0, 1-2=-14250/0,I=-14155/0TCLL: ASCE 7-16; Pr=20.0 psfPlate DOL=1.15; Pf=20.0 psfDOL=1.601-141515/01=-14155/0TCLL: ASCE 7-16; Pr=20.0 psfPlate DOL=1.15; Pf=20.0 psfOL=1.101-141515/01=-14155/0This truss has been designed fchord live load nonconcurrent V1+10404 (LC 21), 5=10832 (LC 6)1=-14155/01=-14215/0, 4-5=-12577/0, 1-2=-14250/0,1=-14155/0This truss has been designed in accordInternational Residential CodeR802.10.2 and referenced stan10-004311/2 Truss, Single Plyspaced at 2-0-0 oc max. startinend to 16-4-4 to connect truss(bottom chord.113/298Simpson Storg Tie HTU214-10dx11/2 Truss, Single Plyspac$	(psf) 20.0 Plate Grip DOL 1.15 TC 0.36 20.0 Lumber DOL 1.15 TC 0.36 10.0 Code IRC2018/TPI2014 TC 0.36 3 SP No.2 Code IRC2018/TPI2014 Matrix-MSH 4) Wind: ASCE 7-16; Vult=130mph (3-sec Vasd=103mph; TCDL=6.0ps; BCDL=6 5 SP No.2 Code IRC2018/TPI2014 Mwind: ASCE 7-16; Vult=130mph (3-sec 10.0 Vasd=103mph; TCDL=6.0ps; BCDL=6 Cat. II; Exp B; Enclosed; MWFRS (envizone; cantilever left and right exposed; and right exposed; Lumber DOL=1.60 TCLL: ASCE 7-16; Pr=2.0. psf (cord LL Plate DOL=1.15); Is=1.0; Rough Cat B; Fully 11.15 Code TCLL: ASCE 7-16; Pr=2.0. psf (cord LL Plate DOL=1.15); Is=1.0; Rough Cat B; Fully 11.15 Code TCLL: ASCE 7-16; Pr=2.0. psf (cord LL Plate DOL=1.15); Is=1.0; Rough Cat B; Fully 11.15 Code TCLL: ASCE 7-16; Pr=2.0. psf (Lum DC DOL=1.60; DOL=1.15); Is=1.0; Rough Cat B; Fully 11.15 Code TCLL: ASCE 7-16; Pr=2.0. psf (Lum DC DC DC=1.15); Is=1.0; Rough Cat B; Fully 11.15 TCL: ASCE 7-16; Pr=2.0. psf (Lum DC DC DC=1.15); Is=1.0; Rough Cat B; Fully Code 11.15 Trues has been designed for a liv This truss has been designed for a liv T	(psi) Spacing 2-0-0 CSI DEFL (psi) Plate Grip DOL 1.15 TC 0.36 DEFL (psi) Lumber DOL 1.15 TC 0.36 DEFL (psi) Line Code IRC2018/TPI2014 Matrix-MSH Dertition (psi) Pace Dota Code IRC2018/TPI2014 Matrix-MSH Dertition (psi) Pace Dota Code IRC2018/TPI2014 Matrix-MSH Dertition (psi) Line SP No.2 Code III: Exp B; Enlosed; MWFRS (envelope) exterid Code (point Line SP No.2 TCL: ASCE 7-16; Pr=20.0 psf (troof LL: Lum DOL= Delt=1.60; IS: IS-10; Rough Cat B; Fully Exp; Ce=0. Code	(prsf) Spacing 2-0-0 (prsf) Plate Grip DOL 1.15 TC 0.36 (prsf) Lumber DOL 1.15 TC 0.36 (prsf) Matrix-MSH Vert(LL) -0.17 (prsf) Matrix-MSH Vert(LL) -0.02 (prsf) Matrix-MSH Vert(LL) -0.02 (prsf) Matrix-MSH Vert(L) -0.02 (prsf) Vert(T) 0.02 -0.02 (prsf) Matrix-MSH Vert(L) -0.02 (prsf) Vert(T) -0.02 Vert(T) -0.02 (prsf) Vert(T) -0.02 Vert(T) -0.02 (prsf) Intercested Inger Particle -0.02 Vert(T) -0.02 (prsf) Intercested Inger Particle -0.02 Vert(T) <td< td=""><td>(pst) Spacing 2-0-0 (pst) Plate Grip DOL 1.15 TC 0.36 10.0 Nep Stress Incr NO 0.0° Code IRC2018/TPI2014 BC 0.71 Wind: ASCE 7-16; Vult=130mph (3-second gust) 3 SP No.2 Wind: ASCE 7-16; Vult=130mph (3-second gust) 0.0° Vasid=103mph; TCDL=6.0psf; BcSCL=6.0psf; h=-25ft; 10.0 Visid=103mph; TCDL=6.0psf; BcSCL=6.0psf; h=-25ft; 20 op purifins. Visid=103mph; (3-second gust) vasid=103mph; TCDL=6.0psf; BcSCL=6.0psf; h=-25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 20 op purifins. Visid=103mph; (3-second gust) vasid=103mph; TCDL=6.0psf; BcSCL=6.0psf; Bc</td><td>(psf) Spacing 2-0-0 CSI DEFL in (loc) I/def 20.0 Lumber DOL 1.15 TC 0.36 Vert(L1) -0.10 8-14 >399 10.0 Rep Stress Incr NO Code IRC2018/TPI2014 Matrix-MSH Vert(CT) 0.01 8-14 >399 3 SP No.2 Ose Pations IRC2018/TPI2014 Matrix-MSH WB 0.88 Vert(CT) 0.02 5 n/a 3 SP No.2 Ose Pations IRC2018/TPI2014 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vert: 7- Ve</td><td>(psf) 20.0 Spacing Plate Gip DOL 1.15 2-0-0 1.15 CSI TC 0.36 BC DEFL Vert(L1) o.10 Nother (loc) I/deft L/deft 0.0* 0.0* Rep Stress Incr NO Code IRC2018/TPI2014 TC 0.36 BC 0.71 Vert(L1) -0.10 8-14 >999 240 0.0* 0.0* 0.0* Rep Stress Incr NO Code IRC2018/TPI2014 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vert: 7=-1900 3 SP No.2 0.0 SP 2400F 2.0E 4 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vert: 7=-1900 1 SP No.3 *Except* 8-3,6-3:2x4 SP No.2 44 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vert: 7=-1900 0 oc purins. 1=0-5-8, 5=0-5-8 Horiz 1=180 (LC 11) Second 20, 0ps f (Lord DOL=1.15); Is=-10, 0ps f (Lord DOL=1.16) 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 19=-115; Is=-10, 0ps f (Lord DOL=1.15); Is=-10, 0ps f (Lord DOL=1.16) 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 10=-115; Is=-10, 0ps f (Lord DOL=1.16) 19=-1900 (B), 19=-1900 (B), 10=-115; Is=-10, 0ps f (Lord DOL=1.16) 10=-115; Is=-10, 0ps f (Lord DOL=1.16) 10=-11.15; Is=-10, 0ps f (Lord DOL=1.16) 10=-10.0ps f</td><td>(pf) Spacing 2-0-0 (pf) Spacing 2-0-0 (pf) Plate Grip DOL 1.15 (pf) Spacing 2-0-0 (pf) Plate Grip DOL 1.15 (pf) Spacing PLATES (pf) Matrix-MSH Vert(LT) -0.17 8-14 >999 160 (pf) Matrix-MSH Matrix-MSH Vert(CT) -0.17 8-14 >999 160 (pf) Space (pf) Matrix-MSH Vert(CT) -0.17 8-14 >999 160 (pf) Space (pf) Nincital Scale <td< td=""></td<></td></td<>	(pst) Spacing 2-0-0 (pst) Plate Grip DOL 1.15 TC 0.36 10.0 Nep Stress Incr NO 0.0° Code IRC2018/TPI2014 BC 0.71 Wind: ASCE 7-16; Vult=130mph (3-second gust) 3 SP No.2 Wind: ASCE 7-16; Vult=130mph (3-second gust) 0.0° Vasid=103mph; TCDL=6.0psf; BcSCL=6.0psf; h=-25ft; 10.0 Visid=103mph; TCDL=6.0psf; BcSCL=6.0psf; h=-25ft; 20 op purifins. Visid=103mph; (3-second gust) vasid=103mph; TCDL=6.0psf; BcSCL=6.0psf; h=-25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 20 op purifins. Visid=103mph; (3-second gust) vasid=103mph; TCDL=6.0psf; BcSCL=6.0psf; Bc	(psf) Spacing 2-0-0 CSI DEFL in (loc) I/def 20.0 Lumber DOL 1.15 TC 0.36 Vert(L1) -0.10 8-14 >399 10.0 Rep Stress Incr NO Code IRC2018/TPI2014 Matrix-MSH Vert(CT) 0.01 8-14 >399 3 SP No.2 Ose Pations IRC2018/TPI2014 Matrix-MSH WB 0.88 Vert(CT) 0.02 5 n/a 3 SP No.2 Ose Pations IRC2018/TPI2014 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vert: 7- Ve	(psf) 20.0 Spacing Plate Gip DOL 1.15 2-0-0 1.15 CSI TC 0.36 BC DEFL Vert(L1) o.10 Nother (loc) I/deft L/deft 0.0* 0.0* Rep Stress Incr NO Code IRC2018/TPI2014 TC 0.36 BC 0.71 Vert(L1) -0.10 8-14 >999 240 0.0* 0.0* 0.0* Rep Stress Incr NO Code IRC2018/TPI2014 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vert: 7=-1900 3 SP No.2 0.0 SP 2400F 2.0E 4 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vert: 7=-1900 1 SP No.3 *Except* 8-3,6-3:2x4 SP No.2 44 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vert: 7=-1900 0 oc purins. 1=0-5-8, 5=0-5-8 Horiz 1=180 (LC 11) Second 20, 0ps f (Lord DOL=1.15); Is=-10, 0ps f (Lord DOL=1.16) 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 19=-115; Is=-10, 0ps f (Lord DOL=1.15); Is=-10, 0ps f (Lord DOL=1.16) 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 19=-1900 (B), 10=-115; Is=-10, 0ps f (Lord DOL=1.16) 19=-1900 (B), 19=-1900 (B), 10=-115; Is=-10, 0ps f (Lord DOL=1.16) 10=-115; Is=-10, 0ps f (Lord DOL=1.16) 10=-11.15; Is=-10, 0ps f (Lord DOL=1.16) 10=-10.0ps f	(pf) Spacing 2-0-0 (pf) Spacing 2-0-0 (pf) Plate Grip DOL 1.15 (pf) Spacing 2-0-0 (pf) Plate Grip DOL 1.15 (pf) Spacing PLATES (pf) Matrix-MSH Vert(LT) -0.17 8-14 >999 160 (pf) Matrix-MSH Matrix-MSH Vert(CT) -0.17 8-14 >999 160 (pf) Space (pf) Matrix-MSH Vert(CT) -0.17 8-14 >999 160 (pf) Space (pf) Nincital Scale (pf) Nincital Scale <td< td=""></td<>

January 9,2024

Page: 1

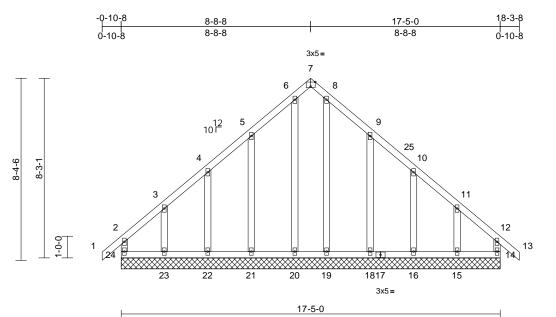
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A MiTek Affi 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	E01	Common Supported Gable	1	1	Job Reference (optional)	162903213

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:29 ID:XfVx5DgSDeEi7jgY6wjof?zRQtJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



1	7	-

Scale = 1:52.9

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

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Plate Grip DOL 1 Lumber DOL 1 Rep Stress Incr Y	2-0-0 1.15 1.15 7ES RC2018	3/TPI2014	CSI TC BC WB Matrix-MR	0.19 0.10 0.17	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: 120 lb	GRIP 244/190 FT = 20%
	P CHORD 2x4 SP No.2 T CHORD 2x4 SP No.2 BS 2x4 SP No.3 HERS 2x4 SP No.3 ACING P P CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.					3=-149, 16=-14: be been of a (3-sec 3CDL=6 SC (env- -8 to 1- R) 5-8-4. corner(3 right ex- C for n shown; in the p d (norm nd Deta igner as igner as (croof LL -um DC	(142, 3/104, considered for .0psf; h=25ft; elope) exterio 11-12, Exterio 3 to 11-5-4, .E) 15-3-8 to posed ; end nembers and Lumber lane of the tru al to the face) ills as applicat s per ANSI/TF .: Lum DOL= ⁻ DL=1.15 Plate	r or), ole, 1.15	on 1 3-00 cho 13) Pro bea 14, upli join 15. 14) This Inte R80	the bottc 6-00 tall rd and a vide me ring plata 83 lb up ft at joint t 18, 56 s truss is rrnationa 02.10.2 a CASE(S)	m choi by 2-0 ny oth- chanica e capa lift at js : 22, 15 ib uplif desig I Resica and refe) Star	rd in all areas wh 0-00 wide will fit er members. al connection (by, bible of withstandi bint 24, 104 lb up 51 lb uplift at join t at joint 16 and ned in accordand dential Code sec erenced standar ndard	between the bottom y others) of truss to ing 60 lb uplift at joint uplift at joint 21, 55 lb t 23, 105 lb uplift at 146 lb uplift at joint ce with the 2018 tions R502.11.1 and
FORCES TOP CHORD BOT CHORD	(lb) - Maximum Com Tension 12-14=-141/53, 7-8=	pression/Maximum 89/185, 8-9=-119/262, 78/76, 11-12=-124/11 9, 2-3=-149/138, (150, 5-6=-119/262, 156/72 23=-102/158, 21=-102/158, 19=-102/158,	5) 12, 6) 7) 8) 9) 10)	Unbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. All plates are 2x4 MT20 unless otherwise indicated. Gable requires continuous bottom chord bearing.									EER. KIN

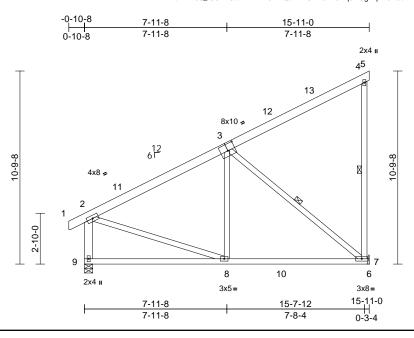
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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	G01	Monopitch	5	1	Job Reference (optional)	162903214

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:29 ID:PdAAD85_ICJN?UaWrZNnF5zRQu2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:64.4

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

Loading TCLL (root) (psf) 200 Spacing PLate Grp DOL Lumber DOL Lumber DOL BCLL 2-0-0 1.15 CSI UPEL TC In (loc) Uddl Lumber DC Lamber DOL Lumber DOL Cde TC 0.48 Vert(CT) 0.12 7.8 >9.99 160 BCLL 0.00 000 000 1.15 BC 0.48 Vert(CT) 0.01 7.8 >9.99 160 LUMBER FOD CHORD 244 SP No.2 0.00 7.8 245 PN 0.2 Vert(CT) 0.01 7.8 29.99 160 Vert(CT) 0.01 7.8 29.99 160 Vert(CT) 0.01 7.8 24.99 160 17.9 160 24.95 160		7, 1). [3.0-3-0,0-4-0]											
TOP CHORD 2x6 SP No.2 BOT CHORD 2x4 SP No.3 "Except 9-2:2x6 SP No.2 BRACING Structural wood sheathing directly applied of 6-0-0 co purins, except end verticals. BOT CHORD Structural wood sheathing directly applied or 10-0-0 co bracing. WEBS 1 Row at midpt 1 Row at midpt 4.7.3-7 REACTIONS (size) 7= Mechanical, 9=0-5-8 Max Horiz 9=271 (L0.14) Max Grav 7=824 (L0.5), 9=750 (L0.5) FORCES (b) - Maximum Compression/Maximum Tension 7=824 (L0.5), 9=750 (L0.5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at loint 7. TOP CHORD 8-9=-322/17, 7.8=-198/540, 6.7=0/0 Vietas to trus to trus to trus to trus to trus to contain exception accordance with the 2018 International Residential Code sections R502.11.1 and R8020.10.2 and referenced standard ANSI/TPI 1. TOP CHORD 8-9=-322/17, 7.8=-198/540, 6.7=0/0 Vieta Standard Vietas 3=8-0/310, 3-7=688/257, 2:8=-0/486 Standard Notres 1) Vieta Standard SEAL 0.0=1.60 Total explored or vertical left exposed/C-C for members and forces & MWFRS for reactions shown; Lumber DoL=1.15 Plate DOL=1.15]; FI-320.0 psf (tond LL: Lum DOL=1.15 SEAL 0366322 0.0=1.4150; Is=1-20.0 psf (cond LL: Lum DOL=1.15 Plate DOL	TCLL (roof) Snow (Pf) TCDL BCLL	20.0 20.0 10.0 0.0*	Plate Grip DOL Lumber DOL Rep Stress Incr	1.15 1.15 YES	TC BC WB	0.66	Vert(LL) Vert(CT)	-0.12 -0.20	7-8 7-8	>999 >909	240 180	MT20	244/190
3) Unbalanced snow loads have been considered for this	TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Wind: ASC Vasd=103r Cat. II; Exp zone and C 2-2-2 to 12 cantilever 1 exposed;C reactions s DOL=1.60 2) TCLL: ASC Plate DOL DOL=1.15; Cs=1.00; C	2x4 SP No.2 2x4 SP No.3 *Excep Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. 1 Row at midpt (size) 7= Mecha Max Horiz 9=271 (LC Max Uplift 7=-219 (L Max Grav 7=824 (LC (Ib) - Maximum Com Tension 4-7=-321/119, 2-9=- 2-4=-674/91, 4-5=-1 8-9=-323/217, 7-8=- 3-8=0/310, 3-7=-686 CE 7-16; Vult=130mph mph; TCDL=6.0psf; Bi o B; Enclosed; MWFR C-C Exterior(2E) -0- 9-2-11-0, Exterior(2E) 12 left and right exposed c-C for members and fi shown; Lumber DOL=: CE 7-16; Pr=20.0 psf (L =1.15); Pf=20.0 psf (L); Is=1-0; Rough Cat E Ct=1.10	athing directly applie cept end verticals. applied or 10-0-0 or 4-7, 3-7 anical, 9=0-5-8 C 14) C 14) C 5), 9=750 (LC 5) pression/Maximum 643/88, 1-2=0/28, 2/0 198/540, 6-7=0/0 5/257, 2-8=0/486 (G-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior 14 to 2-2-2, Interior 2-11-0 to 15-11-0 zoi ; end vertical left orces & MWFRS for 1.60 plate grip froof LL: Lum DOL=1 um DOL=1.15 Plate 3; Fully Exp.; Ce=0.5	load over 5) This chor or 6) * Th on ti c	of 12.0 psf or 1.00 times hangs non-concurrent w truss has been designed d live load nonconcurrent is truss has been designe he bottom chord in all are -00 tall by 2-00-00 wide d and any other member er to girder(s) for truss to vide mechanical connecti ring plate capable of with 7. truss is designed in accor- mational Residential Cod 2.10.2 and referenced st	s flat roof le ith other li d for a 10.0 th with any ed for a live eas where will fit betw rs, with BC truss conr ion (by oth istanding 2 ordance w de sections	bad of 20.0 p ve loads. 0 psf bottom other live loa re load of 20. a rectangle veen the bott DL = 10.0ps rections. ers) of truss 219 lb uplift a ith the 2018 s R502.11.1 a	ads. Opsf tom to t		A.			• -

3) design.

A. GILD January 9,2024

A. GILB

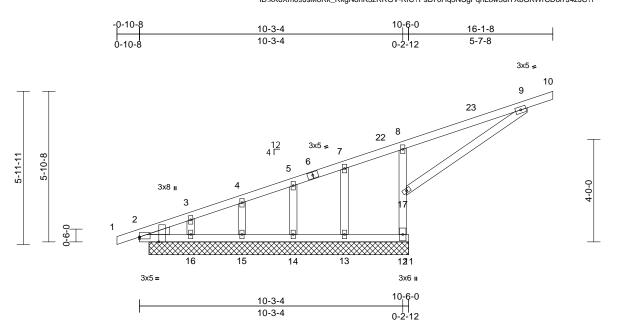


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Job	Truss	Truss Type		Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	H01	Monopitch Supported Gable	2	1	Job Reference (optional)	162903215

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:30 ID:kX6Xm09JsM8Rk_RkgNonK3zRRGV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:44.9	44.9	1:4	=	Scale	
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Plate Offsets (X, Y): [2:Edge,0-0-14], [2:0-2-5,Edge]

									-	
Loading(psf)Spacing2-0-TCLL (roof)20.0Plate Grip DOL1.15Snow (Pf)20.0Lumber DOL1.15TCDL10.0Rep Stress IncrYES	5 5 5 22018/TPI2014 1) Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-C 2-0-0 to 13-1 cantilever lef right exposed for reactions DOL=1.60 2) Truss design only. For stu see Standard or consult qu	WB Matrix-MSH 7-16; Vult=130mph bh; TCDL=6.0psf; BC 3; Enclosed; MWFRS C Exterior(2E) -0-10- -8, Exterior(2E) -0-10- -8, Exterior(2E) -0-10- -8, Exterior(2E) -0-10- st, Exter	CDL=6. S (enve -8 to 2- 1-8 to 1 ; end vo and ford L=1.60 n the pla (norma d Detail gner as	Opsf; h=25ft; lope) exteric 0-0, Interior - 6-1-8 zone; ertical left an ces & MWFR plate grip ane of the tru al to the face is as applical per ANSI/TF	or (1) d RS uss), ble, PI 1.	Inte R80	rnationa	I Resid	erenced standard	tions R502.11.1 and
No-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	 TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 p overhangs no All plates are Gable studs : This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha chord and ar Provide mecl bearing plate 2, 264 lb upli uplift at joint joint 2. 	7-16; Pr=20.0 psf (r .15); Pf=20.0 psf (Lu s=1.0; Rough Cat B	en con greate roof lo ther liv ther liv ther liv ther liv ther wis a 10.0 th any o or a live where a fit betw by othe iding 3 uplift at than 13 ar	Lum DOL= L=1.15 Plate Exp.; Ce=0.9 sidered for the or of min roof ad of 20.0 ps e loads. se indicated. psf bottom other live loa e load of 20.0 a rectangle een the botto een the botto ers) of truss t lb uplift at joi : joint 15, 26 ad 3 lb uplift at	1.15 b; his live sf on ds. opsf om o int lb		A MARTINIAN A		SEA 0363	22 EER A LUN

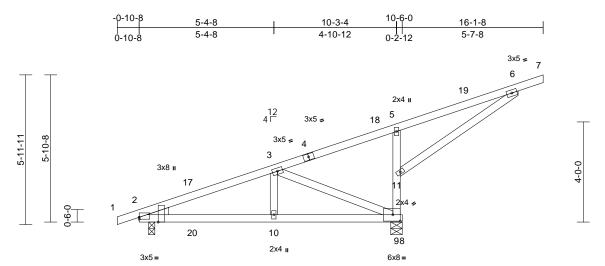
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January 9,2024

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	H02	Monopitch	6	1	I6290 Job Reference (optional)	03216

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:30 ID:nLPVeuW3K4TytrtY3ILLguzRRHK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



0- <u>1</u>	4-8	5-4-8	10-3-4	10-6-0
0-	4-8	5-0-0	4-10-12	0-2-12

<u>Scale = 1:46</u> Plate Offsets (X, Y): [2:Edge,0-0-14], [2:0-2-5,Edge], [9:0-3-8,0-3-0]

	(A, T). [Z.Euge,0-0-14	ij, [z.0-z-3,Euge], [s.0	-3-0,0-3-0	1									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.71 0.27 0.71	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.04 -0.04 -0.01	(loc) 9-10 9-10 9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 67 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEDGE BRACING TOP CHORD BOT CHORD FORCES TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.3 *Excep 2.0E Left: 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-0, § Max Horiz 2=210 (LC Max Uplift 2=-99 (LC Max Grav 2=379 (LC (lb) - Maximum Com Tension 1-2=0/17, 2-3=-368/, 5-6=-594/757, 6-7=-	C 10) C 10), 9=-379 (LC 10) C 1), 9=1090 (LC 21) hpression/Maximum (225, 3-5=-447/428, 29/0	6) d or 7) 8)	load of 12.0 overhangs n This truss ha chord live loi * This truss h on the bottoi 3-06-00 tall li chord and au One H2.5A S recommende UPLIFT at jt and does no This truss is International	as been designed psf or 1.00 times f on-concurrent with as been designed ad nonconcurrent has been designed in chord in all area by 2-00-00 wide w hy other members Simpson Strong-Ti ed to connect truss (s) 9 and 2. This c t consider lateral f designed in accor Residential Code nd referenced star Standard	ilat roof lin n other lin for a 10. with any d for a liv is where ill fit betw ie conne s to bear onnectio forces. dance w sections	bad of 20.0 p ve loads. D psf bottom other live loa e load of 20. a rectangle veen the bott ctors ing walls due n is for uplift ith the 2018 s R502.11.1 a	ads. Opsf tom ≩ to only					
WEBS	9-11=-840/532, 5-11	,	6/599										in the
Vasd=103 Cat. II; Ex zone and 2-1-8 to 13 cantilever C for men	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B' (p B; Enclosed; MWFR C-C Exterior(2E) -0-10 3-1-8, Exterior(2E) 13- 1eft exposed ; porch le nbers and forces & MW umber DOL=1.60 plate	CDL=6.0psf; h=25ft; S (envelope) exterior 0-8 to 2-1-8, Interior (1-8 to 16-1-8 zone; off and right exposed; VFRS for reactions	1)							Genne		SEA 0363	• -

shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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

3) Unbalanced snow loads have been considered for this design.

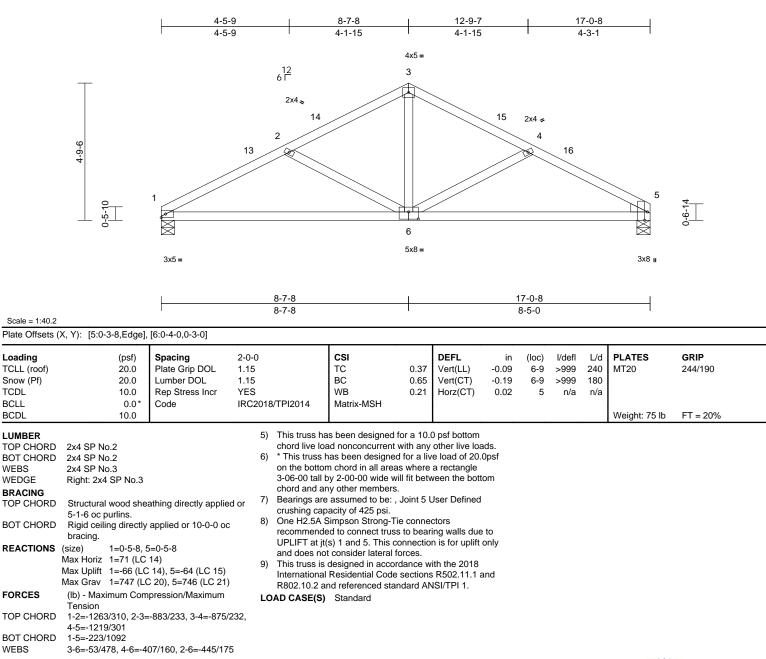


Page: 1

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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	J01	Common	5	1	Job Reference (optional)	162903217

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:31 ID:yPXMLbyKekkHSiWSIZLGINzRR58-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



WEBS NOTES

FORCES

Loading

TCDL

BCLL

BCDL

WEBS

WEDGE

LUMBER

- 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) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-7-8, Exterior(2R) 5-7-8 to 11-7-8, Interior (1) 11-7-8 to 14-0-8, Exterior(2E) 14-0-8 to 17-0-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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 4) design.



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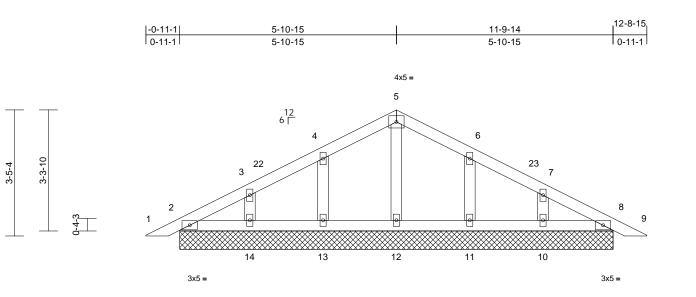


Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	PBA	Piggyback	2	1	Job Reference (optional)	162903218

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:31 ID:RPY8AW_GFKIcY3mFoYebvHzRQqK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



11-9-14

							11314						-
Scale = 1:31.4												•	
.oading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
CLL (roof)	20.0	Plate Grip DOL	1.15		тс	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
now (Pf)	20.0	Lumber DOL	1.15		BC	0.04	Vert(CT)	n/a	-	n/a	999		
CDL	10.0	Rep Stress Incr	YES		WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
CLL	0.0*	Code	IRC2018	8/TPI2014	Matrix-MSH								
CDL	10.0											Weight: 52 lb	FT = 20%
UMBER OP CHORD OT CHORD	2x4 SP No.2		2)	Vasd=103m Cat. II; Exp E	7-16; Vult=130mp oh; TCDL=6.0psf; 3; Enclosed; MWF	BCDL=6 RS (env	.0psf; h=25ft; elope) exterio	r	Deta	ail for C sult qua	onnect	tion to base truss ouilding designer	Truss Connection s as applicable, or
THERS	2x4 SP No.3				C Corner(3E) 0-4-				LOAD	CASE(S) Sta	ndard	
RACING)-8, Corner(3R) 3-								
OP CHORD	Structural wood she 6-0-0 oc purlins.	athing directly applied	d or	zone; cantile	to 10-4-13, Corner	exposed	; end vertical l						
OT CHORD		applied or 10-0-0 oc		MWFRS for	oosed;C-C for mer reactions shown; I			te					
EACTIONS	(size) 2=11-9-14 11=11-9-1 13=11-9- 15=11-9- Max Horiz 2=52 (LC Max Uplift 2=-9 (LC 10=-45 (L 13=-47 (L 15=-9 (LC 10=237 (L 10=237 (L 12=143 (L 14=237 (L 19=123 (L	15), 8=-11 (LC 15), C 15), 11=-47 (LC 15), C 14), 14=-47 (LC 15), C 14), 19=-11 (LC 15), C 21), 8=123 (LC 22), LC 22), 11=244 (LC 2), LC 21), 13=244 (LC 2), LC 22), 15=123 (LC 2), LC 22)	3) (), (), (), (), (2), (1), (1), (1),	only. For sti see Standar or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design. This truss ha load of 12.0 overhangs n	ned for wind loads uds exposed to wind d Industry Gable E ualified building de 57-16; Pr=20.0 ps 1.15); Pf=20.0 psf Is=1.0; Rough Cat	nd (norm End Deta signer a: f (roof Ll (Lum DC t B; Fully been cor for great flat roof le n other li	al to the face) ils as applicate s per ANSI/TF :: Lum DOL=1 bL=1.15 Plate Exp.; Ce=0.9 asidered for th er of min roof pad of 20.0 ps ve loads.), ble, PI 1. I.15 I.15 I; iis live					11111
ORCES	(lb) - Maximum Corr Tension	pression/Maximum	8)	Gable requir	es continuous boti spaced at 2-0-0 o	tom chor						"TH CA	ROUT
OP CHORD		3/116, 6-7=-56/49,) This truss ha chord live loa	as been designed to ad nonconcurrent	for a 10. with any	other live load			4	i	OTHEES	The second
OT CHORD	,	9/67, 12-13=-9/67,	11	on the bottor	nas been designed m chord in all area by 2-00-00 wide w	s where	a rectangle	•				SEA	
EBS	5-12=-102/0, 4-13=- 6-11=-208/125, 7-10	208/125, 3-14=-181/1)=-181/113			ny other members.					Ξ		0363	• -
OTES	,		12	/ N/A							- 0	•	
Unbalance	ed roof live loads have	been considered for									1	·	ALLE
this desigr	n.										1.5	GIN	EFICAN
			13		designed in accor Residential Code			nd			11	CAC	ILBEITT

- 11-12=-9/67, 10-11=-9/67, 8-10=-9/67 WEBS 5-12=-102/0, 4-13=-208/125, 3-14=-181/113, 6-11=-208/125, 7-10=-181/113
- NOTES
- 1) Unbalanced roof live loads have been considered for this design.
- 12) _{N/A}

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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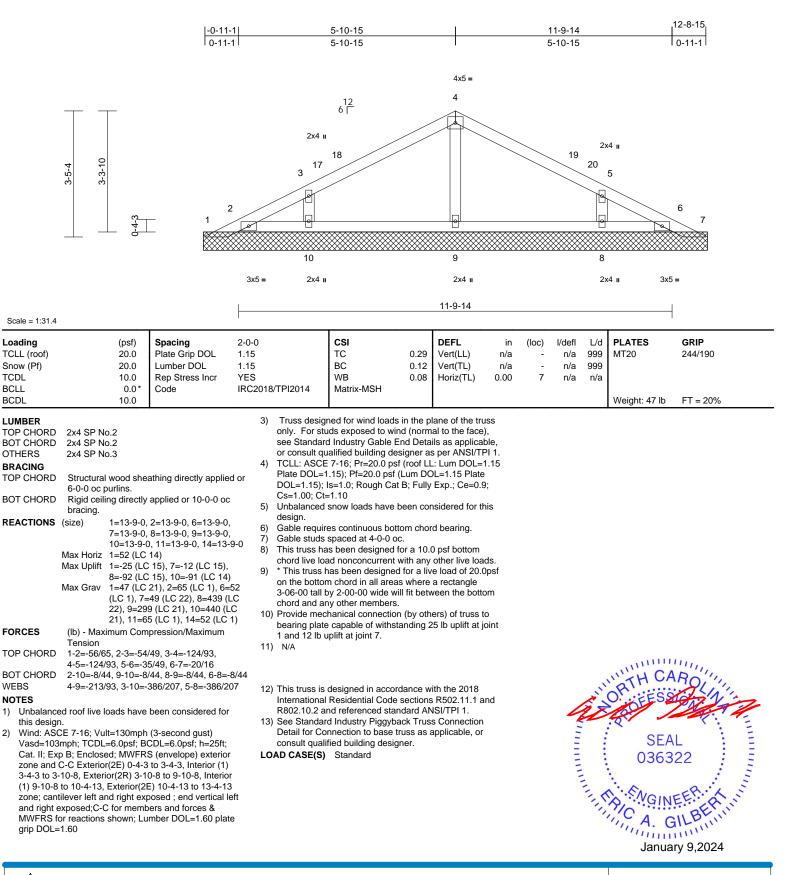
GI 11111111

January 9,2024

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	PBA1	Piggyback	18	1	Job Reference (optional)	162903219

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:32 ID:Cx19sF4HMnJTVINoGDnTDzzRQqC-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

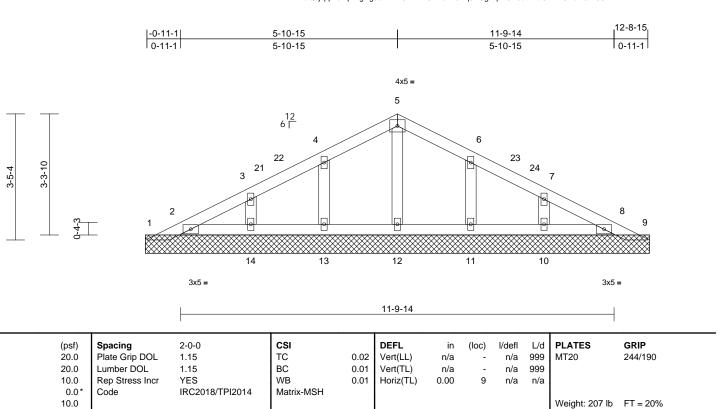
Page: 1



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Job	D .	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23	120143-01	PBA2	Piggyback	2	4	Job Reference (optional)	162903220

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:32 ID:m2dQdjvppkexqPVgwg5aZPzRCX1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	l wood sheathing directly applied or ourlins.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 10-0-0 oc
REACTIONS	(size)	1=13-9-0, 2=13-9-0, 8=13-9-0, 9=13-9-0, 10=13-9-0, 11=13-9-0, 12=13-9-0, 13=13-9-0, 14=13-9-0, 15=13-9-0, 18=13-9-0
	Max Horiz	1=52 (LC 14)
	Max Uplift	1=-25 (LC 15), 2=-14 (LC 14), 8=-7 (LC 15), 9=-2 (LC 22), 10=-45 (LC 15), 11=-47 (LC 15), 13=-48 (LC 14), 14=-44 (LC 14), 15=-14 (LC 14), 18=-7 (LC 15)
	Max Grav	1=24 (LC 18), 2=154 (LC 21), 8=142 (LC 22), 9=4 (LC 1), 10=233 (LC 22), 11=245 (LC 22), 12=144 (LC 21), 13=244 (LC 21), 14=234 (LC 21), 15=154 (LC 21), 18=142

(LC 22)

6-11=-208/121, 7-10=-180/91

7-8=-29/26, 8-9=0/24

Tension

(Ib) - Maximum Compression/Maximum

4-5=-62/105. 5-6=-62/105. 6-7=-55/40.

2-14=-15/54, 13-14=-15/54, 12-13=-15/54,

11-12=-15/54, 10-11=-15/54, 8-10=-15/54

5-12=-103/0, 4-13=-208/121, 3-14=-181/90,

1-2=-56/69. 2-3=-48/32. 3-4=-55/50.

Scale = 1:31.4

TCLL (roof)

Snow (Pf)

TCDL

BCLL

BCDL

FORCES

TOP CHORD

BOT CHORD

WEBS

NOTES

- 4-ply truss to be connected together as follows: Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- 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 and C-C Exterior(2E) 0-4-3 to 3-4-3, Interior (1) 3-4-3 to 3-10-8, Exterior(2R) 3-10-8 to 9-10-8, Interior (1) 9-10-8 to 10-4-13, Exterior(2E) 10-4-13 to 13-4-13 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
- 5) 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.
- 6) 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.
- 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.

Page: 1

- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 2, 7 lb uplift at joint 8, 25 lb uplift at joint 1, 2 lb uplift at joint 9, 48 lb uplift at joint 13, 44 lb uplift at joint 14, 47 lb uplift at joint 11, 45 lb uplift at joint 10, 14 lb uplift at joint 2 and 7 lb uplift at joint 8.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



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818 Soundside Road

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLB1	Valley	1	1	I6290 Job Reference (optional)	03221

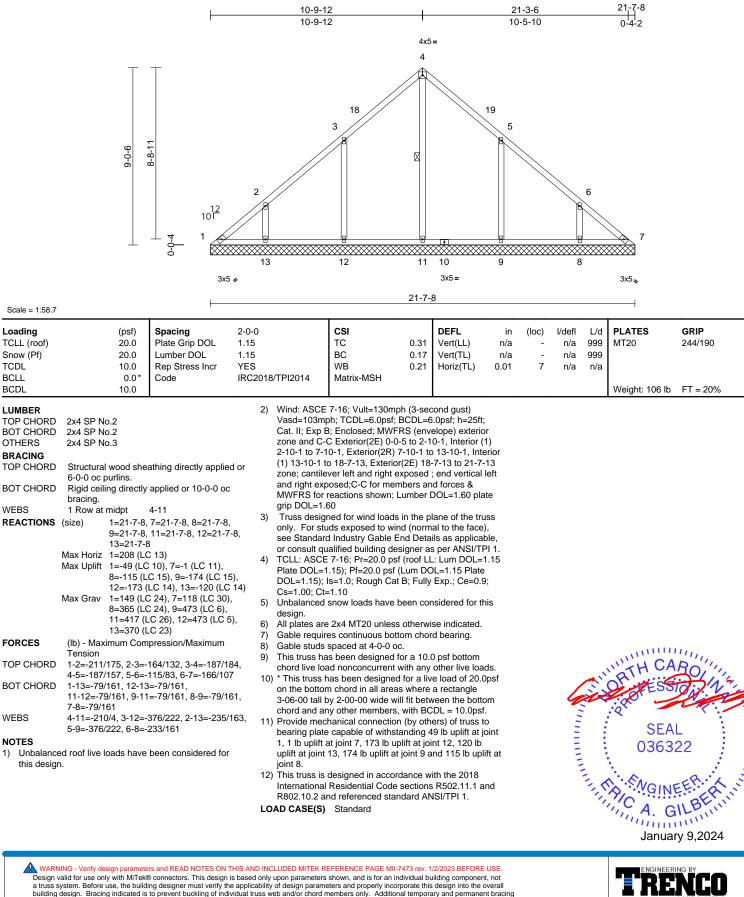
10-9-12

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

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21-3-6

Page: 1

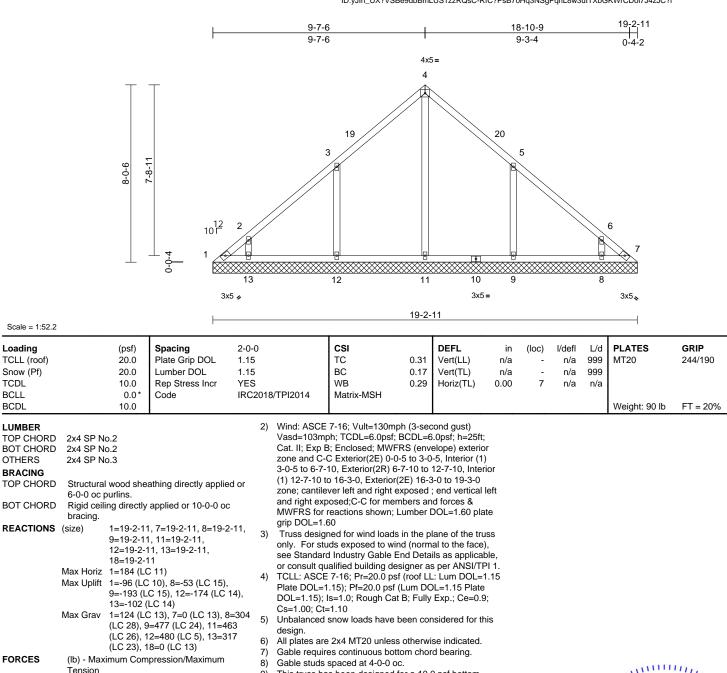


bilding design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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	127 Serenity-Roof-B326 A GLH COP 4BR
23120143-01	VLB2	Valley	1	1	Job Reference (optional)

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:33 ID:yJIn_UX?VSBe9dbBmLUS1zzRQsC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



TOP CHORD 1-2=-218/205, 2-3=-217/187, 3-4=-189/267, 4-5=-178/241, 5-6=-107/66, 6-7=-72/43 BOT CHORD 1-13=-45/64, 12-13=-18/55, 11-12=-18/55 9-11=-18/55, 8-9=-18/55, 7-8=-18/55

4-11=-256/59. 3-12=-379/222.

2-13=-222/173. 5-9=-376/229. 6-8=-217/154

WEBS

TCDL

BCLL

BCDL

NOTES

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

- This truss has been designed for a 10.0 psf bottom 9) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 1, 174 lb uplift at joint 12, 102 lb uplift at joint 13, 193 lb uplift at joint 9 and 53 lb uplift at joint 8.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

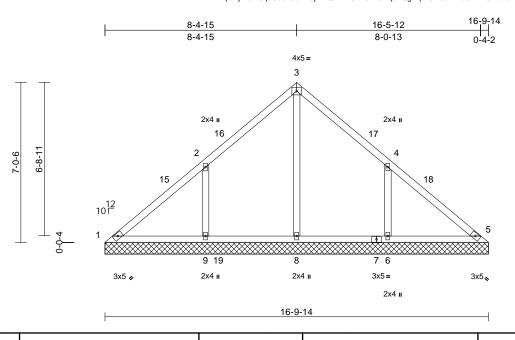


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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLB3	Valley	1	1	Job Reference (optional)	162903223

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:34 ID:4pahjxh9RSqoCd5h0aDV3jzRQs?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:50.5						10 5	17					_		
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.38 0.18 0.41	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: 75 lb	GRIP 244/190 FT = 20%	
this desig 2) Wind: AS Vasd=10 Cat. II; E> zone and 3-0-5 to 5 11-5-4 to cantilever right expo	2x4 SP No.2 2x4 SP No.3 Structural wood she 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=16-9-14 8=16-9-14 8=16-9-14 Max Horiz 1=160 (LC Max Uplift 1=-58 (LC 9=-188 (L Max Grav 1=82 (LC (LC 6), 8= 5), 14=1 ((lb) - Maximum Com Tension 1-2=-105/370, 2-3=- 4-5=-139/290 1-9=-180/76, 8-9=-1 5-6=-180/74 3-8=-471/0, 2-9=-39 ed roof live loads have n. CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B φ B; Enclosed; MWFR C-C Exterior(2E) 0-0-5 i-5-4, Exterior(2E) 1 left and right exposed por shown; Lumber DC	applied or 6-0-0 oc 4, 5=16-9-14, 6=16-9 4, 9=16-9-14, 14=16- 5 10), 6=-183 (LC 15, C 14) 33), 5=1 (LC 24), 6= 654 (LC 23), 9=511 LC 24) pression/Maximum 25/319, 3-4=-2/298, 80/74, 6-8=-180/74, 2/221, 4-6=-392/219 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterion to 3-0-5, Interior (1) 4 to 11-5-4, Interior (1) 4 to 11-5-4, Interior (1) 5 end vertical left and and forces & MWFR	5) 9-14, 6) 9-14 7)), 8) 5511 9) (LC 10 11) 11) nne; d	only. For sti see Standar or consult qu TCLL: ASCE Plate DOL=' DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable requir Gable studs This truss ha chord live lo: * This truss ha chord and ai) Provide mec bearing platt 1, 188 lb upl) This truss is International	snow loads have es continuous bot spaced at 4-0-0 c as been designed ad nonconcurrent nas been designe m chord in all aree by 2-00-00 wide w y other members hanical connectio e capable of withs iff at joint 9 and to designed in accoo Residential Code nd referenced sta	ind (norm End Deta ssigner a: sf (roof Ll (Lum DC (Lum DC tom chor been cor tom chor been cor tom chor been cor tom chor been cor tom chor been cor for a 10. with any d for a liv as where will fit bett s, with BC on (by oth tanding f 83 lb upli rdance we sections	al to the face ils as applica is per ANSI/TI L=1.15 Plate L=1.15 Plate Exp.; Ce=0.9 asidered for the d bearing. 0 psf bottom other live loa re load of 20.1 a rectangle veen the bott CDL = 10.0psi ers) of truss i 58 lb uplift at j fft at joint 6. is the the 2018 is R502.11.1 a), ble, PI 1. 1.15 9 3; his 0psf om f. to oint				SEA 0363	EER ALL	. Norman

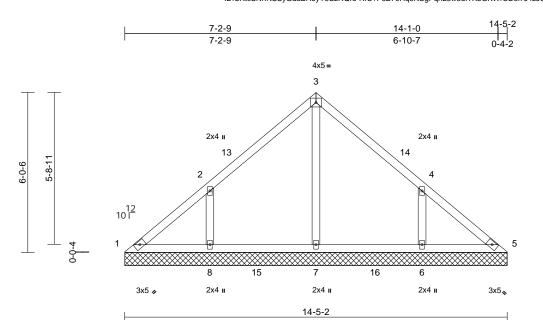


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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLB4	Valley	1	1	Job Reference (optional)	162903224

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:34 ID:CKtcSNrINSSyGdaBHoyY5SzRQro-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale	_ 1	.12	Б
Scale	= 1	:43.	ວ

Loading		(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.15		тс	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL		10.0	Rep Stress Incr	YES		WB	0.14	Horiz(TL)	0.00	5	n/a	n/a		
BCLL		0.0*	Code	IRC201	8/TPI2014	Matrix-MSH								
BCDL		10.0											Weight: 62 lb	FT = 20%
LUMBER				3)	Truss desig	ned for wind loads	s in the p	lane of the tru	JSS					
TOP CHORD	2x4 SP N	0.2			only. For stu	ids exposed to wi	nd (norm	al to the face),					
BOT CHORD	2x4 SP N	lo.2			see Standard	d Industry Gable I	End Deta	ils as applica	ble,					
OTHERS	2x4 SP N	0.3				alified building de								
BRACING				4)		7-16; Pr=20.0 ps								
TOP CHORD	Structura 6-0-0 oc		athing directly applie	d or		.15); Pf=20.0 psf ls=1.0; Rough Ca								
BOT CHORD	Rigid ceil		applied or 6-0-0 oc	5)	Cs=1.00; Ct= Unbalanced	=1.10 snow loads have	been cor	nsidered for t	his					
	Max Uplift Max Grav	7=14-5-2, 1=-137 (L 1=-24 (LC 8=-157 (L 1=124 (LC 6=454 (LC 8=454 (LC	C 10) 10), 6=-154 (LC 15) C 14) C 24), 5=99 (LC 23), C 21), 7=403 (LC 23) C 20)	6), 7) 8) 9)	Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b	es continuous bol spaced at 4-0-0 o is been designed ad nonconcurrent has been designe n chord in all area by 2-00-00 wide w ny other members	ic. for a 10. with any d for a liv as where rill fit betw	0 psf bottom other live loa re load of 20.0 a rectangle veen the botto	Opsf om					
FORCES	Tension		pression/Maximum			hanical connectio capable of withs								
TOP CHORD	1-2=-152 4-5=-121	,	176/118, 3-4=-176/1	,	1, 157 lb upli	ift at joint 8 and 1 designed in acco	54 lb upli	ft at joint 6.						
BOT CHORD	1-8=-59/1 5-6=-59/1	,	9/100, 6-7=-59/100,	I	Ínternational	Residential Code	sections	s R502.11.1 a	ind				NITH CA	1111
WEBS			5/196, 4-6=-375/195			nd referenced sta	nuard Ar	NOI/ I FT 1.					W'LH CA	ROUL
NOTES				Ľ	DAD CASE(S)	Sidiluaru						N	'A1	
1) Unbalance	d roof live	loade bave	boon considered for									2	() . FSS	1 Anna

- 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 3-2-14, Interior (1) 3-2-14 to 4-2-14, Exterior(2R) 4-2-14 to 10-2-14, Interior (1) 10-2-14 to 11-2-14, Exterior(2E) 11-2-14 to 14-5-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

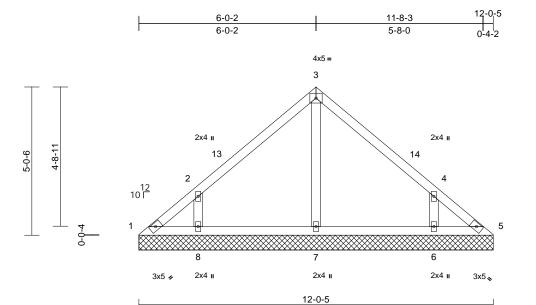


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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLB5	Valley	1	1	Job Reference (optional)	162903225

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:35 ID:vFTOYoza1WjXT9L6tv8uVZzRQre-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:39.1

Loading TCLL (roof) Snow (Pf)	(psf) 20.0 20.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15 YES		CSI TC BC	0.31	DEFL Vert(LL) Vert(TL)	in n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 244/190
TCDL BCLL BCDL	10.0 0.0* 10.0	Rep Stress Incr Code		8/TPI2014	WB Matrix-MSH	0.08	Horiz(TL)	0.00	5	n/a	n/a	Weight: 50 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD	6-0-0 oc purlins.	athing directly applie applied or 10-0-0 oc		only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced	hed for wind loads hds exposed to wind d Industry Gable E alified building des 7-16; Pr=20.0 psf (15); Pf=20.0 psf (s=1.0; Rough Cat =1.10 snow loads have b	d (norm nd Deta signer as (roof LL Lum DC B; Fully	al to the face ils as applica s per ANSI/T .: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9), ble, PI 1. 1.15 9;					
	7=12-0-5 Max Horiz 1=-114 (L Max Uplift 1=-34 (LC 6=-136 (L Max Grav 1=91 (LC	C 10), 5=-6 (LC 11), .C 15), 8=-139 (LC 14	6) 7) 8) =434 9)	Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b	es continuous bott spaced at 4-0-0 oc s been designed f ad nonconcurrent v nas been designed n chord in all area: by 2-00-00 wide wi yy other members.	:. or a 10.0 vith any for a liv s where	0 psf bottom other live loa e load of 20.1 a rectangle	Opsf					
FORCES	(lb) - Maximum Con Tension	pression/Maximum	10) Provide mec	hanical connection capable of withsta								
TOP CHORD	1-2=-114/101, 2-3=- 4-5=-88/63	218/115, 3-4=-218/1	15,		at joint 5, 139 lb up								
BOT CHORD WEBS	1-8=-32/75, 7-8=-31 5-6=-31/73	/73, 6-7=-31/73, 1/220, 4-6=-401/220	11) This truss is International	designed in accord Residential Code	sections	s R502.11.1 a	ind				TH CA	
NOTES	3-7=-172/0, 2-8=-40		L	R802.10.2 ar DAD CASE(S)	nd referenced stan Standard	dard AN	ISI/TPI 1.				- N	RTHUA	SLIN

- 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 Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 9-0-10, Exterior(2E) 9-0-10 to 12-0-10 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
 -) exterior kterior(2R)



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A MiTek Affilia 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLB6	Valley	1	1	I629 Job Reference (optional)	903226

4-9-12

4-9-12

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

Scale = 1:33.2 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

REACTIONS

FORCES

WFBS

1)

2)

NOTES

TOP CHORD

BOT CHORD

this design

DOL=1.60

TCDL

BCLL

BCDL

Run: 8.63 S. Nov. 1.2023 Print: 8.630 S.Nov. 1.2023 MiTek Industries. Inc. Mon. Jan 08.09:18:35 ID:vFTOYoza1WjXT9L6tv8uVZzRQre-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

9-3-6

4-5-10

4x5 = 2

Page: 1

GRIP

244/190

FT = 20%

9 10 3-8-11 4-0-6 12 10 ∟ 3 4 3x5 🖌 2x4 II 3x5 💊 9-7-8 Spacing 2-0-0 CSI DEFL l/defl L/d PLATES in (loc) 20.0 Plate Grip DOL 1.15 TC 0.45 Vert(LL) n/a n/a 999 MT20 BC 20.0 1 15 Lumber DOL 0.42 Vert(TL) n/a n/a 999 10.0 Rep Stress Incr YES WB 0.18 Horiz(TL) 0.01 4 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-MSH 10.0 Weight: 37 lb 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) desian. Structural wood sheathing directly applied or Gable requires continuous bottom chord bearing. 6) 7) Gable studs spaced at 4-0-0 oc. Rigid ceiling directly applied or 6-0-0 oc 8) 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 1=9-7-8, 3=9-7-8, 4=9-7-8 9) Max Horiz 1=90 (LC 11) on the bottom chord in all areas where a rectangle 1=-49 (I C 21) 3=-49 (I C 20) 3-06-00 tall by 2-00-00 wide will fit between the bottom 4=-108 (LC 14) chord and any other members. 1=95 (LC 20), 3=95 (LC 21), 4=772 10) Provide mechanical connection (by others) of truss to (LC 20) bearing plate capable of withstanding 49 lb uplift at joint (lb) - Maximum Compression/Maximum 1, 49 lb uplift at joint 3 and 108 lb uplift at joint 4. 11) This truss is designed in accordance with the 2018 1-2=-115/373, 2-3=-115/373 International Residential Code sections R502.11.1 and 1-4=-214/172, 3-4=-214/172 R802.10.2 and referenced standard ANSI/TPI 1. LOAD CASE(S) Standard Unbalanced roof live loads have been considered for Wind: ASCE 7-16; Vult=130mph (3-second gust) OR 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 6-7-13, Exterior(2E) 6-7-13 to 9-7-13 zone; CHILLING CONTRACT cantilever left and right exposed ; end vertical left and SEAL right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 036322

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.

(psf)

2x4 SP No.2

2x4 SP No.2

2x4 SP No.3

9-7-8 oc purlins.

bracing.

Max Uplift

Max Grav

Tension

2-4=-595/271

(size)

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Edenton, NC 27932

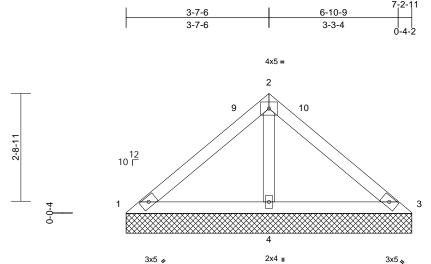
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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLB7	Valley	1	1	Job Reference (optional)	162903227

3-0-6

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:35 ID:vFTOYoza1WjXT9L6tv8uVZzRQre-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



7-2-11



Scale = 1:29.1

Ocale = 1.23.1													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.26 0.26 0.09	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 27 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS	7-2-11 oc purlins. Rigid ceiling directly bracing.	3=7-2-11, 4=7-2-11 11) 2 21), 3=-17 (LC 20), 2 14) C 20), 3=105 (LC 21) C 20) npression/Maximum 8/228	6) 7) 8) 9) 1, 10) 11)	Plate DOL=1 DOL=1.15); Cs=1.00; Cti Unbalanced design. Gable requir 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, 17 lb upliff This truss is International	snow loads have l es continuous bott spaced at 4-0-0 or is been designed nas been designed n chord in all area by 2-00-00 wide wi y other members. hanical connectior capable of withst at joint 3 and 73 I designed in accord Residential Code nd referenced star	(Lum DC B; Fully been con com chor c. for a 10. with any f for a liv s where all fit betw h (by oth anding 1 b uplift a dance w sections	DL=1.15 Plate Exp.; Ce=0.9 Insidered for the d bearing. 0 psf bottom other live loa e load of 20.0 a rectangle veen the bottot ers) of truss t 7 lb uplift at ju at joint 4. the the 2018 5 R502.11.1 a	e); ds. Opsf om oont					
NOTES 1) Unbalance this design	ed roof live loads have	been considered for											in the

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 4-3-0, Exterior(2E) 4-3-0 to 7-3-0 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.

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SEAL

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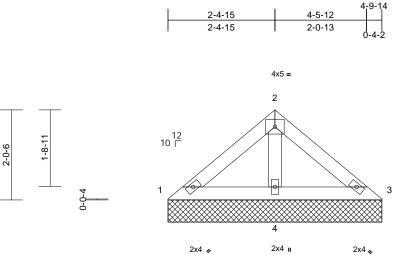
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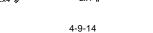
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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLB8	Valley	1	1	I62903228 Job Reference (optional)	

Run: 8,63 S Nov 1 2023 Print: 8,630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:36 ID:vFTOYoza1WjXT9L6tv8uVZzRQre-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:26

Scale = 1:20											
Loading (psf) TCLL (roof) 20.0 Snow (Pf) 20.0 TCDL 10.0 BCLL 0.0* BCDL 10.0	Plate Grip DOL1.Lumber DOL1.Rep Stress IncrYE	0-0 15 15 ES C2018/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: 17 lb	GRIP 244/190 FT = 20%
REACTIONS 4-9-14 oc purlins. Rigid ceiling directly bracing. REACTIONS (size) 1=4-9-14, Max Horiz 1=43 (LC Max Uplift 3=-7 (LC	, 3=4-9-14, 4=4-9-14 13) 15), 4=-33 (LC 14) 20), 3=88 (LC 21), 4=29 pression/Maximum 0/102 /87 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and right ght exposed;C-C for for reactions shown; DL=1.60 n the plane of the truss I (normal to the face), d Details as applicable, gner as per ANSI/TPI 1. roof LL: Lum DOL=1.15 Plate	 design. 6) Gable requir 7) Gable studs 8) This truss ha chord live loo 9) * This truss hord live loo 9) * This truss hord the bottor 3-06-00 tall h chord and ar 10) Provide mechanism plate and 33 lb up 3 11) This truss is International 	designed in accord Residential Code s nd referenced stand	orn chor or a 10. vith any for a liv for a liv where I fit betv (by oth unding 7 lance w sections	d bearing.) psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t lb uplift at joi ith the 2018 R502.11.1 a	ds.)psf om o		4	Ũ	ORTH CA ORTH CA ORTH CA ORTH CA SEA 0363	L

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

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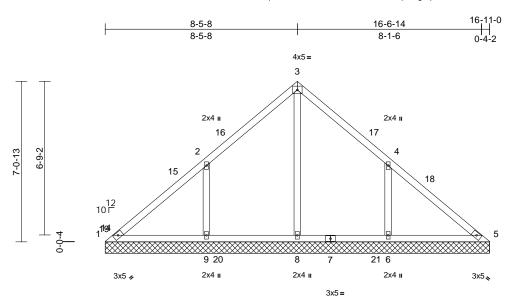


G mmm January 9,2024

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLD1	Valley	1	1	Job Reference (optional)	162903229

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:36 ID:?VRASUfm0qfd3oFPBHC5FHzRQud-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



16-11-0

Scale = 1:50.7

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 IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.35 0.18 0.27	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 N Structura 6-0-0 oc Rigid cei bracing.	No.2 No.3 al wood she purlins. ling directly 1=16-11-0	athing directly appli applied or 6-0-0 oc), 5=16-11-0, 6=16-	5	only. For stu see Standar or consult qu) TCLL: ASCE Plate DOL= DOL=1.15); Cs=1.00; Cta) Unbalanced design.	ned for wind load uds exposed to wi d Industry Gable alified building de 7-16; Pr=20.0 ps 1.15); Pf=20.0 ps Is=1.0; Rough Ca =1.10 snow loads have es continuous bo	nd (norm End Deta esigner as if (roof LL (Lum DC t B; Fully been cor	al to the face ils as applica s per ANSI/TI L: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9), ble, PI 1. 1.15 9;					
	Max Uplift	1=-161 (L 1=-27 (LC 9=-185 (L 1=109 (LC	: 10), 6=-183 (LC 15 C 14) C 24), 5=107 (LC 21 C 24), 8=495 (LC 23	9),	 Gable studs This truss has chord live los * This truss has on the botton 3-06-00 tall has been been been been been been been bee	spaced at 4-0-0 d as been designed ad nonconcurrent has been designe m chord in all area by 2-00-00 wide w	oc. for a 10.0 with any d for a liv as where vill fit betv	0 psf bottom other live loa re load of 20.0 a rectangle veen the botto)psf om					
	Tension		pression/Maximum		0) Provide mec bearing plate	ny other members hanical connection capable of withs	n (by oth tanding 2	ers) of truss t 27 lb uplift at j	0					
TOP CHORD BOT CHORD WEBS	4-5=-120 1-9=-120 5-6=-120)/210)/137, 8-9=-)/137	110/190, 3-4=-109/ [.] 120/137, 6-8=-120/ [.] 6/220, 4-6=-396/219	1 137, ¹	1) This truss is International R802.10.2 a	ift at joint 9 and 1 designed in acco Residential Code nd referenced sta	rdance w sections	ith the 2018 s R502.11.1 a	nd				TH CA	Della
NOTES		,	h	- L	OAD CASE(S)	Standard						AN	RTHOR	TOLIN

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior (1) 3-4-13 to 5-5-13, Exterior(2R) 5-5-13 to 11-5-13, Interior (1) 11-5-13 to 13-11-5, Exterior(2E) 13-11-5 to 16-11-5 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
 - 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)

ENGINEERING BY RENCO

A. GILP

SEAL

036322

WILLING THE

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLD2	Valley	1	1	Job Reference (optional)	162903230

4x5 = 3

7-3-2

7-3-2

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

Scale = 1:43.6 Loading

TCLL (roof)

Snow (Pf)

LUMBER

OTHERS

BRACING

TOP CHORD

BOT CHORD

TOP CHORD

BOT CHORD

FORCES

WEBS

NOTES

1)

2)

TOP CHORD

BOT CHORD

this design

DOL=1.60

REACTIONS (size)

TCDL

BCLL

BCDL

5-9-2 6-0-13

Spacing

Code

Plate Grip DOL

Rep Stress Incr

Lumber DOL

(psf)

20.0

20.0

10.0

10.0

2x4 SP No.2

2x4 SP No.2

2x4 SP No.3

6-0-0 oc purlins.

bracing.

Max Horiz

Max Grav

Tension

4-5=-123/111

5-6=-62/101

0.0

Rigid ceiling directly applied or 6-0-0 oc

1=-137 (LC 10)

8=-156 (LC 14)

8=455 (LC 20)

(Ib) - Maximum Compression/Maximum

1-8=-62/119, 7-8=-62/101, 6-7=-62/101,

3-7=-229/0. 2-8=-374/196. 4-6=-375/195

Unbalanced roof live loads have been considered for

Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;

Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-13 to 3-3-6, Interior (1)

3-3-6 to 4-3-6, Exterior(2R) 4-3-6 to 10-3-6, Interior (1) 10-3-6 to 11-3-6, Exterior(2E) 11-3-6 to 14-6-13 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

Wind: ASCE 7-16; Vult=130mph (3-second gust)

1-2=-142/146, 2-3=-173/122, 3-4=-172/112,

7=14-6-13, 8=14-6-13

1=107 (LC 24), 5=99 (LC 23),

6=457 (LC 21), 7=409 (LC 23),

Max Uplift 1=-29 (LC 10), 6=-155 (LC 15),

Run: 8.63 S. Nov. 1.2023 Print: 8.630 S.Nov. 1.2023 MiTek Industries. Inc. Mon. Jan 08.09:18:36 ID:Th_ZgqfOm8nUgyqbk?jKoVzRQuc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

14-2-1

6-11-0

14-6-3

Page: 1

GRIP

244/190

FT = 20%

2x4 II 2x4 II 14 15 2 Δ 12 10 Г 1168 5 *********** 8 17 7 18 6 2x4 II 2x4 II 2x4 🛛 3x5 🍫 3x5 💊 14-6-3 2-0-0 CSI DEFL l/defl L/d PLATES in (loc) 1.15 TC 0.31 Vert(LL) n/a 999 MT20 n/a BC 1 15 0.16 Vert(TL) n/a n/a 999 YES WB 0.15 Horiz(TL) 0.00 5 n/a n/a IRC2018/TPI2014 Matrix-MSH Weight: 63 lb 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 Structural wood sheathing directly applied or 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. 1=14-6-13, 5=14-6-13, 6=14-6-13, 6) Gable requires continuous bottom chord bearing. 7) 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. * 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 29 lb uplift at joint 1, 156 lb uplift at joint 8 and 155 lb uplift at joint 6.

- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

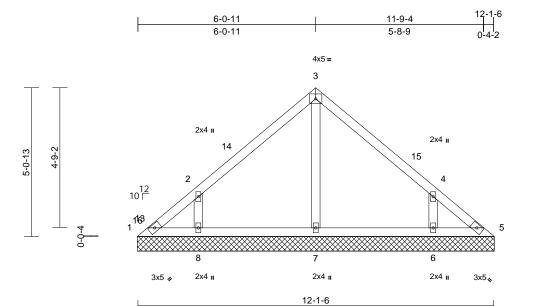


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Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLD3	Valley	1	1	Job Reference (optional)	162903231

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:37 ID:kUxM45s?bF21LX?KCRTFVAzRQqU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:39.3

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 IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.31 0.12 0.08	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: 50 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=12-2-0 7=12-2-0 Max Horiz 1=-114 (L Max Uplift 1=-37 (LC 6=-136 (L Max Grav 1=78 (LC	,	5) 6) 7) 8)) 9) -435	only. For sti see Standar or consult qu TCLL: ASCE Plate DOL=' DOL=1.15); Cs=1.00; Ct Unbalanced design. Gable requir Gable studs This truss ha chord live lo. * This truss ha chord live lo. 3-06-00 tall l	ned for wind load dids exposed to wi d Industry Gable ialified building de 7-16; Pf=20.0 psf Is=1.0; Rough Ca =1.10 snow loads have es continuous bo spaced at 4-0-0 d as been designed ad nonconcurrent has been designed ad nonconcurrent has been designed y 2-00-00 wide w y other members	nd (norm End Deta ssigner aus sf (roof LL (Lum DC t B; Fully been cor tom chor c. for a 10.1 with any d for a liv as where vill fit betw	al to the face ils as applical s per ANSI/TF JL=1.15 Plate Exp.; Ce=0.9 asidered for th d bearing. 0 psf bottom other live loa e load of 20.0 a rectangle), ble, PI 1. 1.15 D; his ds. Dpsf					
FORCES	(lb) - Maximum Con Tension) Provide med	hanical connection connectication connectic	n (by oth							
TOP CHORD	4-5=-92/63	·217/117, 3-4=-217/11	7,	1, 4 lb uplift uplift at joint	at joint 5, 137 lb u 6.	plift at joi	nt 8 and 136	lb					
BOT CHORD	1-8=-32/74, 7-8=-32 5-6=-32/73	2/73, 6-7=-32/73,	11) Beveled plat	e or shim require		de full bearing	g				mm	1117
WEBS NOTES		7/213, 4-6=-398/218	12	 This truss is International 	truss chord at join designed in acco Residential Code	rdance w sections	s R502.11.1 a	nd			- III	WITH CA	RO

- 1) Unbalanced roof live loads have been considered for 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) 0-4-13 to 3-4-13, Exterior (2R) 3-4-13 to 9-2-0, Exterior(2E) 9-2-0 to 12-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S) Standard



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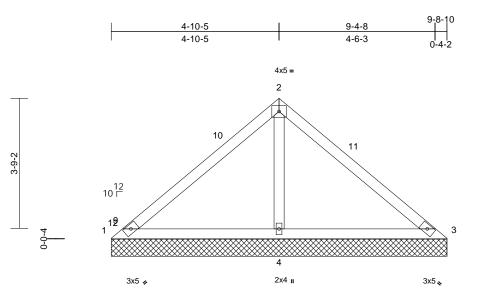


Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLD4	Valley	1	1	I62903232 Job Reference (optional)	

4-0-13

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:37 ID:kUxM45s?bF21LX?KCRTFVAzRQqU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



9-8-10

Scale = 1:33.3

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 IRC20	18/TPI2014	CSI TC BC WB Matrix-MSH	0.46 0.43 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%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES	2x4 SP No.2 2x4 SP No.3 Structural wood sl 9-8-10 oc purlins. Rigid ceiling direct bracing. (size) 1=9-8-1 Max Horiz 1=-90 (I Max Uplift 1=-60 (I 4=-108 Max Grav 1=74 (L (LC 20) (lb) - Maximum Co Tension 1-2=-113/377, 2-3	LC 21), 3=-50 (LC 20) (LC 14) C 20), 3=94 (LC 21), ompression/Maximum =-114/374	67 78 0 9), ⁴⁼⁷⁸⁰ 1	 Plate DOL=' DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable requir Gable studs This truss ha chord live loo; * This truss la on the bottor 3-06-00 tall l chord and ar Provide mec bearing plate 1, 50 lb uplif This truss is International 	snow loads have res continuous bot spaced at 4-0-0 o as been designed ad nonconcurrent has been designed m chord in all area by 2-00-00 wide w ny other members chanical connection e capable of withst t at joint 3 and 108 designed in accor Residential Code nd referenced star	(Lum DC B; Fully been cor tom chor c. for a 10.0 with any d for a liv s where ill fit betv - n (by oth anding 6 b lb uplift dance w sections	DL=1.15 Plate Exp.; Ce=0.9 nsidered for the rd bearing. 0 psf bottom other live load re load of 20.1 a rectangle veen the botth ers) of truss t 50 lb uplift at j at joint 4. ith the 2018 \$ R502.11.1 at	e 9; his Opsf om to oint					
	ed roof live loads hav	ve been considered fo	or									200111	11.

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) 0-4-13 to 3-4-13, Exterior (2R) 3-4-13 to 6-8-14, Exterior(2E) 6-8-14 to 9-8-14 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

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



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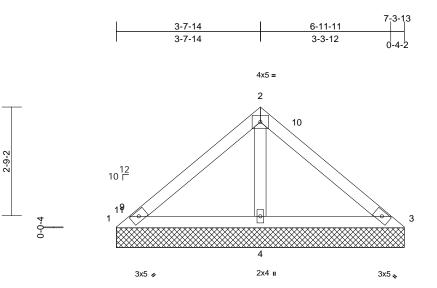
A MiTek . 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLD5	Valley	1	1	I62 Job Reference (optional)	2903233

3-0-13

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:38 ID:CgVkHRtdMZAuzhaXm9_U1OzRQqT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



7-3-13

Scale	_	1:29.3

Ocale = 1.23.3													
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-(1.15 1.15 YES IRC2) 018/TPI2014	CSI TC BC WB Matrix-MP	0.26 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 BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.3 Structural wood she 7-3-13 oc purlins. Rigid ceiling directly bracing. (size) 1=7-3-13, Max Horiz 1=-67 (LC Max Uplift 1=-28 (LC 4=-73 (LC Max Grav 1=72 (LC (lb) - Maximum Com Tension 1-2=-86/230, 2-3=-9	applied or 6-0-0 oc 3=7-3-13, 4=7-3-13 10) 21), 3=-16 (LC 20), 14) 20), 3=103 (LC 21), C 20) appression/Maximum 0/229		 Plate DOL=: DOL=1.15); Cs=1.00; Ct Unbalanced design. Gable requii Gable studs This truss ha chord live lo * This truss on the botto 3-06-00 tall chord and a Provide meet bearing plat 1, 16 lb uplif This truss is International 	snow loads have res continuous bo spaced at 4-0-0 as been designed ad nonconcurren has been designed m chord in all are by 2-00-00 wide ny other member chanical connecti e capable of with t at joint 3 and 73 designed in acco Residential Cod nd referenced sta	of (Lum DC at B; Fully be been cor- bottom chor oc. d for a 10. t with any ed for a liv ass where will fit betw s. on (by oth standing 2 3 lb uplift a ordance w le sections	DL=1.15 Plate Exp.; Ce=0. Insidered for t of bearing. 0 psf bottom other live loa re load of 20. a rectangle veen the bott ers) of truss 28 lb uplift at it joint 4. ith the 2018 \$ R502.11.1 a	e 9; his dds. 0psf om to joint					
NOTES 1) Unbalance	ed roof live loads have	been considered for	r										

- 1)
- Unbalanced roof live loads have been considered for 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) 0-4-13 to 3-8-3, Exterior(2R) 3-8-3 to 4-4-2, Exterior(2E) 4-4-2 to 7-4-2 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
- Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLD6	Valley	1	1	I62903234 Job Reference (optional)	

2-5-8

2-5-8

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

2-0-13

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:38 ID:CgVkHRtdMZAuzhaXm9_U1OzRQqT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-6-14

2-1-6

4x5 = 2

4-11-0

3

2x4 💊



12 10 Г 1-9-2 10 0-0-4 4



4-11-0

Scale = 1:26.2

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 IRC201	8/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) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 18 lb	GRIP 244/190 FT = 20%
BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS (2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 4-11-0 oc purlins. Rigid ceiling directly bracing. (size) 1=4-11-0, Max Horiz 1=-44 (LC Max Uplift 3=-7 (LC Max Grav 1=59 (LC (LC 20) (lb) - Maximum Com Tension	applied or 6-0-0 oc 3=4-11-0, 4=4-11-0 10) 15), 4=-31 (LC 14) 20), 3=87 (LC 21), 4	9) 10 = ²⁹⁴ 11	design. Gable requir Gable studs This truss ha chord live loa * This truss f on the bottor 3-06-00 tall b chord and ar D) Provide mec bearing plate and 31 lb up I) This truss is International R802.10.2 ar	designed in accord Residential Code s nd referenced stand	om chor or a 10.0 vith any for a liv s where I fit betw (by oth anding 7 lance w sections	d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t ' lb uplift at jo ith the 2018 s R502.11.1 a	ds. Dpsf om int 3					
TOP CHORD BOT CHORD WEBS	1-2=-62/102, 2-3=-8 1-4=-80/88, 3-4=-80 2-4=-182/97		LC	DAD CASE(S)	Standard								
NOTES													
 Unbalanced this design. Wind: ASCI Vasd=103n Cat. II; Exp zone and C exposed ; e members a Lumber DC Truss desig only. For si see Standa or consult op 	E 7-16; Vult=130mph nph; TCDL=6.0psf; B B; Enclosed; MWFR Conception: C Exterior(2E) zone and vertical left and rig nd forces & MWFRS DL=1.60 plate grip DC gned for wind loads in tuds exposed to wind ird Industry Gable En qualified building desig	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and ri jht exposed;C-C for for reactions shown; L=1.60 the plane of the trus (normal to the face), d Details as applicab gner as per ANSI/TP	ght ss le, l 1.							J. Contraction	Ż	SEA 0363	

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

ANGIN AND A. (A. GI A. GILIN January 9,2024

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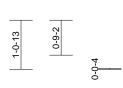
Job	Truss	Truss Type	Qty	Ply	127 Serenity-Roof-B326 A GLH COP 4BR	
23120143-01	VLD7	Valley	1	1	I62903235 Job Reference (optional)	

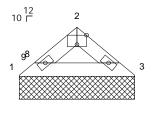
Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Jan 08 09:18:38 ID:CgVkHRtdMZAuzhaXm9_U10zRQqT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



C?f







3x5 =

2x4 🧀 2x4 💊

2-6-3

Scale = 1:25.1

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

Loading (psf) TCLL (roof) 20.0 Snow (Pf) 20.0 TCDL 10.0 BCLL 0.0* BCDL 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.04 0.05 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 7 lb	GRIP 244/190 FT = 20%
BCDL 10.0 Weight 7 Ib FT = 20% LUMBER TOP CHORD 2x4 SP No.2 FT = 20% BOT CHORD 2x4 SP No.2 FT = 20% BOT CHORD 2x4 SP No.2 FT = 120% BOT CHORD 2x4 SP No.2 FT = 120% BOT CHORD Structural wood sheathing directly applied or 100-00 cp bracing. FT is truss has been designed for a 10.0 psf bottom chord in all areas where a retrangle 3-66-00 tall by 2-20-00 word will fit between the bottom chord in all areas where a retrangle 3-66-00 tall by 2-20-00 word well lift between the bottom chord and any other members. BOT CHORD 12-2-117/54, 2-3=-132/58 FT This truss is designed in accordance with the 2018 international Code sections R502:10.2 and referenced standard ANS/ITP1 1. LOAD CASE(S) Standard BOT CHORD 1-32-117/54, 2-3=-132/58 FT reations a there been considered for this design. 10 That stores 1.5: Indexed, WHTPS (or well of the form and ing trapposed C-C for emperses and toros 8. WHTPS for reactions show; turner DOL-1.60 pite graph for L-10; Ibe and dig the proposed C-C for emperses and toros 8. WHTPS for reactions show; turner DOL-1.10; Ibe and the plane of the truss only. For trust designed for wind loads in the plane of the truss only. For trust designed for wind loads in the plane of the truss only. For taids axypact to wind (cord II to the face), see Standard Industry Cable End Details as applicable, or consult qualified building designer as a PMSI/TP1 1. 10 Thustanced and wond loreat											
 Gable requires continuous botton 	-									Janua	ary 9,2024



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