

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 21040028-B 72 Carolina Lakes-Roof-Sterling

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: I46292676 thru I46292708

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



May 26,2021

Sevier, Scott

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	72 Carolina Lakes-Roof-Sterling	
21040028-B	A01	Common Supported Gable	1	1	Job Reference (optional)	146292676

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:15 ID:V6qbZzEgg25mJIQE2RQXSUzd719-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale =	1:62.9
---------	--------

Plate Offsets ((X, Y): [2:0-0-12,0-0-2]], [2:0-0-12,0-9-11], [2	0:0-0-12,0-0-2], [20:0	-0-12,0-9-1	1]								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-f	0.05 0.04 0.22 MSH	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc 21	c) l/defl - n/a - n/a 0 n/a	L/d 999 999 n/a	PLATES MT20 Weight: 248	GRIP 244/19 3 lb FT = 2	90 20%
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD	2x6 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep Left: 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood shea	t* 0-0:2x4 SPF No.2(fl athing directly applied	at) or	Max Grav	2=170 (LC 21), 2 22=224 (LC 35), 24=164 (LC 35), 26=177 (LC 22), 29=237 (LC 22), 31=237 (LC 21), 34=177 (LC 21), 36=164 (LC 34), 29=224 (LC 34),	20=170 (LC 23=141 (L 25=159 (L 28=230 (L 30=181 (L 35=159 (L 37=141 (L	C 22), C 22), C 1), C 22), C 22), C 27), C 21), C 21), C 21), C 21),	2) V V C 2 (2 2 2 2	Vind: ASC /asd=103r Cat. II; Exp cone and C 2-6-3 to 13 2N) 20-4-3 cone; canti und right e:	E 7-16 nph; T(B; End -C Col -6-13, (3 to 31- lever le kposed	; Vult=130mp CDL=6.0psf; E closed; MWFF rner(3E) -0-10 Corner(3R) 13 4-13, Corner(eft and right en l;C-C for mem	1 (3-second 3CDL=6.0ps 3C (envelop -8 to 2-6-3, 3-6-13 to 20 3E) 31-4-13 (posed ; end bers and for	l gust) sf; h=25ft; be) exterior Exterior(2N))-4-3, Exterior 3 to 34-9-8 d vertical left proces &
BOT CHORD	6-0-0 oc purlins. Rigid ceiling directly	applied or 10-0-0 oc	FORCES	(lb) - Max	42=170 (LC 22)	on/Maximu	m	g 3) T	rip DOL=' Truss desi	I.60 gned fo	or wind loads	in the plane	e of the truss
WEBS	T-Brace: Fasten (2X) T and I of web with 10d (0.1) o.c.,with 3in minimum Brace must cover 9	2x4 SPF No.2 - 11-30 braces to narrow edg 31"x3") nails, 6in m end distance. 90% of web length.	e TOP CHORD	Tension 1-2=0/23, 4-5=-90/1 8-9=-71/1 11-12=-10 13-14=-7	2-3=-158/89, 3-4 11, 5-7=-71/134, 91, 9-10=-91/240 05/272, 12-13=-9 ⁻ 1/191, 14-15=-55/	=-114/91, 7-8=-61/15 , 10-11=-10 1/240, 146,	7, 05/272,	0 5 4) T P C	only. For s see Standa or consult o CLL: ASC Plate DOL= DOL=1.15)	tuds ex ard Indu qualifie E 7-16 =1.15); ; Is=1.(xposed to win ustry Gable En d building des 5; Pr=20.0 psf Pf=20.0 psf (0; Rough Cat	d (normal to nd Details a igner as pe (roof LL: Lu Lum DOL=1 B; Fully Exp) the face), is applicable, ir ANSI/TPI 1. JM DOL=1.15 1.15 Plate p.; Ce=0.9;
	(312) 22=33-11: 24=33-11: 26=33-11: 31=33-11: 34=33-11: 36=33-11: 38=33-11: 38=33-11: 38=33-11: Max Horiz 2=-141 (LI Max Uplift 2=-24 (LC 23=-37 (LI 25=-43 (LI 31=-28 (LI 31=-28 (LI 34=-44 (LI 36=-45 (LI 38=-72 (LI	, 20-33-11-0, -0, 23=33-11-0, -0, 28=33-11-0, -0, 30=33-11-0, -0, 30=33-11-0, -0, 35=33-11-0, -0, 35=33-11-0, -0, 35=33-11-0, -0, 39=-33-11-0, -0 C 15), 39=-141 (LC 15) C 15), 22=-67 (LC 15), C 15), 24=-45 (LC 15) C 15), 26=-44 (LC 15) C 15), 26=-44 (LC 15) C 15), 28=-50 (LC 14) C 14), 35=-43 (LC 14) C 14), 37=-35 (LC 14) C 14), 39=-24 (LC 15)	BOT CHORD WEBS , , , , , , , , , , , , ,	15-17=-4 19-20=-82 2-38=-32 36-37=-33 31-32=-32 29-38=-32 29-38=-32 24-25=-33 22-23=-32 11-30=-15 9-32=-190 5-36=-122 12-29=-15 14-26=-11 17-24=-12 19-22=-16 d roof live l	7/100, 17-18=-46/ 3/42, 20-21=0/23 (128, 37-38=-32/1 2/128, 35-36=-32/2 2/128, 30-31=-32/2 2/128, 20-29=-32/2 2/128, 20-22=-32/2 2/128, 20-22=-32/2 2/128, 20-22=-32/2 50/23, 10-31=-197 50/23, 10-31=-107 50/23, 10-23=-107 50/117 oads have been of	55, 18-19= 28, 128, 128, 128, 128, 128, 128, 128,	-59/17, 20/77, 66/117, for	5) U	/S=1.00; C Jnbalance lesign.	d snow	SI 044	EAL 1925	ered for this

May 26,2021

Page: 1



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	A01	Common Supported Gable	1	1	Job Reference (optional)	146292676
Carter Components (Sanford), S	anford, NC - 27332,	Run: 8.5 S 0 May 17	2021 Print: 8	.500 S May 1	17 2021 MiTek Industries, Inc. Tue May 25 15:03:15	Page: 2

ID:V6qbZzEgg25mJIQE2RQXSUzd719-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

- 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.
- All plates are 2x4 MT20 unless otherwise indicated. 7)
- 8) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc. 9)
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, and 22. This connection is for uplift only and does not consider lateral forces.
- 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.
- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	A02	Common	4	1	Job Reference (optional)	146292677

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries. Inc. Tue May 25 15:03:18 ID:g0F??pf01Y3_LJPZWnXljVzLq?Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



(1) 20-4-3 to 31-4-13, Exterior(2E) 31-4-13 to 34-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

818 Soundside Road Edenton, NC 27932

mm May 26,2021

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	A03	Common	2	1	Job Reference (optional)	146292678

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:18 ID:fv1?20dBTWjoXKIMXuuuKzzLpv8-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

818 Soundside Road Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	A04	Common	5	1	Job Reference (optional)	146292679

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:19 ID:z8edV58DoEbwfhNawL8RRXzLptA-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

818 Soundside Road Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	A05	Common	4	1	Job Reference (optional)	146292680

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:19 Page: 1 ID:?w0cRT0WIMa9CGaJsKQF5jzLppS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -0-10-8 5-9-3 22-6-11 11-4-5 16-11-8 28-1-13 33-8-0 0-10-8 5-9-3 5-7-3 5-7-3 5-7-3 5-7-3 5-6-3 5x6= 6 20 21 2x4 ı 2x4 II 12 61 5 7 4x6 ≠ 4x6 👟 4 8 5-0-6 9-5-2 2x4 👟 2x4 💋 3 9 22 19 10 9-9-0 1-7-0 12 23 24 11 3x8= MT20HS 8x12 = 5x10= 3x10 =11-4-5 22-6-11 33-8-0 11-4-5 11-2-5 11-1-5 Scale = 1:62.8 Plate Offsets (X, Y): [2:0-10-0,0-0-14], [10:Edge,0-0-2], [11:0-5-0,0-3-0] 2-0-0 CSI DEFL in l/defl L/d PLATES GRIP Loading (psf) Spacing (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) -0.43 11-12 >941 240 MT20 244/190 Snow (Pf) 20.0 Lumber DOL 1.15 BC 0.63 Vert(CT) -0.65 11-12 >617 180 MT20HS 187/143 TCDL Rep Stress Incr WB 10.0 YES 0.48 Horz(CT) 0.07 10 n/a n/a BCLL 0.0 IRC2018/TPI2014 Matrix-MSH Code BCDL 10.0 Weight: 206 lb FT = 20% LUMBER 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 TOP CHORD 2x6 SP No.2 BOT CHORD 2x4 SP 2400F 2.0E DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10 WEBS 2x4 SP No.3 WEDGE Right: 2x4 SP No.3 4) Unbalanced snow loads have been considered for this desian. BRACING 5) This truss has been designed for greater of min roof live TOP CHORD Structural wood sheathing directly applied or load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on 4-3-14 oc purlins. overhangs non-concurrent with other live loads. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc All plates are MT20 plates unless otherwise indicated. bracing. This truss has been designed for a 10.0 psf bottom 7) REACTIONS (size) 2=0-3-8, 10= Mechanical chord live load nonconcurrent with any other live loads. Max Horiz 2=151 (LC 14) 8) * This truss has been designed for a live load of 20.0psf Max Uplift 2=-148 (LC 14), 10=-128 (LC 15) on the bottom chord in all areas where a rectangle Max Grav 2=1519 (LC 3), 10=1475 (LC 3) 3-06-00 tall by 2-00-00 wide will fit between the bottom FORCES (Ib) - Maximum Compression/Maximum chord and any other members, with BCDL = 10.0psf. Tension Refer to girder(s) for truss to truss connections. 9) TOP CHORD 1-2=0/23, 2-3=-2646/293, 3-5=-2339/255, 10) Provide mechanical connection (by others) of truss to 5-6=-2376/360, 6-7=-2353/361, bearing plate capable of withstanding 128 lb uplift at 7-9=-2307/256. 9-10=-2573/295 joint 10. BOT CHORD 2-10=-310/2342 11) One RT7A MiTek connectors recommended to connect WEBS 5-12=-477/215, 3-12=-397/184, truss to bearing walls due to UPLIFT at jt(s) 2. This 7-11=-494/216, 6-12=-193/1161, connection is for uplift only and does not consider lateral 6-11=-191/1125, 9-11=-327/178 forces 12) This truss is designed in accordance with the 2018 NOTES and and a state of the state of International Residential Code sections R502.11.1 and

R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

- 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) -0-10-8 to 2-5-14, Interior (1) 2-5-14 to 13-7-2, Exterior(2R) 13-7-2 to 20-3-14, Interior (1) 20-3-14 to 30-3-10, Exterior(2E) 30-3-10 to 33-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



S

mm May 26,2021

SEAL

044925

Manunun III

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	A06	Common	1	1	Job Reference (optional)	146292681

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:20 ID:QsLtvZ5j1OfgmoID0p?ufHzLpo4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



ENGINEERING BY REENCO A MITEK Affiliate 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	A07	Common	1	1	Job Reference (optional)	146292682

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:20 ID:ojqlxzbUqUH4ern3HsDzhQzLpm8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:62.8

Plate Offsets (X, Y): [2:0-0-12,0-0-2], [2:0-0-12,0-9-11], [21:0-1-8,0-1-8]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	1-11-4 1.15 1.15 YES IRC2018/TPI2014		CSI TC BC WB Matrix-MSH	0.05 0.04 0.21	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc) - - 21	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 245	GRIP 244/1 Ib FT =	90 20%
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE SLIDER BRACING TOP CHORD BOT CHORD WEBS	2x6 SP N 2x4 SP N 2x4 SP N Left: 2x4 3 Right 2x4 Structural 6-0-0 oc p Rigid ceil bracing. T-Brace: Fasten (2 of web with 3 Brace m	o.2 o.3 *Excep SP No.3 SP No.3 I wood shea ourlins. ing directly X) T and I th 10d (0.1 3in minimur ust cover 9	t* 0-0:2x4 SPF No.2 1-1-14 athing directly applie applied or 10-0-0 oc 2x4 SPF No.2 - 11-3 braces to narrow ed 31*x3*) nails, 6in m end distance. 10% of we benoth.	(flat) d or FORCES 80 ge TOP CHORE	() Т О 1 4 8 1	ax Grav 2=166 22=215 24=155 26=172 29=230 31=230 34=172 36=155 38=217 42=98 lb) - Maximum Cr Tension -2=0/23, 2-3=-15 1-5=-91/102, 5-7 1-5=-74/177, 9-10 1-12=-106/256,	(LC 1), 2 ⁻ 5 (LC 35), 3 (LC 35), 2 (LC 22), 0 (LC 22), 0 (LC 22), 0 (LC 21), 2 (LC 34), 7 (LC 34), 12 (LC	1=98 (LC 22), 23=138 (LC 25=154 (LC 25=154 (LC 30=171 (LC 32=223 (LC 35=154 (LC 37=137 (LC 39=166 (LC on/Maximum 4=-115/82, 7-8=-62/147, 1, 10-11=-106 3/224,	, 22), 1), 22), 27), 21), 1), 21), 1), 21),	 Wii Va Ca zo (2I Ex 33 ve for DC 3) Tr on se or 4) TC Pla 	nd: ASC sd=103n t. II; Exp ne and C V) 2-5-14 terior(2N 8-0 zonc trical left ces & MV D_=1.60 uss desii V). For s e Standa consult c :LL: ASC ate DOL=	E 7-16 nph; T(B; End -C Coi- to 13-) 20-3- e; cant and rig VFRS plate g gned for tuds ex rd Indu jualifie E 7-16 =1.15);	; Vult=130mpf CDL=6.0psf; B closed; MWF rner(3E) -0-10 -7-2; Corner(3I -14 to 30-3-10, ilever left and ght exposed; C for reactions s rip DOL=1.60 or wind loads i xposed to wind ustry Gable En d building desi S; Pr=20.0 psf (Pf=20.0 psf (n (3-second CDL=6.0p S (envelop 8 to 2-5-1 R) 13-7-2 t Corner(3) right expos C for men shown; Lur n the pland d (normal t d Details a gner as pe (roof LL: Li um DOL=	d gust) sf; h=25ft; be) exterior 4, Exterior o 20-3-14, E) 30-3-10 to sed ; end hbers and hber e of the truss o the face), as applicable, er ANSI/TPI 1. um DOL=1.15 1.15 Plate
REACTIONS	(size) Max Horiz Max Uplift	2=33-8-0, 23=33-8-0 26=33-8-0 30=33-8-0 37=33-8-0 2=146 (LC 23=-33 (LI 23=-33 (LI 25=-42 (LI 24=-51 (LC 23=-33 (LI 34=-24 (LI 36=-44 (LI 36=-74 (LI	21=33-8-0, 22=33-8), 24=33-8-0, 25=33-), 28=33-8-0, 29=33-), 31=33-8-0, 32=33-), 35=33-8-0, 39=33-), 38=33-8-0, 39=33-), 38=33-8-0, 39=33-), 38=33-8-0, 39=33-), 38=33-8-0, 39=33-), 32=-74 (LC 14 C 15), 22=-74 (LC 15 C 15), 24=-44 (LC 14 C 15), 26=-42 (LC 14 C 14), 35=-42 (LC 14 C 14), 35=-24 (LC 14 C 14), 39=-21 (LC 14), 39=-21 (LC 14)), 30=-21	-0, 8	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3-14=-74/177, 1: 5-17=-47/89, 17: 9-21=-90/35 2-38=-31/105, 37: 36-37=-31/105, 3: 31-32=-31/105, 3: 31-32=-31/105, 2: 22-23=-31/105, 2: 31-32=-18/76, 1: 9-22=-160/147 roof live loads ha	4-15=-56, -18=-47/4 -38=-31/1 5-36=-31/ 2-34=-31/ 0-31=-31/ 8-29=-31/ 3-24=-31/ 3-24=-31/ 3-24=-31/ 3-24=-31/ 3-24=-31/ 3-21-104/6 3-28=-18 5-25=-11/ 8-23=-104/0 8-24=-104/0 8-23=-104/0 8-24=-104/0	 (133, 15, 18-19=-62) (105, 1/105, 1/105, 1/105, 1/105, 1/105, 1/105, 1/105, 1/151, 1/51, 1/51, 1/51, 1/51, 3/6, 3-38=-161 4/85, 6/74, 4/65, 2003 considered for 	/13, /74, /114, r	Cs 5) Ur de	JL=1.13) =1.00; C balanced sign.	, is=1.10 d snow	viologia Carro	ARO SSION AL 925 NEF	lered for this

NOTES



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	A07	Common	1	1	I462 Job Reference (optional)	292682

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, and 22. This connection is for uplift only and does not consider lateral forces.
- 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 21.
- 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) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:20 ID:ojqlxzbUqUH4ern3HsDzhQzLpm8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

A MiTek 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	B01	Common Supported Gable	1	1	Job Reference (optional)	146292683

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:22 ID:xKJ7yNkb6J8lK7P9S0_DtuzLqNz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

<u>19</u>-9-6 33-11-8 19-9-6 14-2-2 4x5= 13 Ŧ



Scale = 1:63

Plate Offsets (2	X, Y): [2:E	dge,0-0-15]], [2:0-2-6,Edge], [27:	0-3-0,0-3-0], [34:0-3-0	0,0-3	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	1-11-4 1.15 1.15 YES IRC2018/TPI2014	E I	CSI TC BC WB Matrix-MSH	0.07 0.03 0.14	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 22	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 200 I	GRIP 244/19 b FT = 2	90
LUMBER TOP CHORD BOT CHORD WEBS OTHERS WEDGE BRACING TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Left: 2x4 S Structural 6-0-0 oc p Rigid ceil bracing.	o.2 o.3 o.3 SP No.3 I wood shea purlins, exc ing directly	athing directly applied cept end verticals. applied or 10-0-0 oc	d or FORCES	Max (Ib	Grav 2=125 (LC 23=170 (l 25=157 (l 27=213 (l 27=213 (l 29=152 (l 31=212 (l 31=212 (l 35=157 (l 35=157 (l 35=157 (l 35=157 (l 37=159 (l 39=125 (C 1), 22 _C 35), _C 22), _C 22), _C 27), _C 21), _C 21), 3 _C 21), 3 _C 1), 3 _C 1) _D 19, 3	2=69 (LC 22), 24=151 (LC 26=200 (LC : 28=225 (LC : 30=223 (LC : 32=198 (LC : 36=154 (LC : 88=143 (LC : 98=143 (LC : 90/Maximum	1), 22), 22), 21), 21), 4), 34), 4),	2) Wir Vas Cat zon 2-6- (2N zon Lun 3) Tru only	id: ASCE d=103m . II; Exp e and C -4 to 16-) 23-2-2 e; cantile mbers ar nber DO uss desig /. For st	E 7-16; nph; TC B; Enc -C Cor 4-10, C to 30-4 ever le nd forc L=1.60 gned for uds ex	Vult=130mph CDL=6.0psf; B0 (losed; MWFRS ner(3E) -0-10- Corner(3R) 16- 5-0, Corner(3R) ft and right exp es & MWFRS i 0 plate grip DO or wind loads in posed to wind	(3-second) CDL=6.0ps S (envelope B to 2-6-4, 4-10 to 23-) 30-5-0 to 0 ossed; C-C for reaction L=1.60 D the plane (normal to	gust) f; h=25ft; e) exterior Exterior(2N) -2-2, Exterior 33-9-12 for hs shown; of the truss the face),
REACTIONS	Max Horiz Max Uplift	2=33-11-8 23=33-11- 25=33-11- 27=33-11- 31=33-11- 35=33-11- 35=33-11- 37=33-11- 2=149 (LC 23=-44 (LC 25=-33 (LC 27=-34 (LC 32=-32 (LC 34=-32 (LC 36=-33 (LC 38=-47 (LC	8, 22=33-11-8, -8, 24=33-11-8, -8, 26=33-11-8, -8, 28=33-11-8, -8, 30=33-11-8, -8, 32=33-11-8, -8, 34=33-11-8, -8, 36=33-11-8, -8, 36=33-11-8, -8, 36=33-11-8, -8, 36=33-11-8, -8, 36=33-11-8, -8, 36=33-11-8, -8, 36=33-11-8, -15), 22=-6 (LC 11), C 15), 24=-30 (LC 14), C 15), 24=-30 (LC 15), C 14), 31=-33 (LC 10), C 14), 33=-34 (LC 10), C 14), 33=-31 (LC 10), C 14), 33=-31 (LC 10), C 14), 37=-32 (LC 10), C 14), 39=-17 (LC 15), -14), 30=-17 (LC 15), -14), 30=-17 (LC 15), -14), 30=-17 (LC 15), -14), 30=-17 (LC 15), -14), 30=-17 (LC 15), -14), 30	DOT CHORD BOT CHORD)), WEBS),),),),),),),),),),),),),	Te T-2 4-5 7-5 7-5 7-5 11 13 15 19 2-5 35 31 26 22 23 5-3 14 16 19 2-5 35 11 26 6 7 1 19 2-5 31 10 2-5 35 11 26 19 2-5 5 10 2 2 2 13 10 2-5 5 10 2 2 2 2 13 10 2 -5 5 10 2 2 2 2 13 10 2 -5 5 -5 10 2 -5 5 -5 10 2 -5 5 -5 10 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5	, maximum commission 2=0/16, 2-3=-134/ 5=-91/73, 5-6=-73 8=-42/111, 8-10=- -12=-66/154, 12 -14=-77/174, 14-1 -16=-54/112, 16-1 -20=-23/38, 20-21 38=-28/20, 37-38= -32=0/6, 30-31=0. -28=0/6, 25-26=0. -23=0/6 -29=-114/0, 12-30 -31=-173/64, 10-5 33=-116/56, 7-34= 36=-115/56, 4-37= -28=-185/102, 15 -26=-162/56, 17-2 -24=-114/53, 20-2	60, 3-4 (83, 6-5) 3=-77/ 7=-43/ 7=-43/ 7=-210, 2/10, 2/10, 2/10, (6, 29-3) (6, 29-3) (7, 2	=-115/66, ~=-58/97, , 10-11=-55/1 174, 138, 87, 17-19=-3; 8, 21-22=-52; 36-37=-2/10, 32-33=0/6, 00=0/6, 28-29 2:5=0/6, 23-24 102, 3/56, 5, 6-35=-116/, 7, 3-38=-101/ */66, */66 considered for	39, 2/62, 19 =0/6, =0/6, 56, 56,	see or c Plat DO Cs= 5) Unt des 6) This load ove	Standar consult q LL: ASCI te DOL= L=1.15); 1.00; Ct palanced ign. s truss h d of 12.0 rhangs r	rd Indu ualified E 7-16 I.1.15); Is=1.0 Isnow as bee psf or non-co	stry Gable End d building desig ; Pr=20.0 psf (Lu ; Rough Cat B loads have be in designed for 1.00 times flat ncurrent with d CHESS SE 044	a Details as ner as per roof LL: Lu m DOL=1 ; Fully Exp en conside greater of roof load of ther live lo ARO SIO AL 925	s applicable, r ANSI/TPI 1. m DOL=1.15 .15 Plate .; Ce=0.9; ered for this min roof live of 20.0 psf on ads.

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



May 26,2021

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	B01	Common Supported Gable	1	1	Job Reference (optional)	146292683
Carter Components (Sanford), Sa	anford, NC - 27332,	Run: 8.5 S 0 May 17 2	2021 Print: 8	.500 S May 1	17 2021 MiTek Industries, Inc. Tue May 25 15:03:22	Page: 2

ID:xKJ7yNkb6J8lK7P9S0_DtuzLqNz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

- All plates are 2x4 MT20 unless otherwise indicated. 7)
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.

chord and any other members.

- 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

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.

LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	B02	Common	3	1	Job Reference (optional)	146292684

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:23

Page: 1

2-4-7

11

ID:4XtIMxyO0XBnoFvKgym8nUzLqL6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f -0-10-8 13-3-6 33-11-8 6-9-7 19-9-6 26-3-6 0-10-8 6-9-7 6-6-0 6-6-0 6-6-0 7-8-2 4x5= 6 3x5 = 22 21 3x5 = 5x8≈ 412 41 5 7 4 T 23 2x4 🐝 5x8≈ 3 89 20 3x8 II 2 ģ⊥ X • 16 25 15 14 24 12 10 13 3x5= 3x5= 3x5= 3x5 =2x4 u 5.49

7-9-3 15-3-0 23-8-12 ²³⁻¹ 1-8 31-0-1 33-8-0	3x5=			5X8=		
7-9-3 7-5-12 8-5-12 0-2-12 7-0-9 2-7-15 0-3-8	7-9-3 7-9-3	15-3-0 7-5-12	23-8-12 8-5-12	23-11-8 0-2-12	<u>31-0-1</u> 7-0-9	33-11-8 33-8-0

Scale = 1:63

7-2-5 7-1-3

Plate Offsets	(X, Y): [2:Edge,0-0-15]], [2:0-2-6,Edge], [7:0	0-4-0,0-3-4	l], [13:0-4-0,0-3	3-0]									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.91 0.69 0.58	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.19 -0.29 0.03	(loc) 13-14 13-14 13	l/defl >999 >971 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 175 It	GRIP 244/190 • FT = 20%	, 0
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Structural wood shea 2-2-0 oc purlins, exc Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-3-8, 1 Max Horiz 2=153 (LC Max Uplift 2=-137 (LI 13=-228 (I Max Grav 2=892 (LC 13=2170 (athing directly applie cept end verticals. applied or 6-0-0 oc 6-13 1= Mechanical, 13= 2 14) C 10), 11=-222 (LC 3 LC 10) 2 5), 11=153 (LC 35) (LC 4)	2) d or 3) 0-5-8 (4) 34), 5)	Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-(2-6-4 to 16-4 (1) 23-2-2 to zone; cantile members and Lumber DOL TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 g overhangs no	7-16; Vult=130m, h; TCDL=6.0pst; b; Enclosed; MWF C Exterior(2E) -0- -10, Exterior(2E) -0- 10, Exterior(2	bh (3-sec BCDL=6 RS (envi 10-8 to 2 16-4-10 (2E) 30-6 xpposed S for rea DOL=1.60 f (roof LL (Lum DC t B; Fully been cor for greated lat roof Ich o other lin o other lin	cond gust) .0psf; h=25ft; elope) exterior -6-4, Interior to 23-2-2, Inte -12 to 33-11- C-C for ctions shown) :: Lum DOL=: DL=1.15 Plate Exp.; Ce=0.5 isidered for th er of min roof bad of 20.0 ps re loads.	(1) erior 8 ; 1.15 ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	12) This Inte R80 LOAD C	s truss is rnationa 02.10.2 a CASE(S)	desig I Resid and ref) Sta	ned in accordar dential Code se erenced standa ndard	Ice with the 2 xtions R502. rd ANSI/TPI	2018 11.1 and 1.
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig	(lb) - Maximum Com Tension 1-2=0/17, 2-3=-1721 5-6=-699/175, 6-8=-5 8-11=-129/236 2-16=-295/1607, 14- 12-14=-660/113, 11- 3-16=-363/169, 5-16 5-14=-783/239, 6-14 6-13=-1596/285, 7-1 7-12=-33/580, 8-12= ed roof live loads have n.	pression/Maximum /249, 3-5=-1618/261 98/958, 8-9=0/6, .16=-139/866, .12=-52/87, 10-11=0/ .=-118/838, .=-144/1173, 3=-693/229, 404/157 been considered for	6) , 7) /0 8) 9) 10 11	This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Refer to girdk Provide mecl bearing plate joint 11.) One RT7A M truss to beari connection is forces.) One RT16A I truss to beari connection is forces.	s been designed id nonconcurrent ias been designed ias been designed iy 2-00-00 wide w y other members er(s) for truss to tr nanical connection i capable of withst iTek connectors r ing walls due to U for uplift only and MiTek connectors ing walls due to U if or uplift only and	for a 10.0 with any d for a liv is where swhere uss conr n (by oth canding 2 recomme PLIFT at d does no recomm PLIFT at d does no	D psf bottom other live loa e load of 20.0. a rectangle ween the bott DL = 10.0psf nections. ers) of truss t :22 lb uplift at anded to conn jt(s) 2. This ot consider lai mended to conn jt(s) 13. This ot consider lai	ds. Dpsf om ect teral inect		A CONTRACTOR OF A		SEA 0449	AROLI AL 925 SEVIN	

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	B03	Common	5	1	Job Reference (optional)	146292685

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:24 ID:Zue57ocJldSLjltfCDkGrNzLqIz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:63

Plate Offsets	(X, Y): [2:Edge,0-0-15]], [2:0-2-6,Edge], [7:0	0-4-0,0-3-4	4], [13:0-4-0,0-3	3-0]									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.91 0.74 0.58	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.12 -0.21 0.03	(loc) 13-14 16-19 13	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 175	GRIP 244/19 Ib FT = 2	90 20%
LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left: 2x4 SP No.3 Structural wood shea 2-2-0 oc purlins, exa Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-3-8, 1 Max Horiz 2=153 (LC Max Uplift 2=-136 (L 13=-229 (LC Max Grav 2=895 (LC 13=2151 (athing directly applie cept end verticals. applied or 6-0-0 oc 6-13 1= Mechanical, 13= 2 14) C 10), 11=-214 (LC 3 LC 10) 2 5), 11=159 (LC 35) (LC 4)	2) d or 3) 0-3-8 34), 4) 34), 5)	Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-(2-6-4 to 16-4 (1) 23-2-2 to zone; cantile members and Lumber DOL 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	7-16; Vult=130m h; TCDL=6.0psf; 3; Enclosed; MWF C Exterior(2E) -0- -10, Exterior(2E) -0 30-6-12, Exterior wer left and right e d forces & MWFR =1.60 plate grip E 7-16; Pr=20.0 psf is=1.0; Rough Cat =1.10 snow loads have s been designed opsf or 1.00 times f on-concurrent witt	oh (3-sec BCDL=6 RS (env 10-8 to 2 16-4-10 (2E) 30-6 sxposed S for rea DOL=1.6(f (roof LL (Lum DC t B; Fully been cor for greate lat roof Ic	cond gust) .0psf; h=25ft; elope) exterior -6-4, Interior to 23-2-2, Inte .5-12 to 33-11- ;C-C for ctions shown .: Lum DOL=: DL=1.15 Plate Exp.; Ce=0.5 nsidered for th er of min roof bad of 20.0 ps ve loads.	(1) erior 8 ; 1.15 ;); his live sf on	12) This Inter R8(LOAD (s truss is rnationa 02.10.2 a CASE(S)	s desig and ref) Sta	ned in accord: dential Code s ferenced stand ndard	ance with tl ections R5 lard ANSI/ ⁻	he 2018 02.11.1 and ITPI 1.
FORCES	(lb) - Maximum Com Tension 1-2=0/17, 2-3=-1727 5-6=-593/155, 6-8=-1 8-11=-153/207	pression/Maximum /251, 3-5=-1586/243 99/939, 8-9=0/6,	6) 3, 7)	 This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 2.00 0.00 coll but 0.00 00 mill the bottom 									1.	
BOT CHORD	2-16=-297/1613, 14- 12-14=-646/113, 11- 3-16=-372/171, 5-16 5-14=-808/237, 6-14 6-13=-1598/281, 7-1 7-12=-41/636, 8-12=	16=-143/863, 12=-55/86, 10-11=0, =-91/824, =-125/1089, 3=-689/230, -348/166	/0 8) 9) 1(chord and an Refer to girde Provide mech bearing plate joint 11.	y other members er(s) for truss to tr hanical connection capable of withst	, with BC russ conr n (by oth tanding 2	DL = 10.0psf nections. ers) of truss t 214 lb uplift at	0			Se	ORTHO	SIC	ween
NOTES 1) Unbalanc this desig	ed roof live loads have n.	been considered for	. 11	 (i) Chick Transformer (Connection is forces. (i) One RT16A truss to bear connection is forces. 	Mittek connectors for uplift only and Mittek connectors ing walls due to U s for uplift only and	PLIFT at d does no recomm PLIFT at d does no	; jt(s) 2. This ot consider la nended to con ; jt(s) 13. This ot consider la	teral inect teral		HILLE.		044	925 NEER SE	H H H H H H H H H H

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	B04	Common	1	1	Job Reference (optional)	146292686

19-9-6

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

6-9-7

13-3-6

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:24 ID:Pd2d69iulgHC1MgHXIFhbyzLq9p-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1 26-3-6 33-11-8



Plate Offsets (X, Y): [6:0-4-0.0-3-4]. [12:0-4-0.0-3-0]

Loading	(nsf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	l /d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grin DOI	1 15		TC	0.91	Vert(LL)	-0.13	12-13	>999	240	MT20	244/190	
Snow (Pf)	20.0		1 15		BC	0.75	Vert(CT)	-0.22	15-18	>999	180		,	
	10.0	Ren Stress Incr	VES		WB	0.70	Horz(CT)	0.22	10 10	>000 n/a	n/a			
BCU	0.0*	Code	IRC201	8/TDI2014	Matrix-MSH	0.00	11012(01)	0.00	12	Π/α	n/a			
BCDL	10.0	Code	IKC201	0/1112014	IVIAUIX-IVIOI I							Weight: 173 lb	FT = 20%	
			2	Wind [.] ASCE	7-16 [.] Vult=130m	nph (3-sec	cond aust)							
TOP CHORD	2x4 SP No 2		_,	Vasd=103m	ph: TCDL=6.0psf	: BCDL=6	.0psf: h=25f	t:						
BOT CHORD	2x4 SP No.2			Cat. II; Exp I	B; Enclosed; MWI	FRS (env	elope) exteri	or						
WEBS	2x4 SP No.3			zone and C-	C Exterior(2E) 0-	0-0 to 3-4	-12, Interior	(1)						
BRACING				3-4-12 to 16	-4-10, Exterior(2F	R) 16-4-10) to 23-2-2,							
TOP CHORD	Structural wood shea	athing directly applie	ed or	Interior (1) 2	3-2-2 to 30-6-12,	Exterior(2	2E) 30-6-12 t	0						
	2-2-0 oc purlins. exc	ept end verticals.		33-11-8 zon	e; cantilever left a	and right e	xposed ;C-C	; for						
BOT CHORD	Rigid ceiling directly a	applied or 6-0-0 oc		members an	d forces & MWFF	RS for rea	ctions show	ר;						
	bracing.		-	Lumber DOL	=1.60 plate grip	DOL=1.60)							
WEBS	1 Row at midpt 5	5-12	3	TCLL: ASCE	: 7-16; Pr=20.0 p	st (root LL	: Lum DOL=	1.15						
REACTIONS	(size) 1=0-3-8, 10	0= Mechanical, 12=	=0-3-8	Plate DOL=1	1.15); Pt=20.0 pst	r (Lum DC	L=1.15 Plate	e 0.						
	Max Horiz 1=144 (LC	14)		DOL=1.15);	IS=1.0; Rough Ca _1.10	at B; Fully	Exp.; Ce=0.	9;						
	Max Uplift 1=-102 (LC	C 10), 10=-237 (LC	33), 4	Unhalanced	snow loads have	heen cor	sidered for t	his						
	12=-234 (L	_C 10)	·· +,	design	Show loads have	Deen coi		1113						
	Max Grav 1=841 (LC	5), 10=148 (LC 34)), 5	This truss ha	as been designed	for a 10 () psf bottom							
	12=2184 (I	LC 4)	. 0	chord live lo	ad nonconcurrent	t with any	other live loa	ads						
FORCES	(lb) - Maximum Comp	pression/Maximum	6	* This truss I	nas been designe	ed for a liv	e load of 20.	0psf						
	Tension		- /	on the bottor	m chord in all are	as where	a rectangle							
TOP CHORD	1-2=-1725/268, 2-4=-	-1561/258,		3-06-00 tall I	oy 2-00-00 wide v	vill fit betv	veen the bott	om						
	4-5=-564/156, 5-7=-1	05/986, 7-8=0/6,		chord and a	ny other members	s, with BC	DL = 10.0ps	f.						
	7-10=-143/229		7)	Refer to gird	er(s) for truss to t	truss conr	nections.					minin	1111.	
BOT CHORD	1-15=-298/1590, 13-1	15=-139/836,	8)	Provide med	hanical connection	on (by oth	ers) of truss	to				I'L CA	Pall	
	11-13=-684/119, 10-1	11=-55/86, 9-10=0/0	0	bearing plate	e capable of withs	standing 2	37 lb uplift a	t				all	0/11	
WEBS	2-15=-378/179, 4-15=	=-92/829,		joint 10.							1.a	O' EESS	10: 1.	5
	4-13=-809/235, 5-13=	=-125/1090,	9)	One RT7A N	liTek connectors	recomme	nded to con	nect			3 K		Viller 7	4
	5-12=-1627/286, 6-12	2=-693/231,		truss to bear	ing walls due to l	JPLIFT at	jt(s) 1. This						serie	2
	6-11=-43/663, 7-11=-	-374/168		connection is	s for uplift only an	nd does no	ot consider la	ateral				054		-
NOTES			4	TOFCES.								SEA	L	=
1) Unbalance	ed roof live loads have b	been considered for	r I	J) One RTI6A	ing walls due to l		iended to col	nect				0449	25	- 5
this desigi	n.			connection is	s for unlift only an	of does no	t consider la	ateral				. 0445	23 :	- 5
				forces	o ioi upint only an	10 0003 M		atorai			-			-
			1	1) This truss is	designed in acco	ordance w	ith the 2018				20	· En	A: a	-
				International	Residential Code	e sections	R502.11.1	and			11	GIN	EF	
				R802.10.2 a	nd referenced sta	andard AN	ISI/TPI 1.				11		EVIN	
			1	OAD CASE(S)	Standard							11. M.	55.11	
			L.		Ganuaru							in the second se	mm	
												May	/ 26 2021	

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	C01	Common Girder	1	2	Job Reference (optional)	146292687

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:25 ID:Hil1qPxACFu9nuniVnMSvIzd6uV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



	4-11-8	9-7-8	14-3-8	19-3-0	J
	4-11-8	4-8-0	4-8-0	4-11-8	1
Scale = 1:67.5					
Plate Offsets (X_Y): [1:Edge 0-2-4] [1:0-10-7 0-1-8] [12:Edge (0-1-11] [13:0-6-4 0-2	-81			

	X, I). [I.E	uge,o z +j,	[1.0 10 7,0 1 0], [12	Lugo,o	1 11], [10.0 0	4,0 Z 0j									
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	1-11-4 1.15 1.15 NO IRC20 ⁷	18/TPI2014	CSI TC BC WB Matrix-MSH	0.32 0.29 0.75	DEFL Vert(LL) -(Vert(CT) -(Horz(CT) (in 0.04 0.08 0.01	(loc) 13-15 13-15 12	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 358 lb	GRIP 244/190 FT = 20%	%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD JOINTS	2x4 SP N 2x8 SP 24 2x4 SP N 2x4 SP N Left 2x4 S 1-6-0 Structural 5-10-13 c Rigid ceill bracing, 10-0-0 oc 1 Brace a 24	o.2 400F 2.0E o.3 o.3 SP No.3 1 I wood shea oc purlins. ing directly Except: bracing: 1: t Jt(s): 22,	-6-0, Right 2x4 SP I athing directly applie applied or 6-0-0 oc 3-15,12-13.	E V No.2 ed or 1	OT CHORD VEBS OTES) 2-ply truss (0.131"X3") Ton chorde	1-20=-583/167, 19- 18-19=-583/167, 17- 16-17=-583/167, 15- 13-15=-52/3281, 12- 15-21=-101/1580, 7- 10-15=-2948/234, 1- 2-3=-55/2173, 22- 15-22=-62/2442, 4- 21-24=-124/24, 9-2- 16-22=-446/100, 5- 17-23=-688/61, 3-1 8-24=-92/37 to be connected togonalis as follows: connected a confilment	20=-58 7-18=-55 7-13=-57 7-21=-11 10-13=-1 23=-59 18=-22 4=-65/2 23=-51 9=-396 ether wither withe	3/167, 33/167, 33/167, 2/3281 28/1650, 30/3610, 22296, 00/60, , 6-22=-248/98, 4/68, '89, 2-20=-29/17 th 10d	6 7 8 9 7 5, 1 1	 Finite State Finit	L: ASCI e DOL= _=1.15); 1.00; Ct alanced ign. ole studs truss hi rd live lo is truss he botto 5-00 tall rd and a	E 7-16; 1.15); I Is=1.0 =1.10 I snow space ad nor has bee m choi by 2-0 ny othe	; Pr=20.0 psf (rcr Pf=20.0 psf (Lur); Rough Cat B; loads have bee ed at 2-0-0 oc. n designed for a nconcurrent with sen designed for rd in all areas w 0-00 wide will fit er members.	a 10.0 psf br a a 10.0 psf br a rorsidere a inv other I a live load between th	DOL=1.15 5 Plate Ce=0.9; d for this ottom ive loads. of 20.0psf angle ie bottom
FORCES TOP CHORD	(size) Max Horiz Max Uplift Max Grav (lb) - Max Tension 1-2=-174, 4-5=-118; 6-7=-145; 8-9=-152; 10-12=-4;	1=8-7-8, 1 17=8-7-8, 20=8-7-8 1=182 (LC 1=-663 (Ll 16=-311 (l 18=-139 (l 20=-216 (l) 18=3851 (l 20=1281 (l 18=3851 (l 20=1281 (l imum Com 720, 2-3= 2/91, 5-6=- 5/169, 7-8= 0/104, 9-10 346/170	2=0-3-8, 16=8-7-8, 18=8-7-8, 19=8-7-8 2 9) C 32), 12=-153 (LC LC 12), 17=-784 (LC LC 13), 19=-190 (LC LC 12) 2 12), 12=4846 (LC LC 18), 17=-39 (LC LC 19), 19=1673 (L1 LC 21) pression/Maximum 106/845, 3-4=-56/63 1458/136, -1424/139, =-1584/97,	, 13), 2 ; 19), 2 ; 12), 19), 3 (7 3), 3 (7 3), 4 8, 8, 5	 oc. Bottom cho staggered a Web conne except if nc CASE(S) si provided to unless othe Unbalanced this design. Wind: ASC Vasd=103n Cat. II; Exp zone; cantil DOL=1.60 Truss desi only. For s see Standa or consult of 	rds connected as fol at 0-7-0 oc. cted as follows: 2x4 e considered equally ted as front (F) or by cection. Ply to ply con distribute only loads rwise indicated. d roof live loads have E 7-16; Vult=130mpl nph; TCDL=6.0psf; E B; Enclosed; MWFF ever left and right ep olate grip DOL=1.60 gned for wind loads tuds exposed to win rd Industry Gable Er jualified building des	lows: 2 - 1 row y applied ack (B) nection noted been of a been of CDL=6 SC (env. posed in the p d (norm nd Deta igner as	x8 - 2 rows at 0-7-0 oc. d to all plies, face in the LOAE s have been as (F) or (B), considered for cond gust) .0psf; h=25ft; elope) exterior ; Lumber lane of the truss al to the face), ils as applicable, s per ANSI/TPI 1	1	2) _N /A	and the second s		SEA 0449	IL SEFR	A A A A A A A A A A A A A A A A A A A

Continued on page 2 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



May 26,2021

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	C01	Common Girder	1	2	Job Reference (optional)	146292687

- 13) One LUGT2 MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
- 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) Use MiTek THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-3-0 from the left end to 18-3-0 to connect truss(es) to back face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.

17) Minimum of a double stud required directly beneath this truss to attach LUGT2 tiedown.

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft) Vert: 1-7=-58, 7-12=-58, 25-29=-19

Concentrated Loads (lb)

Vert: 13=-1427 (B), 33=-1327 (B), 34=-1327 (B), 35=-1327 (B), 36=-1327 (B), 37=-1427 (B), 38=-1427 (B), 39=-1427 (B), 40=-1429 (B)

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:25 ID:Hil1qPxACFu9nuniVnMSvIzd6uV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	D01	Common Supported Gable	1	1	Job Reference (optional)	146292688

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:26 ID:kLxR?z897Vj7TSTZ4IuaZPzd790-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:40.5

Plate Offsets ((X, Y): [2:E	dge,0-0-15], [2:0-2-6,Edge], [12:	:Edge,0	-0-15], [12:0-2-6	5,Edge], [15:0-3-0,0)-3-0]								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing 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	0.07 0.03 0.05	DEFL Vert(LL) r Vert(CT) r Horz(CT) 0.	in n/a n/a .00	(loc) - - 26	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 90 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N Left: 2x4 Right: 2x- Structura 6-0-0 oc Rigid ceil bracing. (size) Max Horiz Max Uplift Max Grav	lo.2 lo.2 lo.3 SP No.3 4 SP No.3 4 SP No.3 l wood sheat purlins. ing directly 2=19-11-C 14=19-11- 16=19-11- 20=19-11- 20=19-11- 26=29 (LC 26=29 (LC 26=20 (LC 2	athing directly applied applied or 10-0-0 oc 0, 12=19-11-0, -0, 15=19-11-0, -0, 17=19-11-0, -0, 21=19-11-0, -0, 23=19-11-0, -0, 23=19-11-0, -0, 23=19-11-0, -0, 23=19-11-0, -0, 23=19-11-0, -0, 23=19-11-0, -0, 23=10, 12=33 (LC 15), 15), 15=-33 (LC 22), 10), 22=-40 (LC 11), 21), 12=-138 (LC 22), C 22), 17=232 (LC 2), C 22), 19=231 (LC 2), C 22), 21=206 (LC 2), C 34), 23=133 (LC 2), C 22)	, , , , , , , , , , , , , , , , , , ,	TOP CHORD BOT CHORD WEBS 1) Unbalanced this design. 2) Wind: ASCI Vasd=103m Cat. II; Exp zone and C 1-11-8 to 6- (2N) 12-11- zone; cantil and right es (2N) 12-11- zone; cantil and right es (2N) 12-11- zone; cantil and right es for grip DOL=1 3) Truss desig only. For si see Standa or consult q 4) TCLL: ASC Plate DOL= DOL=1.15; Cs=1.00; C 5) Unbalanced design.	1-2=0/17, 2-3=-53, 4-5=-34/54, 5-6=-3 7-8=-39/119, 8-9= 10-11=-36/19, 11- 2-22=-13/55, 21-2; 19-20=-12/55, 18- 16-17=-12/55, 14- 7-18=-107/13, 6-1; 4-21=-167/81, 3-2; 9-16=-177/80, 10- 1 roof live loads have 5 7-16; Vult=130mg ph; TCDL=6.0psf; B; Enclosed; MWF -C Corner(3R) 6 8 to 17-9-8, Corner ever left and right e posed; C-C for men reactions shown; I .60 gned for wind loads uds exposed to wir rd Industry Gable E ualified building de 5 7-16; Pr=20.0 psf 1.15); Pf=20.0 psf 1.10 I snow loads have I	(35, 3-4= 33/78, 6- -32/78, § 12=-24/1 2=-12/55 16=-12/5 9=-191/1 2=-110/6 15=-163. we been we be (3-sec BCDL=6 RS (env 0-8 to 1- -11-8 to (3E) 17- xxposed mbers ar _umber l in the p nd (norm ind Deta signer a: f (roof LL (Lum DC B; Fully been con	41/41, 7=-39/119, 1-10=-32/45, 4, 12-13=0/17 5, 20-21=-12/55, 15, 17-18=-12/55, 15, 17-18=-12/58, 15, 17-18=-12/58, 10, 5-20=-177/80 8, 8-17=-191/107 (79, 11-14=-109/6 considered for considered for considered for considered for considered for 11-8, Exterior(2N] 12-11-8, Exterior 9-8 to 20-9-8; end vertical left d forces & DOL=1.60 plate lane of the truss al to the face), ils as applicable, s per ANS/ITPI 1. .: Lum DOL=1.15 DL=1.15 Plate Exp.; Ce=0.9; histored for this	е 5 7, 1 58 1 1 1 1 1 1	 B) Gat Gat Gat Cho This Cho This Cho N/A N/A N/A N/A N/A N/A N/A N/A N/A 	reled pla acce with s truss is rnationa b2.10.2 a	res coor space as bee ad non has bé m cho by 2-0 ny oth te or s truss desig I Resia and ref	him required to p chord at joint(s) an designed for a neoncurrent with een designed for rd in all areas wh 0-00 wide will fit er members.	rovide full b 2, 23. re with the 2 ions R502.1 ANSI/TPI	earing 018 1.1 and
FURGES	(ID) - MAX Tension	amum Com	pression/Maximum	-	 6) This truss h load of 12.0 overhangs n 7) All plates ar 	as been designed f psf or 1.00 times f non-concurrent with e 2x4 MT20 unless	for great lat roof le o other lin o otherwi	er of min roof live bad of 20.0 psf on ve loads. se indicated.	١				MGIN May	26,2021	C. I.



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	D01	Common Supported Gable	1	1	Job Reference (optional)	146292688
Carter Components (Sanford), Sa	anford, NC - 27332,	Run: 8.5 S 0 May 17 2	2021 Print: 8	500 S May 1	7 2021 MiTek Industries, Inc. Tue May 25 15:03:26	Page: 2

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:26 ID:kLxR?z897Vj7TSTZ4luaZPzd790-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	D02	Common	1	1	Job Reference (optional)	146292689

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:27 ID:ZO_iEjfZhvTOzfXbu2eu7mzd773-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:40.5

3-11-0

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

	, , [,]												
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code)/TPI2014	CSI TC BC WB Matrix-MSH	0.54 0.93 0.35	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.15 -0.32 0.05	(loc) 8-11 8-14 6	l/defl >999 >747 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 84 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalance this design this design Cat. II; Exp zone and 0 (2-1-8 to 6- (1) 12-11-{ zone; cant and right e MWFRS for grip DOL= 3) TCLL: ASC Plate DOL DOL=1.15 Cs=1.00; 0	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she: 4-0-9 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-8, 6 Max Horiz 2=-57 (LC Max Uplift 2=-126 (L Max Grav 2=906 (LC (lb) - Maximum Com Tension 1-2=0/17, 2-3=-1896 4-5=-1304/290, 5-6= 2-6=-325/1755 4-8=-2/541, 5-8=-62 ad roof live loads have b CE 7-16; Vult=130mph mph; TCDL=6.0psf; B4 o B; Enclosed; MWFR: C-C Exterior(2E) -0-10 11-8, Exterior(2Z) -0-10 12-10, Exte	athing directly applied applied or 2-2-0 oc 3=0-3-8 (15) C 10), 6=-126 (LC 11) C 21), 6=906 (LC 22) pression/Maximum 6/422, 3-4=-1304/290 e-1896/422, 6-7=0/17 7/201, 3-8=-627/200 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior -8 to 2-1-8, Interior (1 1-8 to 12-11-8, Interior (1 1-8 to 20-9.8 bosed ; end vertical levers and forces & mber DOL=1.60 plate roof LL: Lum DOL=1. um DOL=1.15 Plate ; Fully Exp.; Ce=0.9;	4) 5) d or 6) 7) 8) 9) LO	Unbalanced design. This truss ha load of 12.0 p overhangs nu This truss ha chord live loa * This truss h on the bottom chord and ar One RT7A M truss to beari This connect lateral forces This truss is International R802.10.2 ar AD CASE(S)	snow loads have b s been designed f part or 1.00 times fl on-concurrent with is been designed n chord in all areas by 2-00-00 wide wi y other members. liTek connectors re- ing walls due to UI ion is for uplift only. designed in accord Residential Code nd referenced stan Standard	opeen cor or greate at roof lo other liv or a 10.0 with any l for a liv s where II fit betw ecomme PLIFT at y and do dance w sections idard AN	sidered for t er of min roo aad of 20.0 p ve loads.) psf bottom other live loa e load of 20. a rectangle veen the bott nded to com jt(s) 2 and 6 es not consi ith the 2018 .R502.11.1 a ISI/TPI 1.	this f live sof on ads. Opsf tom nect S. der and				SEA 0449	ROL L 25 SEVILL 26,2021



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	D03	Common	3	1	Job Reference (optional)	146292690

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:27 ID:6IUA9?3Gw2djQkYwKTkdzjzd76Y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



														_
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.53	Vert(LL)	-0.15	6-12	>999	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.93	Vert(CT)	-0.32	6-12	>744	180			
TCDL	10.0	Rep Stress Incr	YES		WB	0.35	Horz(CT)	0.05	5	n/a	n/a			
BCLL	0.0*	Code	IRC2018	3/TPI2014	Matrix-MSH									
BCDL	10.0						-					Weight: 81 lb	FT = 20%	
	2×4 SP No 2		4)	Unbalanced design	snow loads have b	een cor	sidered for t	his						
BOT CHORD	2x4 SP No.2		5)	This truss ha	s been designed fo	ora 10 () psf bottom							
WEBS	2x4 SP No.3		0)	chord live loa	ad nonconcurrent w	ith anv	other live loa	ads.						
BRACING			6)	* This truss h	as been designed	for a liv	e load of 20.	Opsf						
TOP CHORD	Structural wood she	athing directly applie	, d or	on the bottor	n chord in all areas	where	a rectangle	•						
	4-0-14 oc purlins.	annig anoony applie		3-06-00 tall b	y 2-00-00 wide will	fit betv	veen the bott	om						
BOT CHORD	Rigid ceiling directly bracing.	applied or 2-2-0 oc	7)	chord and ar One RT7A N	iy other members. IiTek connectors re	comme	nded to conr	nect						
REACTIONS	(size) 1=0-3-8, 5 Max Horiz 1=-53 (LC Max Uplift 1=-94 (LC Max Grav 1=853 (LC	5=0-3-8 5 15) 5 10), 5=-94 (LC 11) C 20), 5=853 (LC 21)) 8)	truss to bear This connect lateral forces This truss is	ing walls due to UP ion is for uplift only designed in accord	LIFT at and do ance w	jt(s) 1 and 5 es not consid ith the 2018	der						
FORCES	(lb) - Maximum Com Tension	pression/Maximum		R802.10.2 a	nd referenced stand	dard AN	ISI/TPI 1.							
TOP CHORD	1-2=-1908/459, 2-3= 3-4=-1310/311, 4-5=	1310/311, 1908/459		JAD CASE(S)	Standard									
BOT CHORD	1-5=-380/1767													
WEBS	3-6=-19/544, 4-6=-63	34/213, 2-6=-634/21	3											
NOTES														
1) Unbalanc this desig	ed roof live loads have n.	been considered for	r									UNIT CA	Rollin	
2) Wind: AS Vasd=103 Cat. II; Ex zone and	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B0 cp B; Enclosed; MWFRS C-C Exterior(2E) 0-0-0	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterio to 3-0-0, Interior (1)	r)							4	Sc	of the ss	guter)
3-0-0 to 6	-11-8, Exterior(2R) 6-11	2E) 16-11-0 to 19-11	lor -0							3		SEA	L 1 E	
zone; can	tilever left and right exp	osed ; end vertical	left							=		0440		
and right	exposed;C-C for memb	ers and forces &								=		0449	25 : 5	
MWFRS f	for reactions shown; Lu	mber DOL=1.60 pla	te							-	1.1		1 2	
grip DOL=	=1.60										2.	·	alas	
 TCLL: AS Plate DOI 	CE 7-16; Pr=20.0 psf (i L=1.15); Pf=20.0 psf (Li	roof LL: Lum DOL=1 um DOL=1.15 Plate	1.15								110	COSNGIN	EFF	
DOL=1.15	5); Is=1.0; Rough Cat B	; Fully Exp.; Ce=0.9);									TTA	CEVIN	

grip DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) 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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



mm May 26,2021

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	D04	Common Girder	1	2	Job Reference (optional)	146292691

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:27

Page: 1 ID:?0_yxwflmGEuVRfvBDcKYMzLb9I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 5-1-7 9-11-8 14-9-9 19-11-0 5-1-7 4-10-1 4-10-1 5-1-7 4x5 = 3 12 4 Г 3x5 ≠ 3x5 🕿 2 4 3-9-14 16 17 5 0 0 ΙſΓ́Π X Ø 18 19 9 20 8 23 21 22 7 6 24 2x4 II 6x8 = 4x6 = 3x5 = 3x5 = JUS26 2x4 II JUS26 JUS26 JUS26 JUS26 JUS26 MSH29 JUS26 JUS26 14-9-9 19-11-0 5-1-7 9-11-8 5-1-7 4-10-1 4-10-1 5-1-7 Scale = 1:37 Plate Offsets (X, Y): [8:0-4-0,0-4-0] 2-0-0 CSI DEFL in l/defl L/d PLATES GRIP Loading (psf) Spacing (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.32 Vert(LL) -0.10 6-8 >999 240 MT20 244/190 Snow (Pf) 20.0 Lumber DOL 1.15 BC 0.39 Vert(CT) -0.12 6-8 >999 180 TCDL Rep Stress Incr WB Horz(CT) 10.0 NO 0.25 0.03 5 n/a n/a BCLL 0.0 IRC2018/TPI2014 Matrix-MSH Code Weight: 203 lb FT = 20% BCDL 10.0 LUMBER 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Increase=1.15 TOP CHORD 2x4 SP No.2 Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior BOT CHORD 2x6 SP No.2 Uniform Loads (lb/ft) zone; cantilever left and right exposed ; end vertical left WEBS 2x4 SP No.3 Vert: 1-3=-60, 3-5=-60, 10-13=-20 and right exposed; Lumber DOL=1.60 plate grip Concentrated Loads (lb) BRACING DOL=1.60 Vert: 7=-92 (B), 8=-92 (B), 18=-87 (B), 19=-87 (B), TOP CHORD Structural wood sheathing directly applied or TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 5) 20=-87 (B), 21=-92 (B), 22=-92 (B), 23=-92 (B), 6-0-0 oc purlins. Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate 24=-78 (B) BOT CHORD Rigid ceiling directly applied or 6-0-0 oc DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; bracing. Cs=1.00; Ct=1.10 **REACTIONS** (size) 1=0-3-8, 5=0-3-8 6) Unbalanced snow loads have been considered for this Max Horiz 1=-53 (LC 51) desian. Max Uplift 1=-575 (LC 45), 5=-585 (LC 44) This truss has been designed for a 10.0 psf bottom 7) Max Grav 1=1405 (LC 2), 5=1410 (LC 2) chord live load nonconcurrent with any other live loads. FORCES (Ib) - Maximum Compression/Maximum * This truss has been designed for a live load of 20.0psf 8) Tension on the bottom chord in all areas where a rectangle

6-8=-1360/3096. 5-6=-1360/3096 WEBS 3-8=-760/1194, 4-8=-969/503, 4-6=-438/393, 2-8=-962/514, 2-9=-448/381

1-2=-3295/1460, 2-3=-2392/977,

3-4=-2392/977, 4-5=-3304/1449

1-9=-1371/3088. 8-9=-1371/3088.

NOTES

TOP CHORD

BOT CHORD

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

- Web connected as follows: 2x4 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, 2) except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- connection is for uplift only and does not consider lateral forces. 10) One RT8A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces. 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and

chord and any other members

R802.10.2 and referenced standard ANSI/TPI 1. 12) Use MiTek JUS26 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max.

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

One RT7A MiTek connectors recommended to connect

truss to bearing walls due to UPLIFT at jt(s) 1. This

- starting at 2-0-0 from the left end to 16-0-0 to connect truss(es) to back face of bottom chord 13) Use MiTek MSH29 (With 10d nails into Girder & 4-10d
- nails into Truss) or equivalent at 18-0-0 from the left end to connect truss(es) to back face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber. LOAD CASE(S) Standard

0 Contraction of the SEAL 044925 mm May 26,2021



 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

9)

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	E01	Common Supported Gable	1	1	Job Reference (optional)	146292692

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:28 ID:XDsImjXoBX?P3TtNT5wEwSzd74e-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



			10 11 0		
Scale = 1:38.7	Г				
Plate Offsets (X, Y): [10:0-4-12,0-1-4	8], [16:0-4-12,0-1-8]				

															_
Loading		(psf)	Spacing	1-11-4		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)		20.0	Plate Grip DOL	1.15		TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.05	Vert(CT)	n/a	-	n/a	999			
TCDL		10.0	Rep Stress Incr	YES		WB	0.10	Horz(CT)	0.00	10	n/a	n/a			
BCLL		0.0*	Code	IRC201	8/TPI2014	Matrix-MR									
BCDL		10.0											Weight: 64 lb	FT = 20%	
LUMBER				2)	Wind: ASCE	7-16: Vult=130mp	oh (3-seo	cond aust)		14) This	s truss is	desic	ned in accordance	ce with the 2018	
TOP CHORD	2x4 SP N	0.2		,	Vasd=103mp	h; TCDL=6.0psf;	BCDL=6	.0psf; h=25ft;		Ínte	rnationa	l Resi	dential Code sect	tions R502.11.1 and	
BOT CHORD	2x4 SP N	0.2			Cat. II; Exp E	; Enclosed; MWF	RS (env	elope) exterio	r	R80)2.10.2 a	and ret	ferenced standar	d ANSI/TPI 1.	
WEBS	2x4 SP N	0.3			zone and C-0	C Corner(3E) -0-10	0-8 to 2-	1-8, Exterior(2	2N)	LOAD	CASE(S) Sta	ndard		
OTHERS	2x4 SP N	0.3			2-1-8 to 2-5-8	3, Corner(3R) 2-5-	-8 to 8-5	-8, Exterior(2N	V)			,			
BRACING					8-5-8 to 8-9-8	3, Corner(3E) 8-9-	8 to 11-9	9-8 zone;							
TOP CHORD	Structura	I wood she	athing directly applie	d or	cantilever lef	t and right expose	d;end\	ertical left and	d						
	6-0-0 oc i	purlins, exc	cept end verticals.		right exposed	d;C-C for members	s and for	ces & MWFR	S						
BOT CHORD	Rigid ceil bracing.	ing directly	applied or 6-0-0 oc		for reactions DOL=1.60	shown; Lumber D	OL=1.60) plate grip							
REACTIONS	(size)	10-10-11	-0 11-10-11-0	3)	Truss desigr	ned for wind loads	in the p	lane of the tru	SS						
REAGNONO	(3120)	12=10-11	-0 13=10-11-0		only. For stu	ds exposed to wir	nd (norm	al to the face)	,						
		14=10-11	-0. 15=10-11-0.		see Standard	Industry Gable E	nd Deta	ils as applicat	ble,						
		16=10-11	-0	4)		allited building des	signer as		11. . 45						
	Max Horiz	16=-142 (LC 12)	4)	Ploto DOI -1	15): Pf=20.0 psf		Lum DOL=1	.15						
	Max Uplift	10=-41 (L	C 11), 11=-95 (LC 1	5),		. 15), FI=20.0 pSI (Exp : Co=0.9							
		12=-73 (L	C 15), 14=-73 (LC 14	4),	$C_{S=1} 00^{\circ} C_{t=1}$	3–1.0, Rough Cat ₁ 10	D, Tuny	Lxp., 06-0.3	,						
		15=-99 (L	C 14), 16=-59 (LC 10	0) 5)	Unbalanced	snow loads have h	heen cor	sidered for th	is						
	Max Grav	10=126 (L	.C 28), 11=155 (LC 2	22), "	design										
		12=272 (L	_C 22), 13=170 (LC 2	27), 6)	This truss ha	s been designed f	or areat	er of min roof	live						
		14=272 (L	.C 21), 15=159 (LC 2	24),	load of 12.0	osf or 1.00 times fl	lat roof le	bad of 20.0 ps	fon					111.	
		16=141 (L	-C 25)		overhangs no	on-concurrent with	other liv	/e loads.					N' I CA	D'''	
FORCES	(lb) - Max	timum Com	pression/Maximum	7)	All plates are	2x4 MT20 unless	otherwi	se indicated.			۰.		"ATH UA	NO	
	Tension			8)	Gable require	es continuous bott	om chor	d bearing.				5	ONVESS	ina Ala	
TOP CHORD	2-16=-11	5/96, 1-2=0	/38, 2-3=-88/86,	9)	Truss to be f	ully sheathed from	n one fac	e or securely				X		Noten	
	3-4=-61/1	15, 4-5=-1	10/224, 5-6=-110/22	4,	braced again	st lateral moveme	ent (i.e. d	iagonal web).				K	cour_		
	6-7=-58/1	15, 7-8=-6	7/65, 8-9=0/38,	10) Gable studs	spaced at 2-0-0 or	с.								
	8-10=-10	5/96 C/447 444	E 00/447	11) This truss ha	s been designed f	or a 10.0) psf bottom			=		SEA	L : =	
BUICHURD	12 14 6	0/117,14-1 6/117,101	D=-00/117,		chord live loa	ad nonconcurrent v	with any	other live load	ds.		=		0440	25 : 2	
	13-14=-0	6/117,12-1 6/117,10,1	3=-00/117, 1- 66/117	12) * This truss h	as been designed	for a liv	e load of 20.0	psf		=		0449	20 ; 2	
WERS	5 12-20	5/12 1 1/-	- 222/1/17		on the botton	n chord in all area	s where	a rectangle			-				
WEBS	3-1512	6/1/3 6-12	-232/147		3-06-00 tall b	y 2-00-00 wide wi	II fit betv	veen the botto	m				1. 0.	ains	
	7-11=-12	6/143	- 202/17/,	40	chord and an	iy other members.						-10	O VGIN	EENAN	
NOTES	= 12	0, 1 10		13	9 N/A							11	0	- Aller	
1) Unbalance	od roof live	loade have	boon considered for										M. F.M.	SEIN	
this design	n.	iuaus nave											in min	mm.	

NOTES

818 Soundside Road Edenton, NC 27932

May 26,2021

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	G01	Common Supported Gable	1	1	Job Reference (optional)	146292693

2-5-6

2-6-8

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:28 ID:_r1nF4pXwr?5CS5Ru_qAqRzLq4W-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

May 26,2021

818 Soundside Road Edenton, NC 27932



Scale = 1:27.6 Plate Offsets (X, Y): [2:Edge,0-0-15], [2:0-2-6,Edge], [8:Edge,0-0-15], [8:0-2-6,Edge]

	· ·, · /· · -·-·	-9-,], [=:= = =,==:3=], [=:=		-], [,	9-1									
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	1-11-4 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.08 0.03 0.04	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 19	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 49 lb	GRIP 244/190 FT = 20))%
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No 2x4 SP No 2x4 SP No Left: 2x4 S Right: 2x4 Structural 6-0-0 oc p Rigid ceili bracing. (size) Max Horiz Max Uplift Max Grav	0.2 0.2 0.3 SP No.3 SP No.3 SP No.3 wood shear purlins. ng directly 2=11-8-0, 11=11-8-0 14=11-8-0 2=-34 (LC 2=-38 (LC 2=-38 (LC 10=-31 (LI 13=-37 (LC 10=193 (LI 12=139 (LI 12=139 (LI 12=139 (LI 14=193 (LI	athing directly applied applied or 10-0-0 oc 8=11-8-0, 10=11-8-0 , 12=11-8-0, 13=11-1 15), 15=-34 (LC 15) 10), 8=-44 (LC 11), C 15), 11=-37 (LC 14) C 10), 14=-33 (LC 14) C 10), 19=-44 (LC 11) 2 1), 8=177 (LC 22), C 22), 11=229 (LC 2 C 21), 13=229 (LC 2 C 21), 15=177 (LC 22)	2) d or 3)), 8-0, 8-0 4) (), (), (), (), (), (), (), (), (), ()	Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-C (2N) 1-10-0 t Exterior(2N) zone; cantile and right exp MWFRS for n grip DOL=1.6 Truss design only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 p overhangs or	7-16; Vult=130mp bh; TCDL=6.0psf; E 5; Enclosed; MWFF C Corner(3E) -0-10 o 2-10-0, Corner(3 8-10-0 to 9-6-8, CC ver left and right e: osed;C-C for mem reactions shown; L 60 hed for wind loads ds exposed to wind I Industry Gable Ei alified building des 7-16; Pr=20.0 psf (s=1.0; Rough Cat ±1.10 snow loads have b s been designed fo psf or 1.00 times fi pon-concurrent with 2x4 MT20 unless	h (3-sec BCDL=6 RS (env)-8 to 1- SR) 2-10 prmer(3E xposed bers an umber I in the p d (norm nd Deta signer as (roof LL Lum DC B; Fully been cor or great at roof k other kin other kin	ond gust) .0psf; h=25ft; elope) exterior 10-0, Exterior ot os 8-10-0,) 9-6-8 to 12- end vertical d forces & DOL=1.60 pla ane of the tru al to the face is as applical is per ANSI/TF : Lum DOL=- iL=1.15 Plate Exp.; Ce=0.5 isidered for th er of min roof pad of 20.0 ps ve loads. se indicated	; or r left uss), ble, PI 1. 1.15 ; his live sf on	13) This Inte R8(LOAD (s truss is ernationa 02.10.2 a CASE(S)	desig I Resic and ref) Star	ned in accordance dential Code sect erenced standard ndard	e with the ions R502 J ANSI/TF	9 2018 2.11.1 and 기 1.
FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	(lb) - Max Tension 1-2=0/24, 4-5=-38/9 7-8=-19/1 2-14=-14/ 11-12=-5/ 5-12=-100 6-11=-191 ed roof live le	19=177 (L imum Com 2-3=-23/2(6, 5-6=-38/ 9, 8-9=0/24 48, 13-14= 48, 10-11= 0/54, 4-13= 1/150, 7-10 oads have	C 22) pression/Maximum 5, 3-4=-32/41, '96, 6-7=-32/41, 4 -5/48, 12-13=-5/48, -5/48, 8-10=-14/48 -191/150, 3-14=-146 =-146/99 been considered for	8) 9) 10 11 /99, 12	Gable require Gable studs 1) This truss ha chord live loa) * This truss h on the botton 3-06-00 tall b chord and an) N/A	es continuous botto spaced at 2-0-0 oc s been designed fo d nonconcurrent v las been designed n chord in all areas by 2-00-00 wide wil y other members.	om chor c. or a 10. vith any for a liv s where Il fit betv	d bearing.) psf bottom other live loa e load of 20.0 a rectangle ween the botto	ds. Dpsf om				SEA 0449	L 25 SEV	A CONTRACTION OF THE STATE

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	G02	Common	5	1	Job Reference (optional)	146292694



					5-10-0					11-8-0			
					5-10-0					5-10-0			
Scale = 1:31													
Loading TCLL (roof) Snow (Pf) TCDL	(psf) 20.0 20.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr	1-11-4 1.15 1.15 YES	19/TDI2014	CSI TC BC WB	0.59 0.42 0.09	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.07 -0.08 0.01	(loc) 6-12 6-12 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0	Code	11(0201	10/11/2014	Matrix-Mort							Weight: 41 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 5-2-7 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-0, - Max Horiz 2=-34 (LC Max Uplift 2=-184 (L Max Grav 2=613 (LC (lb) - Maximum Com Tension 1-2=0/24, 2-3=-803/ 4-5=0/24 2-6=-970/685, 4-6=- 3-6=-420/239 ed roof live loads have n. CE 7-16; Vult=130mph mph: TCD=6.0psf: B	athing directly applied applied or 5-8-8 oc 4=0-3-0 2 15) C 10), 4=-184 (LC 11 2 21), 4=613 (LC 22) pression/Maximum 1120, 3-4=-803/1120 970/685 been considered for (3-second gust) CDL=6.0psf: h=25ft;	5 dor 7 8) 9	 This truss ha load of 12.0 overhangs n This truss ha chord live loa * This truss f on the bottor 3-06-00 tall t chord and ar One RT7A M truss to bear This connect lateral forces This truss is International R802.10.2 a OAD CASE(S) 	as been designed psf or 1.00 times ion-concurrent wii as been designed ad nonconcurrent has been designed m chord in all are by 2-00-00 wide v y 2-00-00 wide v y other members diTek connectors ing walls due to I tion is for uplift or s. designed in acco Residential Code nd referenced sta Standard	for great flat roof I th other Ii for a 10.1 with any d for a liv as where vill fit betw s. recomme JPLIFT at JPLIFT at ally and do rdance w e sections andard AN	er of min roo bad of 20.0 p ve loads. 0 psf bottom other live loa e load of 20. a rectangle veen the bott ended to com it (s) 2 and 4 ies not consi ith the 2018 5 R502.11.1 i ISI/TPI 1.	f live Isf on ads. Opsf iom nect i. der and					NRO/ MA
Cat. II; Ex	p B; Enclosed; MWFR C-C Exterior(2E) -0-10	S (envelope) exterior	1)								1	ONEESS	ich Nie

- 2-1-8 to 2-10-0, Exterior(2R) 2-10-0 to 8-10-0, Interior (1) 8-10-0 to 9-6-8, Exterior(2E) 9-6-8 to 12-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) 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
- 4) Unbalanced snow loads have been considered for this design.

This many COLOR WARDEN SEAL 044925 S mm May 26,2021

3x5 =

818 Soundside Road Edenton, NC 27932

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

3x5 =

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	H01	Monopitch Supported Gable	1	1	Job Reference (optional)	146292695

4-7-12

-0-10-8

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

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:30 ID:pxcNqEOCZK1tAt77PejzZQzd767-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:28.6

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	8/TPI2014	CSI TC BC WB Matrix-MP	0.38 0.42 0.02	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.09 0.07 -0.01	(loc) 8-11 8-11 2	l/defl >604 >708 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 19 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Wind: ASC Vasd=103 Cat. II; Exp zone and C exposed ; and forces DOL=1.60 2) Truss des only. For s see Standa or consult	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood sf 4-7-12 oc purlins, Rigid ceiling direct bracing. (size) 2=0-3-8 Max Horiz 2=71 (L Max Uplift 2=-89 (I Max Grav 2=323 ((Ib) - Maximum Co Tension 1-2=0/25, 2-3=-76 4-7=-160/205 2-8=-110/49, 7-8= 3-8=-81/46 CE 7-16; Vult=130mr mph; TCDL=6.0psf; b; Enclosed; MWF C-C Corner(3E) zono porch left and right of a MWFRS for reac plate grip DOL=1.60 igned for wind loads studs exposed to win ard Industry Gable E qualified building de	eathing directly applie except end verticals. ly applied or 10-0-0 oc , 7= Mechanical C 10) .C 10), 7=-77 (LC 10) LC 21), 7=261 (LC 21) mpression/Maximum '32, 3-4=-72/38, 4-5=-4 D/0, 6-7=0/0 wh (3-second gust) BCDL=6.0psf; h=25ft; RS (envelope) exterion ; cantilever left and rig xposed; C-C for memt ions shown; Lumber) in the plane of the tru od (normal to the face) in d Details as applicat signer as per ANSI/TP	5) 6) 7) 8d or 8) 5 9) 10 10 11 8/0, LC 8/0, LC ss ss , ole, 11.	This truss ha load of 12.0 p overhangs no Gable studs : This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Refer to girdd Provide meci bearing plate 7 and 89 lb u) This truss is International R802.10.2 ar DAD CASE(S)	s been designed sof or 1.00 times 1 spaced at 2-0-0 o s been designed id nonconcurrent ias been designed y 2-00-00 wide w by other members ar(s) for truss to tr hanical connectio capable of withsi plift at joint 2. designed in accor Residential Code and referenced stat Standard	for great flat roof ld h other liv c. for a 10.0 with any d for a liv as where "uss conr n (by oth tanding 7 rdance w sections ndard AN	er of min roof pad of 20.0 p ve loads. D psf bottom other live loa e load of 20.1 a rectangle veen the bott nections. ers) of truss i 7 lb uplift at j ith the 2018 R 502.11.1 a ISI/TPI 1.	f live sef on ads. Opsf com to joint and			and the second se	Viegin: 13 ib	ROL L 25
 Plate DOL DOL=1.15 Cs=1.00; (Unbalance design. 	=1.15); Pf=20.0 psf); Is=1.0; Rough Cat Ct=1.10 ed snow loads have	(Lum DOL=1.15 Plate B; Fully Exp.; Ce=0.9	; is									COTT M.	SEVIEN



May 26,2021

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	H02	Monopitch	5	1	Job Reference (optional)	146292696

4-7-12 4-7-12

-0-10-8 0-10-8

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

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:31 ID:AvQGtxRLNtfAGe?4CBI8GTzd762-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:27.7

Loading TCLL (roof) Snow (Pf) TCDL 3CLL 3CDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	/TPI2014	CSI TC BC WB Matrix-MP	0.40 0.36 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.07 0.06 -0.01	(loc) 6-9 6-9 2	l/defl >747 >911 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 18 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 3OT CHORD 3OT CHORD BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD TOP CHORD BOT CHORD TOP CHORD BOT CHORD TOTES 1) Wind: ASC Vasd=103r Cat. II; Exp zone and C exposed ; p and forces DOL=1.60 2) TCLL: ASC Plate DOL= DOL=1.15) Cas=1.00; Cas=1.0	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 4-7-12 oc purlins, ex Rigid ceiling directly bracing. (size) 2=0-3-8, 6 Max Horiz 2=71 (LC Max Uplift 2=-89 (LC Max Grav 2=323 (LC (Ib) - Maximum Com Tension 1-2=0/25, 2-3=-68/90 2-6=-100/77, 5-6=0/0 2: 6 -100/77, 5-6=0/0 2: 7-16; Vult=130mph mph; TCDL=6.0psf; BC 0- B; Enclosed; MWFRS C-C Exterior(2E) zone; porch left and right ext & MWFRS for reaction plate grip DOL=1.60 DE 7-16; Pr=20.0 psf (LC); Is=1.0; Rough Cat B Ct=1.10 d snow loads have be has been designed for 0 psf or 1.00 times flat non-concurrent with 0 has been designed for load nonconcurrent with	athing directly applied copt end verticals. applied or 10-0-0 oc S= Mechanical 10) 10), 6=-77 (LC 10) 21), 6=261 (LC 21) pression/Maximum 0, 3-4=-8/0, 3-6=-193 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and rig bosed;C-C for membrane ns shown; Lumber roof LL: Lum DOL=1. um DOL=1.15 Plate ; Fully Exp.; Ce=0.9; en considered for this roof lad of 20.0 psf ther live loads. a 10.0 psf bottom th any other live loads.	6) 7) 8) 9) LO /167 /167 15 s ve on s.	* This truss h on the botton 3-06-00 tall b chord and an Refer to girde Provide mecl bearing plate 6 and 89 lb u This truss is of International R802.10.2 ar AD CASE(S)	as been designed n chord in all areas y 2-00-00 wide wil y other members. er(s) for truss to tru- nanical connection capable of withsta plift at joint 2. designed in accord Residential Code : nd referenced stan Standard	for a liv s where Il fit betw uss conr (by oth anding 7 dance wi sections dard AN	e load of 20. a rectangle veen the bott ections. ers) of truss i 7 lb uplift at j th the 2018 R502.11.1 a SI/TPI 1.	Opsf om to joint and				SEA 0449	ROLINE 25 EFNIE	Ammin.
												"minin	inni.	

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



May 26,2021

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	H03	Roof Special	4	1	Job Reference (optional)	146292697

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:31 ID:mgNG4_Rm33_X6FGr?QmMbmzd74m-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:29.1

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 IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.66 0.58 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.17 0.14 -0.02	(loc) 4-7 4-7 2	l/defl >385 >473 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190	
BCDL	10.0										Weight: 22 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 5-7-4 oc purlins, ex Rigid ceiling directly bracing. (size) 2=0-3-8, Max Horiz 2=81 (LC Max Holift, 2=-102.0	eathing directly applie cept end verticals. y applied or 10-0-0 oc 4=0-3-8 10)	 6) * This truss on the botto 3-06-00 tall chord and a 7) Provide med bearing plat 4 and 103 lb 8) This truss is Internationa R802.10.2 a 	has been designed m chord in all areas by 2-00-00 wide wi ny other members. chanical connection e capable of withsta uplift at joint 2. designed in accord I Residential Code nd referenced stan Standard	I for a liv s where II fit betw h (by oth anding 9 dance w sections idard AN	e load of 20.0 a rectangle veen the botto ers) of truss t 3 lb uplift at j ith the 2018 i R502.11.1 a ISI/TPI 1.	Dpsf om oint und						
	Max Uplift 2=-103 (L Max Grav 2=382 (L)	.C 10), 4=-93 (LC 10) C 21) 4=291 (LC 21))										
FORCES	(lb) - Maximum Con Tension	npression/Maximum											
TOP CHORD BOT CHORD	1-2=0/25, 2-3=-88/1 2-4=-131/106	21, 3-4=-212/209											
NOTES 1) Wind: ASC Vasd=1033 Cat. II; Exp zone and (exposed; and forces DOL=1.60 2) TCLL: ASC	CE 7-16; Vult=130mph mph; TCDL=6.0psf; B b B; Enclosed; MWFR C-C Exterior(2E) zone porch left and right ex & MWFRS for reaction plate grip DOL=1.60 CE 7-16; Pr=20.0 psf	n (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and ri posed;C-C for memb ons shown; Lumber (roof LL: Lum DOL=1	ght vers .15						-		NITH CA	ROLIN	
Plate DOL DOL=1.15 Cs=1.00; 0	=1.15); Pf=20.0 psf (L); Is=1.0; Rough Cat E Ct=1.10	um DOL=1.15 Plate 3; Fully Exp.; Ce=0.9	;						, and the second s		SEA	L	
 Unbalance design. 	ed snow loads have be	een considered for th	is						Ξ		0449	25	Ξ
 4) This truss load of 12. overhands 	has been designed fo 0 psf or 1.00 times fla non-concurrent with	r greater of min roof l t roof load of 20.0 ps other live loads.	live f on									-R. Q.	11111
5) This truss chord live	has been designed fo load nonconcurrent w	r a 10.0 psf bottom ith any other live load	ls.							and a second	OTT M.	SEVIET	

May 26,2021

Page: 1



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	VL3	Valley	1	1	Job Reference (optional)	146292698

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:31 ID:NA28YURLFYKTf0vGQfY0zozLbRe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2-9-5

1-2-10



Page: 1





3-1-8

1-6-12

1-6-12

Scale =	1:25.2
---------	--------

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

Loading	(psf)	Spacing	2-0-0		CSI	0.00	DEFL	in n/c	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (FOOT)	20.0	Plate Grip DOL	1.15			0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
	20.0	Ren Stress Incr	VES		WB	0.07	Horiz(TL)	0.00	- 3	n/a	999 n/a		
BCU	0.0*	Code	IRC2018	7PI2014	Matrix-MP	0.00	110112(11)	0.00	5	Π/a	Π/α		
BCDL	10.0	oode	11(02010	/1112014								Weight: 9 lb	FT = 20%
LUMBER			7)	Gable studs	spaced at 4-0-0 or	с.							
TOP CHORD	2x4 SP No.2		8)	This truss ha	s been designed f	or a 10.) psf bottom						
BOT CHORD	2x4 SP No.2			chord live loa	ad nonconcurrent v	with any	other live loa	ds.					
BRACING			9)	* This truss h	as been designed	for a liv	e load of 20.0)psf					
TOP CHORD	Structural wood shea 3-1-8 oc purlins.	athing directly applie	ed or	on the bottor 3-06-00 tall b	n chord in all area by 2-00-00 wide wi	s where	a rectangle veen the botto	om					
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 or	, 10)	chord and ar Provide mec	y other members. hanical connectior	n (by oth	ers) of truss t	0					
REACTIONS	(size) 1=3-1-8, 3	3=3-1-8		bearing plate	capable of withst	anding 1	0 lb uplift at jo	oint					
	Max Horiz 1=27 (LC	13)	11)	Tand TUID L	ipliπ at joint 3.	donoow	ith the 2019						
	Max Uplift 1=-10 (LC	14), 3=-10 (LC 15)	11)	International	Residential Code	sections	R502 11 1 a	nd					
	Max Grav 1=144 (LC	C 20), 3=144 (LC 21))	R802.10.2 a	nd referenced star	Idard AN	ISI/TPI 1.	nu					
FORCES	(lb) - Maximum Com Tension	pression/Maximum	LO	AD CASE(S)	Standard								
TOP CHORD	1-2=-182/74, 2-3=-18	82/74											
BOT CHORD	1-3=-43/132												
NOTES													
 Unbalance this design 	ed roof live loads have n.	been considered for											
2) Wind: AS	CE 7-16; Vult=130mph	(3-second gust)											
Vasd=103	Bmph; TCDL=6.0psf; B0	CDL=6.0psf; h=25ft;										, in the second	
Cat. II; Ex	p B; Enclosed; MWFR	S (envelope) exterio	r									"TH CA	Rollin
zone and	C-C Exterior(2E) zone;	cantilever left and r	ight							٦	R	R	the state
exposed;	and forces & MW/ERS	for reactions shown									312	6550	QN: A
Lumber D	OI =1 60 plate grip DO	I = 1.60								6	1		Somer/
3) Truss des	signed for wind loads in	the plane of the tru	ss										
only. For	studs exposed to wind	(normal to the face)	,							=		SEA	L 1 1
see Stand	ard Industry Gable End	d Details as applicat	ole,							=	:	0440	25 : 2
or consult	qualified building desig	gner as per ANSI/TF	Y 1.							=		0449	20 3
4) TCLL: AS	CE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1	.15									X	1 E
Plate DOL	_=1.15); Pf=20.0 psf (L	um DOL=1.15 Plate										· · ·	0105

- 3
- 4 DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this 5) design.
- 6) Gable requires continuous bottom chord bearing.





Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	VL3A	Valley	1	1	Job Reference (optional)	146292699

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:32 ID:aCZ_x9HZgZu9bVwOOF2riWzd76G-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1







Scale = 1:20.2

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	3/TPI2014	CSI TC BC WB Matrix-MP	0.06 0.08 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 7 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING TOP CHORD Structural wood she 2-7-12 oc purlins, e BOT CHORD Rigid ceiling directly bracing. REACTIONS (size) 1=2-7-0, 3 Max Horiz 1=25 (LC Max Uplift 1=-12 (LC Max Grav 1=122 (LC FORCES (lb) - Maximum Com Tension TOP CHORD 1-2=-179/76, 2-3=-6 BOT CHORD 1-3=-111/162 NOTES 1) Wind: ASCE 7-16; Vult=130mph Vasd=103mph; TCDL=6.0psf; Cat. II; Exp B; Enclosed; MWFR zone and C-C Exterior(2E) zone exposed ;C-C for members and reactions shown; Lumber DOL=: DOL=1.60 2) Truss designed for wind loads in only. For studs exposed to wind see Standard Industry Gable En or consult qualified building desi 3) TCLL: ASCE 7-16; Pr=20.0 psf (L DOL=1.15); Is=1.0; Rough Cat E Cs=1.00; Ct=1.10 4) Unbalanced snow loads have be design. 5) Gable requires continuous botto 6) Gable studs spaced at 4-0-0 oc.	athing directly applied xcept end verticals. applied or 10-0-0 oc 3=2-7-0 10) 2 10), 3=-19 (LC 10) 2 20), 3=-19 (LC 20) apression/Maximum 3/44 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and rig forces & MWFRS for 1.60 plate grip n the plane of the trus: (normal to the face), d Details as applicable gner as per ANSI/TPI roof LL: Lum DOL=1. d Details as applicable gner as per ANSI/TPI roof LL: Lum DOL=1. S; Fully Exp.; Ce=0.9; even considered for this m chord bearing.	7) 8) 107 9) 10 11 12 LC LC s s, 1. 15 5	This truss has chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Bearing at joi using ANSI/T designer shoi) Provide mect bearing plate 1 and 19 lb u) This truss is of International R802.10.2 ar) Gap between diagonal or vo AD CASE(S)	s been designed fo d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. nt(s) 3 considers p PI 1 angle to grain uld verify capacity nanical connection capable of withsta plift at joint 3. designed in accord Residential Code s d referenced stand inside of top chord ertical web shall no Standard	or a 10.0 ith any for a liv where fit betw arallel t formula of beari (by oth- nding 1 ance wi sections dard AN d bearir ot excee	a) psf bottom other live loa e load of 20.0 a rectangle veen the botto o grain value a. Building ng surface. ers) of truss t 2 lb uplift at ju th the 2018 R502.11.1 a (SI/TPI 1. og and first d 0.500in.	ds. Jpsf om oint nd				SEA 0449	ROUNT NONSE 25 SEVIENT	Summing.

- desian. 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	VL3B	Valley	1	1	Job Reference (optional)	146292700

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:33 ID:pU?ySK8LwSvSQWMS1AydcQzLbGP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2x4 🛛







2x4 =

3-5-12

1-2-3

Scale = 1:21.1

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.14 0.19 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 10 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 3-5-12 oc purlins, e Rigid ceiling directly bracing. (size) 1=3-5-12, Max Horiz 1=36 (LC Max Uplift 1=-16 (LC	athing directly applie xcept end verticals. applied or 10-0-0 oc 3=3-5-12 10) 2 10), 3=-26 (LC 10)	7) This truss chord live 8) * This trus on the bo 3-06-00 ta chord and 9) Provide n 9 Provide n 9 and 16 10) This truss Internatio R802.10	has been designed load nonconcurrent is has been designe tom chord in all aree and the second second second the second second second echanical connection ate capable of withs buplift at joint 1. is designed in acco nal Residential Code and referenced sta S) Standard	for a 10. with any d for a liv as where vill fit betv s. on (by oth tanding 2 rdance w e sections indard AN	D psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss tr 26 lb uplift at jo ith the 2018 s R502.11.1 a JSI/TPI 1.	ds.)psf om oint nd						
Max Holiz 1=05 (LC 10) R802.10.2 and referenced standard ANSI/TPI 1. Max Uplift 1=-16 (LC 10), 3=-26 (LC 10) LOAD CASE(S) Max Grav 1=173 (LC 20), 3=173 (LC 20) LOAD CASE(S) FORCES (lb) - Maximum Compression/Maximum Tension Standard TOP CHORD 1-2=-323/139, 2-3=-104/80 BOT CHORD BOT CHORD 1-3=-195/297													
NOTES 1) Wind: ASt Vasd=102 Cat. II; Ex zone and exposed ; reactions DOL=1.6(2) Truss dee: only. For see Stanc or consult 3) TCLL: AS Plate DOI DOL=1.15 Cs=1.00; 4) Unbalanc design. 5) Gable req 6) Gable stu	CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; Br c-C Exterior(2E) zone (C-C for members and i shown; Lumber DOL=' signed for wind loads ir studs exposed to wind ard Industry Gable En- t qualified building design (CE 7-16; Pr=20.0 psf (L L=1.15); Pf=20.0 psf (L L=1.15); Pf=20.0 psf (L ct=1.10 ed snow loads have be quires continuous bottoo ds spaced at 4-0-0 oc.	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and ri forces & MWFRS for 1.60 plate grip In the plane of the trus (normal to the face), d Details as applicab gner as per ANSI/TP roof LL: Lum DOL=1 um DOL=1.15 Plate B; Fully Exp.; Ce=0.9; een considered for thi m chord bearing.	r ght ss le, l 1. .15 ; is								SEA 0449	EER. HALL	





Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	VL5	Valley	1	1	Job Reference (optional)	146292701

2-0-3

0-0-4

2-3-14

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:33 ID:4Yc3WH9HvAltnK3f0d6O?kzLbS0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

5-2-2

2-5-0

5-6-4



4x5 = 2 12 10 Г

2-9-2

2-9-2



5-6-4



Scale = 1:26.2

Loading TCLL (ro Snow (P TCDL BCLL BCLL BCDL	pof) f)		(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	0.12 0.15 0.05	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 20 lb	GRIP 244/190 FT = 20%
LUMBE TOP CH BOT CH OTHERS BRACIN TOP CH BOT CH REACTI	R ORD ORD G ORD ORD ORD	2x4 SP N 2x4 SP N 2x4 SP N Structural 5-6-4 oc p Rigid ceili bracing. (size)	0.2 0.2 0.3 wood shea ourlins. ng directly 1=5-6-4, 3	athing directly applie applied or 6-0-0 oc 3=5-6-4, 4=5-6-4	5) 6 7] 8] ed or 9]	 Unbalanced design. Gable require Gable studs : This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Bravide mod 	snow loads have b es continuous botto spaced at 4-0-0 oc s been designed fr d nonconcurrent v as been designed n chord in all areas y 2-00-00 wide wil y other members.	oeen cor om chor c. or a 10. with any for a liv s where Il fit betw	nsidered for the d bearing. D psf bottom other live load e load of 20.1 a rectangle veen the botto orc) of truce 1	his ads. Opsf om					
		Max Horiz Max Uplift Max Grav	1=50 (LC 3=-5 (LC 1=95 (LC (LC 20)	11) 15), 4=-43 (LC 14) 20), 3=95 (LC 21), 4	l=355 1	bearing plate and 43 lb upl 1) This truss is International	capable of withsta ift at joint 4. designed in accord	dance w	ib uplift at jo th the 2018	io vint 3					
FORCE	6	(lb) - Max Tension	mum Com	pression/Maximum		R802.10.2 ar	nd referenced stan	dard AN	ISI/TPI 1.						
TOP CH	ORD	1-2=-86/1	34, 2-3=-8	6/134	L	OAD CASE(S)	Standard								
BOT CH	ORD	1-4=-101/	107, 3-4=-	101/107											
WEBS		2-4=-231/	126												
NOTES															
1) Unb	alance	ed roof live l	oads have	been considered for	•										180 mm
 Wind Vase Cat. zone exponent Lum Tru: only see 	d: AS(d=103 II; Ex and bsed; ber D ss des For Stand	DE 7-16; Vu mph; TCDL p B; Enclose C-C Exterio end vertical and forces & OL=1.60 pla signed for w studs expos ard Industry	t=130mph =6.0psf; B0 ed; MWFR3 (2E) zone; left and rig MWFRS te grip DO nd loads ir ed to wind Gable En	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and r ht exposed;C-C for for reactions shown; L=1.60 t he plane of the tru (normal to the face) d Details as applicab	r ight ss ,							- Annun	ela Ba	SEA	ROLINE Service L 25
4) TCL Plate DOL Cs=	onsult L: AS e DOL =1.15 1.00;	qualified bu CE 7-16; Pr =1.15); Pf= ;); Is=1.0; Ro Ct=1.10	ilding desig =20.0 psf (l 20.0 psf (L ough Cat B	gner as per ANSI/TP roof LL: Lum DOL=1 um DOL=1.15 Plate ; Fully Exp.; Ce=0.9	PI 1. .15 ;									OTT M.	SEVIER

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



М. mm May 26,2021

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	VL5A	Valley	1	1	Job Reference (optional)	146292702

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:33 ID:aCZ_x9HZgZu9bVwOOF2riWzd76G-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





4-7-0

3x5 =

1-6-9

2x4 🛚

2x4 🛛

						4-7-0)			-			
Scale = 1:20.2	2	i											
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	0.31 0.39 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 14 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 3OT CHORD BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Wind: AS Vasd=10: Cat. II; E: zone and exposed reactions	 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 4-7-0 oc purlins, ex Rigid ceiling directly bracing. (size) 1=4-7-0, : Max Horiz 1=49 (LC Max Uplift 1=-21 (LC Max Grav 1=239 (L1 (lb) - Maximum Conr Tension 1-2=-509/217, 2-3=- 1-3=-298/473 CE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B xp B; Enclosed; MWFR C-C Exterior(2E) zone ;C-C for members and shown; Lumber DOL= 	I athing directly applie cept end verticals. applied or 10-0-0 oc 3=4-7-0 10) 2 10), 3=-36 (LC 10) 2 20), 3=239 (LC 20) apression/Maximum 153/118 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior ; cantilever left and r forces & MWFRS for 1.60 plate grip	7) 8) 2d or 9) 5 10 10 10 10 10 10 10 10 10 10 10 10 10	This truss ha chord live loo * This truss I on the bottoo 3-06-00 tall I chord and an Provide mec bearing plate 3 and 21 lb (0) This truss is International R802.10.2 a DAD CASE(S)	I ss been designed ad nonconcurreni nas been designe n chord in all are yy 2-00-00 wide v ny other members hanical connectite e capable of with e capable of with designed in accc Residential Cod nd referenced sta Standard	I for a 10. t with any ed for a liv as where will fit betw s. on (by oth standing 3 ordance wi e sections andard AN) psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 6 lb uplift at j ith the 2018 R502.11.1 a ISI/TPI 1.	ds. Dpsf om oint ind					
DOL=1.6 2) Truss de only. For see Stan or consul 3) TCLL: AS Plate DO DOL=1.1 CS=1.00; 4) Unbalanc design. 5) Gable rec 6) Gable stu	0 signed for wind loads in studs exposed to wind dard Industry Gable En t qualified building desi SCE 7-16; Pr=20.0 psf (L L=1.15); Pf=20.0 psf (L 5); Is=1.0; Rough Cat E Ct=1.10 sed snow loads have be quires continuous botto ids spaced at 4-0-0 oc.	n the plane of the tru I (normal to the face) d Details as applicat gner as per ANS/ITP roof LL: Lum DOL=1 um DOL=1.15 Plate 3; Fully Exp.; Ce=0.9 een considered for th m chord bearing.	ss , ble, Pl 1. I.15 ; iis							R		SEA 0449	L 25 SEVILUTION



Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	VL5B	Valley	1	1	Job Reference (optional)	146292703

1-9-15

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:34 ID:_36FdTtwLO0j9_61Bq1EAZzLbGm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



12 4 □ 1 3 0-0-4 2x4 🛚 3x5 🚅 5-5-0

Page: 1

1-9-15



5-5-0

Scale = 1:21.3														
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	1-11-4 1.15 1.15 YES IRC2018/1	TPI2014	CSI TC BC WB Matrix-MP	0.48 0.55 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 17 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 2x4 SP No BOT CHORD 2x4 SP No BEACING TOP CHORD Structural 5-5-0 oc p BOT CHORD Rigid ceilin bracing. REACTIONS (size) Max Horiz Max Uplift Max Uplift (b) - Maxi Tension TOP CHORD 1-2=-629/2 BOT CHORD 1-2=-629/2 BOT CHORD 1-3=-361/3 NOTES 1) Wind: ASCE 7-16; Vul Vasd=103mph; TCDL= Cat. II; Exp B; Enclose zone and C-C Exterior exposed (:C- for mem reactions shown; Luml DOL=1.60 2) Truss designed for wir only. For studs expose see Standard Industry or consult qualified bui 3) TCLL: ASCE 7-16; Pr= Plate DOL=1.15); Is=1.0; Rc Cs=1.00; Ct=1.10 4) Unbalanced snow load design. 5) Gable requires continu 6) Gable studs spaced at	2.2 2.2 2.3 wood shee urlins, exe ng directly 1=5-5-0, 3 1=58 (LC 1=-23 (LC 1=-23 (LC 1=-278 (LC mum Com 264, 2-3= 586 t=130mph 6-0.0psf; B- 6-0.0psf; B	athing directly applie cept end verticals. applied or 10-0-0 oc i=5-5-0 10) 10), 3=-41 (LC 10) 20), 3=278 (LC 20) pression/Maximum 183/141 (3-second gust) CDL=6.0psf; h=25ft; 5 (envelope) exterior cantilever left and ri orces & MWFRS for .60 plate grip the plane of the trus (normal to the face), d Details as applicab gner as per ANSI/TP roof LL: Lum DCL=1. Jm DCL=1.15 Plate ; Fully Exp.; Ce=0.9; en considered for thi n chord bearing.	7) - 8) - 10) - 10) - 10) - 10) - 10) - 10 10) - 10 10 10 10 10 10 10 10 10 10 10 10 10	This truss ha chord live loa * This truss h on the botton 3-06-00 tall b Provide mecl bearing plate 3 and 23 lb u This truss is International R802.10.2 ar	s been designed ad nonconcurrent has been designen n chord in all area y 2-00-00 wide w hy other members hanical connectio e capable of withs plift at joint 1. designed in accoo Residential Code do referenced sta Standard	for a 10.0 with any d for a liv as where ill fit betw n (by oth tanding 4 rdance w s sections ndard AN	0 psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss to 11 lb uplift at jo ith the 2018 s R502.11.1 at ISI/TPI 1.	ds. Dpsf o Doint nd				SEA 0449	ROJUL 25 SEVIE	

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	VL8	Valley	1	1	Job Reference (optional)	146292704

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:34 ID:7uytWnwNNLva?P6?O7HxkjzLbSJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





7-11-1

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	8/TPI2014	CSI TC BC WB Matrix-MP	0.33 0.32 0.11	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: 30 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 7-11-1 oc purlins. Rigid ceiling directly bracing. (size) 1=7-11-1 Max Horiz 1=-74 (LC Max Uplift 1=-32 (LC 4=-88 (LC Max Grav 1=105 (LL 4=613 (L) (lb) - Maximum Con Tension 1-2=-107/274, 2-3=: 1-4=-188/170, 3-4=: 2-4448/220	eathing directly applie / applied or 6-0-0 oc , 3=7-11-1, 4=7-11-1 C 12) C 21), 3=-32 (LC 20), C 14) C 20), 3=105 (LC 21) C 20) npression/Maximum -107/274 -188/170	4) 5) d or 6) 7) 8) 9) 9) 11	TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable requir Gable studs This truss ha chord live loc * This truss ha chord live loc * This truss ha chord and ar) Provide mec bearing plate 1, 32 lb uplif) This truss is International R802.10.2 a	7-16; Pr=20.0 ps 1.15); Pf=20.0 ps 1.15); Pf=20.0 ps 1s=1.0; Rough Cat =1.10 snow loads have spaced at 4-0-0 o as been designed ad nonconcurrent as been designed in chord in all area by 2-00-00 wide w hy other members thanical connection e capable of withst t at joint 3 and 88 designed in accor Residential Code nd referenced star	f (roof LL (Lum DC B; Fully been cor com chor c. for a 10. with any d for a liv s where a liv the toty of the set of the	L: Lum DOL= DL=1.15 Plate Exp.; Ce=0.9 nsidered for the d bearing. 0 psf bottom other live loa re load of 20.0 a rectangle veen the botto ers) of truss t 32 lb uplift at j 32 lb uplift at j 450 ft uss t 35 R502.11.1 at VSI/TPI 1.	1.15); ds.)psf om oint nd					
NOTES				JAD CASE(S)	Stanuard								

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) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 4-11-6, Exterior(2E) 4-11-6 to 7-11-6 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

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.

With Hilling COLONNAL STREET SEAL 044925 unun May 26,2021



Job	Truss	Truss Type	Qty Ply 72 Carolina Lakes-Roof-Sterling		72 Carolina Lakes-Roof-Sterling	
21040028-B	VL10	Valley	1	1	Job Reference (optional)	146292705

5-1-15

Carter Components (Sanford), Sanford, NC - 27332

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:34 ID:fQt4ldi4dpe7rekYLLyj?wzLbSb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

9-11-12

10-3-14

Page: 1

GRIP

244/190

FT = 20%

2 9 10 4-0-3 12 10 □ 3 4 3x5 🍫 2x4 II 3x5 💊 10-3-14 Spacing 2-0-0 CSI DEFL l/defl L/d PLATES in (loc) Plate Grip DOL 1.15 TC 0.53 Vert(LL) n/a n/a 999 MT20 BC Lumber DOL 1 15 0.49 Vert(TL) n/a n/a 999 Rep Stress Incr YES WB 0.23 Horiz(TL) 0.01 4 n/a n/a Code IRC2018/TPI2014 Matrix-MSH Weight: 39 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 5) Unbalanced snow loads have been considered for this desian. or 6) Gable requires continuous bottom chord bearing. Gable studs spaced at 4-0-0 oc. 7) 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 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. 58 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 1, 67 lb uplift at joint 3 and 124 lb uplift at joint 4. 11) 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

NOTES

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) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 7-4-3, Exterior(2E) 7-4-3 to 10-4-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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. on north and mm May 26,2021

818 Soundside Road Edenton, NC 27932

SEAL

044925

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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 Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Scale	=	1:36	

Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL

BCDL

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	wood sheathing directly applied o
	10-0-0 oc	purlins.
BOT CHORD	Rigid ceili	ng directly applied or 6-0-0 oc
	bracing.	
REACTIONS	(size)	1=10-3-14, 3=10-3-14, 4=10-3-14
	Max Horiz	1=-97 (LC 10)
	Max Uplift	1=-67 (LC 21), 3=-67 (LC 20),
		4=-124 (LC 14)
	Max Grav	1=91 (LC 20), 3=91 (LC 21), 4=8
		(LC 20)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	1-2=-131/	424, 2-3=-131/424
BOT CHORD	1-4=-241/	187, 3-4=-241/187
WEBS	2-4=-670/	295

(psf)

20.0

20.0

10.0

0.0

10.0

Job	Truss	Truss Type	Qty Ply 72 Carolina Lakes-Roof-Sterling		72 Carolina Lakes-Roof-Sterling	
21040028-B	VL13	Valley	1	1	Job Reference (optional)	146292706

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:34 ID:f9LeApVQdaVY11xHrH8kpLzLbSs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



12-8-11

Scale = 1:40.4

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 IRC2018	/TPI2014	CSI TC BC WB Matrix-MSH	0.32 0.12 0.09	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=12-8-11 7=12-8-11 Max Horiz 1=120 (LC Max Uplift 1=-30 (LC 8=-143 (LC 6=435 (LC 8=435 (LC	athing directly applied applied or 10-0-0 oc 1, 5=12-8-11, 6=12-8- 1, 8=12-8-11 C 11) C 11) C 10), 6=-140 (LC 15), C 14) C 24), 5=81 (LC 27), C 21), 7=270 (LC 21), C 20)	3) 4) 1 or 5) 111, 6) 7) 8) 9)	Truss desig only. For stu see Standar TCLL: ASCE Plate DOL= DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable requir Gable studs This truss ha chord live loc * This truss l on the bottoo 3-06-00 tall l	I ned for wind load uds exposed to w d Industry Gable Jalified building d z-16; Pr=20.0 ps Is=1.0; Rough C =1.10 snow loads have es continuous bo spaced at 4-0-0 as been designed an onconcurren nas been designed n chord in all are by 2-00-00 wide v	Is in the p ind (norm End Deta esigner a: sf (roof LL f (Lum DC at B; Fully been cor to been cor to c. I for a 10.0 t with any ad for a liv as where will fit betw	lane of the tru- lal to the face ills as applical is per ANSI/TH :: Lum DOL=: DL=1.15 Plate Exp.; Ce=0.9 nsidered for th d bearing. 0 psf bottom other live loa re load of 20.0 a rectangle veen the botto	uss), ble, Pl 1. 1.15 9; his ds. Dpsf pm				vveignt: 53 ib	FT = 20%
FORCES	(lb) - Maximum Com Tension	pression/Maximum	10)	Provide mec bearing plate	hanical connections capable of with	s. on (by oth standing 3	ers) of truss t 30 lb uplift at j	o oint					
TOP CHORD	1-2=-129/106, 2-3=- 4-5=-102/66	208/116, 3-4=-208/11	6, 11	1, 143 lb upl This truss is	ift at joint 8 and 1 designed in acco	40 lb upli ordance w	ft at joint 6. ith the 2018						
BOT CHORD	1-8=-37/94, 7-8=-37, 5-6=-37/79	/79, 6-7=-37/79,	,	International R802.10.2 a	Residential Cod nd referenced sta	e sections andard AN	s R502.11.1 a NSI/TPI 1.	ind					11111
WEBS	3-7=-184/0, 2-8=-38	4/204, 4-6=-384/204	LO	AD CASE(S)	Standard						1 3	"TH UA	HO
NOTES				(-)							5	ONFESS	in In
 Unbalance this design Wind: ASI 	ed roof live loads have n. CE 7-16: Vult=130mph	been considered for (3-second gust)									Y	tothe	Servie

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, Interior (1) 3-0-5 to 3-4-10, Exterior(2R) 3-4-10 to 9-4-10, Interior (1) 9-4-10 to 9-9-0, Exterior(2E) 9-9-0 to 12-9-0 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



Page: 1

E. ENGINEERING BY CAMERING BY

Job	Truss	Truss Type	Qty Ply 72 Carolina Lakes-Roof-Sterling		72 Carolina Lakes-Roof-Sterling	
21040028-B	VL15	Valley	1	1	Job Reference (optional)	146292707

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:35 ID:XkSDE70u_2SIb6?7Idu0YWzLppT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scol	o — '	1.117
Judi		1.44./

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(222	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 IRC2	018/TPI2014	CSI TC BC WB Matrix-MSH	0.31 0.16 0.17	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: 66 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural woo 6-0-0 oc purlin Rigid ceiling of bracing. (size) 1=- 7=- Max Horiz 1=- Max Uplift 1=- 8=- Max Grav 1=- 6=4 8=-	od shea ns. directly 15-1-8, -144 (LC -23 (LC -165 (LC 126 (LC 467 (LC	athing directly applied applied or 6-0-0 oc 5=15-1-8, 6=15-1-8, 8=15-1-8 C 10) 10), 6=-162 (LC 15) C 14) 2 24), 5=100 (LC 23), 2 20)	d or	 Truss desig only. For stu see Standar or consult qu TCLL: ASCE Plate DOL=1 TCL: ASCE Plate DOL=1.15); Cs=1.00; Cts Unbalanced design. Gable requir Gable studs This truss ha chord live loa * This truss for on the botton 3-06-00 tall back 	ned for wind loads dids exposed to wind d Industry Gable E tailified building des 7-16; Pr=20.0 psf (15); Pf=20.0 psf (1	in the p d (norm nd Deta signer a: (roof LL Lum DC B; Fully eeen cor om chor ; or a 10. vith any for a liv s where I fit bett	lane of the tru al to the face) ils as applicat s per ANSI/TF .: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9 asidered for th d bearing. D psf bottom other live load e load of 20.0 a rectangle veen the bottom	ss , ble, 11. .15 ; is ds. psf m				<u>.</u>	
FORCES	(lb) - Maximuı Tension	m Com	pression/Maximum		10) Provide mec bearing plate	hanical connection capable of withsta	(by oth anding 2	ers) of truss to 3 lb uplift at jo	o pint					
TOP CHORD	1-2=-154/168 4-5=-123/131	, 2-3=-1	160/136, 3-4=-160/11	15,	1, 165 lb upl 11) This truss is	ft at joint 8 and 16 designed in accord	2 lb upli lance w	ft at joint 6.						
BOT CHORD	1-8=-73/131, 5-6=-73/109	7-8=-73	3/109, 6-7=-73/109,		International R802.10.2 a	Residential Code	sections	R502.11.1 a	nd				, mining	110m
WEBS	3-7=-244/0, 2	-8=-378	3/201, 4-6=-378/200		LOAD CASE(S)	Standard						-	TH CA	Roilin
NOTES 1) Unbalanc	ed roof live load	s have	been considered for									Į.	O HESS	Quiter
this desig 2) Wind: AS Vasd=102 Cat. II; Ex zone and 3-0-5 to 4 10-7-1 to cantilever right expo for reaction	n. CE 7-16; Vult=1: Bmph; TCDL=6.C p B; Enclosed; N C-C Exterior(2E -7-1, Exterior(2F 12-1-12, Exterio left and right ex sed;C-C for mer ons shown; Lumb	30mph Dpsf; BC WWFRS 0 0-0-5 () 4-7-1 (2E) 12 (posed ; mbers a ber DO	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior to 3-0-5, Interior (1) to 10-7-1, Interior (1 2-1-12 to 15-1-12 zo end vertical left and and forces & MWFRS L=1.60 plate grip) ne; S							A manage		SEA 0449	L 25 EER HAIN

Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 4-7-1, Exterior(2R) 4-7-1 to 10-7-1, Interior (1) 10-7-1 to 12-1-12, Exterior(2E) 12-1-12 to 15-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



unun May 26,2021

Job	Truss	Truss Type	Qty	Ply	72 Carolina Lakes-Roof-Sterling	
21040028-B	VL18	Valley	1	1	Job Reference (optional)	146292708

Run: 8.5 S 0 May 17 2021 Print: 8.500 S May 17 2021 MiTek Industries, Inc. Tue May 25 15:03:35 ID:Vy4FHI7b1wT31XoNMedCvKzLptB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

GRIP

244/190

FT = 20%



- 2x4 SP No.2 TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.3 OTHERS BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. **REACTIONS** (size) 1=17-6-4, 5=17-6-4, 6=17-6-4, 8=17-6-4, 9=17-6-4 Max Horiz 1=167 (LC 11) Max Uplift 1=-21 (LC 10), 6=-191 (LC 15), 9=-194 (LC 14) 1=119 (LC 24), 5=85 (LC 21), Max Grav 6=550 (LC 24), 8=520 (LC 23), 9=554 (LC 23) FORCES (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=-154/285, 2-3=-89/210, 3-4=-90/190, 4-5=-115/242 BOT CHORD 1-9=-138/141, 8-9=-138/141, 6-8=-138/141,

5-6=-138/141 WEBS 3-8=-340/0, 2-9=-405/228, 4-6=-404/227

NOTES

Scale = 1:51.8

TCLL (roof)

Snow (Pf)

LUMBER

TCDL

BCLL

BCDL

- 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, Interior (1) 3-0-5 to 5-9-7, Exterior(2R) 5-9-7 to 11-9-7, Interior (1) 11-9-7 to 14-2-1, Exterior(2E) 14-2-1 to 17-2-1 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

- 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); ls=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) 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 chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1, 194 lb uplift at joint 9 and 191 lb uplift at joint 6.
- 11) 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





