

RE: 21020047-A 164 Crossings-Roof Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Capitol City Homes	Project Name: 21020047-A
Lot/Block: 164	Model: Havenbrook A
Address: 79 LaKe Crest Trail	Subdivision: Crossing at AC
City: Spring Lake	State: NC

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Wind Code: ASCE 7-10 Roof Load: 40.0 psf

Design Program: MiTek 20/20 8.3 Wind Speed: 130 mph Floor Load: N/A psf

This package includes 26 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E14607799	PB1	2/5/2021	21	E14607819	V2	2/5/2021
2	E14607800	PB1GE	2/5/2021	22	E14607820	V3	2/5/2021
3	E14607801	PB1GR	2/5/2021	23	E14607821	V4	2/5/2021
4	E14607802	T1	2/5/2021	24	E14607822	V5	2/5/2021
5	E14607803	T1A	2/5/2021	25	E14607823	V6	2/5/2021
6	E14607804	T1AGE	2/5/2021	26	E14607824	V7	2/5/2021
7	E14607805	T1GE	2/5/2021				
8	E14607806	T2	2/5/2021				
9	E14607807	T2GE	2/5/2021				
10	E14607808	Т3	2/5/2021				
11	E14607809	T3GE	2/5/2021				
12	E14607810	T4	2/5/2021				
13	E14607811	T4A	2/5/2021				
14	E14607812	T4GE	2/5/2021				
15	E14607813	T5	2/5/2021				
16	E14607814	T5GR	2/5/2021				
17	E14607815	T5SE	2/5/2021				
18	E14607816	Т6	2/5/2021				
19	E14607817	T6GE	2/5/2021				
20	E14607818	V1	2/5/2021				

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision

based on the parameters provided by Carter Components (Sanford, NC)).

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.



Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	PB1	Piggyback	1	1	Job Reference (optional)	E14607799

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:25 ID:m7m??kq6yiUctmgh5_6U34yzR?U-SVc5WdgFAPoKqFV5uILHp4KShbJMjUEtUQS?zgyzQVE





Scale = 1:40.7

	., ., [],[
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 13.9/20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/TPI201	CSI TC BC WB 4 Matrix-MP	0.31 0.32 0.07	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 2	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 42 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Left: 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=7-11-1 7=7-11-1 Max Horiz 2=-122 (L Max Uplift 2=-36 (LC 7=-36 (LC Max Grav 2=239 (LI (LC 2), 7: 2)	eathing directly applied applied or 10-0-0 oc 0, 4=7-11-10, 6=7-11- 0, 10=7-11-10 C 9), 7=-122 (LC 9) C 14), 4=-29 (LC 13), C 14), 10=-29 (LC 13) C 2), 4=239 (LC 2), 6= =239 (LC 2), 10=239 (3) Truss only. I see St or con 4) TCLL: DOL=' snow); Plate I Ct=1.1 5) Gable 6) Gable 6) Gable 6) Gable 6) Gable 7) * This on the 3-06-0 chord. 8) One R truss truss tru	designed for wind load for studs exposed to v andard Industry Gable sult qualified building of ASCE 7-10; Pr=20.0 p ASCE 7-10; Pr=20.0 p Pf=13.9 psf (flat roof s 20L=1.15); Category I 0 russ has been design bottom chord in all are 0 tall by 2-00-00 wide and any other member T7A USP connectors I 0 bearing walls due to onnection is for uplift o forces.	Is in the p vind (norm End Deta lesigner a sof (roof lix Pg=20.0 snow: Lum ; Exp B; F vttom choi oc. ed for a liv as where will fit betv s. ecommer UPLIFT a nly and dc ordance w	lane of the tru ial to the face ils as applical s per ANSI/TF re load: Lumb ber DOL=1.1 ully Exp.; d bearing. re load of 20.0 a rectangle veen the botto ided to conne t jt(s) 2 and 4, ses not consic ith the 2015	uss), ble, bl 1. er 5 5 Dpsf ct ct						
FORCES	(lb) - Maximum Con Tension	npression/Maximum	Interna R802.	tional Residential Coc 0.2 and referenced st	e sections andard Al	s R502.11.1 a NSI/TPI 1.	nd				muu	um.	
TOP CHORD	1-2=0/11, 2-3=-229/ 4-5=0/11 2-6=-158/170 4-6=-	168, 3-4=-220/168, .32/99	10) See St Detail consul	andard Industry Piggy or Connection to base t qualified building des	back Trus truss as a igner	s Connection applicable, or				5	WH CA	AROLI	2
WEBS	3-6=-143/119	02/00		SE(S) Standard	ignor.				6	11		Pit	2
NOTES			20.12 0/1						-		10 -10	and the	1
 Unbalance this design Wind: ASC Vasd=103 Cat. II; Ext Exterior (2 vertical lef forces & M DOL=1.60 	ed roof live loads have CE 7-10; Vult=130mph mph; TCDL=6.0psf; B p B; Enclosed; MWFR 2) zone; cantilever left t and right exposed;C- WFRS for reactions s plate grip DQL=1.33	been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C-C and right exposed ; er -C for members and shown; Lumber	d							A A A A A A A A A A A A A A A A A A A	SEA 0363	EER.X	The manner of the second

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 ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



GI 111111111 July 10,2020

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	PB1GE	Piggyback	1	1	Job Reference (optional)	E14607800

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:27 ID:m7m??kq6yiUctmgh5_6U34yzR?U-KGscL_jIEeJmIsps78QE_wU9vCk8fH4SP2QC6RyzQVA Page: 1



Scale = 1:43.2

DOL=1.60 plate grip DOL=1.33

Plate Offsets (X, Y): [2:0-2-13,0-1-0)], [6:0-2-12,0-1-0]												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 13.9/20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2019	5/TPI2014	CSI TC BC WB Matrix-MP	0.23 0.08 0.14	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 6	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 47 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 *Excep Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=7-11-11 9=7-11-11 11=7-11- Max Horiz 2=-122 (L Max Uplift 2=-155 (L 8=-138 (L 11=-155 (8=237 (LC 8=237 (LC) 14=119 (I	ot* 9-4:2x4 SP No.2 eathing directly applied applied or 10-0-0 oc 0, 6=7-11-10, 8=7-11- 0, 10=7-11-10, 10, 14=7-11-10 .C 9), 11=-122 (LC 9) .C 11), 6=-8 (LC 10), .C 14), 10=-208 (LC 1 (LC 11), 14=-8 (LC 10, C 13), 6=119 (LC 25), C 26), 9=131 (LC 28), LC 25), 11=184 (LC 1 LC 25)	3) 4) d or -10, 5) 6) 7) 3), 8) (, 3), 8)	Truss desig only. For stu see Standar or consult qu TCLL: ASCE DOL=1.15 P snow); Pf=1: Plate DOL=' Ct=1.10 Gable requir Gable studs * This truss I on the bottor 3-06-00 tall I chord and at One RT7A L truss to bear 8. This conn consider late This truss is International	ned for wind load ds exposed to w d Industry Gable Ialified building d 7-10; Pr=20.0 p Iate DOL=1.15); 3.9 psf (flat roof s 1.15); Category II es continuous bot spaced at 2-0-0 - nas been designe n chord in all are by 2-00-00 wide y y other members SP connectors r ing walls due to I ection is for uplift real forces. designed in accoc Residential Cod	Is in the p ind (norm End Deta esigner a: sf (roof liv Pg=20.0 µ Pg=20.0 µ ; Exp B; F bittom chor oc. ed for a liv as where will fit betv s. ecommen UPLIFT a: conly and ordance w e sections	lane of the tru al to the face ils as applica s per ANSI/TI e load: Lumb ber DOL=1.1 fully Exp.; d bearing. e load of 20.0 a rectangle veen the botto ded to conne ; jt(s) 2, 6, 10 does not ith the 2015 s R502.11.1 a	uss), ble, PI 1. er 5 Dpsf ct , and						
	(lb) - Maximum Com Tension	npression/Maximum	10	R802.10.2 a) See Standar	nd referenced sta d Industry Piggyl	andard AN back Trus	ISI/TPI 1. s Connection					WH CA	RO	
BOT CHORD	4-5=-130/125, 5-6=- 2-10=-93/136, 9-10=	-119/87, 6-7=0/11 =-93/136, 8-9=-93/136	^{3,} LC	consult quali	fied building desi Standard	igner.	арріїсаріе, ог			4	N. N	A S	A A	·
WEBS	3-10=-482/481, 4-9=	=-82/32, 5-8=-269/260)									. C	× -	1=
NOTES	,											SEA	d :	Ξ
 Unbalance this design Wind: ASC Vasd=103 Cat. II; Ex, Exterior (2 vertical lef forces & M DOL=1.60 	ed roof live loads have n. CE 7-10; Vult=130mph imph; TCDL=6.0psf; B p B; Enclosed; MWFR 2) zone; cantilever left t and right exposed;C- MWFRS for reactions s plate grip DOL=1.33	been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C-C and right exposed ; ei- C for members and shown; Lumber	C nd							1110 C	A A A A A A A A A A A A A A A A A A A		EER.	ALL DATE OF THE OF T

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 ANS/TP11 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

July 10,2020

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	PB1GR	Piggyback	1	2	Job Reference (optional)	E14607801

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:27 ID:FJJOD3rkj0cTVwEtfidjbHyzR?T-KGscL_jIEeJmlsps78QE_wUA3CjsfJ3SP2QC6RyzQVA Page: 1



Scale = 1:40.7

Plate Offsets (X, Y): [2:0-4-0,0-1-2], [4:0-4-0,0-1-2]

Loading TCLL (roof) Snow (Pf/Pg)	(psf) 20.0 13.9/20.0 10.0	Spacing2-Plate Grip DOL1.Lumber DOL1.Rep Stress IncrY	-0-0 .15 .15 ES	CSI TC BC WB	0.15 0.16	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a	(loc) - - 2	l/defl n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190	
BCLL BCDL	0.0*	Code IF	RC2015/TPI201	4 Matr	trix-MP	1012(01)	0.00	2	1/4	n/α	Weight: 83 lb	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.2 2x4 SP No.2 Structural wood shee 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=7-11-10 Max Horiz 2=-122 (L Max Uplift 2=-37 (LC Max Grav 2=239 (LC (LC 2), 7= 2)	athing directly applied or applied or 10-0-0 oc 0, 4=7-11-10, 6=7-11-10 0, 10=7-11-10 C 9), 7=-122 (LC 9) : 14), 4=-30 (LC 13), : 14), 10=-30 (LC 13) C 2), 4=239 (LC 2), 6=17 :239 (LC 2), 10=239 (LC	 4) Wind: Vasd= Cat. II; Exterio vertica forces DOL=' 5) Truss only. I see St or com 6) TCLL: DOL=' snow; Plate I 7) Gable 8) Gable 	ASCE 7-10; 103mph; TC Exp B; Encl or (2) zone; c I left and rigf & MWFRS f A MWFRS f designed fo For studs exi andard Indus sult qualified ASCE 7-10; 1.15 Plate D0 Pf=13.9 psf DOL=1.15); 0 0 requires con studs space	; Vult=130mph (3-set CDL=6.0psf; BCDL=6 closed; MWFRS (env cantilever left and rig pht exposed;C-C for r for reactions shown; rip DOL=1.33 or wind loads in the p xposed to wind (norm ustry Gable End Deta d building designer a d building designer a ; Pr=20.0 psf (roof lik DOL=1.15); Pg=20.0 p ff (flat roof snow: Lun Category II; Exp B; F intinuous bottom choi ed at 4-0-0 oc.	cond gust) cond gust) copsf; h=25ft; elope) and C- ht exposed ; e nembers and Lumber lane of the tru al to the face) ils as applicat s per ANSI/TF e load: Lumbo s f (ground ber DOL=1.1: ully Exp.; d bearing.	C end ss , ble, PI 1. er 5						
TOP CHORD	Tension 1-2=0/11, 2-3=-229/ ⁻	170, 3-4=-222/170,	on the 3-06-0	bottom chor 0 tall by 2-00	ord in all areas where 00-00 wide will fit betw	a rectangle veen the botto	om					1	
BOT CHORD WEBS NOTES 1) 2-ply truss Top chord follows: 2> Bottom ch follows: 2> 2) All loads a except ifn CASE(S) : provided t unless oth 3) Unbalance this design	2-6=-181/195, 4-6=- 3-6=-147/121 s to be connected toget ls connected with 10d (44 - 1 row at 0-9-0 oc. ords connected with 11 44 - 1 row at 0-9-0 oc. are considered equally loted as front (F) or bar section. Ply to ply comply section. Ply to ply const nerwise indicated. ed roof live loads have h.	32/99 (0.131"x3") nails as (0.131"x3") nails as applied to all plies, ck (B) face in the LOAD nections have been noted as (F) or (B), been considered for	 10) One R truss to This cc lateral 11) This tr Interna R802.⁻ 12) See S Detail consul LOAD CA: 	T7A USP co o bearing wa onnection is forces. uss is design titional Resid 10.2 and refe tandard Indu for Connecti t qualified bu SE(S) Stan	onnectors recommen alls due to UPLIFT al s for uplift only and do ned in accordance w dential Code sections ferenced standard AN ustry Piggyback Trus tion to base truss as a building designer. Indard	ded to connec jt(s) 2 and 4. es not consid ith the 2015 i R502.11.1 an ISI/TPI 1. s Connection applicable, or	ct er nd		Marin Marine		SEA 0363	L 22 EEER.H	Manning

July 10,2020



Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T1		3	1	Job Reference (optional)	E14607802

0-10-8

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:28



ID:bAx8KKyBgUDAWcRvxhUg7UyzRDX-oSQ_ZKkO?yRdw0N2hrxTW71JFc1sOfScei9mfuyzQV9 0-10-8 11-0-0 5-6-2 5-6-2 5-5-14



5-6-2	10-10-8	11-0-0
5-6-2	5-4-6	0-1-8

Scale = 1:36

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL LUMBER	(psf) 20.0 13.9/20.0 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	5/TPI2014	CSI TC BC WB Matrix-MSH	0.32 0.30 0.46 for a liv	DEFL Vert(LL) Vert(CT) Horz(CT) e load of 20.0	in -0.02 -0.05 0.01	(loc) 6-9 5-6 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 48 lb	GRIP 244/190 FT = 20%
TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep Structural wood shea 5-11-3 oc purlins, e: Rigid ceiling directly bracing. (size) 2=0-3-0, 5 Max Horiz 2=92 (LC	t* 5-3:2x4 SP No.2 athing directly applie xcept end verticals. applied or 10-0-0 oc 5=0-1-8 14)	6) d or : 7) 8)	on the botton 3-06-00 tall b chord and an Bearing at jo using ANSI/I designer sho Provide mecl bearing plate One RT7A U truss to beari This connect	n chord in all areas by 2-00-00 wide will by other members. int(s) 5 considers p Pl 1 angle to grain uld verify capacity hanical connection at joint(s) 5. SP connectors reco ing walls due to UP ion is for uplift only	where fit betw arallel t formula of beari (by oth commen LIFT at and do	a rectangle veen the bott a. Building ng surface. ers) of truss t ded to conne jt(s) 2 and 5 es not consid	om om to ect der					
FORCES TOP CHORD BOT CHORD WEBS	Max Grav 2=-37 (LC Max Grav 2=489 (LC (Ib) - Maximum Com Tension 1-2=0/16, 2-3=-905// 4-10=-61/42, 4-5=-1 2-6=-342/843, 5-6=- 3-6=0/113, 3-5=-850	22), 5=432 (LC 2) pression/Maximum 267, 3-10=-89/28, 40/97 342/843 //313	9) LC	lateral forces This truss is International R802.10.2 ar DAD CASE(S)	designed in accord Residential Code s nd referenced stand Standard	ance w ections lard AN	ith the 2015 R502.11.1 a ISI/TPI 1.	and					

NOTES

- Wind: ASCE 7-10; Vult=130mph (3-second gust) 1) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber 2) DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.





Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T1A		3	1	Job Reference (optional)	E14607803

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:28 ID:bAx8KKyBgUDAWcRvxhUg7UyzRDX-oSQ_ZKkO?yRdw0N2hrxTW71BBczGOmZcei9mfuyzQV9

Page: 1



3x5 =



Scale = 1:31.1

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 13.9/20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MP	0.77 0.53 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.10 -0.22 0.03	(loc) 4-7 4-7 2	l/defl >861 >381 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 25 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Wind: ASC Vasd=103 Cat. II; Exy Exterior (2 vertical lef forces & M DOL=1.60 2) TCLL: ASC DOL=1.15 snow); Pf= Plate DOL Ct=1.10 3) Unbalance design. 4) This truss load of 12. overhangs	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exo Rigid ceiling directly bracing. (size) 2=0-3-0, 4 Max Horiz 2=61 (LC Max Grav 2=-33 (LC Max Uplift 2=-33 (LC (b) - Maximum Com Tension 1-2=0/16, 2-8=-164/7 3-4=-184/137 2-4=-180/116 CE 7-10; Vult=130mph mph; TCDL=6.0psf; BC o B; Enclosed; MWFR8 o B; Enclosed; MWFR8 o D; Enclosed; MWFR8	athing directly applie cept end verticals. applied or 10-0-0 oc 1=0-1-8 14) 11), 4=-13 (LC 15) 2), 4=271 (LC 2) pression/Maximum 79, 3-8=-64/55, (3-second gust) CDL=6.0psf; h=25ft; 5 (envelope) and C-6 and right exposed; e C for members and hown; Lumber roof live load: Lumbe =20.0 psf (ground w: Lumber DOL=1.15 cp B; Fully Exp.; en considered for thi greater of min roof I coof load of 13.9 ps ther live loads.	5) d or 7) 8) 9) LO C nd er 5 is ive f on	* This truss h on the botton 3-06-00 tall b chord and an Bearing at joi using ANSI/T designer sho Provide mecl bearing plate One RT7A U truss to beari This connect lateral forces This truss is o International R802.10.2 ar	as been designed a chord in all areas y 2-00-00 wide will y other members. Int(s) 4 considers p PI 1 angle to grain uld verify capacity hanical connection at joint(s) 4. SP connectors rec ng walls due to UP ion is for uplift only designed in accord Residential Code s d referenced stand Standard	for a liv where fit betw arallel t formula of beari (by oth ommen LIFT at and do ance w sections dard AN	e load of 20.0 a rectangle reen the bottu o grain value a. Building ng surface. ers) of truss t ded to conne it(s) 2 and 4 es not consic th the 2015 R502.11.1 a SI/TPI 1.	Opsf om to to ter				SEA 0363	RO 22 E.R. A. I.I. ILBER ILBER ILDER	Manual Contraction of the second s



Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T1AGE		1	1	Job Reference (optional)	E14607804

1-3-4

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:28 ID:3MVXXgzpRoL08m06VO?vfiyzRDW-oSQ_ZKkO?yRdw0N2hrxTW71Mfc4SOmZcei9mfuyzQV9

2x4 II

Page: 1





3x5 =

3-0-0

Scale = 1:22.7

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.10	DEFL Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15		BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDI	0.0*	Code	IRC2015/	TPI2014	Matrix-MP							Weight [,] 12 lb	FT = 20%
	10.0											Wolght. 12 lb	11-20/0
LUMBER			5)	This truss ha	s been designed f	or great	er of min roof	live					
TOP CHORD	2x4 SP No.2			load of 12.0 p	ost or 2.00 times the	at root io	bad of 13.9 ps	ston					
WERS	2x4 SP No.2 2x4 SP No.3		6)	Gable require	es continuous bott	om chor	d bearing						
BRACING	274 01 100.0		7)	Gable studs	spaced at 2-0-0 oc	D.	a soarrig.						
TOP CHORD	Structural wood sh	eathing directly applie	dor 8)	* This truss h	as been designed	l for a liv	e load of 20.0	Opsf					
	3-0-0 oc purlins, e	xcept end verticals.		on the bottom	n chord in all areas	s where	a rectangle						
BOT CHORD	Rigid ceiling direct	ly applied or 10-0-0 oc		3-06-00 tall b	y 2-00-00 wide wil	ll fit betv	veen the botto	om					
	bracing.		9)	One RT7A LL	SP connectors rec	commen	ded to conne	ct					
REACTIONS	(size) 2=3-0-0	, 4=3-0-0, 5=3-0-0	• • •	truss to beari	ng walls due to UF	PLIFT at	it(s) 2 and 4.						
	Max Horiz 2=30 (L	C 14), 5=30 (LC 14)	. 21	This connecti	ion is for uplift only	y and do	es not consid	ler					
	(LC 11)	.C 11), 4=-3 (LC 15), t		lateral forces									
	Max Grav 2=175 (LC 2), 4=109 (LC 2), 5	=175 ¹⁰⁾	I his truss is (designed in accord	dance w	ith the 2015 R502 11 1 a	nd					
	(LC 2)			R802.10.2 ar	nd referenced stan	dard AN	ISI/TPI 1.	ina					
FORCES	(lb) - Maximum Co	mpression/Maximum	LOA	AD CASE(S)	Standard								
	1-2-0/16 2-052	45 3-027/25 3-4	72/50										
BOT CHORD	2-4=-48/34	40, 0-9-21/20, 0-4	2/33										
NOTES	2 1 10/01												
1) Wind: AS(CE 7-10: Vult=130mr	h (3-second aust)											
Vasd=103	Smph; TCDL=6.0psf;	BCDL=6.0psf; h=25ft;										IIIII	1111
Cat. II; Ex	p B; Enclosed; MWF	RS (envelope) and C-	C _									I'''H CA	ROUL
Exterior (2	2) zone; cantilever lef	t and right exposed ; e	nd								1	R	A line
forces & N	AWERS for reactions	shown: Lumber								/	5	0. EE89	OT Vin
DOL=1.60) plate grip DOL=1.3	}								4			KAN
2) Truss des	signed for wind loads	in the plane of the tru	SS										
only. For	studs exposed to wir	d (normal to the face)	,							=	- 1	SEA	L 1 2
see Stand	lard Industry Gable E	nd Details as applicab	le,							=	:	0363	22 : =
3) TCLL AS	CF 7-10 [·] Pr=20 0 ps	(roof live load. I umbe	ii. Ar							Ξ		0303	
DOL=1.15	5 Plate DOL=1.15); P	g=20.0 psf (ground								-			1 3
snow); Pf=	=13.9 psf (flat roof sn	ow: Lumber DOL=1.1	5								- 1	N. ENOW	-ERIA S
Plate DOL	_=1.15); Category II;	Exp B; Fully Exp.;									12	A GIN	St. CR N
4) Unbalance	ed snow loads have l	peen considered for th	is									A G	ILBUIN
design.												"IIIIII	(IIII)
5												July	/ 10,2020



Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T1GE		1	1	Job Reference (optional)	E14607805

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WEBS OTHERS BRACING	2x4 SP No.3 2x4 SP No.3 2x4 SP No.3		Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber
TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc	2)	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,
REACTIONS	(size) 2=11-0-0, 8=11-0-0, 9=11-0-0, 10=11-0-0, 11=11-0-0, 12=11-0-0, 13=11-0-0 Max Horiz 2=92 (LC 14), 13=92 (LC 14) Max Uplift 2=-18 (LC 11), 8=-2 (LC 12), 9=-9 (LC 11), 10=-10 (LC 15), 11=-7 (LC 11), 12=-19 (LC 15), 13=-18 (LC 11) Max Grav 2=161 (LC 2), 8=63 (LC 22), 9=168 (LC 22), 10=166 (LC 2), 11=135 (LC 2), 12=232 (LC 2), 13=161 (LC 2)	3) 4) 5) 6)	or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10 Unbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads. All plates are 2x4 MT20 unless otherwise indicated.
FORCES	(lb) - Maximum Compression/Maximum Tension	7) 8)	Gable requires continuous bottom chord bearing. Gable studs spaced at 2-0-0 oc.
TOP CHORD	1-2=0/16, 2-3=-153/86, 3-4=-118/69, 4-17=-96/58, 5-17=-91/63, 5-6=-71/54, 6-7=-52/47, 7-8=-47/34	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.
BOT CHORD	2-12=-110/72, 11-12=-47/52, 10-11=-47/52, 9-10=-47/52, 8-9=-47/52	10)) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 2, 8, 9, 10.
WEBS	6-9=-128/88, 5-10=-123/83, 4-11=-105/71, 3-12=-163/112		11, and 12. This connection is for uplift only and does not consider lateral forces.
NOTES		11)) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
		LO	AD CASE(S) Standard

LIFT at it(s) 2. 8. 9. 10. for uplift only and does ance with the 2015 sections R502.11.1 and dard ANSI/TPI 1.



818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T2	Monopitch	3	1	Job Reference (optional)	E14607806

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:29 ID:9axkUYub969qLlst2eTueSySZwi-GfzMmgI0mFZUYAyFEZSi3LaJY0EY7DplsMvJBKyzQV8

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					8-10)-4						
Scale = 1:30.2										I		
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	0.99	Vert(LL)	0.22	4-7	>485	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.54	4-7	>195	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0	-			-			_	_		Weight: 31 lb	FT = 20%
LUMBER			5) * This truss	has been design	ed for a liv	e load of 20.	0psf					
TOP CHORD	2x4 SP No.1		on the bott	om chord in all are	eas where	a rectangle						

BOT CHORD	2x4 SP N 2x4 SP N	0.2
BRACING	274 01 10	0.0
TOP CHORD	Structural except er	l wood sheathing directly applied, id verticals.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 9-0-12 oc
REACTIONS	(size) Max Horiz Max Uplift Max Grav	2=0-3-8, 4= Mechanical 2=75 (LC 14) 2=-35 (LC 11), 4=-16 (LC 15) 2=403 (LC 2), 4=346 (LC 2)
FORCES	(lb) - Max Tension	imum Compression/Maximum
TOP CHORD	1-2=0/16,	2-8=-231/98, 3-8=-76/68,

- 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections. 6)
- Provide mechanical connection (by others) of truss to 7) bearing plate capable of withstanding 16 lb uplift at joint 4
- 8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 9) International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 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



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3-4=-239/163 2-4=-247/148

BOT CHORD

NOTES

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber 2) DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this 3) design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T2GE	Monopitch Supported Gable	1	1	Job Reference (optional)	E14607807

BRACING

TOP CHORD

BOT CHORD

FORCES

TOP CHORD

BOT CHORD

WEBS

NOTES

REACTIONS (size)

bracing.

Max Grav

Tension

6-7=-43/38

7-8=-41/45

DOL=1.60 plate grip DOL=1.33

1) Wind: ASCE 7-10; Vult=130mph (3-second gust)

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

Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber

Structural wood sheathing directly applied or

2=8-10-4, 7=8-10-4, 8=8-10-4,

9=8-10-4, 10=8-10-4, 11=8-10-4

(LC 15), 9=-8 (LC 11), 10=-17 (LC

2=156 (LC 2), 7=57 (LC 2), 8=178

(LC 2), 9=136 (LC 2), 10=222 (LC

6-0-0 oc purlins, except end verticals.

Max Horiz 2=75 (LC 14), 11=75 (LC 14)

Max Uplift 2=-21 (LC 11), 7=-1 (LC 12), 8=-10

15), 11=-21 (LC 11)

2), 11=156 (LC 2)

(lb) - Maximum Compression/Maximum

4-15=-70/44, 5-15=-65/51, 5-6=-44/38,

2-10=-93/61, 9-10=-41/45, 8-9=-41/45,

5-8=-132/95, 4-9=-106/78, 3-10=-157/115

1-2=0/16, 2-3=-129/75, 3-4=-94/58,

Rigid ceiling directly applied or 10-0-0 oc

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				8-10-4									
Scale = 1:30										I			
Loading	(psf)	Spacing	2-0-0	csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	2	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 37 lb	FT = 20%	
LUMBER TOP CHORD	2x4 SP No.2		2) Truss desi only. For s	gned for wind loa tuds exposed to v	ids in the p wind (norm	ane of the tri al to the face	uss e),						
BOT CHORD	2x4 SP No.2		see Standa	rd Industry Gable	e End Deta	ils as applica	ble,						
WEBS	2x4 SP No.3		or consult o	ualified building	designer as	s per ANSI/T	PI 1.						
OTHERS	2x4 SP No.3		3) TCLL: ASC	E 7-10; Pr=20.0	pst (roof liv	e ioad: Lumb	ber						

~ . . .

- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 7, 8, 9, and 10. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S) Standard



818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	ТЗ	Monopitch	7	1	Job Reference (optional)	E14607808

-0-10-8

0-10-8

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

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2-10-4

2-10-4

2-10-4

Scale = 1:25					I			I						
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 13.9/20.0 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	5/TPI2014	CSI TC BC WB Matrix-MP	0.09 0.06 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 4-7 4-7 2	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 11 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Wind: ASC Vasd=103 Cat. II; Ext Exterior (2 vertical lext Exterior (2 vertical lext DOL=1.16 2) TCLL: ASC DOL=1.15 snow); Pf= Plate DOL Ct=1.10 3) Unbalance design. 4) This truss load of 12. overhangs	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 2-10-4 oc purlins, ex Rigid ceiling directly bracing. (size) 2=0-3-8, 4 Max Horiz 2=29 (LC Max Grav 2=169 (LC (lb) - Maximum Com Tension 1-2=0/16, 2-3=-50/45 2-4=-44/31 CE 7-10; Vult=130mph mph; TCDL=6.0psf; BG DB; Enclosed; MWFRS b) zone; cantilever left a t and right exposed;C-10WFRS for reactions sl plate grip DOL=1.33 CE 7-10; Pr=20.0 psf (l Plate DOL=1.15); Pg= 13.9 psf (flat roof snov =1.15); Category II; Ex ed snow loads have be has been designed for 0 psf or 2.00 times flat non-concurrent with o	athing directly applied xcept end verticals. applied or 10-0-0 oc 4= Mechanical 14) : 11), 4=-4 (LC 15) 2), 4=100 (LC 2) pression/Maximum 5, 3-4=-68/56 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C-C and right exposed ; er C for members and hown; Lumber roof live load: Lumbe =20.0 psf (ground w: Lumber DOL=1.15 cp B; Fully Exp.; een considered for thi : greater of min roof lit roof load of 13.9 psf ther live loads.	5) d or 7) 8) 9) LC nd r s vive ion	* This truss I on the bottor 3-06-00 tall It chord and ar Refer to gird Provide mec bearing plate 4. One RT7A L truss to bear connection is forces. This truss is International R802.10.2 a DAD CASE(S)	has been designed in chord in all area by 2-00-00 wide wi by other members. er(s) for truss to tr hanical connection a capable of withst ISP connectors re- ing walls due to U is for uplift only and designed in accor Residential Code ind referenced star Standard	I for a liv s where ill fit betw uss conr h (by oth anding 4 commen PLIFT at I does no dance w sections ndard AN	e load of 20.0 a rectangle veen the botto nections. ers) of truss t l b uplift at jo ded to conne ; jt(s) 2. This ot consider la ith the 2015 a R502.11.1 a ISI/TPI 1.	Opsf om int teral and				SEA 0363	L 22 EEFRERING 10,2020	and an and the second sec

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July 10,2020

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T3GE	Monopitch Supported Gable	1	1	Job Reference (optional)	E14607809

-0-10-8

0-10-8

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

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2x4 II

2-10-4

2-10-4

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3x5 =

2-10-4

Scale = 1:22.6

Loading	(psf) 20.0	Spacing Plate Grip DOI	2-0-0 1 15		CSI TC	0 09	DEFL Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 244/190
Snow (Pf/Pa)	13 9/20 0	Lumber DOI	1 15		BC	0.06	Vert(CT)	n/a	-	n/a	999		210,000
TCDL	10.0	Rep Stress Incr	YES		WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/T	PI2014	Matrix-MP	0.00		0.00	-				
BCDL	10.0											Weight: 11 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 2-10-4 oc purlins, e Rigid ceiling directly bracing. (size) 2=2-10-4, Max Horiz 2=29 (LC Max Uplift 2=-31 (LC LC 11) Max Gray 2-189 (LC	athing directly applied xcept end verticals. applied or 10-0-0 oc , 4=2-10-4, 5=2-10-4 14), 5=29 (LC 14) 2 11), 4=-3 (LC 15), 5	5) T la 6) G 7) G 1 or 8) * 9) C =-31 la 169 10) T	his truss has bad of 12.0 p overhangs no Gable require Gable studs s This truss h no the bottom I-06-00 tall b hord and an One RT7A U truss to bearin his connecti ateral forces.	s been designed for sf or 2.00 times fla in-concurrent with is continuous botto paced at 2-0-0 oc as been designed o chord in all areas y 2-00-00 wide will y other members. SP connectors recong walls due to UP on is for uplift only lesigned in accord	or great at roof k other liv om chor for a liv where I fit betw ommen PLIFT at and do lance w	er of min roof pad of 13.9 ps re loads. d bearing. e load of 20.0 a rectangle veen the botto ded to conner jt(s) 2 and 4. es not consid ith the 2015	live sf on)psf om ct ler					
	Max Grav 2=169 (LC (LC 2)	C 2), 4=103 (LC 2), 5=	=169 Ir R	nternational	Residential Code s	sections	R502.11.1 a	nd					
FORCES	(lb) - Maximum Com	pression/Maximum	LOAI	D CASE(S)	Standard								
	1-2-0/16 2-3-50/4	5 3-168/56											
	1-2=0/10, 2-3=-30/4	5, 5-4=-00/50											
BOTCHORD	2-4=-44/31												
NOTES		(a											
1) Wind: AS Vasd=10: Cat. II; Ex Exterior (2 vertical le forces & 1 DOL=1.60	CE /-10; Vult=130mph Bmph; TCDL=6.0psf; B p; B; Enclosed; MWFR 2) zone; cantilever left i ft and right exposed;C- MWFRS for reactions s 0 plate grip DOL=1.33	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C-C and right exposed ; er C for members and hown; Lumber) nd							4	in the	HTH CA	ROLINI
 Truss de only. For see Stand or consult 	signed for wind loads in studs exposed to wind dard Industry Gable En qualified building desi	n the plane of the trus I (normal to the face), d Details as applicabl gner as per ANSI/TPI	e, 1.							THIN .		SEA 0363	L 22
 TCLL: AS DOL=1.15 snow); Pf Plate DOI Ct=1.10 Unbalance dopiar 	or consult qualined building designer as per ANSI/TPT1. TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10 Unbalanced snow loads have been considered for this												
aesign.												July	10,2020

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

Job	Truss	Truss Type	Qty Ply		164 Crossings-Roof	
21020047-A	T4	Common	7	1	Job Reference (optional)	E14607810

Loading

TCDL

BCLL

BCDL

WEBS

WEBS

FORCES

WEBS

NOTES

LUMBER

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:30 ID:5z3UuEwshjPYa20FA3VMjtySZwg-GfzMmgI0mFZUYAyFEZSi3LaKY0HD76NIsMvJBKyzQV8 Page: 1



- Unbalanced roof live loads have been considered for 1) this design
- Wind: ASCE 7-10; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

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



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Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T4A	Common	10	1	Job Reference (optional)	E14607811

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Page: 1



BCDL	10.0									
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.1 *Excep 2x4 SP 2400F 2.0E No.1, 17-13:2x4 SP 2x4 SP No.2 *Excep Structural wood she except end verticals. Rigid ceiling directly bracing Except	t* 1-3:2x4 SP No.2 *Except* 12-16:2x4 SP No.2 t* 9-8,15-14:2x4 SP No.3 athing directly applied, applied or 10-0-0 oc	2) 3)	Wind: ASCE Vasd=103mp Cat. II; Exp E Exterior (2) z vertical left a forces & MW DOL=1.60 pl TCLL: ASCE DOL=1.15 Pl snow); Pf=13	ond gust) .0psf; h=25ft; slope) and C-C ht exposed ; end tembers and Lumber e load: Lumber ssf (ground ber DOL=1.15					
REACTIONS FORCES	6-0-0 oc bracing: 13 (size) 9= Mecha Max Horiz 20=254 (L Max Grav 9=1564 (L (lb) - Maximum Com Tension	-17 nical, 20=0-3-8 C 12) C 26), 20=1617 (LC 25) pression/Maximum	4) 5)	Plate DOL=1 Ct=1.10 This truss ha load of 12.0 overhangs n 200.0lb AC u 16-10-0 from	.15); Category II; Exp B; F is been designed for great past or 2.00 times flat roof k on-concurrent with other lin init load placed on the bott uleft end supported at two	ully Exp.; er of min roof live pad of 13.9 psf on /e loads. om chord, points 5-0-0				
TOP CHORD	1-2=0/43, 2-3=-2137 4-5=-1988/165, 5-6= 6-7=-1879/87, 7-8=-2 2-20=-1521/153, 8-9	 43, 2-3=-2137/60, 3-4=-1927/90, 988/165, 5-6=-1974/165, 6) 879/87, 7-8=-2082/56, 7) 1521/153, 8-9=-1469/104	1-2=0/43, 2-3=-2137/60, 3-4=-1927/90, 4-5=-1988/165, 5-6=-1974/165, 6) / 6-7=-1879/87, 7-8=-2082/56, 7)	 apart. All plates are 3x5 MT20 unless otherwise indicated. * This truss has been designed for a live load of 20.0psf on the bottom chard in all areas where a rectangle. 	se indicated. e load of 20.0psf					
BOT CHORD	19-20=-232/701, 18- 16-18=0/1364, 16-2 15-22=0/1364, 12-22 10-11=0/1644, 9-10= 14-23=-82/0, 14-24=	19=0/1829, 1=0/1364, 15-21=0/1364, 2=0/1364, 11-12=0/1364, =-67/279, 17-23=-82/0, 82/0, 13-24=-82/0	8) 9)	3-06-00 tall b chord and ar Refer to gird This truss is International	y 2-00-00 wide will fit betw yy other members, with BC er(s) for truss to truss conr designed in accordance w Residential Code sections	when the bottom DL = 10.0psf. ections. ith the 2015 ith The 2015	4			
WEBS	6-10=-186/15, 4-19= 8-10=0/1419, 4-18=- 5-17=0/987, 5-13=0/ 6-11=-423/305, 14-1	-128/11, 2-19=0/1252, 459/304, 17-18=-42/846, 953, 11-13=-41/812, 5=-98/0	LO	R802.10.2 and referenced standard ANSI/TPI 1. DAD CASE(S) Standard						
NOTES										
1) Unbalanc	ed roof live loads have	been considered for								

this design.

Scale = 1:82.7

Loading

TCDL

BCLL

TCLL (roof)

Snow (Pf/Pg)



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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type		Ply	164 Crossings-Roof	
21020047-A	T4GE	Common Supported Gable	2	1	Job Reference (optional)	E14607812

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:30 ID:WXkdXFyk_en7RWlqrB23LVySZwd-IrXk_0leXZhK9JXRoGzxcY6gZPmRsdwv50esjmyzQV7

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Scale =	1:73
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Plate Offsets (X, Y):	[7:0-2-4,0-2-4], [17:0-2-4,0-2-4]	

	() , 													
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	13	(psf) 20.0 .9/20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015/TPI2014	CSI TC BC WB Matrix-N	0.20 0.10 0.20 MR	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a 0.01	(loc) - - 24	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 268 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD	2x4 SP No 2x4 SP No 2x4 SP No 2x4 SP No 41-5,42-4,4 No.3 Structural	0.2 0.2 0.3 0.2 *Excep 43-3,27-19 wood shea	t* 0,26-20,25-21:2x4 SF athing directly applied	, I or	Max Grav	24=222 (LC 9), ; 26=169 (LC 26), 28=166 (LC 26), 30=166 (LC 26), 33=171 (LC 26), 35=174 (LC 25), 38=166 (LC 25), 40=166 (LC 25), 42=167 (LC 2), 44=312 (LC 10)	25=203 (LC 1 27=165 (LC 29=166 (LC 31=166 (LC 34=229 (LC 37=165 (LC 39=166 (LC 41=166 (LC 41=268 (LC 1	12), 26), 26), 26), 14), 25), 25), 25), 11),	NOTES	i	12-34 10-37 6-40= 3-43= 14-31 16-29 19-27 21-25	=-313/204, 11-35 =-134/90, 9-38=- 128/82, 5-41=-1 -150/130, 13-33 =-134/90, 15-30= =-128/82, 18-28= =-127/81, 20-26= =-159/124	=-134/63, 126/80, 8-39=- 27/81, 4-42=-1 -131/63, -126/80, -128/82, -131/83,	128/82, 31/83,
BOT CHORD	Rigid ceilir	ng directly	applied or 6-0-0 oc	FORCES	(lb) - Maximum Compression/Maximum					 b) on balanced root live roads have been considered for this design. b) wind ASCE 7-10: Vult=130mph (3-second dust) 				
WEBS	1 Row at n (size)	nidpt 24=33-8-0 27=33-8-0 30=33-8-0 34=33-8-0	12-34, 11-35, 10-37, 13-33, 14-31), 25=33-8-0, 26=33-{ , 28=33-8-0, 29=33-{), 31=33-8-0, 33=33-{), 35=33-8-0, 37=33-{	TOP CHORD 3-0, 3-0, 3-0,	2-44=-205 3-4=-168/ 6-7=-121/ 9-10=-200 11-12=-29 13-14=-25 15-16=-15	5/143, 1-2=0/43, 2 161, 4-5=-146/14 120, 7-8=-119/13 0/236, 10-11=-25 94/347, 12-13=-2 52/298, 14-15=-2 52/298, 16-17=-11	2-3=-245/215 2, 5-6=-133/ 4, 8-9=-152/ 2/298, 94/347, 00/236, 02/120	5, 135, 178,	Vas Cai Ext ver forc DO	sd=103n t. II; Exp rerior (2) tical left ces & M rL=1.60	nph; TC B; Enc zone; and rig WFRS plate g	CDL=6.0psf; BCE closed; MWFRS (cantilever left and ht exposed;C-C for reactions sho rip DOL=1.33	L=6.0psf; h=25 envelope) and I right exposed or members a wn; Lumber	5ft; C-C I ; end nd
	Max Horiz Max Uplift	38=33-8-C 41=33-8-C 44=256 (L 24=-137 (l 26=-24 (L 28=-29 (L 30=-29 (L 30=-29 (L 33=-19 (L) 33=-19 (L) 33=-30 (L) 41=-31 (L) 43=-223 (l	i, 39=33-8-0, 40=33-ξ , 42=33-8-0, 43=33-ξ) C 12) LC 12), 25=-162 (LC C 14), 27=-31 (LC 14 C 14), 27=-31 (LC 14 C 14), 31=-35 (LC 14 C 14), 33=-29 (LC 13 C 13), 40=-29 (LC 13 C 13), 40=-29 (LC 13 LC 10), 44=-232 (LC	9), BOT CHORD), .),),),),),),), 11)	17-18=10 19-20=-87 21-22=-17 22-24=-15 43-44=-11 41-42=-11 39-40=-11 37-38=-11 33-34=-11 33-34=-11 31-32=-11 29-30=-11 27-28=-11	14/106, 18-19=-7 7/82, 20-21=-112/ 7/148, 22-23=0/- 51/119 17/138, 42-43=-1 17/138, 42-43=-1 17/138, 38-39=-1 17/138, 38-39=-1 17/138, 33-33=-1 17/138, 30-31=-1 17/138, 20-31=-1 17/138, 20-27=-1 17/138, 24-25=-1	7/79, 102, 13, 17/138, 17/138, 17/138, 17/138, 17/138, 17/138, 17/138, 17/138, 17/138, 17/138,					SEA 0363	ROUT L 22 LBERUT	and an an an an an

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Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	7-A T4GE Common Supported Gable		2	1	Job Reference (optional)	E14607812

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely
- braced against lateral movement (i.e. diagonal web).9) Gable studs spaced at 2-0-0 oc.
- 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.
- 11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 44, 24, 35, 37, 38, 39, 40, 41, 42, 43, 33, 31, 30, 29, 28, 27, 26, and 25. This connection is for uplift only and does not consider lateral forces.
- 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	Т5	Piggyback Base	1	1	Job Reference (optional)	E14607813

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:31 ID:qu_YDP3rYFLu5?dez48n_OyzRDO-D157BMmGItpBnT6dMzUA8mfkrpz9b3h2KgOQFDyzQV6 Page: 1

1-5-4 -0-10-8 0-10-8 1-5-4 21-6-8 <u>6-3-0</u> 4-9-12 20-8-0 15-2-0 8-11-0 5-6-0 0-10-8 8x10 🏿 4x6、 5 4 16¹² 10-0-0 3x10 3 5x6= 6 2x4 2 7 1-8-0 -0-0 X 8 12 11 10 14 9 X 13 2x4 II 3x5= 3x8= 3x5 🍫 3x5= 5x6= **∟**12 -3-8 0-3-8 6-4-12 15-0-4 20-8-0 8-7-8 5-7-12 5-1-4 0-3-8 1-0-0

Scale = 1:76.2

Plate Offsets (X, Y): [3:0-2-9,0-1-8], [4:0-2-13,Edge], [5:0-3-2,0-2-0], [6:0-3-8,0-0-12]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 18.9/20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MSH	0.68 0.65 0.30	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.17 -0.29 0.03	(loc) 9-11 9-11 8	l/defl >999 >844 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 149 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design	2x4 SP No.2 *Excep 2.0E 2x4 SP No.2 2x4 SP No.2 *Excep SP No.3 Structural wood shea 6-0-0 oc purlins, exc 2-0-0 oc purlins (6-0 Rigid ceiling directly bracing. 1 Row at midpt (size) 8=0-3-8, 1 Max Horiz 13=-242 (I Max Grav 8=876 (LC (Ib) - Maximum Com Tension 1-2=0/62, 2-3=-117/ 4-5=-431/230, 5-6=-7 2-13=-157/95, 6-8=4 12-13=-354/904, 11- 10-11=-82/525, 10-1 9-14=-82/525, 8-9=- 3-12=-206/588, 3-11 4-9=-151/101, 5-9=0 6-9=-56/431	t* 4-5:2x4 SP 2400F t* 12-3,13-2,13-3,8-6 athing directly applie- cept end verticals, ar -0 max.): 4-5. applied or 9-11-9 oc 4-9 3=0-3-8 LC 11) c 2), 13=876 (LC 2) pression/Maximum 100, 3-4=-826/232, 788/205, 6-7=0/62, 837/209 12=-246/653, 4=-82/525, 111/204 =-265/226, 4-11=0/3 /213, 3-13=-1316/28 been considered for	2) 5:2x4 d or 3) d 4) 5) 6) 7) 8) 2, 9) LC	Wind: ASCE Vasd=103mp Cat. II; Exp E Exterior (2) z vertical left at forces & MW DOL=1.60 pl TCLL: ASCE DOL=1.15 Pl snow); Pf=18 Plate DOL=1 Ct=1.10, Lu= This truss ha load of 12.0 g overhangs nu Provide aded * This truss h on the bottom 3-06-00 tall b chord and ar Bearing at jo using ANSI/T designer sho This truss is International R802.10.2 ar Graphical pu or the orienta bottom chorc	7-10; Vult=130mph b; TCDL=6.0psf; E ; Enclosed; MWFR one; cantilever left dright exposed;C FRS for reactions s ate grip DOL=1.33 7-10; Pr=20.0 psf ate DOL=1.15); Pg .9 psf (flat roof snc .15); Category II; E 50-0-0 s been designed for bef or 2.00 times flat on-concurrent with uate drainage to p as been designed in chord in all areas y 2-00-00 wide will y cher members, nt(s) 13 considers Pl 1 angle to grain uld verify capacity designed in accord Residential Code s d referenced stand tion of the purlin al Standard	n (3-sec 3CDL=6 3S (envi and rig -C for n shown; (roof liv =20.0 p w: Lum Exp B; F or greated ta roof liv were to for a liv where for mula of beari ance w sections dard AN does no long the	ond gust) .0psf; h=25ft elope) and C ht exposed; nembers and Lumber e load: Lumtb osf (ground ber DOL=1.' ully Exp.; er of min rool ber DOL=1.' ully Exp.; er of min rool ad of 13.9 p re loads. water pondin e load of 20. a rectangle veen the bott DL = 10.0ps to grain valu a. Building ng surface. ith the 2015 .R502.11.1 a [SI/TPI 1. bt depict the set top and/or	; -C end 5 5 f live sf on g. Dpsf c. pom f. le				SEAL 03632	ROL 1.1.1	
										3		A C AGINE	EREKIN	



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Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T5GR	Piggyback Base Girder	1	2	Job Reference (optional)	E14607814

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:31 ID:H4DeC_2l55n_OIMMJtCxgBySZwV-D157BMmGltpBnT6dMzUA8mfh?p2MbwG2KgOQFDyzQV6

Page: 1



Scale = 1:66.2

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Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL	(psf) 20.0 18.9/20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC20	15/TPI2014	CSI TC BC WB Matrix-MSH	0.86 0.38 0.84	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.10 -0.23 0.02	(loc) 16-17 16-17 12	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS MT20HS	GRIP 244/190 244/190 187/143	
BCDL	10.0											Weight: 492 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x10 SP 2400F 2.0E 2x4 SP No.2 *Except 12-11:2x4 SP No.3 2x4 SP No.3 *Except 23-7,17-25,19-26,21 Structural wood shea 3-1-4 oc purlins, exc 2-0-0 oc purlins, (5-4 Rigid ceiling directly	t* 14-11:2x4 SP No. t* -3:2x4 SP No.2 athing directly applie ept -3 max.): 4-8. applied or 10-0-0 oc	1, d or 1	VEBS 4 2 1 1 5 1 1 00TES 1 2-ply truss to (0.131"x3") n Top chords c	4-20=0/5914, 4-26 24-25=-435/0, 23- 3-14=0/5246, 14-2 1-28=0/4344, 11- 15-23=0/199, 6-24 5-25=-29/185, 17- 3-21=-37/176, 2-2 10-28=-579/19, 13 be connected tog ails as follows: connected as follo	=-289/9, 24=-516/ 7=0/451 12=-607 =-232/0, 25=-86/8 2=-318/1 -28=-107 gether with ws: 2x4 -	25-26=-543/ 0, 14-23=-52(1, 27-28=0/4 9/0, 7-23=0/2 16-24=-114/2 7, 19-26=0/3 17, 9-27=0/3 78/0 th 10d 1 row at 0-9-	0, 0/0, 111, 04, 27, 95, 98, 0	 8) All 9) All 10) Gat 11) * Tr on 1 3-00 cho 12) WA thai 13) This Inte R80 14) Gra 	blates ar blates ar ble studs his truss he botto 6-00 tall rd and a RNING: n input b s truss is rrnationa)2.10.2 a nohical po	e MT2 e 2x4 l space has be m cho by 2-0 ny oth Requi earing desig l Resid und refu	0 plates unless o MT20 unless oth d at 2-0-0 oc. en designed for rd in all areas wh 0-00 wide will fit l er members. red bearing size : size. ned in accordanc lential Code sect erenced standard presentation doe	therwise indic arwise indicate a live load of 2 ere a rectangl between the b at joint(s) 1 gr with the 201 ions R502.11. d ANSI/TPI 1.	ated. ed. 20.0psf le lottom eater 15 .1 and he size
	bracing.			Bottom chore	is connected as fo	llows: 2	(10 - 2 rows		or t	he orient	ation of	of the purlin along	the top and/c	ne size
JOINTS	1 Brace at Jt(s): 23, 24, 25, 27			staggered at	0-7-0 oc.		10 21000		bott	om chor	d.			
REACTIONS FORCES TOP CHORD	(size) 1=0-3-8, (Max Horiz 1=177 (LC Max Grav 1=8664 (L (lb) - Maximum Com Tension 1-2=-7859/0, 2-3=-79 4-5=-4484/0, 8-9=-7 10-11=-7115/0 1-32=0/4691 22-32	req. 0-3-9), 12=0-3-6 2 29) C 2), 12=7878 (LC 2 pression/Maximum 965/0, 3-4=-7794/0, 484/0, 6-7=-4484/0, 131/0, 9-10=-7512/0 -0/4691, 22-33=0/46	8 2 2) 3 1, 2	 Web connect All loads are except if note CASE(S) see provided to d unless otherw Unbalanced i this design. Wind: ASCE Vasd=103mp 	ted as follows: 2x4 considered equal ad as front (F) or b tition. Ply to ply co listribute only load wise indicated. roof live loads hav 7-10; Vult=130mp h; TCDL=6.0psf;	4 - 1 row by applied back (B) f nnection s noted a re been o bh (3-sec BCDL=6	at 0-9-0 oc. d to all plies, ace in the LC s have been as (F) or (B), considered for ond gust) .0psf; h=25ft;	DAD	15) Use 12- 2-0 18- cho 16) Fill	USP TH 10d x 1-1 -0 oc ma 8-12 to c rd. all nail h	HD26 (1/2 nai x. star onnec oles w	With 18-16d nail: Is into Truss) or e ting at 0-8-12 fro t truss(es) to bac here hanger is in the call of the call of the call here hanger is in	s into Girder & equivalent spa m the left end k face of botto contact with I	iced at to om lumber.
	21-33=0/4691, 20-21 19-34=0/4793, 18-19 17-35=0/4793, 16-35 15-36=0/4793, 14-15 37-38=0/0, 13-38=0/	=0/4691, 20-34=0/4 =0/4691, 20-34=0/4 =0/4793, 17-18=0/4 =0/4793, 16-36=0/4 5=0/4793, 14-37=0/0 0, 12-13=0/0	1793, 1794, 1795, 1705,1	Cat. II; Exp B left and right exposed; Lur Truss desigr only. For stu see Standarc or consult qu TCLL: ASCE DOL=1.15 Pl snow); Pf=18 Plate DOL=1 Ct=1.10, Lu= ') Provide adec	b; Enclosed; MWF exposed; end ve mber DOL=1.60 p hed for wind loads ds exposed to wird l Industry Gable E alified building de 7-10; Pr=20.0 ps ate DOL=1.15); P .9 psf (flat roof sr .15); Category II; .50-0-0 juate drainage to	RS (envertical left late grip in the pl in the pl ind Detai signer as f (roof liv g=20.0 p ow: Lum Exp B; F prevent v	elope); cantile and right DOL=1.33 ane of the tru al to the face) Is as applicat per ANSI/TF e load: Lumbu sf (ground ber DOL=1.1: ully Exp.; vater ponding	ever ss j, ple, ple, pl 1. er 5		Contraction of the second s		SEA 0363	L 22 ILBER	Munning

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 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 **ANS/TP11 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

July 10,2020

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T5GR	Piggyback Base Girder	1	2	Job Reference (optional)	E14607814
Carter Components (Sanford), Sa	nford, NC - 27332,	Run: 8.33 S May 6 2	020 Print: 8.3	330 S May 6	2020 MiTek Industries, Inc. Fri Jul 10 15:42:31	Page: 2

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:31 ID:H4DeC_2l55n_OIMMJtCxgBySZwV-D157BMmGltpBnT6dMzUA8mfh?p2MbwG2KgOQFDyzQV6

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate 1) Increase=1.15
 - Uniform Loads (lb/ft)

Vert: 1-4=-48, 4-8=-58, 8-11=-48, 12-29=-20 Concentrated Loads (lb)

- Vert: 18=-1287 (B), 14=-1287 (B), 31=-1290 (B), 32=-1287 (B), 33=-1287 (B), 34=-1287 (B), 35=-1287 (B), 36=-1287 (B), 37=-1287 (B), 38=-1287 (B)



Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T5SE	Piggyback Base Structural Gable	1	1	Job Reference (optional)	E14607815

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:33 ID:7FvCho8EvPEuR4f_t2mQmsyzRDH-hEfVOinu3Ax2Pdhqwh0PhzCv1DKnKS0CZK7zofyzQV5

Page: 1



Plate Offsets (X, Y): [3:0-2-9,0-1-8], [4:0-4-12,0-1-8], [9:0-2-13, Edge], [12:0-3-0,0-0-12]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 18.9/20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MSH	0.65 0.62 0.55	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.17 -0.27 0.02	(loc) 15-17 15-17 14	l/defl >999 >650 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 183	GRIP 244/19 Ib FT = 2	90 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 *Excep 18-3,19-2,19-3,14-12 2x4 SP No.3 *Excep No.2 Structural wood shea 6-0-0 oc purlins, exc 2-0-0 oc purlins, exc	t* 2:2x4 SP No.3 t* 21-8,24-10:2x4 SP athing directly applied xept end verticals, an 0-0 max.): 4-9.	We dor NC d 1)	EBS 3 4 2 1 3 2 2 5 6 5 7 ES Unbalanced a this design.	3-18=-206/463, 3-1 1-20=-502/134, 20- 22-23=-522/140, 21 5-21=-553/154, 9- 3-19=-934/150, 15- 24-25=-341/314, 12 5-20=-30/28, 8-21= 3-23=-64/38, 10-24 roof live loads have	7=-304, 23=-48 -22=-5- 15=-50 24=-36 -25=-3: -24/12, =-93/80	239, 4-17=-4 8/113, 44/159, 1/194, 6/335, 32/306, 7-22=-50/28, 0, 11-25=-55/3	, , 33 97	10) * Th on t 3-00 choi 11) Bea usin desi 12) One trus This latei 12) Thi	is truss he botto 5-00 tall rd and a ring at ju g ANSI/ igner sh RT7A I s to bea s connec ral force	has be m cho by 2-0 ny oth pint(s) TPI 1 ould ve JSP ce ring we ction is s.	een designed fi rd in all areas 10-00 wide will er members, w 19 considers p angle to grain erify capacity c onnectors reco alls due to UPL for uplift only a	or a live loa where a re- fit between vith BCDL = varallel to g formula. B of bearing s mmended JFT at jt(s) and does r	ad of 20.0psf ctangle 1 the bottom = 10.0psf. grain value building surface. to connect) 14 and 15. not consider bo 2015
BOT CHORD WEBS JOINTS REACTIONS	Rigid ceiling directly bracing. 1 Row at midpt 1 Brace at Jt(s): 20, 21, 22, 24 (size) 14=6-3-8, Max Horiz 19=-242 (I Max Uplift 14=-28 (Li Max Grav 14=125 (Li 19=599 (I	applied or 6-0-0 oc 9-15 15=6-3-8, 19=0-3-8 LC 11) C 29), 15=-37 (LC 13 C 30), 15=1068 (LC C 29)	2)) 3) 2),	Wind: ASCE Vasd=103mp Cat. II; Exp B Exterior (2) z vertical left ar forces & MW DOL=1.60 pla Truss design only. For stu see Standard	7-10; Vult=130mpf h; TCDL=6.0psf; B ;; Enclosed; MWFR one; cantilever left nd right exposed;C FRS for reactions s ate grip DOL=1.33 need for wind loads i ds exposed to wind I Industry Gable Er	n (3-sec SCDL=6 SS (envi- and rig -C for n shown; n the p d (norm nd Deta	cond gust) .0psf; h=25ft elope) and C ht exposed ; nembers and Lumber lane of the tru al to the face ils as applica	; -C end uss), ble,	13) This Inte R80 14) Gra or th bott	truss is rnationa 2.10.2 a phical p ne orient om chor CASE(S)	a desig I Resid and ref urlin re cation o d.) Sta	ned in accorda dential Code se erenced stand opresentation c of the purlin alc ndard	Ince with the sections R50 and ANSI/T loes not de ang the top	10 2015 02.11.1 and IFI 1. spict the size and/or
FORCES TOP CHORD BOT CHORD	(b) - Maximum Com Tension 1-2=0/62, 2-3=-70/13 4-5=-19/100, 5-6=-19 7-8=-19/100, 8-9=-19 10-11=-125/215, 11- 12-13=0/62, 2-19=-1 18-19=-354/699, 17- 16-17=-84/336, 16-2 15-26=-84/336, 14-1	39, 3-4=-507/122, 3/100, 6-7=-19/100, 9/100, 9-10=-44/277, 12=-161/230, 12/132, 12-14=-87/11 18=-246/503, 6=-84/336, 5=-60/134	4) 01 5) 6) 7) 8) 9)	or consult qu. TCLL: ASCE DOL=1.15 Pl snow); Pf=18 Plate DOL=1 Ct=1.10, Lu= This truss ha load of 12.0 p overhangs no Provide adeq All plates are Truss to be ft braced again Gable studs s	alified building desi 7-10; Pr=20.0 psf ate DOL=1.15); Pg 9.9 psf (flat roof sno .15); Category II; E 50-0-0 s been designed fo osf or 2.00 times fla on-concurrent with juate drainage to p 2x4 MT20 unless at lateral movemen spaced at 2-0-0 oc.	igner as (roof liv =20.0 p w: Lum ixp B; F or great at roof lo other liv revent v otherwi one fac ot (i.e. d	s per ANSI/TI e load: Lumb sof (ground iber DOL=1.1 'ully Exp.; er of min roof bad of 13.9 p: <i>ve</i> loads. water ponding se indicated. e or securely iagonal web)	PI 1. F5 Iive sf on g.		A DITTURE		SE 036	ARO AL 322 NEER GILB	A A A A A A A A A A A A A A A A A A A



GILDIN July 10,2020

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	Т6		1	1	Job Reference (optional)	E14607816

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:33 ID:bRTau89sgiMI3DEARIIfJ4yzRDG-9QDtc2oWqU3v0nG0TOXeDBk6mdkN3zhLn_tWK5yzQV4 Page: 1



1-3-8 0-3-8 H-+ 0-3-8 0-3-8 1-0-0 14-8-0 14-4-8 13-4-8 7-4-0 6-0-8 6-0-8 1-0-0 0-3-8

Scale = 1:83.1	
Plate Offsets (X, Y):	[3:0-2-9,0-1-8], [5:0-2-9,0-1-8]

,		-												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 13.9/20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MSH	0.52 0.28 0.26	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.02 -0.06 0.05	(loc) 9-10 9-10 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 116 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this desigr 2) Wind: ASC Vasd=103 Cat. II; Ext Exterior (2 vertical lef forces & M DOL=1.60	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep No.2 Structural wood she 6-0-0 oc purlins, exx Rigid ceiling directly bracing. (size) 8=0-3-8, 1 Max Horiz 12=-279 (Max Uplift 8=-7 (LC Max Grav 8=636 (LC (lb) - Maximum Com Tension 1-2=0/62, 2-3=-98/2: 4-5=-526/201, 5-6=- 2-12=-101/239, 6-8= 11-12=-381/870, 10- 9-10=-96/473, 8-9=- 4-10=-128/408, 5-10 3-10=-389/310, 3-11 3-12=-1177/339, 5-8 ed roof live loads have be CE 7-10; Vult=130mph mph; TCDL=6.0psf; Bf b B; Enclosed; MWFR: b B; Enclosed; MWFR: b CI = 2000 CL = 1.33	t* 10-4,10-5,10-3:2x4 athing directly applie cept end verticals. applied or 9-6-9 oc 12=0-3-8 LC 11) 13), 12=-7 (LC 14) C 2), 12=636 (LC 2) pression/Maximum 26, 3-4=-517/201, 100/198, 6-7=0/62, -114/212 -11=-271/602, 125/674)=-349/289, 5-9=-32/4 =-208/632, 3=-1241/343 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C-C and right exposed ; e C for members and hown; Lumber	3) 4 SP 4) d or 5) 6) 7) 8) 495, LC	TCLL: ASCE DOL=1.15 P snow); Pf=13 Plate DOL=1 Ct=1.10 This truss ha load of 12.0 j overhangs m * This truss f on the bottor 3-06-00 tall b chord and ar Bearing at jo using ANSI/T designer sho One RT7A U truss to bear This connect lateral forces This truss is International R802.10.2 ar	7-10; Pr=20.0 psf late DOL=1.15); Pt 3.9 psf (flat roof sm .15); Category II; I s been designed fi porton concurrent with has been designed in chord in all areas by 2-00-00 wide will yo other members. int(s) 12, 8 conside TPI 1 angle to grain uid verify capacity SP connectors rec ing walls due to UF ion is for uplift only casigned in accord Residential Code ind referenced stan Standard	(roof liv g=20.0 p ow: Lum Exp B; F or greatu at roof lo other liv for a liv s where Il fit betw ers para n formula of beari commen PLIFT at v and do dance w sections dard AN	e load: Lumb sf (ground ber DOL=1.' ully Exp.; er of min rool oad of 13.9 p re loads. e load of 20.1 a rectangle recen the bott lel to grain v a. Building ng surface. ded to conne jt(s) 12 and es not consid ith the 2015 .R502.11.1 a ISI/TPI 1.	er 5 flive sf on Opsf om alue ect 8. der alue				SEA 0363	RO(11 22 EBERTI 10,2020	Annunner.

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 ANS/TP11 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

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	T6GE		1	1	Job Reference (optional)	E14607817

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:33 ID:bRTau89sgiMl3DEARIIfJ4yzRDG-9QDtc2oWqU3v0nG0TOXeDBkCKdnF3_gLn_tWK5yzQV4 Page: 1



Scale = 1:80.8	
Plate Offsets (X, Y):	[13:0-3-0,0-1-4], [19:0-3-0,0-1-4]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 13.9/20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-MSH	0.17 0.09 0.20	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 19-20 13-14 12	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 132 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 *Excep No.2 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. 1 Row at midpt (size) 12=14-8-(15=14-8-(18=14-8-(8=14-8-(18=14-8-(18=-14-8-(18=-14-8-(18=-14-8-(18=-14-8-(18=-14-8-(18=-14-14-14-14-14-14-14-14-14-14-14-14-14-	athing directly applied cept end verticals. applied or 10-0-0 oc 6-16 0, 13=14-8-0, 14=14-8 0, 16=14-8-0, 17=14-8 0, 16=14-8-0, 20=14-8 LC 11) C 10), 13=-134 (LC 1 LC 14), 15=-96 (LC 1 2 12), 17=-97 (LC 13), LC 13), 19=-346 (LC LC 11) LC 25), 13=164 (LC 2 LC 26), 15=204 (LC 2 LC 26), 15=204 (LC 2 LC 25), 19=434 (LC 1 LC 12) pression/Maximum 08, 3-4=-162/152, 269/323, 6-7=-269/32 131/111, 9-10=-90/10 (38/131, 10-12=-140/ -17=-195/235,	Wi SP N(1) d or 2) 8-0, 8-0, 3-0 3) 4), 4), (10), 4) 6), 6), 6), 6), 5), 5), 5), 7) 23, 8) 130 9)	EBS 3 TES Unbalanced 1 this design. Wind: ASCE Vasd=103mp Cat. II; Exp E Exterior (2) z vertical left auf forces & MW DOL=1.60 pl. Truss design only. For stu see Standarc or consult qu TCLL: ASCE DOL=1.15 Pl snow); Pf=13 Plate DOL=1 Ct=1.10 This truss ha load of 12.0 p overhangs no All plates are Truss to be fn braced again Gable studs : * This truss ha on the bottom 3-06-00 tall b	3-20=-516/442, 9-1: 5-16=-442/299, 5-1: 1-18=-231/214, 3-1: 7-15=-210/180, 8-1: 7-15=-210/180, 8-1: 7-10; Vult=130mph bh; TCDL=6.0psf; Bi ; Enclosed; MWFR one; cantilever left nd right exposed; C FRS for reactions sist tag grip DOL=1.33 red for wind loads in ds exposed to wind l ndustry Gable Err alified building desist 7-10; Pr=20.0 psf ate DOL=1.15); Pg .9 psf (flat roof sno .15); Category II; E s been designed for soft or 2.00 times flat on-concurrent with 2x4 MT20 unless of ally sheathed from st lateral movemer spaced at 2-0-0 oc. as been designed in a chord in all areas y 2-00-00 wide will	2=-503, 7=-209, 9=-387, 4=-232, 4=-232, 4=-232, 4=-232, 6 CDL=6 S (env, and rig -C for n shown; n the pl d (norm d Deta gner as (roof liv =20.0 p w: Lum xp B; F or greate to roof k other liv one fac to for a liv where fit betw	404, (404, (180, (214, (21	r C end Iss), ole, 11. er 5 live sf on 0psf om	10) One trus 12. con forc 12) One trus 15, not 13) This Inte R80 LOAD C	RTTA I s to bea This cor sider late RT16A s to bea nection i es. RT16A s to bea and 14. conside truss is rnationa i2.10.2 a CASE(S)	JSP cc ring wa nectio eral for USP of ring wa s for u USP of latera desig I Resic nd ref Star	onnectors recom alls due to UPLIF nis for uplift only rces. connectors recom alls due to UPLIF plift only and doe connectors recom alls due to UPLIF onnection is for u inde in accordance dential Code sect erenced standard ndard	nended to connect T at jt(s) 19, 20, an and does not imended to connect T at jt(s) 13. This is not consider late imended to connect T at jt(s) 16, 17, 18 plift only and does e with the 2015 ions R502.11.1 and ANSI/TPI 1.	tral
	15-16=-195/235, 14- 13-14=-195/235, 12-	-15=-195/235, -13=-273/326		chord and an	y other members.							CA. G	ILBERT	

July 10,2020





Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	V1	Valley	1	1	Job Reference (optional)	E14607818

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:34 ID:w6Ql9H_dGZ9ilzUPWKcmz8ySZwa-dcnFpNp8boBmexrC162tmOHLc16NoPTU0ec4sXyzQV3 Page: 1



Scale = 1:72.1

_oading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	тс	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.36	Horiz(TL)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 114 lb	FT = 20%

LUMBER		
TOP CHORD	2x4 SP N	0.2
BOT CHORD	2x4 SP N	0.2
OTHERS	2x4 SP N	o.2 *Except* 13-2,8-6:2x4 SP No.3
BRACING		
TOP CHORD	Structural 6-0-0 oc p	l wood sheathing directly applied or ourlins.
BOT CHORD	Rigid ceili bracing.	ing directly applied or 10-0-0 oc
WEBS	1 Row at	midpt 4-10
REACTIONS	(size)	1=18-9-2, 7=18-9-2, 8=18-9-2, 9=18-9-2, 10=18-9-2, 12=18-9-2, 13=18-9-2
	Max Horiz	1=-260 (LC 9)
	Max Uplift	1=-228 (LC 11), 7=-195 (LC 12), 8=-165 (LC 14), 9=-226 (LC 14), 12=-226 (LC 13), 13=-165 (LC 13)
	Max Grav	1=304 (LC 13), 7=288 (LC 14), 8=347 (LC 25), 9=546 (LC 25), 10=349 (LC 27), 12=547 (LC 24), 13=347 (LC 24)
FORCES	(lb) - Max Tension	imum Compression/Maximum
TOP CHORD	1-2=-452/ 4-5=-222/	(368, 2-3=-243/196, 3-4=-222/206, (206, 5-6=-211/154, 6-7=-452/368
BOT CHORD	1-13=-186 12-14=-18 10-11=-18 9-15=-186	5/249, 13-14=-186/249, 36/249, 11-12=-186/249, 36/249, 9-10=-186/249, 5/249, 8-15=-186/249, 7-8=-186/249
WEBS	4-10=-21 2-13=-363	1/117, 3-12=-455/394, 3/318, 5-9=-455/394, 6-8=-363/318

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- * 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 7, 12, 13, 9, and 8. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2015 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	164 Crossings-Roof	
21020047-A	V2	Valley	1	1	Job Reference (optional)	E14607819

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:34 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-dcnFpNp8boBmexrC162tmOHL7168oRIU0ec4sXyzQV3

Page: 1



Scale = 1:69.3

-														
Loading		(psf)	Spacing	2-0-0		csi		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.15		тс	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	1	3.9/20.0	Lumber DOL	1.15		BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL		10.0	Rep Stress Incr	YES		WB	0.24	Horiz(TL)	0.00	5	n/a	n/a		
BCLL		0.0*	Code	IRC201	5/TPI2014	Matrix-SH								
BCDL		10.0											Weight: 97 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS	2x4 SP N 2x4 SP N 2x4 SP N	0.2 0.2 0.2		3)	Truss design only. For stu see Standard or consult qu TCLL: ASCE	ned for wind loads ids exposed to wir d Industry Gable E alified building des 7-10; Pr=20.0 psi	in the p nd (norm nd Deta signer as f (roof liv	lane of the tru al to the face ils as applical s per ANSI/TF e load: Lumb	uss), ble, Pl 1. er					
TOP CHORD	Structura 6-0-0 oc i	l wood shea ourlins.	athing directly applie	d or	DOL=1.15 P snow); Pf=13	late DOL=1.15); P 3.9 psf (flat roof sn	g=20.0 p low: Lum	osf (ground ber DOL=1.1	5					
BOT CHORD	Rigid ceil bracing.	ing directly	applied or 10-0-0 oc		Plate DOL=1 Ct=1.10	.15); Category II;	Exp B; F	ully Exp.;						
WEBS	1 Row at	midpt	3-7	5	Gable requir	es continuous bott	tom chor	d bearing.						
REACTIONS	(size) Max Horiz Max Uplift Max Grav	1=16-9-2, 7=16-9-2, 1=-231 (L) 1=-53 (LC) 6=-250 (L) 1=232 (LC) 6=537 (LC) 9=537 (LC)	5=16-9-2, 6=16-9-2, 9=16-9-2 C 9) 11), 5=-23 (LC 12), C 14), 9=-250 (LC 13) 2 25), 5=209 (LC 24) 2 25), 7=343 (LC 27) 2 24)	8) 8j	 * This truss h on the bottor 3-06-00 tall b chord and ar One RT7A U truss to bear 6. This connections 	spaced at 4-0-0 or has been designed in chord in all area by 2-00-00 wide wi by other members, SP connectors re- ing walls due to U ection is for uplift of ral forces.	c. d for a liv s where ill fit betv , with BC commen PLIFT at only and	e load of 20.0 a rectangle veen the botto DL = 10.0psf ded to conne i jt(s) 1, 5, 9, a does not	Dpsf om 5. ct and					
FORCES	(lb) - Max Tension	imum Com	pression/Maximum	9]	This truss is International	designed in accore Residential Code	dance w sections	ith the 2015 R502.11.1 a	ind					
TOP CHORD	1-2=-238/ 4-5=-231/	/205, 2-3=-: /185	200/181, 3-4=-200/18	31, L	R802.10.2 a DAD CASE(S)	nd referenced star Standard	ndard AN	ISI/TPI 1.						
BOT CHORD	1-9=-165/ 6-7=-165/	/224, 8-9=- /224, 5-6=-	165/224, 7-8=-165/22 165/224	24,	(-)								"TH CA	Ro
WEBS	3-7=-169	/83, 2-9=-4	31/418, 4-6=-481/418	3								X	R	· · · · · ·
NOTES 1) Unbalance this design 2) Wind: ASR Vasd=103 Cat. II; Ex	ed roof live l n. CE 7-10; Vu 3mph; TCDL sp B; Enclose	loads have It=130mph .=6.0psf; B0 ed; MWFR	been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C-0	5							Contraction of the second	N	SEA 0363	L 22

Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33



818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	V3	Valley	1	1	Job Reference (optional)	E14607820

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:34 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-dcnFpNp8boBmexrC162tmOHMw160oSqU0ec4sXyzQV3 Page: 1

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Scale = 1:59.9

oading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
CLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999			
CDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	5	n/a	n/a			
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH									
BCDL	10.0										Weight: 83 lb	FT = 20%	
UMBER			3) Truss design	ned for wind loads	s in the pl	ane of the tru	ss						

- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3 *Except* 7-3:2x4 SP No.2 BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 1 Row at midpt 3-7 **REACTIONS** (size) 1=14-9-2, 5=14-9-2, 6=14-9-2, 7=14-9-2, 8=14-9-2 Max Horiz 1=-203 (LC 9) Max Uplift 1=-66 (LC 11), 5=-40 (LC 12), 6=-219 (LC 14), 8=-219 (LC 13) Max Grav 1=195 (LC 25), 5=175 (LC 24), 6=476 (LC 25), 7=343 (LC 27), 8=476 (LC 24) FORCES (Ib) - Maximum Compression/Maximum Tension 1-2=-221/184, 2-3=-191/159, 3-4=-181/159, TOP CHORD 4-5=-219/167 BOT CHORD 1-8=-134/191.7-8=-134/191.6-7=-134/191. 5-6=-134/191 WEBS 3-7=-128/42, 2-8=-435/388, 4-6=-435/388 NOTES
- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
- DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.
- 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 5, 8, and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S) Standard



818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply 164 Crossings-Roof		
21020047-A	V4	Valley	1	1	Job Reference (optional)	E14607821

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:34 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-dcnFpNp8boBmexrC162tmOHMA166oSxU0ec4sXyzQV3



Scale	- 1	1.54	1

OTHERS

BRACING

TOP CHORD

BOT CHORD

REACTIONS (size)

(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
13.9/20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	5	n/a	n/a		
0.0*	Code	IRC2015/TPI2014	Matrix-SH								
10.0										Weight: 69 lb	FT = 20%
x4 SP No.2		4) TCLL: ASC DOL=1.15 snow): Pf-	E 7-10; Pr=20.0 p Plate DOL=1.15);	osf (roof liv Pg=20.0 p	e load: Lumb osf (ground	er					
	(psf) 20.0 13.9/20.0 10.0 0.0* 10.0 x4 SP No.2	(psf) 20.0 13.9/20.0 10.0 0.0* 10.0 x4 SP No.2 x4 SP No.2 x4 SP No.2	(psf) 20.0 13.9/20.0 13.9/20.0 10.0 20.0 Plate Grip DOL 1.15 1.1	(psf) Spacing 2-0-0 CSI 20.0 Plate Grip DOL 1.15 TC 13.9/20.0 Lumber DOL 1.15 BC 10.0 Rep Stress Incr YES WB 0.0* Code IRC2015/TPI2014 Matrix-SH 4) TCLL: ASCE 7-10; Pr=20.0 DOL=1.15 Plate DOL=1.15; x4 SP No.2 snow): PI=13 9 nsf (flat roof	(psf) Spacing 2-0-0 CSI 20.0 Plate Grip DOL 1.15 TC 0.23 13.9/20.0 Lumber DOL 1.15 BC 0.18 10.0 Rep Stress Incr YES WB 0.14 0.0* Code IRC2015/TPI2014 Matrix-SH	(psf) Spacing 2-0-0 CSI DEFL 20.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) 13.9/20.0 Lumber DOL 1.15 BC 0.18 Vert(LL) 10.0 Rep Stress Incr YES WB 0.14 Horiz(TL) 10.0 Code IRC2015/TPI2014 Matrix-SH Horiz(TL) 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumb DOL=1.15); Pg=20.0 psf (ground spow): Pf-13.9 psf (flat roof spow): Lumper DOL=1.15); Pg=20.0 psf (ground spow): Pf-13.9 psf (flat roof spow): Lumper DOL=1.15; Pg=20.0 psf (ground spow): Pf-13.9 psf (flat roof spow): Lumper DOL=1.15; Pg=20.0 psf (ground spow): Pf-13.9 psf (flat roof spow): Lumper DOL=1.15; Pg=20.0 psf (ground spow): Pf-13.9 psf (flat roof spow): Lumper DOL=1.15; Pg=20.0 psf (ground spow): Pf-13.9 psf (flat roof spow): Pf-14	(psf) Spacing 2-0-0 CSI DEFL in 20.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a 13.9/20.0 Lumber DOL 1.15 BC 0.18 Vert(TL) n/a 10.0 0.0* Code IRC2015/TPI2014 WB 0.14 Horiz(TL) 0.00 10.0 Vert(TL) 10.0	(psf) Spacing 2-0-0 CSI DEFL in (loc) 20.0 Plate Grip DOL 1.15 TC 0.23 DEFL in (loc) 13.9/20.0 Lumber DOL 1.15 BC 0.18 Vert(LL) n/a - 10.0 0.0* Code IRC2015/TPI2014 WB 0.14 Horiz(TL) 0.00 5 10.0 Code IRC2015/TPI2014 Matrix-SH Vert(IL) n/a - 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground x4 SP No.2 Spow): Pf=13.9 psf (flat roof spow): Lumber DOL=1.15); Pg=20.0 psf (ground Spow): Dol = 1.15 Plate DOL=1.15); Pg=20.0 psf (ground	(psf) Spacing 2-0-0 CSI DEFL in (loc) l/defl 20.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a - n/a 13.9/20.0 Lumber DOL 1.15 BC 0.18 Vert(LL) n/a - n/a 10.0 Rep Stress Incr YES WB 0.14 Matrix-SH Horiz(TL) 0.00 5 n/a 10.0 IRC2015/TPI2014 Matrix-SH 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15); Pg=20.0 psf (ground specifiat pof sport). Lumber DOL=1.15); Pg=20.0 psf (ground specifiat pof sport). Lumber DOL=1.15; Pg=20.0 psf (ground specifiat pof sport). Pg=20.0 psf (ground specifiat pof sport). Lumber DOL=1.15; Pg=20.0 psf (ground <br< td=""><td>(psf) Spacing 2-0-0 CSI DEFL in (loc) l/defl L/d 20.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a - n/a 999 13.9/20.0 Lumber DOL 1.15 BC 0.18 Vert(LL) n/a - n/a 999 10.0 0.0* Code IRC2015/TPI2014 WB 0.14 Vert(TL) 0.00 5 n/a n/a 999 10.0 Code IRC2015/TPI2014 Matrix-SH Vert(TL) 0.00 5 n/a n/a 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground specificitat roof sport, Jumber DOL=1.15, precound sport (Jumber DOL=1.15, precound sport, Jumber DOL=1.15,</td><td>(psf) Spacing 2-0-0 CSI DEFL in (loc) I/defl L/d PLATES 13.9/20.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a - n/a 999 MT20 13.9/20.0 Lumber DOL 1.15 BC 0.18 Vert(TL) n/a - n/a 999 MT20 10.0 0.0* Code IRC2015/TPI2014 WB 0.14 Vert(TL) 0.00 5 n/a n/a 10.0 Code IRC2015/TPI2014 Matrix-SH Vert(or code Vert(TL) 0.00 5 n/a n/a 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15; Plate DOL=1.15; Pg=20.0 psf (ground Space 1.15; Plate DOL=1.15; Pg=20.0 psf (ground Space 1.15; Pg=20.0 psf (ground <td< td=""></td<></td></br<>	(psf) Spacing 2-0-0 CSI DEFL in (loc) l/defl L/d 20.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a - n/a 999 13.9/20.0 Lumber DOL 1.15 BC 0.18 Vert(LL) n/a - n/a 999 10.0 0.0* Code IRC2015/TPI2014 WB 0.14 Vert(TL) 0.00 5 n/a n/a 999 10.0 Code IRC2015/TPI2014 Matrix-SH Vert(TL) 0.00 5 n/a n/a 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground specificitat roof sport, Jumber DOL=1.15, precound sport (Jumber DOL=1.15, precound sport, Jumber DOL=1.15,	(psf) Spacing 2-0-0 CSI DEFL in (loc) I/defl L/d PLATES 13.9/20.0 Plate Grip DOL 1.15 TC 0.23 Vert(LL) n/a - n/a 999 MT20 13.9/20.0 Lumber DOL 1.15 BC 0.18 Vert(TL) n/a - n/a 999 MT20 10.0 0.0* Code IRC2015/TPI2014 WB 0.14 Vert(TL) 0.00 5 n/a n/a 10.0 Code IRC2015/TPI2014 Matrix-SH Vert(or code Vert(TL) 0.00 5 n/a n/a 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15; Plate DOL=1.15; Pg=20.0 psf (ground Space 1.15; Plate DOL=1.15; Pg=20.0 psf (ground Space 1.15; Pg=20.0 psf (ground <td< td=""></td<>

truss to bearing walls due to UPLIFT at jt(s) 1, 5, 8, and

International Residential Code sections R502.11.1 and

6. This connection is for uplift only and does not

This truss is designed in accordance with the 2015

R802.10.2 and referenced standard ANSI/TPI 1.

- snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15
 - Plate DOL=1.15); Category II; Exp B; Fully Exp.;
 - Ct=1.10 Gable requires continuous bottom chord bearing. 5)
 - 6) Gable studs spaced at 4-0-0 oc.

consider lateral forces.

LOAD CASE(S) Standard

- 6-0-0 oc purlins. 7) * This truss has been designed for a live load of 20.0psf Rigid ceiling directly applied or 10-0-0 oc on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom 1=12-9-2, 5=12-9-2, 6=12-9-2, chord and any other members, with BCDL = 10.0psf. 7=12-9-2, 8=12-9-2 One RT7A USP connectors recommended to connect 8)
- Max Horiz 1=-174 (LC 9) Max Uplift 1=-90 (LC 11), 5=-67 (LC 12), 6=-198 (LC 14), 8=-198 (LC 13) Max Grav 1=168 (LC 10), 5=145 (LC 9), 6=414 (LC 25), 7=331 (LC 27), 8=414 (LC 24)

2x4 SP No.3 *Except* 7-3:2x4 SP No.2

Structural wood sheathing directly applied or

FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-221/173, 2-3=-188/138, 3-4=-169/138,

4-5=-221/167 BOT CHORD 1-8=-105/157 8-9=-105/157 7-9=-105/157

bracing.

- 7-10=-105/157, 6-10=-105/157, 5-6=-105/157 WEBS 3-7=-119/7, 2-8=-412/378, 4-6=-412/378 NOTES
- Unbalanced roof live loads have been considered for 1) this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 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.

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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 MSIVTP11 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

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	V5	Valley	1	1	Job Reference (optional)	E14607822

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:35 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-dcnFpNp8boBmexrC162tmOHLa16foS2U0ec4sXyzQV3

10-9-2 || 0-2-9 5-4-9 10-6-9 5-4-9 5-2-0 4x5 = 3 6-10-1 7-2-5 2x4 ı 2x 4 2 12 16 F 0-0-4 8 9 7 10 6 3x5 🖌 2x4 🛛 3x6 II 3x5 💊

Scale = 1:51.3

Loading FCLL (roof) Snow (Pf/Pg) FCDL BCLL	(psf) 20.0 13.9/20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2015	5/TPI2014	CSI TC BC WB Matrix-SH	0.26 0.15 0.13	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	
BCDL	10.0											Weight: 55 lb	FT = 20%	
UMBER TOP CHORD 30T CHORD DTHERS BRACING	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep	t* 7-3:2x4 SP No.2	4)	TCLL: ASCE DOL=1.15 Pl snow); Pf=13 Plate DOL=1 Ct=1.10 Gable require	7-10; Pr=20.0 p late DOL=1.15); 3.9 psf (flat roof s .15); Category I	osf (roof liv Pg=20.0 p snow: Lum I; Exp B; F	e load: Lumb osf (ground ber DOL=1.1 ully Exp.; d bearing	er 5						
SOT CHORD	Structural wood shea 6-0-0 oc purlins. Rigid ceiling directly bracing.	athing directly applied applied or 10-0-0 oc	l or 5) 6) 7)	Gable studs * This truss h on the botton 3-06-00 tall b	spaced at 4-0-0 has been design n chord in all are by 2-00-00 wide	oc. ed for a liv eas where will fit betw	e load of 20.0 a rectangle veen the botto)psf om						
REACTIONS	(size) 1=10-9-2.	5=10-9-2, $6=10-9-2$.		ورجاء والمتحاج	·		DI 10.0 (

	chord and any other members, with BCDL = 10.0pst.
8)	One RT7A USP connectors recommended to connect
	truss to bearing walls due to UPLIFT at jt(s) 1, 5, 8, and
	6. This connection is for uplift only and does not
	consider lateral forces.
0	This to use is desired in secondary south the OOAE

LOAD CASE(S) Standard



Page: 1

ENGINEERING BY EREPACED AMITEK Affiliate 818 Soundside Road Edenton, NC 27932

6=405 (LC 25), 7=301 (LC 24), 8=405 (LC 24) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-279/221, 2-3=-186/116, 3-4=-171/116, 4-5=-279/221 BOT CHORD 1-8=-77/124, 8-9=-77/124, 7-9=-77/124, 7-10=-77/124, 6-10=-77/124, 5-6=-77/124 WEBS 3-7=-115/0, 2-8=-457/433, 4-6=-457/433 NOTES Image: Complexity of the second second

Max Horiz 1=-146 (LC 9)

Max Uplift

7=10-9-2, 8=10-9-2

Max Grav 1=176 (LC 13), 5=167 (LC 14),

1=-151 (LC 11), 5=-132 (LC 12), 6=-206 (LC 14), 8=-206 (LC 13)

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 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.

This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	V6	Valley	1	1	Job Reference (optional)	E14607823

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:35 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-5pLd1jpnM5JdG5QPbpZ6lcqT?QTJXwEeFIMdO_yzQV2 Page: 1



Scale = 1:40.8

Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15		CSI TC	0.48	DEFL Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15		BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES		WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015	5/TPI2014	Matrix-P								
BCDL	10.0											Weight: 41 lb	FT = 20%
LUMBER TOP CHORD	2x4 SP No.2		5) 6) 7)	Gable require Gable studs	es continuous botto spaced at 4-0-0 oc	om chor :.	d bearing.	Incf					
	2X4 SP NO.2		7)	on the botton	as been designed	where	e loau of 20.0	psi					
DRACING	2X4 3P INU.2			3-06-00 tall b	v 2-00-00 wide wil	l fit betv	veen the botto	m					
	Structural wood cho	athing directly applic	d or	chord and an	y other members.								
	6-0-0 oc purlins.	auning directly applie	8)	One RT7A U truss to bear	SP connectors rec	ommen PLIFT at	ded to connectitics) 1 and 3.	ct					
BOT CHORD	bracing.	applied or 10-0-0 oc	2	This connect	on is for uplift only	and do	es not consid	er					
REACTIONS	EACTIONS (size) 1=8-9-2, 3=8-9-2, 4=8-9-2 Iateral forces. Max Horiz 1=117 (LC 12) 9) This truss is designed in accordance with the 2015 Max Uplift 1=-30 (LC 14), 3=-23 (LC 13) International Residential Code sections R502.11.1 and Max Grav 1=210 (LC 2), 3=210 (LC 2), 4=236 LOAD CASE(S)												
FORCES	(Ib) - Maximum Con Tension	npression/Maximum											
TOP CHORD	1-2=-172/73, 2-3=-1	58/73											
BOT CHORD WEBS	1-4=-47/87, 3-4=-47 2-4=-134/41	7/87											
NOTES													
1) Unbalance	ed roof live loads have	been considered for											
this desig	n.											, unun	U11.
 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOI =1 60 plate grip DOI =1 33 							ROUN						
3) Truss des	signed for wind loads i	n the plane of the tru	SS							=		JLA	
only. For	studs exposed to wind	d (normal to the face)	,							Ξ	- 1	0363	22 : 3
see Stand	lard Industry Gable Er	d Details as applicat	ole,								3		1 E -
or consult	qualified building desi	gner as per ANSI/TF	911.							1	2	· ~	A 1. 3
4) TCLL: AS	CE 7-10; Pr=20.0 psf	(root live load: Lumbe	er								3.0	NGINI	FERIA
DOL=1.15	Plate DOL=1.15); Pg	=20.0 pst (ground	-								14	210	ET N
SHOW); PT=	=13.9 psi (ilat 1001 SN0	w. Lumber DOL=1.1	5								1	A G	ILD
Ct=1.10	, Oalegory II, E	λρ D, I ully Lλρ.,										111111	IIIII





Job	Truss	Truss Type	Qty	Ply	164 Crossings-Roof	
21020047-A	V7		1	1	Job Reference (optional)	E14607824

Run: 8.33 S May 6 2020 Print: 8.330 S May 6 2020 MiTek Industries, Inc. Fri Jul 10 15:42:35 ID:008iXACkzdkKwhzl6urMxiyzRDD-5pLd1jpnM5JdG5QPbpZ6lcqYAQT2Xx3eFIMdO_yzQV2 Page: 1



Scale = 1:33.5

Plate Offsets (X, Y): [2:0-2-3,Edge], [4:0-2-3,Edge]

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	(psf) 20.0 18.9/20.0 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	15/TPI2014	CSI TC BC WB Matrix-SH	0.15 0.07 0.02	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: 29 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, exc 2-0-0 oc purlins (6-0 Rigid ceiling directly	athing directly applie sept -0 max.): 2-4. annlied or 10-0-0 oc	d or	 TCLL: ASCE DOL=1.15 P snow); Pf=11 Plate DOL=2 Ct=1.10, Lu= Forvide adeu Gable requir Gable studs * This truss I 	E 7-10; Pr=20.0 ps late DOL=1.15); F 8.9 psf (flat roof sr 1.15); Category II; =50-0-0 quate drainage to res continuous bot spaced at 4-0-0 c has been designee	of (roof liv Pg=20.0 p now: Lum Exp B; F prevent v ttom chor bc. d for a liv	e load: Lumb sf (ground ber DOL=1. ⁻ ully Exp.; water pondin d bearing. e load of 20.	ber 15 g. 0psf					
REACTIONS	(size) 1=6-9-2, 5 Max Horiz 1=-71 (LC Max Uplift 1=-33 (LC Max Grav 1=185 (LC (LC 28)	5=6-9-2, 6=6-9-2 5 9) 5 14), 5=-30 (LC 14) C 2), 5=185 (LC 2), 6	 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. 9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces. 										
FORCES TOP CHORD	(lb) - Maximum Com Tension 1-2=-161/130, 2-3=- 4-5=-160/130	pression/Maximum 145/155, 3-4=-145/1	55,	 This truss is International R802.10.2 a Graphical put 	designed in accord Residential Code nd referenced sta	rdance w sections Indard AN	ith the 2015 R502.11.1 a ISI/TPI 1.	and					
3OT CHORD WEBS	1-6=-21/78, 5-6=-21 3-6=-56/24	/78		or the orient	ation of the purlin d.	along the	top and/or						in the
1) Unbalance this design 2) Wind: AS(Vasd=103	ed roof live loads have n. CE 7-10; Vult=130mph 3mph: TCDI =6 0psf: B	been considered for (3-second gust) CDI =6 0pst: b=25ft:		LUAD CASE(S)	Standard					4	and the second	ORTH CA	ROLLING

 Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

 Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. SEAL 036322 July 10,2020



