

RE: 21070087-A

209 Crossing at ACC-Havenbrooke B - Roof

Site Information:

Customer: Capitol City HomesProject Name: 21070087-A
Model:Lot/Block: 209Model:Address: 112 Kensington DriveSubdivision: Crossings at Anderson Creek
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 8.4 Wind Speed: 130 mph Floor Load: N/A psf

This package includes 22 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	145382159	T1	7/14/2021	21	145382179	V6	7/14/2021
2	145382160	T1A	7/14/2021	22	145382180	V7	7/14/2021
3	145382161	T1B	7/14/2021			••	.,
4	145382162	T1GE	7/14/2021				
5	145382163	T2	7/14/2021				
6	145382164	T2GE	7/14/2021				
7	145382165	T3	7/14/2021				
8	145382166	T3GE	7/14/2021				
9	145382167	T4	7/14/2021				
10	145382168	T4A	7/14/2021				
11	145382169	T4B	7/14/2021				
12	145382170	T4GE	7/14/2021				
13	145382171	T5	7/14/2021				
14	145382172	T5GE	7/14/2021				
15	145382173	T5GR	7/14/2021				
16	145382174	V1	7/14/2021				
17	145382175	V2	7/14/2021				
18	145382176	V3	7/14/2021				
19	145382177	V4	7/14/2021				
20	145382178	V5	7/14/2021				

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: Johnson, Andrew

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.



Trenco

818 Soundside Rd

Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T1	Common	1	1	Job Reference (optional)

6-7-12

6-7-12

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

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:24:44 ID:DBpz3ssLdUv75RjUxDQQZ1ySZwk-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

13-3-8

6-7-12

Page: 1

14-2-0

0-10-8





Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T1A	Common	2	1	Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:24:51 ID:DBpz3ssLdUv75RjUxDQQZ1ySZwk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

March 27,2021

818 Soundside Road Edenton, NC 27932



6-4-4	13-0-0
6-4-4	6-7-12

Plate Offsets (X, Y): [5:Edge,0-0-0]

Scale = 1:35.4

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 IRC201	5/TPI2014	CSI TC BC WB Matrix-MSH	0.50 0.41 0.08	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.10 0.02	(loc) 7-14 7-14 1	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 54 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 2 2-6-0 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1= Mecha Max Horiz 1=-37 (LC Max Uplift 5=-8 (LC (lb) - Maximum Com Tension 1-2=-210/41, 2-16=- 3-17=-623/223, 4-17 5-6=-0/25	2-6-0, Right 2x4 SP M athing directly applie applied or 10-0-0 oc inical, 5=0-3-0 i 16) 16) 2 2), 5=574 (LC 2) pression/Maximum 654/212, 3-16=-638/ =-654/210, 4-5=-265	3) No.3 4) Id or 5) ; 6) 7) 8) 225, 8)	TCLL: ASCE DOL=1.15 P snow); Pf=13 Plate DOL=1 Ct=1.10 Unbalanced design. This truss ha load of 12.0 overhangs n * This truss ha load of 12.0 overhangs n * This truss ha on the bottor 3-06-00 tall b chord and ar Refer to gird One RT7A U truss to bear connection is forces.	7-10; Pr=20.0 psf late DOL=1.15); P. 3.9 psf (flat roof sm .15); Category II; I snow loads have b is been designed f psf or 2.00 times fl on-concurrent with as been designed in chord in all areas by 2-00-00 wide wi by other members. er(s) for truss to tru SP connectors rec ing walls due to UI s for uplift only and Standard	(roof liv g=20.0 p ow: Lum Exp B; F peen cor or great at roof le o ther lir for a liv s where Il for a liv s where Il for a sup commen PLIFT at	e load: Luml ssf (ground iber DOL=1. ully Exp.; asidered for t er of min roo bad of 13.9 p ve loads. e load of 20. a rectangle veen the bott nections. ded to conne. jt(s) 5. This bt consider la	ber 15 this if live ssf on 0psf tom ect ateral						
BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: AS(Vasd=103 Cat. II; Ex Exterior (2 vertical let forces & N DOL=1.60	1-7=-159/604, 5-7=- 3-7=0/171 ed roof live loads have n. CE 7-10; Vult=130mph 3mph; TCDL=6.0psf; Bf p B; Enclosed; MWFR 2) zone; cantilever left a ft and right exposed;C- ft and right exposed;C- MWFRS for reactions s 0 plate grip DOL=1.33	106/604 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C-6 and right exposed ; e C for members and hown; Lumber	C							Comme		SEA 4584	ROLINE L 14	

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T1B	Common	2	1	Job Reference (optional)

Run: 8,43 S Mar 4 2021 Print: 8,430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:24:52 ID:hONLGCtzOo1_jbIgUxxf5EySZwj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



5-10-4	13-0-0
5-10-4	7-1-12

Scale = 1:35.4 Plate Offsets (X, Y): [5:Edge,0-0-0]

Loading TCLL (roof) Snow (Pf/Pg) TCDL 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 IRC201	5/TPI2014	CSI TC BC WB Matrix-MSH	0.52 0.42 0.07	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.06 -0.12 -0.02	(loc) 7-14 7-14 5	l/defl >999 >702 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190	
BCDL	10.0											Weight: 54 lb	FT = 20%	
LUMBER TOP CHORD 30T CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 2 2-6-0 Structural wood shea 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1= Mecha	2-6-0, Right 2x4 SP N athing directly applied applied or 10-0-0 oc nical, 5=0-3-0, 7=0-3	3) No.3 4) d or 5) 6) 3-8	TCLL: ASCE DOL=1.15 Pl snow); Pf=13 Plate DOL=1 Ct=1.10 Unbalanced design. This truss ha load of 12.0 µ overhangs nu * This truss h on the bottom 3-06-00 tall b	7-10; Pr=20.0 psf late DOL=1.15); Pt 8.9 psf (flat roof sm .15); Category II; I snow loads have b s been designed for psf or 2.00 times fl on-concurrent with has been designed in chord in all areas by 2-00-00 wide wil	(roof liv g=20.0 p ow: Lum Exp B; F peen cor or great at roof l other lir for a liv s where Il fit betw	e load: Luml ssf (ground iber DOL=1. ully Exp.; nsidered for 1 er of min roo bad of 13.9 p ve loads. e load of 20. a rectangle veen the bott	ber 15 this of live osf on .0psf tom						
FORCES	Max Horiz 7=-37 (LC Max Uplift 1=-60 (LC 7=-22 (LC Max Grav 1=516 (LC (LC 15) (lb) - Maximum Com	: 16) : 15), 5=-44 (LC 16), : 33) : 2), 5=572 (LC 2), 7 pression/Maximum	7) 8) =111	chord and an Refer to girde Provide mech bearing plate 1. One RT7A U	y other members. er(s) for truss to tru hanical connection capable of withsta SP connectors rec	uss conr n (by oth anding 6 commen	nections. ers) of truss 60 lb uplift at ded to conne	to joint ect						
TOP CHORD	Tension 1-2=-171/81, 2-16=-(3-17=-602/393, 4-17 5-6=0/25	665/405, 3-16=-649/4 ′=-635/381, 4-5=-311	417, /0, 10	truss to beari connection is forces.	ing walls due to UF s for uplift only and USP connectors re	PLIFT at does no	i jt(s) 5. This ot consider la nded to conr	ateral nect					Della	
	1-7=-301/614, 5-7=-2 3-7=-120/180	260/586		truss to beari connection is forces	ing walls due to UF s for uplift only and	PLIFT at does n	t jt(s) 7. This of consider la	ateral		\int	and a	ORTHO	ion X	in a
 Unbalance this design Wind: AS(Vasd=103 Cat. II; Ex Exterior (2 vertical lef forces & N DOL=1.60 	ed roof live loads have n. CE 7-10; Vult=130mph mph; TCDL=6.0psf; B(p B; Enclosed; MWFRS 2) zone; cantilever left at t and right exposed;C- WFRS for reactions sl plate grip DOL=1.33	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	LC nd	DAD CASE(S)	Standard						No.	SEA 4584 SNGIN March	EER. O OHNSUU 27,2021	and an



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T1GE	Common Supported Gable	1	1	I45382162 Job Reference (optional)

Run: 8 43 S. Mar. 4 2021 Print: 8 430 S. Mar. 4 2021 MiTek Industries. Inc. Fri Mar. 26 12:24:53 ID:9axkUYub969qLlst2eTueSySZwi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



TOP CHORD	Structural wood sheathing directly applied or
	6-0-0 oc purlins.

BOT CHORD	Rigid ceil bracing.	ing directly applied or 10-0-0 oc
REACTIONS	(size)	2=13-3-8, 10=13-3-8, 12=13-3-8,

		13=13-3-8, 14=13-3-8, 15=13-3-8,
		16=13-3-8, 17=13-3-8, 21=13-3-8
	Max Horiz	2=-31 (LC 16), 17=-31 (LC 16)
	Max Uplift	2=-12 (LC 11), 10=-13 (LC 12),
		12=-23 (LC 16), 13=-15 (LC 16),
		15=-15 (LC 15), 16=-26 (LC 15),
		17=-12 (LC 11), 21=-13 (LC 12)
	Max Grav	2=166 (LC 2), 10=166 (LC 2),
		12=197 (LC 34), 13=158 (LC 34),
		14=133 (LC 2), 15=158 (LC 33),
		16=197 (LC 33), 17=166 (LC 2),
		21=166 (LC 2)
FORCES	(lb) - Max	imum Compression/Maximum
	Tension	
TOP CHORD	1-2=0/25,	2-3=-83/39, 3-4=-18/26,
	4-5=-52/6	5, 5-6=-59/106, 6-7=-59/106,
	7-8=-52/6	4, 8-9=-11/19, 9-10=-83/38,
	10-11=0/2	25
BOT CHORD	2-16=0/41	1, 15-16=0/41, 14-15=0/41,
	13-14=0/4	41, 12-13=0/41, 10-12=0/41
WFBS	6-14=-90/	0 5-15=-123/85 4-16=-142/98

NOTES

Loading

TCDL

BCLL

BCDL

LUMBER

OTHERS

SLIDER

BRACING

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

7-13=-123/85, 8-12=-142/99

- 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) Unbalanced snow loads have been considered for this desian.
- 6) 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.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 10, 15, 16, 13, and 12. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



Page: 1



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T2	Monopitch	3	1	I45382163 Job Reference (optional)

Run: 8,43 S Mar 4 2021 Print: 8,430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:24:55



Scale = 1:30.2					8-10	-4						
	(nsf)	Spacing	2-0-0	CSI		DEEL	in	(loc)	l/defl	l /d		GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	тс	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		
TOP CHORD	2x4 SP N	0.1
BOT CHORD	2x4 SP N	0.2
WEBS	2x4 SP N	0.3
BRACING		
TOP CHORD	Structural except er	l wood sheathing directly applied, nd verticals.
BOT CHORD	Rigid ceil bracing.	ing directly applied or 9-0-12 oc
REACTIONS	(size)	2=0-3-8, 4= Mechanical
	Max Horiz	2=75 (LC 14)
	Max Uplift	2=-35 (LC 11), 4=-16 (LC 15)
	Max Grav	2=403 (LC 2), 4=346 (LC 2)
FORCES	(lb) - Max Tension	imum Compression/Maximum
TOP CHORD	1-2=0/16, 3-4=-239/	2-8=-231/98, 3-8=-76/68, /163

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

TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber

Unbalanced snow loads have been considered for this

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.

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.;

BOT CHORD 2-4=-247/148

DOL=1.60 plate grip DOL=1.33

NOTES

1)

2)

3)

4)

Ct=1.10

design.

- 5) * 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.
- 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
- One RT7A USP connectors recommended to connect 8) truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard

3x5 =

annun nin VIIII IN MARINE SEAL 45844 minin March 27,2021

Page: 1

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T2GE	Monopitch Supported Gable	1	1	I45382164 Job Reference (optional)

Run: 8 43 S. Mar. 4 2021 Print: 8 430 S. Mar. 4 2021 MiTek Industries. Inc. Fri Mar. 26 12:24:56 ID:9axkUYub969qLlst2eTueSySZwi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



					0 10	/ 1							
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	тс	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 BOT CHORD	2x4 SP No.2 2x4 SP No.2		 Truss design only. For s see Standa 	gned for wind load tuds exposed to v ard Industry Gable	ds in the pl wind (norm e End Deta	ane of the tru al to the face ils as applica	iss), ble,						

8-10-4

BOT CHORD	2X4 OF IN	0.2
WEBS	2x4 SP N	0.3
OTHERS	2x4 SP N	0.3
BRACING		
TOP CHORD	Structural 6-0-0 oc p	I wood sheathing directly applied or purlins, except end verticals.
BOT CHORD	Rigid ceil bracing.	ing directly applied or 10-0-0 oc
REACTIONS	(size)	2=8-10-4, 7=8-10-4, 8=8-10-4, 9=8-10-4, 10=8-10-4, 11=8-10-4
	Max Horiz	2=75 (LC 14), 11=75 (LC 14)
	Max Uplift	2=-21 (LC 11), 7=-1 (LC 12), 8=-10
	·	(LC 15), 9=-8 (LC 11), 10=-17 (LC 15), 11=-21 (LC 11)
	Max Grav	2=156 (LC 2), 7=57 (LC 2), 8=178 (LC 2), 9=136 (LC 2), 10=222 (LC 2), 11=156 (LC 2)
FORCES	(lb) - Max Tension	imum Compression/Maximum
TOP CHORD	1-2=0/16,	2-3=-129/75, 3-4=-94/58,
	4-15=-70/	/44, 5-15=-65/51, 5-6=-44/38,
	6-7=-43/3	8
BOT CHORD	2-10=-93/	/61, 9-10=-41/45, 8-9=-41/45,
	7-8=-41/4	5

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

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

- or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber
- 3) 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 4) 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.
- Gable requires continuous bottom chord bearing. 7)
- Gable studs spaced at 2-0-0 oc. 8)
- * This truss has been designed for a live load of 20.0psf 9) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) 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. LOAD CASE(S) Standard
- С The manufacture of the second Yuun maning SEAL 45844 mm March 27,2021

Page: 1

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	ТЗ	Monopitch	7	1	I45382165 Job Reference (optional)

Scale = 1:25

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:24:57 ID:9axkUYub969qLlst2eTueSySZwi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





2-10-4

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 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	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=0-3-8, 4 Max Horiz 2=29 (LC Max Uplift 2=-31 (LC Max Grav 2=169 (LC (lb) - Maximum Com Tension 1-2=0/16, 2-3=-50/4 2-4=-44/31	athing directly applie xcept end verticals. applied or 10-0-0 oc 4= Mechanical 14) 2 11), 4=-4 (LC 15) C 2), 4=100 (LC 2) pression/Maximum 5, 3-4=-68/56	6) d or 7) : 8)	 * This truss h on the bottor 3-06-00 tall h chord and ar Refer to gird Provide mec bearing plate 4. One RT7A L truss to bear connection is forces. 	has been desigr m chord in all ar by 2-00-00 wide ny other membe er(s) for truss to thanical connect e capable of with JSP connectors ing walls due to s for uplift only a Standard	ned for a liv eas where will fit betw rs. b truss conr cion (by oth standing 4 recommen UPLIFT at and does no	e load of 20.1 a rectangle veen the bott nections. ers) of truss t b uplift at jo ded to conne ; jt(s) 2. This ot consider la	Dpsf om int ct teral					
NOTES 1) Wind: ASC Vasd=103 Cat. II; Ex Exterior (2 vertical lef forces & M DOL=1.6C 2) TCLL: ASC DOL=1.15	CE 7-10; Vult=130mph imph; TCDL=6.0psf; B(p B; Enclosed; MWFR3) zone; cantilever left at t and right exposed;C- WFRS for reactions s plate grip DOL=1.33 CE 7-10; Pr=20.0 psf (DIate DOL=1.15); pg	(3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C- and right exposed ; e C for members and hown; Lumber roof live load: Lumber	C Ind er							ſ	A STA	WHH CA	ROL

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.

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.



Page: 1



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T3GE	Monopitch Supported Gable	1	1	Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:24:59 ID:9axkUYub969qLlst2eTueSySZwi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2x4 II

Page: 1





3x5 =

2-10-4

~ 4.00.0 _

Scale = 1:22.6														
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	0.09 0.06 0.00	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: 11 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 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 Grav 2=169 (LC (LC 2)	athing directly applie xcept end verticals. applied or 10-0-0 oc 4=2-10-4, 5=2-10-4 14), 5=29 (LC 14) : 11), 4=-3 (LC 15), 5 C 2), 4=103 (LC 2), 5	5) 6) 7) 6d or 8) 5 5 5 5 5 5 5 5 5 5 169 LO	This truss ha load of 12.0 overhangs n Gable requir Gable studs * This truss f on the bottor 3-06-00 tall b chord and ar One RT7A U truss to bear This connect lateral forces AD CASE(S)	Is been designed psf or 2.00 times on-concurrent wit es continuous boi spaced at 2-0-0 c nas been designe n chord in all area by 2-00-00 wide w by 0ther members ISP connectors re ing walls due to L ion is for uplift on 5. Standard	for great flat roof k h other livi ttom chor oc. d for a livi as where vill fit betv s. ecommen JPLIFT at ly and do	er of min roof pad of 13.9 ps re loads. d bearing. e load of 20.0 a rectangle reen the botto ded to conner jt(s) 2 and 4. es not consid	live of on ppsf om ct er						_
FORCES TOP CHORD BOT CHORD NOTES 1) Wind: ASC	(Ib) - Maximum Com Tension 1-2=0/16, 2-3=-50/4 2-4=-44/31 CE 7-10: Vult=130mph	pression/Maximum 5, 3-4=-68/56 (3-second aust)												
 Wind. Association of the second second	The source of the second secon	(O-second gust) CDL=6.0ps; h=25ft; S (envelope) and C-1 and right exposed ; e C for members and hown; Lumber the plane of the trus (normal to the face) d Details as applicab gner as per ANSI/TP roof live load: Lumbe =20.0 psf (ground w: Lumber DOL=1.1! cp B; Fully Exp.; then considered for the	C end ss , , ole, er 5 5							Continue	E A A A A A A A A A A A A A A A A A A A	SEA 4584 March	ROX 4 4 5 5 7,2021	



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	Τ4	Common	9	1	Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:24:59 ID:5z3UuEwshjPYa20FA3VMjtySZwg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T4A	Common	7	1	Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:01

10 minin March 27,2021

818 Soundside Road Edenton, NC 27932



			_										
Loading TCLL (roof) Snow (Pf/Pg)	(psf) 20.0 13.9/20.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15 VES		CSI TC BC WB	0.89 0.84	DEFL Vert(LL) Vert(CT)	in -0.32 -0.66 0.04	(loc) 14 14	l/defl >999 >604	L/d 240 180	PLATES MT20	GRIP 244/190
BCLL	0.0*	Code	IRC201	5/TPI2014	Matrix-MSH	0.44	11012(01)	0.04	9	n/a	11/a		
BCDL	10.0		_			-						Weight: 227 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS	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: 6-0-0 oc bracing: 13 (size) 9= Mecha	t* 1-3:2x4 SP No.2 *Except* 12-16:2x4 S No.2 t* 9-8,15-14:2x4 SP f athing directly applied applied or 10-0-0 oc -17 nical, 20=0-3-8	2) P No.3 I, 3)	Wind: ASCE Vasd=103m Cat. II; Exp E Exterior (2) z vertical left a forces & MW DOL=1.60 p TCLL: ASCE DOL=1.15 P snow); Pf=11 Plate DOL=1.0 This truss ha	7-10; Vult=130m bh; TCDL=6.0psf; 3; Enclosed; MWF cone; cantilever le ind right exposed; (FRS for reactions ate grip DOL=1.3 if 7-10; Pr=20.0 ps late DOL=1.15); F 3.9 psf (flat roof sr 1.15); Category II; as been designed	ph (3-sec BCDL=6 FRS (env ft and rig C-C for r s shown; 3 sf (roof liv Pg=20.0 µ now: Lum Exp B; F for great	cond gust) 5.0psf; h=25ft elope) and C ht exposed ; nembers and Lumber re load: Lumb osf (ground iber DOL=1.1 rully Exp.; er of min roof	; -C end ber 15					
FORCES	Max Horiz 20=254 (L Max Grav 9=1564 (L	LC 12) LC 26), 20=1617 (LC	4) 25)	load of 12.0 overhangs n	psf or 2.00 times on-concurrent wit	flat roof le h other li	pad of 13.9 p ve loads.	sfon					
TOP CHORD	(ID) - Maximum Com Tension 1-2=0/43, 2-3=-2137 4-5=-1988/165, 5-6= 6-7=-1879/87, 7-8=- 2-20=-1521/153, 8-9	pression/Maximum //60, 3-4=-1927/90, 1974/165, 2082/56, I=-1469/104	5) 6) 7)	200.0lb AC u 16-10-0 from apart. All plates are * This truss h	unit load placed on h left end, support a 3x5 MT20 unles has been designe	n the bott ed at two s otherwi d for a liv	om chord, points, 5-0-0 se indicated. e load of 20.0) 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=0/13 2=0/1364, 11-12=0/13 =-67/279, 17-23=-82/0 82/0, 13-24=-82/0	364, 364, 8) ^{0,} Le	3-06-00 tall t chord and ar Refer to gird	by 2-00-00 wide w by other members er(s) for truss to the Standard	vill fit betw , with BC russ conr	veen the both DL = 10.0ps nections.	om f.		\int		NITH CA	ROLIN
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=0/125 459/304, 17-18=-42/ 953, 11-13=-41/812, 5=-98/0	2, 846,							U		SEA 4584	L 44
 Unbalance this design 	ed roof live loads have n.	been considered for									N. A.	NOREW J	EER. OHNS

Scale = 1:82.7

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T4B	Common	1	1	Job Reference (optional)

4x5 II 5

16-10-0

8-3-4

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

Scale = 1:82.7

Loading

TCDL

BCLL

BCDL

WEBS

BRACING

TOP CHORD

BOT CHORD

FORCES

TOP CHORD

BOT CHORD

WERS

NOTES

this design.

1)

LUMBER

TOP CHORD

BOT CHORD

TCLL (roof)

Snow (Pf/Pg)

-0-10-8

0-10-8

8-6-12

8-6-12

Run: 8 43 S Mar, 4 2021 Print: 8 430 S Mar, 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:03 ID:2LAEJvx6DKfGpMAeHUXqolySZwe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

33-8-0

8-6-12

818 Soundside Road Edenton, NC 27932

25-1-4

8-3-4

Page: 1

8¹² 4 6 12-2-1 6x8: 10x12 =2 8 ę 23 4 24 9 ₽7 19 18 1@1 15 2212 11 10 4x5= 2x4= 2x4 II 2x4 =4x5= 13-11-0 21-4-1 2x4 u 12-8-7 21-0-4 20-11-9 12-7-12 1<u>6-10-0</u> 8-6-12 12-3-15 19-9-0 25-1-4 33-8-0 ++ 1-2-9 8-6-12 3-9-3 0-3-13 2-11-0 2-11-0 3-9-3 8-6-12 0-0-11 0-0-11 Plate Offsets (X, Y): [2:0-3-8,Edge], [8:Edge,0-8-2] 2-0-0 CSI DEFL in l/defl L/d PLATES GRIP (psf) Spacing (loc) 20.0 Plate Grip DOL 1.15 тс 0.95 Vert(LL) -0.32 14 >999 240 MT20 244/190 13.9/20.0 Lumber DOL 1.15 BC 0.84 Vert(CT) -0.66 14 >606 180 10.0 Rep Stress Incr WB Horz(CT) YES 0.45 0.04 9 n/a n/a 0.0 Code IRC2015/TPI2014 Matrix-MSH Weight: 228 lb 10.0 FT = 20% 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 2x4 SP No.1 *Except* 1-3:2x4 SP No.2 Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C 2x4 SP 2400F 2.0E *Except* 12-16:2x4 SP Exterior (2) zone; cantilever left and right exposed ; end No.1, 17-13:2x4 SP No.2 vertical left and right exposed;C-C for members and 2x4 SP No.2 *Except* 15-14:2x4 SP No.3 forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33 Structural wood sheathing directly applied, TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber 3) except end verticals. DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground Rigid ceiling directly applied or 10-0-0 oc snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 bracing. Except: Plate DOL=1.15); Category II; Exp B; Fully Exp.; 6-0-0 oc bracing: 13-17 Ct=1.10 **REACTIONS** (size) 9=0-3-8, 20=0-3-8 This truss has been designed for greater of min roof live 4) Max Horiz 20=251 (LC 10) load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on Max Grav 9=1573 (LC 26), 20=1631 (LC 25) overhangs non-concurrent with other live loads (Ib) - Maximum Compression/Maximum 5) 200.0lb AC unit load placed on the bottom chord. Tension 16-10-0 from left end, supported at two points, 5-0-0 1-2=0/43, 2-3=-2158/61, 3-4=-1947/91, apart. 4-5=-2010/166, 5-6=-2015/168, All plates are 3x5 MT20 unless otherwise indicated. 6) 6-7=-1945/88, 7-8=-2155/56, * This truss has been designed for a live load of 20.0psf 2-20=-1534/154, 8-9=-1476/109 on the bottom chord in all areas where a rectangle 19-20=-230/702. 18-19=0/1847. 3-06-00 tall by 2-00-00 wide will fit between the bottom 16-18=0/1384, 16-21=0/1384, 15-21=0/1384, chord and any other members, with BCDL = 10.0psf. 15-22=0/1384, 12-22=0/1384, 11-12=0/1384, LOAD CASE(S) Standard 10-11=0/1699, 9-10=-87/387, 17-23=-83/0, 14-23=-83/0, 14-24=-83/0, 13-24=-83/0 "" 4-18=-458/305, 17-18=-42/845, 5-17=0/986, Summerin 5-13=0/994, 11-13=-44/851, 6-11=-464/307, 2-19=0/1269, 4-19=-130/10, 6-10=-139/17, SEAL 8-10=0/1376, 14-15=-98/0 5844 Unbalanced roof live loads have been considered for mm March 27,2021 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE
 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T4GE	Common Supported Gable	2	1	I45382170 Job Reference (optional)

Run: 8,43 S Mar 4 2021 Print: 8,430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:04 ID:WXkdXFyk_en7RWIqrB23LVySZwd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:73		
Plate Offsets (X_Y)	[7.0-2-4 0-2-4] [1	17.0-2-4 0-2-41

	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- 1/												
Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCCL	(r 2 13.9/2 1 1	psf) 20.0 20.0 0.0 0.0* 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 1.15 YES IRC2015/TPI2014	CSI TC BC WB Matrix	0.20 0.10 0.20	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.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.2 *1 41-5,42-4,43-3 No.3 Structural woo	Except 3,27-19	* ,26-20,25-21:2x4 SF athing directly applied	dor	Max Grav	24=222 (LC 9) 26=169 (LC 26 30=166 (LC 26 33=171 (LC 26 35=174 (LC 25 38=166 (LC 25 40=166 (LC 25 40=166 (LC 25 40=167 (LC 2)	, 25=203 (LC i), 27=165 (L i), 29=166 (L i), 31=166 (L i), 34=229 (L i), 37=165 (L i), 39=166 (L i), 41=166 (L i), 43=268 (LC	: 12), C 26), C 26), C 26), C 26), C 14), C 25), C 25), C 25), : 11),	WEBS	5	12-34 10-37 6-40= 3-43= 14-31 16-29 19-27 21-25	=-313/204, 11-3E =-134/90, 9-38= -128/82, 5-41=-1 -150/130, 13-33 =-134/90, 15-33 =-128/82, 18-28 =-128/82, 18-28 =-127/81, 20-26= =-159/124	=-134/63, 126/80, 8-39: 27/81, 4-42= 131/63, 126/80, 128/82, 131/83,	=-128/82, ⊢131/83,
BOT CHORD	6-0-0 oc purlin Rigid ceiling di bracing.	ns, exc lirectly	ept end verticals. applied or 6-0-0 oc	FORCES	(lb) - Ma Tension	ximum Compres	sion/Maximu	m	1) Un this 2) Wi	balanceo design. nd: ASC	d roof li E 7-10;	ve loads have be Vult=130mph (3	en considere	ed for
WEBS	1 Row at midp	ot	12-34, 11-35, 10-37, 13-33, 14-31	TOP CHORD	2-44=-20 3-4=-168)5/143, 1-2=0/43 3/161, 4-5=-146/	, 2-3=-245/2 42, 5-6=-13	15, 3/135,	Va: Ca	sd=103n t. II; Exp	nph; TC B; Enc	CDL=6.0psf; BCD losed; MWFRS (L=6.0psf; h= envelope) ar	⊧25ft; nd C-C
REACTIONS	(size) 24= 30= 34= 38= 41= 44= Max Horiz 44= Max Uplift 24= 26= 28= 30= 33= 37= 39= 41= 43=	=33-8-0 =33-8-0 =33-8-0 =33-8-0 =33-8-0 =33-8-0 =33-8-0 =33-8-0 =33-8-0 =33-8-0 =33-8-0 =23-8-0 =256 (L =-137 (L =-29 (LC =-30 (LC =-31 (L =-223 (L	, 25=33-8-0, 26=33- , 28=33-8-0, 29=33- , 31=33-8-0, 33=33- , 35=33-8-0, 37=33- , 35=33-8-0, 40=33- , 42=33-8-0, 43=33- C 12) C 12) C 12), 25=-162 (LC 14 C 14), 27=-31 (LC 14 C 14), 27=-31 (LC 14 C 14), 31=-35 (LC 14 C 14), 35=-20 (LC 13 C 13), 40=-29 (LC 13 C 13), 42=-23 (LC 13 C 10), 44=-232 (LC	8-0, 8-0, 8-0, 8-0, 8-0, 8-0, 9), BOT CHORD),),),),),),), 11)	6-7=-12' 9-10=-2(11-12=-2' 11-12=-2' 11-12=-2' 19-20=-{ 21-22=-' 22-24=-' 43-44=-' 41-42=-' 39-40=-' 35-36=-' 33-34=-' 31-32=-' 29-30=-' 27-28=-'	<pre>//120, 7-8=-119/)0/236, 10-11=-2 994/347, 12-13=- 252/298, 14-15=- 152/178, 16-17=- 104/106, 18-19=- 17/82, 20-21=-11 77/138, 42-43=- 151/119 17/138, 42-43=- 17/138, 42-43=- 17/138, 42-43=- 17/138, 38-39=- 17/138, 38-39=- 17/138, 34-35=- 17/138, 34-35=- 17/138, 28-29=- 17/138, 28-29=- 17/138, 24-25=-</pre>	134, 8-9=-15; 52/298, 294/347, 200/236, 102/120, 77/79, 2/102, //43, 117/138, 117/138, 117/138, 117/138, 117/138, 117/138, 117/138, 117/138, 117/138, 117/138, 117/138,	2/178,	Ext ver forr DC	erior (2) tical left ces & M L=1.60	zone; and rig WFRS plate g	cantilever left ann ht exposed;C-C for reactions sho ip DOL=1.33	right exposi- ior members wn; Lumber	ed ; end and

JULIU March 27,2021



.10

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T4GE	Common Supported Gable	2	1	I45382170 Job Reference (optional)

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; 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
- This truss has been designed for greater of min roof live 5) 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.
- Gable requires continuous bottom chord bearing. 7)
- Truss to be fully sheathed from one face or securely 8)
- braced against lateral movement (i.e. diagonal web). 9) Gable studs spaced at 2-0-0 oc.
- 10) * This truss has been designed for a 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.

LOAD CASE(S) Standard

Run: 8.43 S. Mar. 4.2021 Print: 8.430 S. Mar. 4.2021 MiTek Industries. Inc. Fri Mar. 26.12:25:04 ID:WXkdXFyk_en7RWIqrB23LVySZwd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	Т5	Common	3	1	I45382171 Job Reference (optional)

Run: 8,43 S Mar 4 2021 Print: 8,430 S Mar 4 2021 MiTek Industries. Inc. Fri Mar 26 12:25:05 ID:SwsNyxz?VF1rgqvDyc5XQwySZwb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:68.8

Plate Offsets ((X, Y): [2:Edge,0-1-3],	[4:Edge,0-1-3]											
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/	/TPI2014	CSI TC BC WB Matrix-MSH	0.81 0.32 0.30	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.01 -0.06 0.01	(loc) 7-8 6-7 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 104 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 WEBS NOTES 1) Unbalance this design 2) Wind: ASG Vasd=103 Cat. II; Ex, Exterior (2 vertical lef forces & M DOL=1.60 3) TCLL: ASS DOL=1.15 snow); Pfa Plate DOL Ct=1.10	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood shea 4-8-6 oc purlins, exi Rigid ceiling directly bracing. (size) 6=0-3-8, 8 Max Horiz 8=-277 (L Max Uplift 6=-7 (LC Max Grav 6=636 (LC (lb) - Maximum Com Tension 1-2=0/62, 2-3=-530/ 4-5=0/62, 2-3=-532/ 7-8=-353/467, 6-7=- 3-7=-67/271, 2-7=-3: ed roof live loads have n. CE 7-10; Vult=130mph Bmph; TCDL=6.0psf; BG p B; Enclosed; MWFRR 2) zone; cantilever left a ft and right exposed; C- MWFRS for reactions sl 0 plate grip DOL=1.33 CE 7-10; Pr=20.0 psf (la 5 Plate DOL=1.15); Pg= 13.9 psf (flat roof sno .=1.15); Category II; Ex-	athing directly applie cept end verticals. applied or 9-9-11 or 3=0-3-8 C 11) 13), 8=-7 (LC 14) C 2), 8=636 (LC 2) pression/Maximum 189, 3-4=-530/189, 194, 4-6=-572/194 251/386 20/444, 4-7=-322/44 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C- and right exposed ; e C for members and hown; Lumber zoof live load: Lumber z0.0 psf (ground w: Lumber DOL=1.1 sp B; Fully Exp.;	4) 5) ed or c 6) LOA 15 r Cend er 5	This truss ha load of 12.0 ij overhangs nu * This truss h on the botton 3-06-00 tall b chord and ar This connect lateral forces AD CASE(S)	s been designed fo osf or 2.00 times fl on-concurrent with has been designed in chord in all areas y 2-00-00 wide will y other members. SP connectors rec ing walls due to Uf ion is for uplift only Standard	or great at roof lo other lin s where I fit betw commen PLIFT at and do	er of min roof bad of 13.9 p ve loads. e load of 20.0 a rectangle veen the bottu ded to conne t jt(s) 8 and 6 ies not consid	live sf on Opsf om oct der		Continue.		SEA 4584	ROL 4 4 0HNS01111 27,2021
WARN	NING - Verify design paramete	ers and READ NOTES ON	THIS AND INC	LUDED MITEK RE	EFERENCE PAGE MII-7	'473 rev. 5	/19/2020 BEFOR	E USE.				ENGINEER	ING BY



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T5GE	Common Supported Gable	1	1	I45382172 Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:05 ID:w6Ql9H_dGZ9iIzUPWKcmz8ySZwa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



14-8-0

Scale = 1:69.1

Plate Offsets (X, Y): [7:Edge,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 IRC201	5/TPI2014	CSI TC BC WB Matrix-MR	0.35 0.15 0.24	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 14	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 137 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.2 *Excep 20-4,21-3,15-10,14-	t* 11:2x4 SP No.3	W N(1)	EBS 6 3 1 DTES Unbalanced 1 this design	6-18=-316/198, 8-17 6-19=-265/252, 4-20 6-21=-376/330, 9-10 0-15=-304/291, 11 roof live loads have	7=-314, 0=-307, 6=-263, -14=-3 • been ((195, (292, (251, 61/313 considered fo	r	11) One truss 17, ⁷ and L OAD C	RT7A l s to bea 19, 20, 1 does no s ASE(S)	JSP co ring wa 6, and t cons Star	onnectors recom alls due to UPLIF d 15. This connec ider lateral force ndard	nended to connect T at jt(s) 21, 14, 18, tion is for uplift only s.
BRACING TOP CHORD BOT CHORD WEBS REACTIONS	Structural wood she 6-0-0 oc purlins, exi Rigid ceiling directly bracing. 1 Row at midpt (size) 14=14-8-0 20=14-8-0 20=14-8-0 Max Horiz 21=-277 (Max Uplift 14=-151 (16=-109 (20=-219 (Max Grav 14=286 (L 16=176 (L 16=224 (L 20=325 (L)	athing directly applied cept end verticals. applied or 6-0-0 oc 6-18, 8-17 0, 15=14-8-0, 16=14-{ 0, 15=14-8-0, 19=14-{ 0, 18=14-8-0, 19=14-{ 0, 21=14-8-0 LC 11) LC 10), 15=-217 (LC LC 14), 17=-17 (LC 1 LC 13), 21=-163 (LC LC 25), 15=320 (LC 2 C 26), 17=221 (LC 1 C 14), 19=173 (LC 2 C 25), 21=295 (LC 2)	d or 2) 8-0, 8-0, 14), (1), 3), 9) (6), 3), (5), (6), 5), (6), 5), (7)	Wind: ASCE Vasd=103mp Cat. II; Exp B Exterior (2) z vertical left at 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	7-10; Vult=130mph h; TCDL=6.0psf; B ; Enclosed; MWFR one; cantilever left nd right exposed;C- FRS for reactions s et grip DOL=1.33 ed for wind loads in ds exposed to wind I ndustry Gable En alified building desi 7-10; Pr=20.0 psf ate DOL=1.15); Pg .9 psf (flat roof sno .15); Category II; E	a (3-sec CDL=6 S (env and rig -C for n shown; a the pla d (norm d Deta gner as (roof liv =20.0 p w: Lum xp B; F	cond gust) .0psf; h=25ft; elope) and C- ht exposed; and C- ht exposed; and C- ht exposed; and C- ht exposed; and C- lis as applications and the face; is as applications applications of (ground and constructions) ber DOL=1.1 ully Exp.; er of min roof	SC end ss), ble, Pl 1. er 5 live			11	WHTH CA	ROLIN
FORCES	(Ib) - Maximum Com	pression/Maximum	- /	load of 12.0 p overhangs no	osf or 2.00 times fla	t roof le other liv	oad of 13.9 ps /e loads.	sf on		C	En	niofes	Dickin
TOP CHORD	2-21=-286/282, 1-2= 3-4=-223/210, 4-5=- 6-7=-163/191, 7-8=- 9-10=-180/220, 10-1 11-12=-185/205, 12- 12-14=-283/283 20-21=-143/158, 19- 18-19=-143/158, 17- 16-17=-143/158	0/62, 2-3=-187/206, 175/218, 5-6=-353/43 164/191, 8-9=-352/43 1=-210/197, 13=0/62, 20=-143/158, 18=-143/158,	6) 34, 7) 33, 8) 9) 10	All plates are 2x4 M120 unless otherwise indicated. Gable requires continuous bottom chord bearing. Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web). Gable studs spaced at 2-0-0 oc. * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.							L HANNING		



Page: 1



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	T5GR	Common Girder	1	2	I45382173 Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:06 ID:H4DeC_2l55n_OIMMJtCxgBySZwV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:70.2

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

Loa TCL Snc TCL BCL BCL	ading LL (roof) ow (Pf/Pg) DL LL DL	(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 NO IRC201	5/TPI2014	CSI TC BC WB Matrix-MSH	0.70 0.23 0.50	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.08 0.00	(loc) 5-6 5-6 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 262 lb	GRIP 244/190 187/143 FT = 20%	
LUN TOF BO TOF BO REA FOF BO TOF BO TOF BO	MBER > CHORD T CHORD BS ACING > CHORD T CHORD ACTIONS ACTIONS CHORD T CHORD BS 2-ply truss 2-ply truss (0.131"x3" Top chorda oc.	2x4 SP 2400F 2.0E 2x8 SP 2400F 2.0E 2x4 SP No.2 *Excep Structural wood shea 6-0-0 oc purlins, exc Rigid ceiling directly bracing. (size) 4=0-3-8, 7 Max Horiz 7=243 (LC Max Grav 4=5373 (L (Ib) - Maximum Com Tension 1-2=-4527/0, 2-3=-4! 3-4=-4319/0 7-8=-254/557, 8-9=-2 6-10=0/1895, 10-11= 5-12=0/1895, 5-13=- 4-14=-77/365 2-6=0/3382, 1-6=0/2 3-5=0/2411 to be connected toget) nails as follows: s connected as follows:	t* 6-1,5-3:2x4 SP No athing directly applie cept end verticals. applied or 10-0-0 oc 7=0-3-8 C 6) .C 2), 7=6210 (LC 2) pression/Maximum 522/0, 1-7=-4320/0, 254/557, 6-9=-254/5 =0/1895, 11-12=0/18 -77/365, 13-14=-77/3 402, 2-5=0/3365, ther with 10d s: 2x4 - 1 row at 0-9-0	4) 	Wind: ASCE Vasd=103mp Cat. II; Exp E left and right exposed; Lur TCLL: ASCE DOL=1.15 Pl snow); Pf=13 Plate DOL=1 Ct=1.10 All plates are * This truss h on the botton 3-06-00 tall b chord and ar Use USP TH 12-10d x 1-1, 2-0-0 oc max 12-8-12 to cc chord. Fill all nail ho Dead + Snc Increase=1. Uniform Los Vert: 1-2: Concentrate Vert: 6=-	7-10; Vult=130mpl h; TCDL=6.0psf; exposed ; end vert nber DOL=1.60 pla 7-10; Pr=20.0 psf ate DOL=1.15); Pg 9 psf (flat roof snc .15); Category II; E MT20 plates unles as been designed n chord in all areas y 2-00-00 wide will y other members, D26 (With 18-16d /2 nails into Truss) . starting at 0-8-12 nnect truss(es) to les where hanger i Standard w (balanced): Lum 15 ads (lb/ft) =-48, 2-3=-48, 4-7= ad Loads (lb) 1287 (B), 8=-1291	h (3-sec SCDL=6 SCDL=6 SS (env. iccal left ate grip (roof liv j=20.0 p bw: Lum Exp B; F ss other for a liv where I fit betw with BC nails int or equi from th back fa s in cor ber Inc =-20 (B), 9=-	cond gust) Opsf; h=25ft elope); cantil and right DOL=1.33 e load: Lumb sf (ground uber DOL=1.1 ully Exp.; wise indicate e load of 20.1 a rectangle veen the bott DDL = 10.0ps o Girder & valent space le left end to ce of bottom atact with lum rease=1.15,	; ever 15 ad. 0psf om f. d at uber. Plate		C		WHTH CA	ROLIN	A LANDA
2) 3)	staggered Web conne All loads a except if ne CASE(S) s provided to unless othe Unbalance	at 0-6-0 oc. ected as follows: 2x4 - re considered equally oted as front (F) or bac section. Ply to ply conn o distribute only loads i erwise indicated. ed roof live loads have	1 row at 0-9-0 oc. applied to all plies, ck (B) face in the LO. nections have been noted as (F) or (B), been considered for	AD	(B)	(b), 12=-1207 (b)	, 13=-1	207 (D), 14=	-1207		11111	N. A.	4584	4 ER.CO	Minine Minine
this design.													in min	1111	

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

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



March 27,2021

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	V1	Valley	1	1	I45382174 Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:08 ID:w6QI9H_dGZ9iIzUPWKcmz8ySZwa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:56.4

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	0.23	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		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 74 lb	FT = 20%
	IMPED 3) Trues designed for wind loads in the plane of the trues											

LOWIDEN									
TOP CHORD	2x4 SP N	0.2							
BOT CHORD	2x4 SP N	0.2							
OTHERS	2x4 SP N	o.3 *Except* 7-3:2x4 SP No.2							
BRACING									
TOP CHORD	Structural 6-0-0 oc p	wood sheathing directly applied or purlins.							
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.								
WEBS	1 Row at	midpt 3-7							
REACTIONS	(size)	1=13-6-2, 5=13-6-2, 6=13-6-2, 7=13-6-2, 8=13-6-2							
	Max Horiz	1=188 (LC 10)							
	Max Uplift	1=-77 (LC 11), 5=-38 (LC 12),							
		6=-185 (LC 14), 8=-189 (LC 13)							
	Max Grav	1=168 (LC 25), 5=138 (LC 24),							
		6=438 (LC 25), 7=354 (LC 27), 8=446 (LC 24)							
FORCES	(lb) - Max	imum Compression/Maximum							
	Tension								
TOP CHORD	1-2=-204/ 4-5=-198/	190, 2-3=-182/156, 3-4=-163/156, 167							
BOT CHORD	1-8=-124/	169, 8-13=-124/169,							
	7-13=-124	4/169, 7-14=-124/169,							
	6-14=-124	4/169, 5-6=-124/169							
WEBS	3-7=-150/	9, 2-8=-413/368, 4-6=-413/368							
NOTES									
1) Unbalance	ed roof live l	oads have been considered for							

- or 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

- 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) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc. 6)
- * This truss has been designed for a live load of 20.0psf 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 1 and 38 lb uplift at joint 5.
- One RT4 USP connectors recommended to connect 9) truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.
- LOAD CASE(S) Standard



Page: 1

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	V2	Valley	1	1	I45382175 Job Reference (optional)

Run: 8,43 S Mar 4 2021 Print: 8,430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:08 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



1x3 II



11-6-2

Scale = 1:53.6

Loading TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	13.9/	(psf) 20.0 /20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2) 2015/TPI2014	CSI TC BC WB Matrix-MSH	0.25 0.16 0.12	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: 60 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wo 6-0-0 oc purl Rigid ceiling bracing. (size) 1= 7= Max Horiz 1= Max Uplift 1= 6= Max Grav 1= 6= 8=	*Except bood sheat directly =11-6-2, =11-6-2, =160 (LC =-98 (LC =-167 (LC =387 (LC =396 (LC	* 7-3:2x4 SP No.2 athing directly applie applied or 10-0-0 o 5=11-6-2, 6=11-6-2 8=11-6-2 : 10) 11), 5=-62 (LC 12) C 14), 8=-173 (LC 1 : 10), 5=117 (LC 9) 2 25), 7=309 (LC 27 : 24)	ed or 2,), 13) ,7),	 TCLL: ASC DOL=1.15 snow); Pf= Plate DOL: Ct=1.10 Gable requ Gable stud Gable stud This truss on the bott 3-06-00 tal chord and Provide me bearing pla 1 and 62 lb One RT4 L truss to be This conne lateral forc 	E 7-10; Pr=20.0 pc Plate DOL=1.15); f 13.9 psf (flat roof s =1.15); Category II; irires continuous bo s spaced at 4-0-0 c s has been designe om chord in all area l by 2-00-00 wide w any other members achanical connection the capable of withs o uplift at joint 5. JSP connectors rec aring walls due to U ction is for uplift on es.	sf (roof liv Pg=20.0 tg now: Lur ; Exp B; F ttom chor oc. dd for a liv as where will fit betv s, with BC on (by oth standing S commend JPLIFT at ally and dc	e load: Lumi ssf (ground iber DOL=1. 'ully Exp.; d bearing. e load of 20. a rectangle veen the bott iDL = 10.0ps ers) of truss 8 lb uplift at ed to connec ijt(s) 8 and 6 es not consi	ber 15 Opsf tom f. to joint st 3. der					
FORCES	(lb) - Maximu Tension	um Com	pression/Maximum		LOAD CASE(S	S) Standard								
TOP CHORD	1-2=-220/178	8. 2-3=-1	197/146. 3-4=-174/ [.]	146.										



BOT CHORD

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

1-8=-80/129, 8-13=-80/129, 7-13=-80/129,

7-14=-80/129, 6-14=-80/129, 5-6=-80/129

3-7=-110/20, 2-8=-427/395, 4-6=-427/395

4-5=-220/170

- 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
- 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.

C Summun Summer in SEAL 45844 JO mmm March 27,2021

11111111

Page: 1





Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	V3	Valley	1	1	I45382176 Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:09 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

9-6-2 4-9-1 9-3-9 4-9-1 4-6-8 4x4 = 2 6-0-11 6-4-5 12 16 ⊏ 3 0-0-4 Ø 4 2.5x4 = 1x3 II 2.5x4 =

9-6-2

Scale = 1:45.3 Plate Offsets (X, Y): [1:0-0-10 0-1-4] [3:0-0-9 0-1

Plate Offsets	(X, Y): [1:0-0-10,0-1-4], [3:0-0-9,0-1-4]												
Loading FCLL (roof) Snow (Pf/Pg) FCDL 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-MSH	0.31 0.31 0.35	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.01	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 45 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORE BOT CHORE DTHERS BRACING TOP CHORE BOT CHORE REACTIONS	 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood she 9-6-2 oc purlins. Rigid ceiling directly bracing. (size) 1=9-6-2, 3 Max Horiz 1=-131 (L Max Uplift 1=-18 (LC 4=-122 (L Max Grav 1=85 (LC (LC 2) 	athing directly applie applied or 6-0-0 oc 3=9-6-2, 4=9-6-2 C 9) 3 11), 3=-10 (LC 28), C 13) 28), 3=85 (LC 29), 4	4 d or 5 6 7 8 =656 9	 TCLL: ASCE DOL=1.15 P snow); Pf=13 Plate DOL=1 Ct=1.10 Gable requin Gable studs * This truss h on the bottor 3-06-00 tall t chord and ar Provide mec bearing plate 1 and 10 lb u One RT4 US truss to bear 	7-10; Pr=20.0 psf late DOL=1.15); Pg 3.9 psf (flat roof sno .15); Category II; E es continuous botto spaced at 4-0-0 oc. has been designed in chord in all areas by 2-00-00 wide will by other members. hanical connection a capable of withsta uplift at joint 3. P connectors recor- ing walls due to LIP	(roof liv =20.0 p w: Lum xp B; F or choir for a liv where fit betw (by oth nding 1	e load: Lumb ssf (ground iber DOL=1.1 'ully Exp.; d bearing. e load of 20.0 a rectangle veen the botto ers) of truss t 8 lb uplift at j ed to connect i ti(s) 4 This	er 5 Dpsf om oint						
FORCES FOP CHORE BOT CHORE WEBS	 (lb) - Maximum Corr Tension 1-2=-259/265, 2-3=- 1-4=-248/237, 3-4=- 2-4=-592/368 	npression/Maximum 170/261 248/237	L	connection is forces. OAD CASE(S)	Standard	does n	ot consider la	teral						
NOTES	2 1- 002/000											min	un.	
 Unbaland this design Wind: AS Vasd=10 Cat. II; E Exterior (vertical le forces & DOL=1.6 	ced roof live loads have gn. GCE 7-10; Vult=130mph 3mph; TCDL=6.0psf; B xp B; Enclosed; MWFR (2) zone; cantilever left; oft and right exposed;C- MWFRS for reactions s 0 plate grip DOL=1.33	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	C							0		SEA	ROLL 14	Samo

 Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. SEAL 45844 NONEER CONTINUE March 27,2021

Page: 1



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	V4	Valley	1	1	I45382177 Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:10 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



7-6-2

Scale = 1:39.5				1				1				
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 35 lb	FT = 20%

LUMBER TOP CHORD 2x4 S BOT CHORD 2x4 S OTHERS 2x4 S BRACING TOP CHORD Struc 7-6-2 BOT CHORD Rigid bracin REACTIONS (size) Max Hu Max Uj Max G	 No.2 No.2 No.3 ural wood sheathing directly applied or coc purlins. ceiling directly applied or 6-0-0 oc g. 1=-6-2, 3=7-6-2, 4=7-6-2 riz 1=-102 (LC 9) lift 1=-5 (LC 11), 4=-92 (LC 13) av 1=77 (LC 28), 3=77 (LC 29), 4=494 (LC 2) 	5) 6) 7) 8) 9)	Gable requires continuous bottom chord bearing. 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. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1. One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces. AD CASE(S) Standard		
FORCES (lb) - Tensi	Aximum Compression/Maximum				
 FOP CHORD 1-2=- 3OT CHORD 1-4=- WEBS 2-4=- NOTES 1) Unbalanced roof I this design. 2) Wind: ASCE 7-10 Vasd=103mph; Tr Cat. II; Exp B; Ene Exterior (2) zone; vertical left and rig forces & MWFRS DOL=1.60 plate g 3) Truss designed fc only. For studs e: see Standard Indi or consult qualifie 4) TCLL: ASCE 7-10 DOL=1.15 Plate E snow); Pf=13.9 ps Plate DOL=1.15); Ct=1.10 	83/181, 2-3=-128/181 01/204, 3-4=-201/204 13/267 we loads have been considered for Vult=130mph (3-second gust) :DL=6.0psf; BCDL=6.0psf; h=25ft; losed; MWFRS (envelope) and C-C cantilever left and right exposed ; end the exposed; C-C for members and for reactions shown; Lumber ip DOL=1.33 wind loads in the plane of the truss posed to wind (normal to the face), stry Gable End Details as applicable, I building designer as per ANSI/TPI 1. Pr=20.0 psf (roof live load: Lumber OL=1.15); Pg=20.0 psf (ground i (flat roof snow: Lumber DOL=1.15 Category II; Exp B; Fully Exp.;			Contraction of the second second	SEAL 45844 MGINEERSOT



Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	V5	Valley	1	1	I45382178 Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:12 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



5-6-2

Scale	= 1	.34
ocale	_	1.07

coding CLL (roo) (ps) CLL (roo) Spacing Plate Gip DOL 1:15 2-0-0 1:15 CSI DS (0 10 DFL DS (0 in (loc) Ideal (loc) PLATES Plate (loc) GRIP PLATES CDL (roo) 1.00 Code 1:15 BC 0.11 Var(LL) BC n'a - n'a 956 CDL (roo) 0.00 Code 1:15 BC 0.11 Var(LL) n'a - n'a 956 CDL (roo) 0.00 Code 1:15 BC 0.11 Var(LL) n'a - n'a 956 Code 1:10 Code Var(LD) 0.00 3 n'a - n'a 956 Code Transition															
 Sable requires continuous bottom chord bearing. Gable studies spaced at 4-0 oc. One RT4 USP connectors recommended to connect truss to bearing walls due to UPLFT at [[0] 4. This connection is for one RT4 USP connectors recommended to connect truss to bearing walls due to UPLFT at [[0] 4. This connection is for upth only and does not consider lateral broces. Con CASE (I) - Maximum Compression/Maximum Tension Or CHORD 1. 4122/133, 3-4-122/133 (L C 2) Or CHORD 1. 4227/133, 3-4-122/133 (L C 2) Or CHORD 1. 4227/133, 3-4-122/133 (C C 1) Or CHORD 1. 4227/133 Or CHORD 1. 4227/133 Cone cantilever left and right exposed, end form the truss on consult qualified building designer as per ANSI/FT 1. Tust designed for vind locads in the plane of the truss on consult qualified building designer as per ANSI/FT 1. Tust designed for vind locads in the plane of the truss on consult qualified building designer as per ANSI/FT 1. Tust designed for vind locads in the plane of the truss on consult qualified building designer as per ANSI/FT 1. Tust designer as per ANSI/FT 1. Tust designer a	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	/TPI2014	CSI TC BC WB Matrix-MP	0.11 0.13 0.05	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 25 lb	GRIP 244/190 FT = 20%	
	LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design Vasd=103 Cat. II; Exp Exterior (2 Vasd=103 Cat. II; Exp Exterior (2 Vasd=1.60 Cat. II; Exp Exterior (2 Vasd=1.16 Cat. II; Exp Exterior (2 Vasd=1.1	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 5-6-2 oc purlins. Rigid ceiling directly bracing. (size) 1=5-6-2,3 Max Horiz 1=-74 (LC Max Grav 1=71 (LC (LC 2) (lb) - Maximum Com Tension 1-2=-89/102, 2-3=-5 1-4=-122/133, 3-4=- 2-4=-225/139 ed roof live loads have b CE 7-10; Vult=130mph mph; TCDL=6.0psf; Bf D B; Enclosed; MWFR3) zone; cantilever left at t and right exposed;C- WFRS for reactions s Date grip DOL=1.33 gned for wind loads in studs exposed to wind ard Industry Gable En- gualified building desig CE 7-10; Pr=20.0 psf (Plate DOL=1.15); Pg= 13.9 psf (flat roof snov =1.15); Category II; E)	athing directly applie applied or 6-0-0 oc 3=5-6-2, 4=5-6-2 29) 28), 3=71 (LC 29), 4 apression/Maximum 6/88 122/133 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) and C-1 and right exposed ; e C for members and hown; Lumber the plane of the trus (normal to the face) d Details as applicab gner as per ANSI/TP roof live load: Lumbe =20.0 psf (ground w: Lumber DOL=1.15 xp B; Fully Exp.;	5) 6) 7) d or 8) =321 =321	Gable require Gable studs s * This truss h on the bottom 3-06-00 tall b chord and an One RT4 US truss to beari connection is forces. AD CASE(S)	es continuous botto spaced at 4-0-0 oc as been designed n chord in all areas y 2-00-00 wide will y other members. P connectors recor ng walls due to UP for uplift only and Standard	om chor for a liv where l fit betv mmend LIFT at does no	d bearing. e load of 20.0 a rectangle veen the botto ed to connect jt(s) 4. This of consider lat	ipsf om eral				SEA 4584 Monte W June		Ammunit

ENGINEERING BY EREPACED A MITEK Attiliate 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	V6	Valley	1	1	I45382179 Job Reference (optional)

Run: 8.43 S Mar 4 2021 Print: 8.430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:13 ID:OJ_7Md?F1tHZw72b417?VLySZwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:27.3

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

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/TPI2014	CSI TC BC WB Matrix-MP	0.08 0.08 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 13 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS (FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Unbalanced this design. 2) Wind: ASC Vasd=103m Cat. II; Exp Exterior (2) vertical left forces & MI DOL=1.60 3) Truss desig only. For s see Standa or consult c DOL=1.15 snow); Pf= Plate DOL= Ct=1.10 5) Gable requ 6) Gable stud:	2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 Structural wood shee 3-6-2 oc purlins. Rigid ceiling directly bracing. (size) 1=3-6-2, 3 Max Horiz 1=45 (LC Max Grav 1=140 (LC (lb) - Maximum Com Tension 1-2=-155/38, 2-3=-8 1-3=-18/107 d roof live loads have E 7-10; Vult=130mph nph; TCDL=6.0psf; Bt B; Enclosed; MWFR3 cone; cantilever left and right exposed; C- WFRS for reactions s plate grip DOL=1.33 gned for wind loads in tuds exposed to wind rd Industry Gable Enqualified building desig E 7-10; Pr=20.0 psf (115); Category II; E) ires continuous bottor s spaced at 4-0-0 oc.	athing directly applie applied or 10-0-0 oc 3=3-6-2 12) C 2), 3=140 (LC 2) pression/Maximum 6/36 been considered for (3-second gust) CDL=6.0pst; h=25ft; S (envelope) and C-0 and right exposed; e C for members and hown; Lumber the plane of the trus (normal to the face) d Details as applicab gner as per ANS/TP roof live load: Lumbe =20.0 psf (ground w: Lumber DDL=1.15 xp B; Fully Exp.; m chord bearing.	7) * This truss h on the bottor 3-06-00 tall chord and ar d or LOAD CASE(S)	has been designed in chord in all areas by 2-00-00 wide wil y other members. Standard	for a liv s where I fit betw	e load of 20.0 a rectangle veen the botto	Dpsf		Culture		SEA 4584 March	ROL 4. EFF. 60 0HN 0HN 01 27,2021	
	NG - Verify design paramete	ers and READ NOTES ON	THIS AND INCLUDED MITEK R	EFERENCE PAGE MII-7	473 rev. 5	19/2020 BEFOR	E USE.				ENGINEER	ING BY	

ENGINEERING BY AMITEK Affiliate 818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	209 Crossing at ACC-Havenbrooke B - Roof
21070087-A	V7	Valley	1	1	I45382180 Job Reference (optional)

Run: 8,43 S Mar 4 2021 Print: 8,430 S Mar 4 2021 MiTek Industries, Inc. Fri Mar 26 12:25:13 ID:sVYWaz0toAPQXHdoeleE2ZySZwY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-6-2

0-9-1 0-9-

1-0-5 2x4 🎣 2x4 💊 1-6-2 Plate Offsets (X, Y): [2:Edge,0-2-8] 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 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



Scale = 1:29.8

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/TPI201	4 CSI TC BC WB 4 Matrix-MP	0.01 0.02 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 5 lb
LUMBER TOP CHORD BOT CHORD BRACING	2x4 SP No.2 2x4 SP No.2		7) * This on the 3-06-0 chord a	truss has been design bottom chord in all are 0 tall by 2-00-00 wide and any other member	ed for a liv eas where will fit betw rs.	re load of 20. a rectangle veen the bott	0psf om				
TOP CHORD	Structural wood she 1-6-2 oc purlins. Rigid ceiling directly bracing.	athing directly applie	ed or LOAD CA	Standard							
REACTIONS	(size) 1=1-6-2, 3 Max Horiz 1=-17 (LC Max Grav 1=60 (LC	3=1-6-2 ; 9) 2), 3=60 (LC 2)									
FORCES	(lb) - Maximum Com Tension	pression/Maximum									
TOP CHORD BOT CHORD	1-2=-60/17, 2-3=-27, 1-3=-5/40	/13									
NOTES	ed roof live loads have	been considered fo	r								
this design	1. 2. 7. 10: Vult 120mmh	(2 accord quat)									
Z) Wind: ASC Vasd=103	mph; TCDL=6.0psf; B	CDL=6.0psf; h=25ft;	•								
Cat. II; Exp	D B; Enclosed; MWFR;	S (envelope) and C-	<u>ل</u>								

DOL=1.60 plate grip DOL=1.33 Truss designed for wind loads in the plane of the truss 3) only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber 4) 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.



SEAL

45844

Page: 1

GRIP 244/190

FT = 20%

818 Soundside Road Edenton, NC 27932

