WILBUR E. DEES, P.E., P.L.S. CONSULTING ENGINEERING AND LAND SURVEYING 1100 CLARENDON STREET, SUITE 101 FAYETTEVILLE, N. C., 28305 CELL PHONE (910) 624-4779 E-MAIL: WED7111@GMAIL.COM

APRIL 6, 2021

HARNETT COUNTY CENTRAL PERMITTING P.O. BOX 65 LILLINGTON, NORTH CAROLINA 27546

RE: DECK RESTORATION AND NEW ROOF 377 TACTICAL DRIVE BUNNLEVEL, NORTH CAROLINA 28323

DEAR SIR:

BASED UPON MY PREVIOUS SITE VISIT AND INSPECTIONS OF THE EXISTING WOOD DECK RESTORATION AND NEW DECK ROOF I FOUND THE EXISTING WOOD DECK AND NEW ROOF CONSTRUCTION WAS COMPLETED. I WAS FURNISHED A COPY OF THE GABLE END TRUSS DRAWING AND THE REGULAR DECK TRUSS DRAWING. CONVENTIONAL LIGHT WOOD FRAMING WAS USED FOR THE VALLEY PORTION OF THE NEW ROOF.

A COPY OF EACH TRUSS'S DRAWING IS INCLUDED HEREWITH.

I FOUND THE WOOD DECK PORTION OF THE CONSTRUCTION COMPLIED ESSENTIALL WITH ALL THE REQUIREMENTS OF "APPENDIX M WOOD DECKS" REQUIREMENTS. THE HOT DIPPED GALVANIZED BOLTS WERE 1/2 INCH IN LIEU OF 5/8 INCHES. I CONSIDER THE 1/2 INCHE BOLTS WERE ADEQUATE SINCE ALL THE JOIST SPAN LENGTHS HAD BEEN REDUCED BY THE ADDITION OF A NEW DROP GIRDER.

NEW 6 X 6 PRESSURE TREATED WOOD POST SUPPORTED ALL THE NEW ROOF FRAMING.

I HEREBY CERTIFY THAT THE NEW ROOF FRAMING SYSTEM IS SAFE AND CAN SUPPORT ALL LOADS REQUIRED BY THE NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE, 2018 EDITION.

I WOULD CLASSIFY THE WORKMANSHIP OF THE DECK RENOVATION AND THE NEW DECK ROOF AS ABOVE AVERAGE.

SHOULD YOU HAVE ANY QUESTIONS PLEASE DO NOT HESITATE TO

SINCERE PERSONAL SALL WILBUR CARCES, P.E., P.L.S.

	J.	Truss	Truss Type	Qty	Ply	RICHARD JOHNSON
8	2!	TR1	FINK	6	1	Job Reference (optional)

C&R Building Supply, AUTRYVILLE, C&R Building Supply

7.630 s Jul 9 2015 MiTek Industries, Inc. Tue Dec 08 10:26:50 2020 Page 1 ID:bOukan8C1Mzgzd85teYtfNz81P9-cFxbFQ0tUnVpjvBFP1gEXXxEIQUA21pgD_oHAgyB3n3

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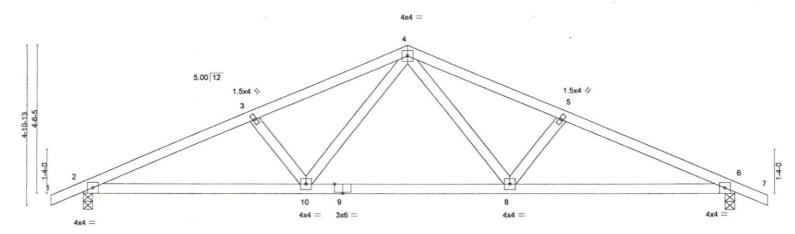


Plate Off	sets (X,Y) [9:0-3-0,Edge]				,					·	
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defi	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.06	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(TL)	-0.17	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(TL)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2012/T	PI2007	(Mat	rix-S)	Wind(LL)	0.04	8-10	>999	240	Weight: 88 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied.

Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=860/0-3-8 (min. 0-1-8), 6=860/0-3-8 (min. 0-1-8)

Max Horz 2=72(LC 7)

Max Uplift2=-96(LC 8), 6=-96(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1490/148, 3-4=-1318/144, 4-5=-1318/144, 5-6=-1490/148

BOT CHORD 2-10=-7/1/327, 9-10=-1/910, 8-9=-1/910, 6-8=-71/1/327 WEBS 3-10=-286/106, 4-10=-11/443, 4-8=-11/443, 5-8=-286/106

NOTES-

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

2) Wind: ASCE 7-10; Vult=140mph (3-second gust) V(IRC2012)=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
- 6) This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	RICHARD JOHNSON
2560R	TR1GA	GABLE	1	1	Job Reference (optional)

C&R Building Supply, AUTRYVILLE, C&R Building Supply

7.630 s Jul 9 2015 MiTek Industries, Inc. Tue Dec 08 10:26:51 2020 Page 1 ID:bOukan8C1Mzgzd85teYtfNz81P9-4SV_Tm1VF5dgL3mRzkBT4ITPVpqPnU3qSeYrj6yB3n2

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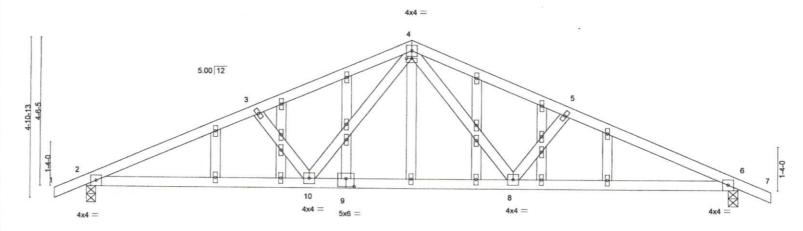


Plate Offsets (X,Y)	[4:0-2-0,0-0-0], [9:0-3-0,0-3-0]		
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2012/TPI2007	CSI. TC 0.22 BC 0.43 WB 0.18 (Matrix-S)	DEFL. in (loc) I/defl L/d PLATES GRIP Vert(LL) -0.06 8-10 >999 360 MT20 244/190 Vert(TL) -0.17 8-10 >999 240 Horz(TL) 0.04 6 n/a n/a Wind(LL) 0.04 8-10 >999 240 Weight: 114 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3 BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied. Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=860/0-3-8 (min. 0-1-8), 6=860/0-3-8 (min. 0-1-8) Max Horz 2=72(LC 7)

Max Uplift2=-96(LC 8), 6=-96(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1490/148, 3-4=-1318/144, 4-5=-1318/144, 5-6=-1490/148

BOT CHORD 2-10=-71/1327, 9-10=-1/910, 8-9=-1/910, 6-8=-71/1327 WEBS 3-10=-286/106, 4-10=-11/443, 4-8=-11/443, 5-8=-286/106

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=140mph (3-second gust) V(IRC2012)=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.

5) Gable studs spaced at 2-0-0 oc.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 8) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2012 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPL1
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard