



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 ESSENTIALLY 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
CONTACT ME

SINCERELY,



WILBUR E. DEES, P.E., P.L.S.

Jr	Truss	Truss Type	Qty	Ply	RICHARD JOHNSON
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
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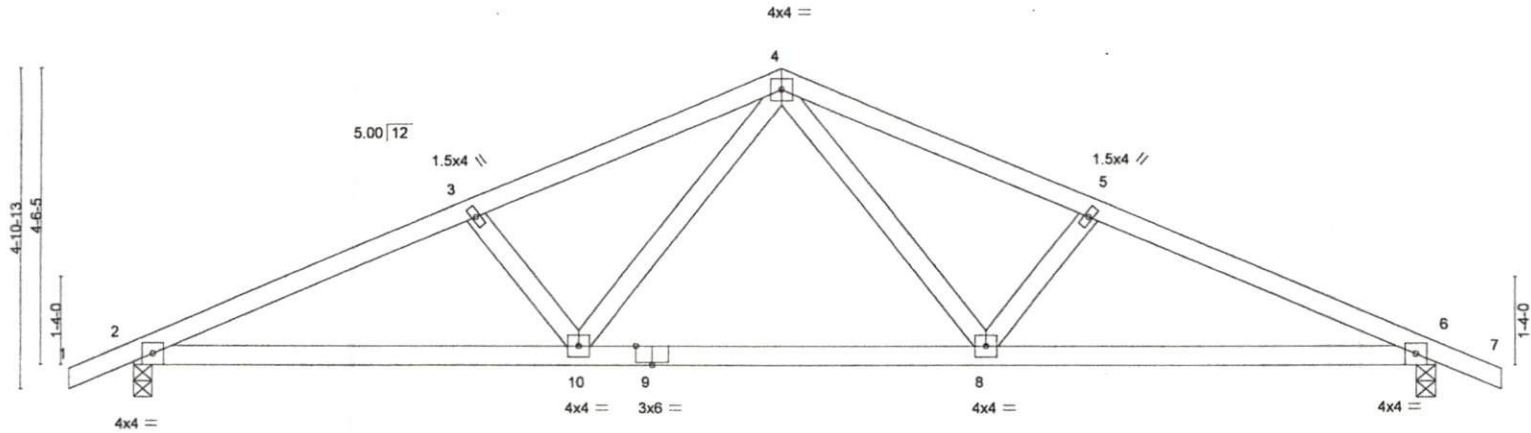


Plate Offsets (X,Y)-- [9:0-3-0,Edge]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	L/defl	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/TPI2007	(Matrix-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 Structural wood sheathing directly applied.
BOT CHORD 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 Uplift 2=-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) 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 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Job 2560R	Truss TR1GA	Truss Type GABLE	Qty 1	Ply 1	RICHARD JOHNSON
C&R Building Supply, ATRUVILLE, C&R Building Supply					Job Reference (optional)

Scale = 1:35.3

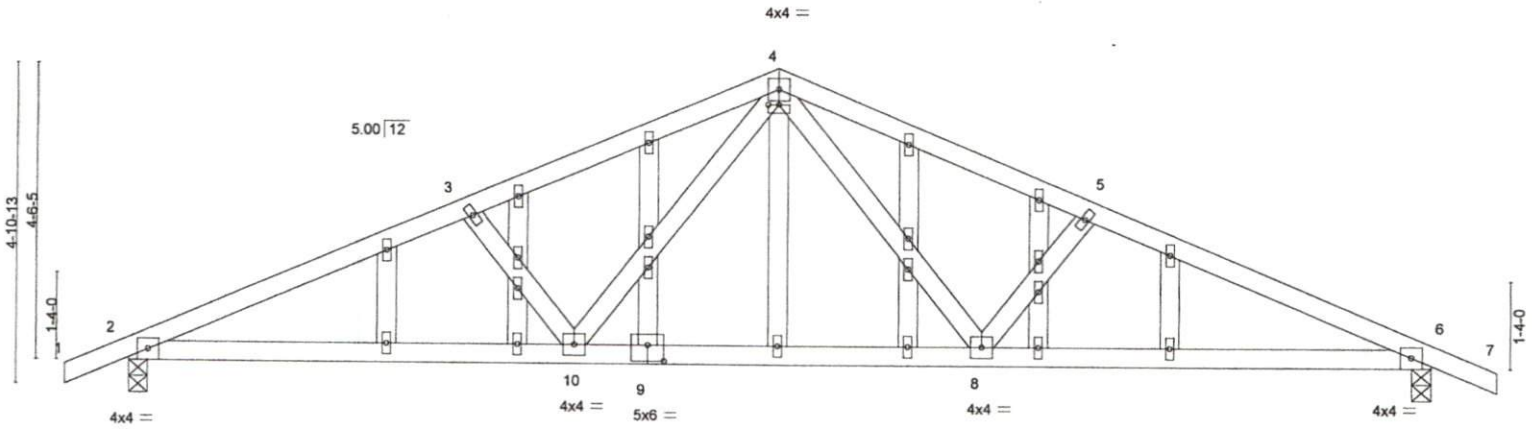


Plate Offsets (X,Y) -- [4:0-2-0,0-0-0], [9:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.43	Vert(LL) -0.06 8-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Vert(TL) -0.17 8-10 >999 240		
BCDL 10.0	Rep Stress Incr YES	(Matrix-S)	Horz(TL) 0.04 6 n/a n/a		
	Code IRC2012/TPI2007		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 Structural wood sheathing directly applied.
 BOT CHORD 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 Uplift 2=-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.
 - 4) 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.
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LOAD CASE(S) Standard

Job 25608	Truss TR1GA	Truss Type GABLE	Qty 1	Ply 1	RICHARD JOHNSON
					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
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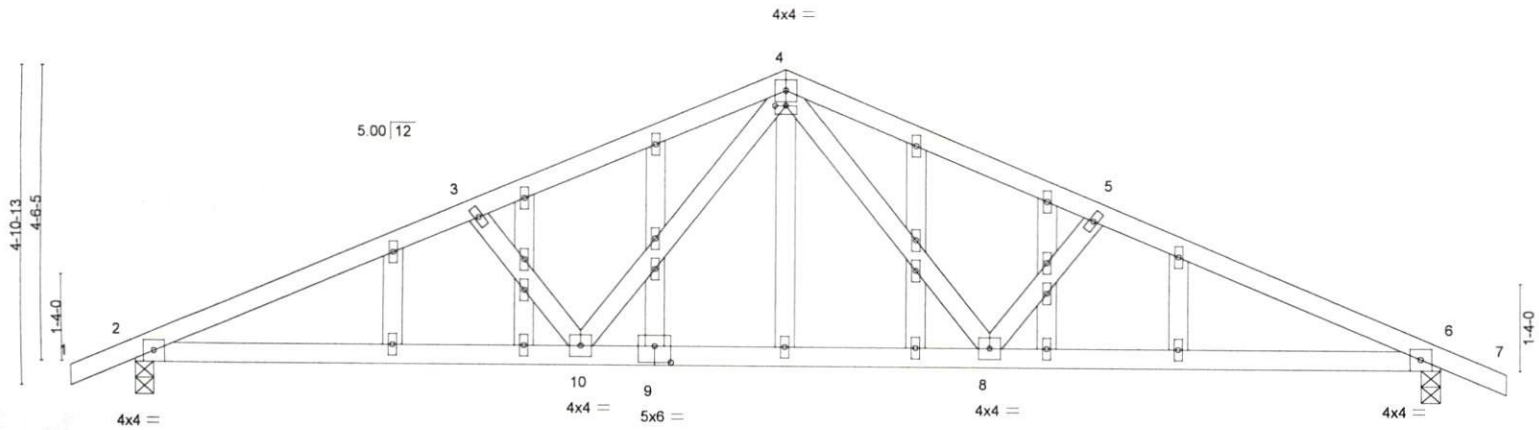


Plate Offsets (X,Y)-- [4:0-2-0,0-0-0], [9:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	Vert(LL)	-0.06	8-10	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.43	Vert(TL)	-0.17	8-10	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Horz(TL)	0.04	6	n/a		
BCDL 10.0	Rep Stress Incr YES	(Matrix-S)	Wind(LL)	0.04	8-10	>999		
	Code IRC2012/TPI2007						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.

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

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- 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
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LOAD CASE(S) Standard

