ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0718-3290
Cary Reconstruction/25 Crutchfield Dr.

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: E12170064 thru E12170076

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844

September 5,2018

Strzyzewski, Marvin

IMPORTANT NOTE: Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	A1	FINK	8	1	E12170064
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:40 2018 Page 1
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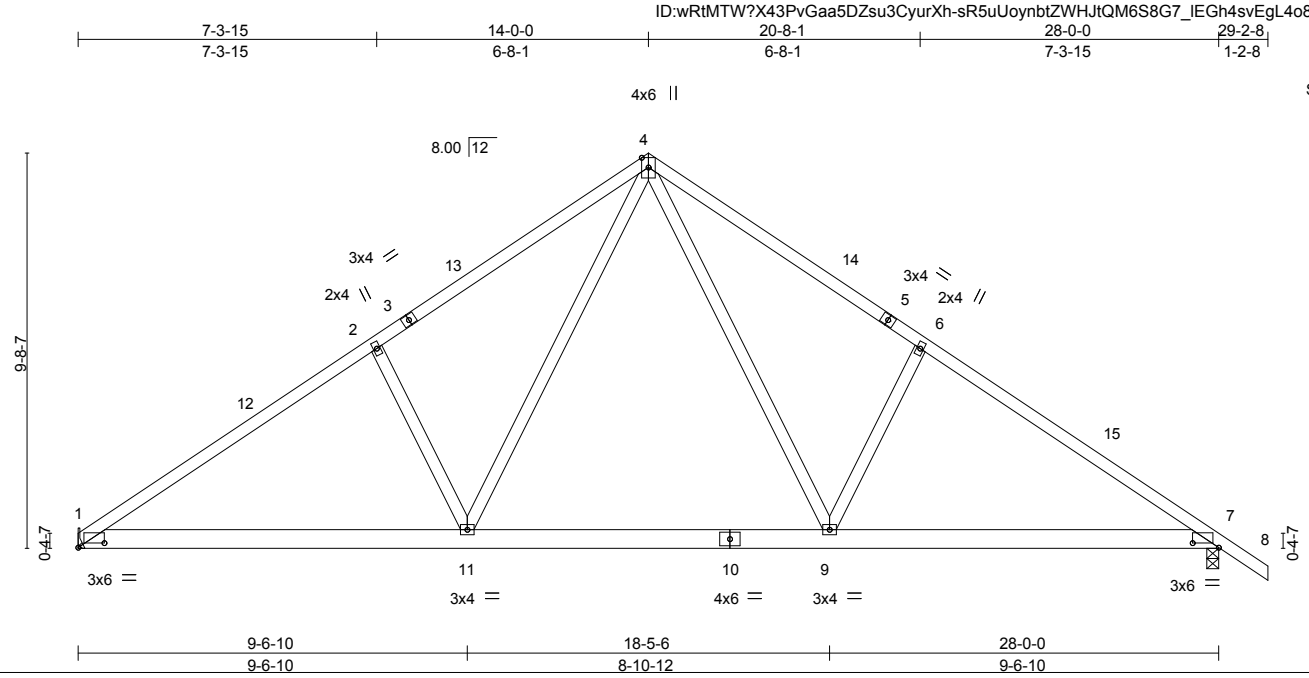


Plate Offsets (X,Y)-- [1:0-7-11,0-1-5], [7:0-7-11,0-1-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.44	Vert(LL)	-0.15	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(TL)	-0.23	9-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(TL)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-R							Weight: 163 lb	FT = 0%

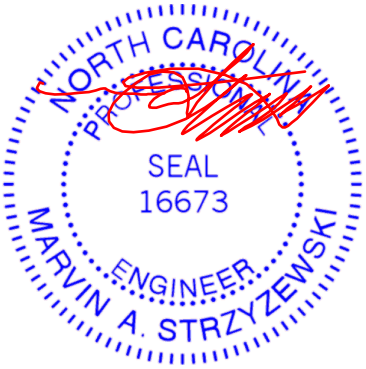
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=1286/Mechanical, 7=1372/0-3-8
Max Horz 1=-274(LC 3)
Max Uplift 1=-81(LC 5), 7=-135(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1984/402, 2-4=-1796/485, 4-6=-1783/469, 6-7=-1972/388
BOT CHORD 1-11=-163/1553, 9-11=0/1045, 7-9=-146/1538
WEBS 2-11=-372/261, 4-11=-179/839, 4-9=-151/818, 6-9=-362/250

NOTES- (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-1-0 to 4-5-13, Interior(1) 4-5-13 to 9-7-3, Exterior(2) 9-7-3 to 14-0-0, Interior(1) 18-4-13 to 24-9-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * 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, with BCDL = 10.0psf.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 1 and 135 lb uplift at joint 7.
6) Harnett Co.



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Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	A1GE	GABLE	1	1	E12170065
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:41 2018 Page 1
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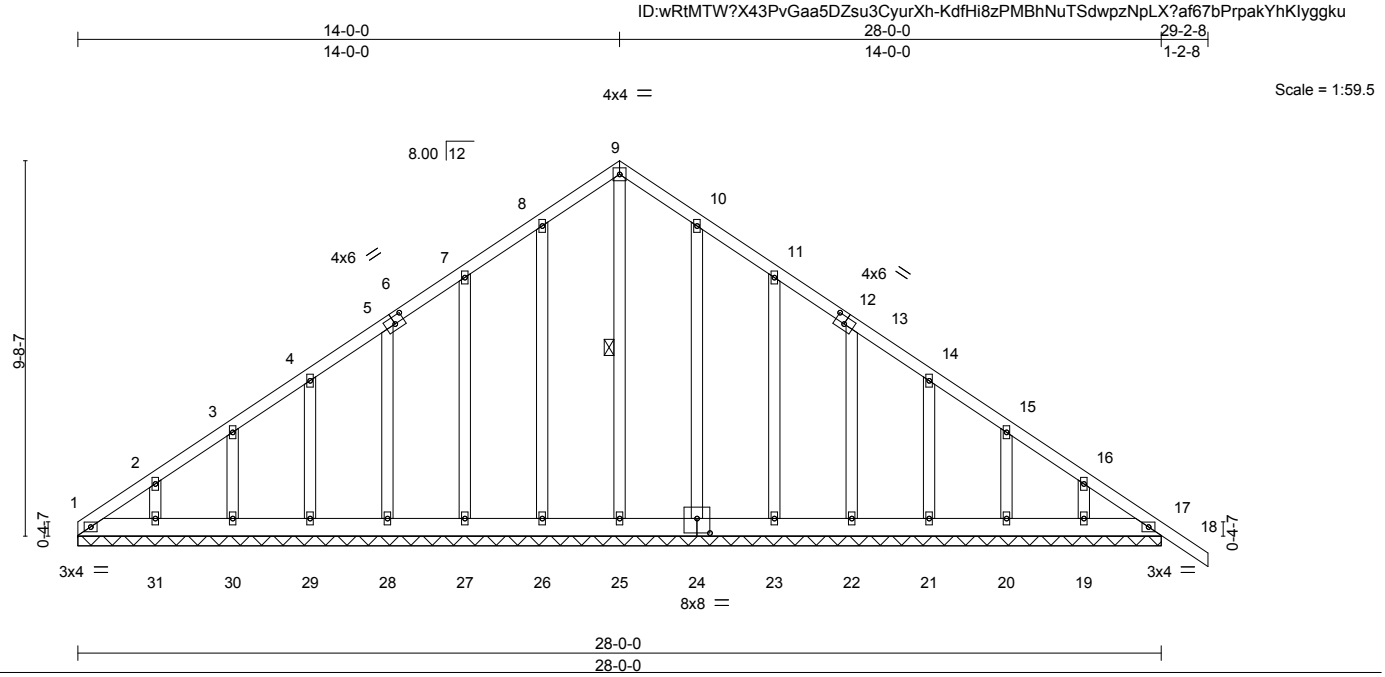


Plate Offsets (X,Y)-- [5:0-2-2,0-0-0], [6:0-3-0,0-2-4], [6:0-0-0,0-1-12], [12:0-3-0,0-2-4], [12:0-0-0,0-1-12], [13:0-2-2,0-0-0], [24:0-4-0,0-4-8]

LOADING (psf)		SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL 1.00	TC	0.08	Vert(LL)	-0.00	18	n/r	120	MT20	244/190
TCDL 10.0		Lumber DOL 1.15	BC	0.04	Vert(TL)	-0.01	18	n/r	90		
BCLL 0.0	*	Rep Stress Incr NO	WB	0.15	Horz(TL)	0.01	17	n/a	n/a		
BCDL 10.0		Code IRC2009/TPI2007	Matrix-R							Weight: 209 lb	FT = 0%

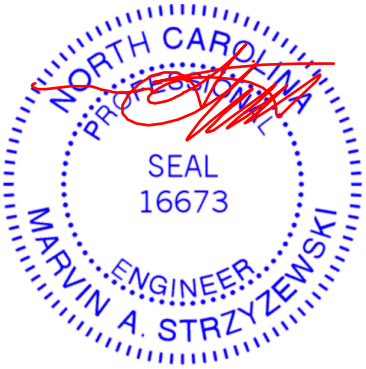
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.3

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 9-25

REACTIONS. All bearings 28-0-0.
(lb) - Max Horz 1=-343(LC 3)
Max Uplift All uplift 100 lb or less at joint(s) 1, 17, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 19
Max Grav All reactions 250 lb or less at joint(s) 1, 17, 25, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 19

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-284/170
BOT CHORD 1-31=-56/262, 30-31=-56/262, 29-30=-56/262, 28-29=-56/262, 27-28=-56/262, 26-27=-56/262, 25-26=-56/262, 24-25=-56/262, 23-24=-56/262, 22-23=-56/262, 21-22=-56/262, 20-21=-56/262, 19-20=-56/262, 17-19=-56/262

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) 0-0-0 to 4-4-13, Exterior(2) 4-4-13 to 9-7-3, Corner(3) 9-7-3 to 14-0-0, Exterior(2) 18-4-13 to 24-9-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
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, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 17, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 19.
9) Harnett Co.



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Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	A2	FINK	1	1	E12170066
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:42 2018 Page 1

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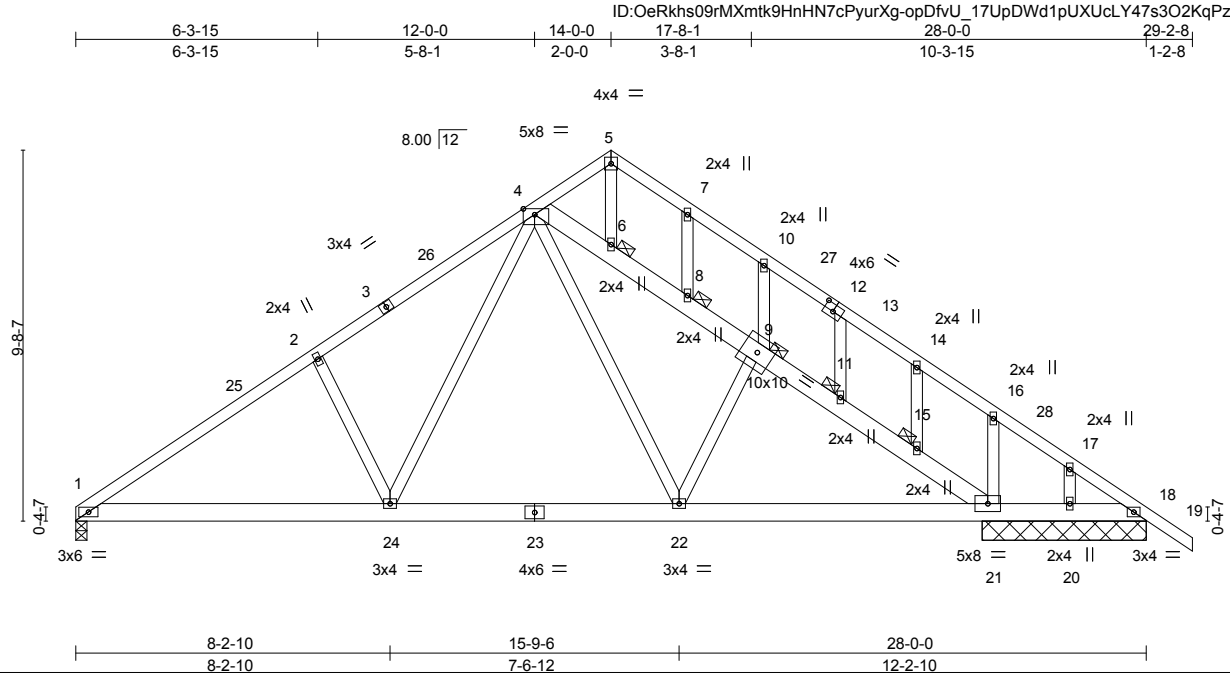


Plate Offsets (X,Y)-- [4:0-3-9,Edge], [12:0-3-0,0-2-4], [12:0-0-0,0-1-12], [13:0-2-2,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.31	Vert(LL)	-0.09	22-24	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(TL)	-0.14	22-24	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.32	Horz(TL)	0.03	18	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-R							Weight: 211 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SP No.1 *Except* 4-21: 2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-6-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 6, 8, 9, 11, 15

REACTIONS. All bearings 4-3-8 except (jt=length) 1=0-3-8.

(lb) - Max Horz 1=-343(LC 3)

Max Uplift All uplift 100 lb or less at joint(s) 20 except 1=-211(LC 5), 21=-476(LC 6)

Max Grav All reactions 250 lb or less at joint(s) 20 except 1=1111(LC 1), 21=1253(LC 1), 18=302(LC 1)

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

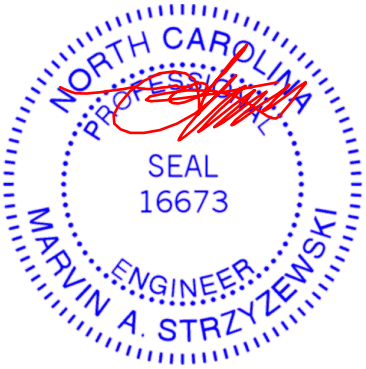
TOP CHORD 1-2=-1706/313, 2-4=-1546/394, 16-17=-274/0, 17-18=-329/0, 4-6=-1172/352, 6-8=-1136/347, 8-9=-1187/374, 9-11=-1232/401, 11-15=-1284/429, 15-21=-1342/467

BOT CHORD 1-24=-257/1331, 22-24=-77/895, 21-22=-111/1212, 20-21=0/359, 18-20=0/359

WEBS 2-24=-303/283, 4-24=-217/705, 4-22=-125/566

NOTES- (6)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-7-3, Exterior(2) 9-7-3 to 14-0-0, Interior(1) 18-4-13 to 24-9-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * 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, with BCDL = 10.0psf.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20 except (jt=lb) 1=211, 21=476.
5) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
6) Harnett Co.



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Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	B1	ROOF TRUSS	7	1	E12170067
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:43 2018 Page 1
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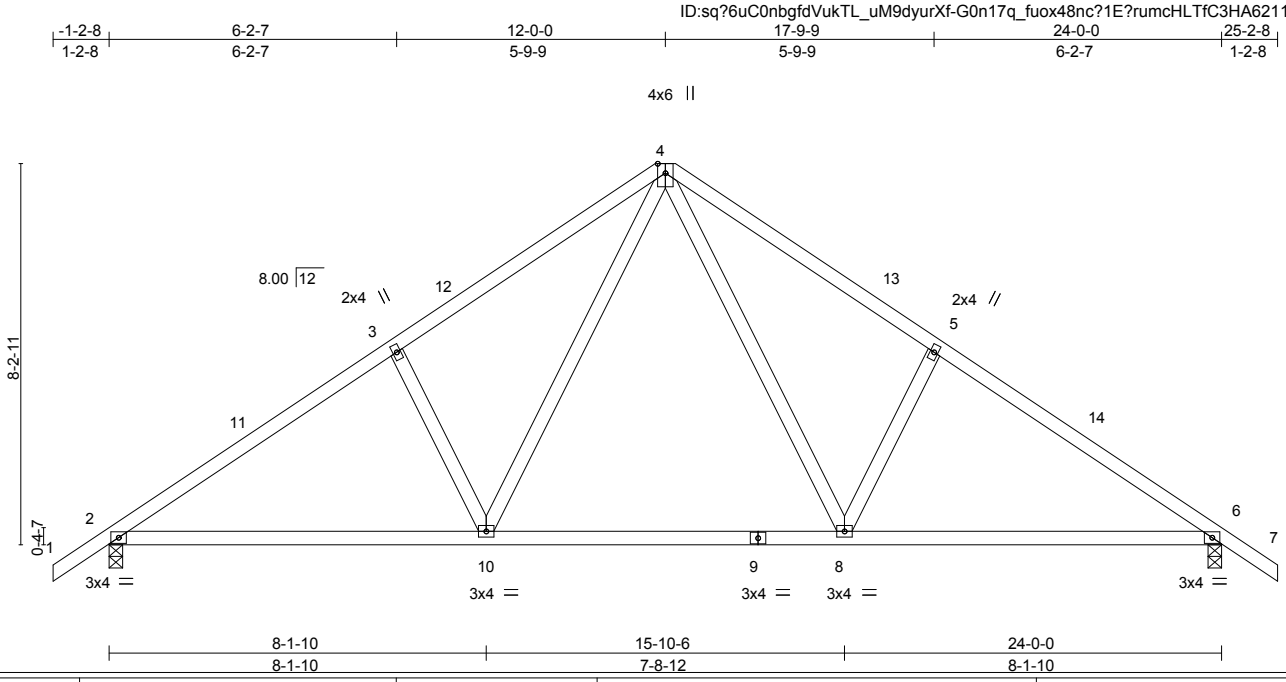


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	-0.24	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(TL)	-0.32	8-10	>898	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(TL)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-R							Weight: 122 lb	FT = 0%

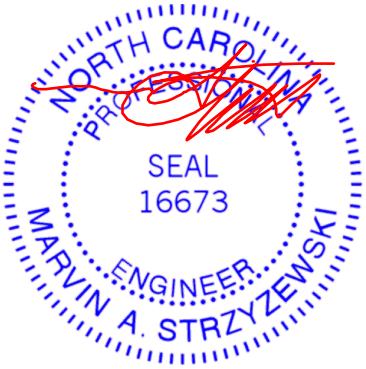
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1184/0-3-8, 6=1184/0-3-8
Max Horz 2=-223(LC 3)
Max Uplift 2=-123(LC 5), 6=-123(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1665/330, 3-4=-1503/401, 4-5=-1503/401, 5-6=-1665/330
BOT CHORD 2-10=-118/1293, 8-10=0/877, 6-8=-118/1293
WEBS 3-10=-303/217, 4-10=-132/689, 4-8=-132/689, 5-8=-303/217

NOTES- (5)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 7-7-3, Exterior(2) 7-7-3 to 12-0-0, Interior(1) 16-4-13 to 20-9-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * 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, with BCDL = 10.0psf.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=123, 6=123.
5) Harnett Co.



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Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	B1GE	GABLE	1	1	E12170068
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:43 2018 Page 1
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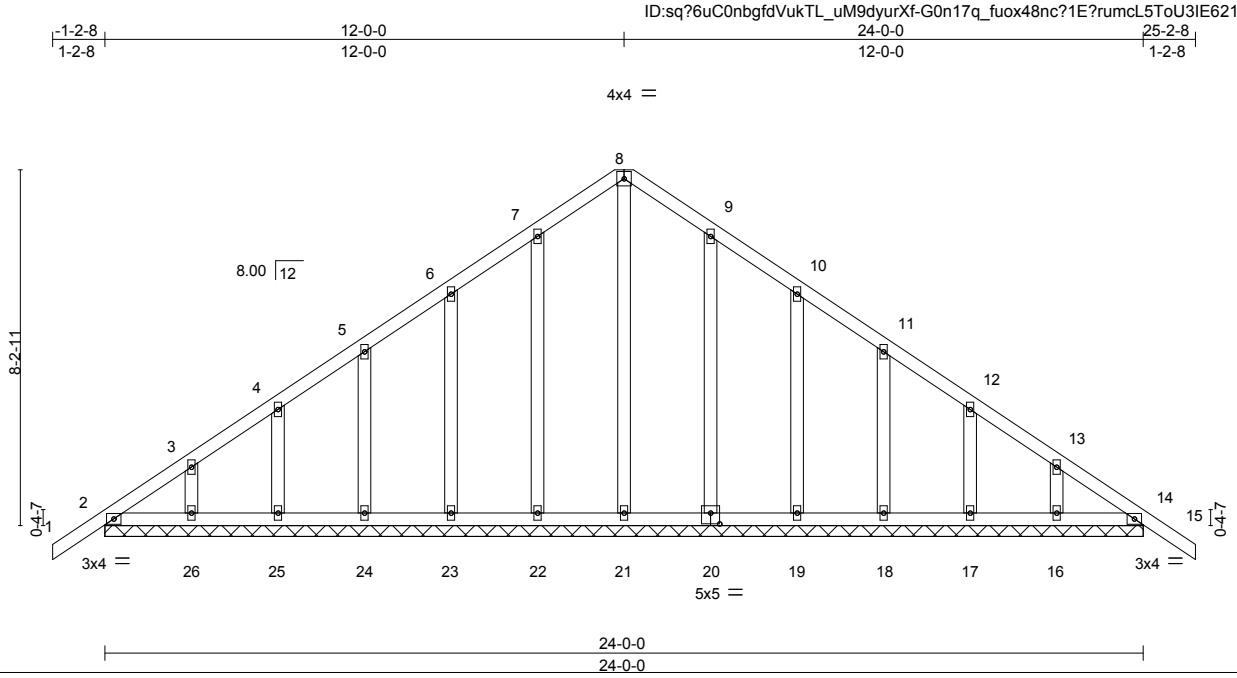


Plate Offsets (X,Y)-- [20:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	-0.00	15	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	-0.01	15	n/r	90		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.22	Horz(TL)	0.01	14	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-R							Weight: 152 lb	FT = 0%

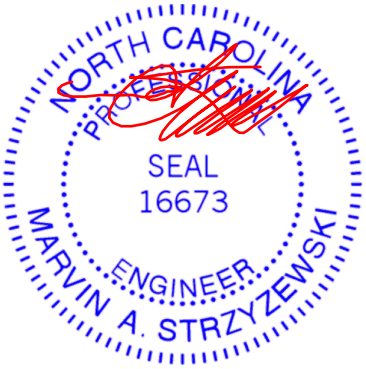
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.3

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.

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz 2=-284(LC 3)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 14, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-251/176

NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -1-2-8 to 3-2-5, Exterior(2) 3-2-5 to 7-7-3, Corner(3) 7-7-3 to 12-0-0, Exterior(2) 16-4-13 to 20-9-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
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, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16.
9) Harnett Co.



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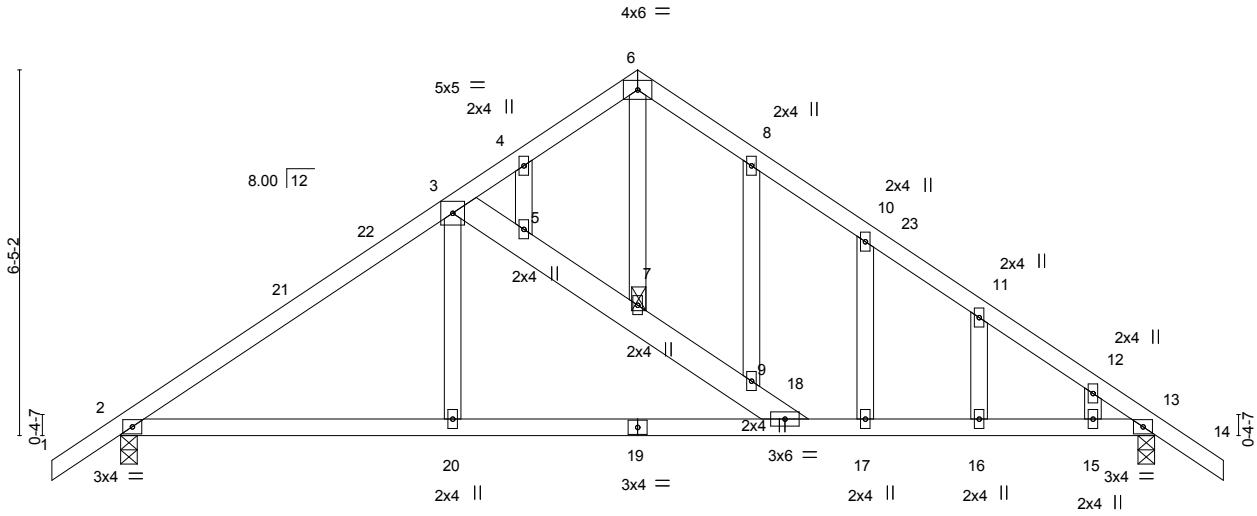
Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	C1	KINGPOST	1	1	E12170069
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:44 2018 Page 1
ID:sq?6uC0nbgfdVukTL_uM9dyurXf-kCLPKA?Hf63xlxBCbyX4Rz9PEt11olHGGhmLxdyggkr

-1-2-8 | 5-10-0 | 9-1-0 | 18-2-0 | 19-4-8
1-2-8 | 5-10-0 | 3-3-0 | 9-1-0 | 1-2-8

Scale = 1:40.5



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.57	Vert(LL)	0.19	16-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(TL)	-0.32	16-17	>679	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(TL)	0.02	13	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-R							Weight: 109 lb	FT = 0%

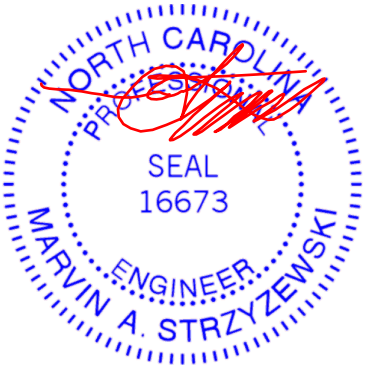
LUMBER-
TOP CHORD 2x4 SP No.1 *Except* 3-18: 2x6 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 7

REACTIONS. (lb/size) 13=796/0-3-8, 2=796/0-3-8
Max Horz 2=216(LC 4)
Max Uplift 13=-244(LC 6), 2=-244(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-972/233, 3-4=-771/299, 4-6=-759/331, 6-8=-745/327, 8-10=-776/265, 10-11=-793/210, 11-12=-837/165, 12-13=-884/125, 5-7=-273/152
BOT CHORD 2-20=-126/713, 18-20=-127/711, 17-18=-46/646, 16-17=-46/646, 15-16=-46/646, 13-15=-46/646
WEBS 6-7=-243/556

NOTES- (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 4-8-3, Exterior(2) 4-8-3 to 9-1-0, Interior(1) 13-5-13 to 14-11-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * 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.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=244, 2=244.
5) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
6) Harnett Co.



September 5,2018

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	C2-2PLY	HOWE	1	2	E12170070
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:45 2018 Page 1

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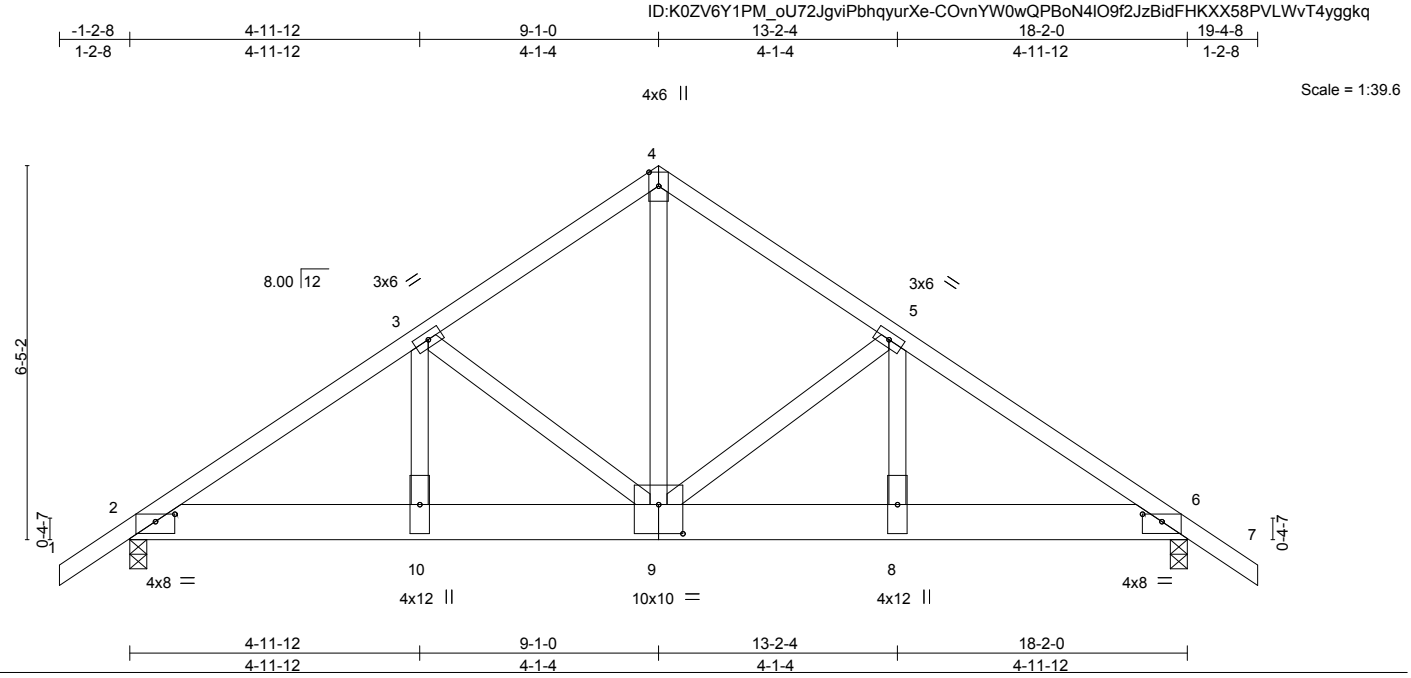


Plate Offsets (X,Y)-- [2:0-4-0,0-1-9], [6:0-4-0,0-1-9], [9:0-5-0,0-6-0]

LOADING (psf)		SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.00	TC	0.36	Vert(LL)	-0.07	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.65	Vert(TL)	-0.18	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB	0.64	Horz(TL)	0.05	6	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007	Matrix-R							Weight: 248 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x8 SP No.1
WEBS 2x4 SP No.3 *Except*
4-9: 2x4 SP No.2

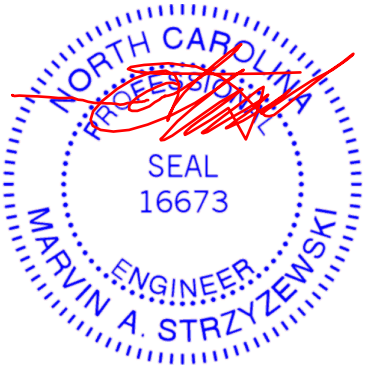
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=5392/0-3-8, 6=5392/0-3-8
Max Horz 2=164(LC 3)
Max Uplift 2=-872(LC 4), 6=-872(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7230/1099, 3-4=-5016/818, 4-5=-5016/818, 5-6=-7230/1100
BOT CHORD 2-10=-908/5972, 9-10=-908/5972, 8-9=-855/5972, 6-8=-855/5972
WEBS 3-10=-347/2410, 4-9=-824/5216, 5-8=-350/2410, 3-9=-2357/434, 5-9=-2357/436

NOTES- (8)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
5) * 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=872, 6=872.
7) Girder carries tie-in span(s): 28-0-0 from 0-0-0 to 18-2-0
8) Harnett Co.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (plf)
Vert: 2-6=-534(F=-514), 1-4=-60, 4-7=-60



September 5,2018

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	D1	ROOF TRUSS	2	1	E12170071
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:45 2018 Page 1
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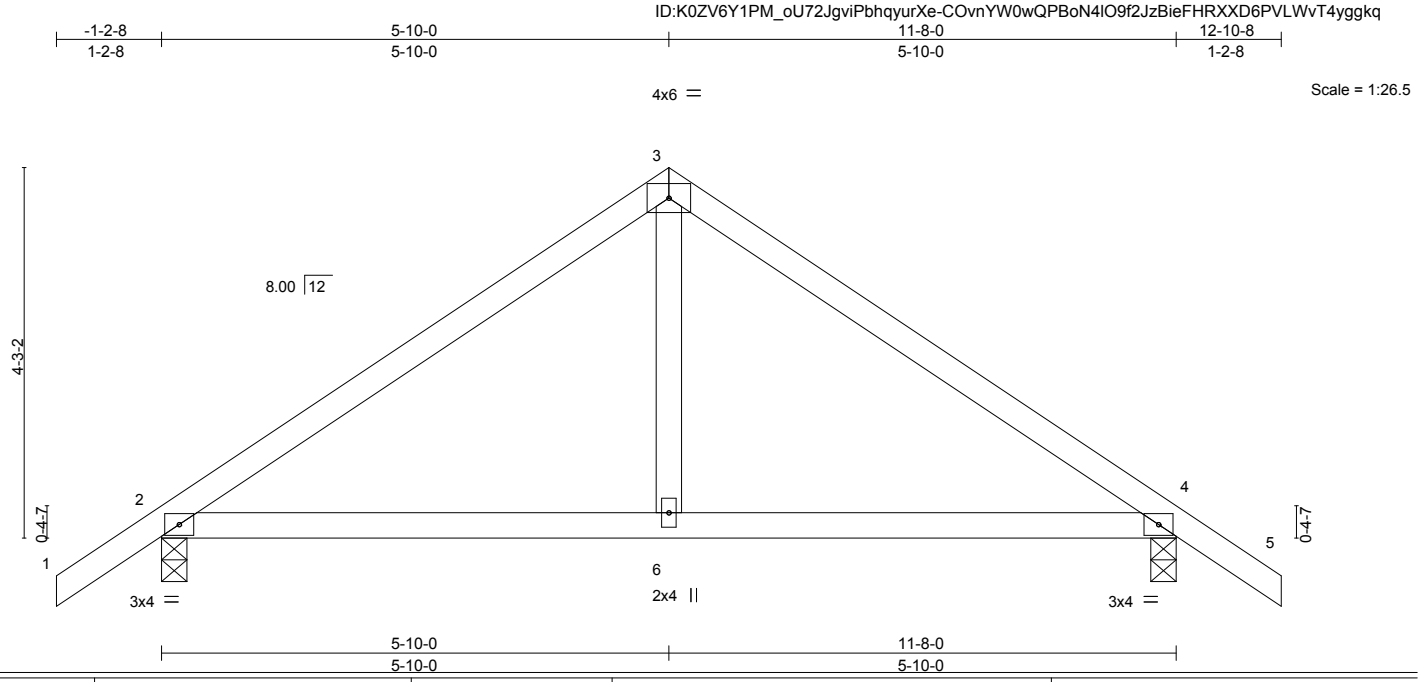


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	-0.02	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	-0.06	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(TL)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-R							Weight: 48 lb	FT = 0%

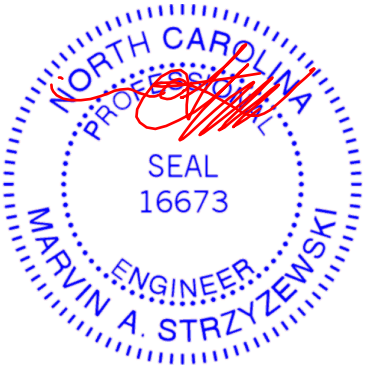
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

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.

REACTIONS. (lb/size) 2=536/0-3-8, 4=536/0-3-8
Max Horz 2=-108(LC 3)
Max Uplift 2=-89(LC 5), 4=-89(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-557/160, 3-4=-557/160
BOT CHORD 2-6=0/387, 4-6=0/387

NOTES- (5)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * 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.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
5) Harnett Co.



September 5,2018

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	D1GE	ROOF TRUSS	1	1	E12170072
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:46 2018 Page 1
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-1-2-8 5-10-0 11-8-0 12-10-8
1-2-8 5-10-0 5-10-0 1-2-8

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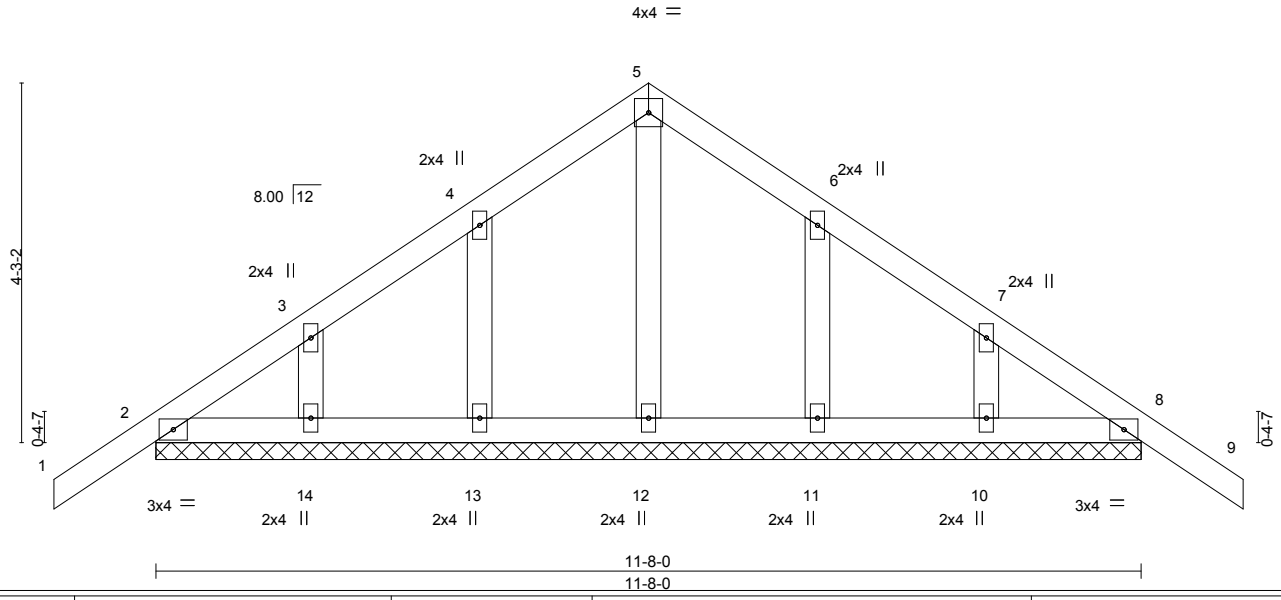


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	-0.01	9	n/r	90		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-R							Weight: 59 lb	FT = 0%

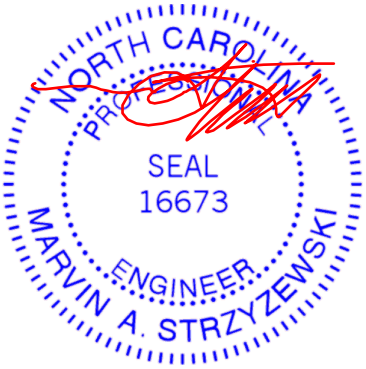
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.3

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.

REACTIONS. All bearings 11-8-0.
(lb) - Max Horz 2=-141(LC 3)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES- (8)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) * 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
8) Harnett Co.



September 5,2018

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	E1	MONO TRUSS	9	1	E12170073
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:46 2018 Page 1
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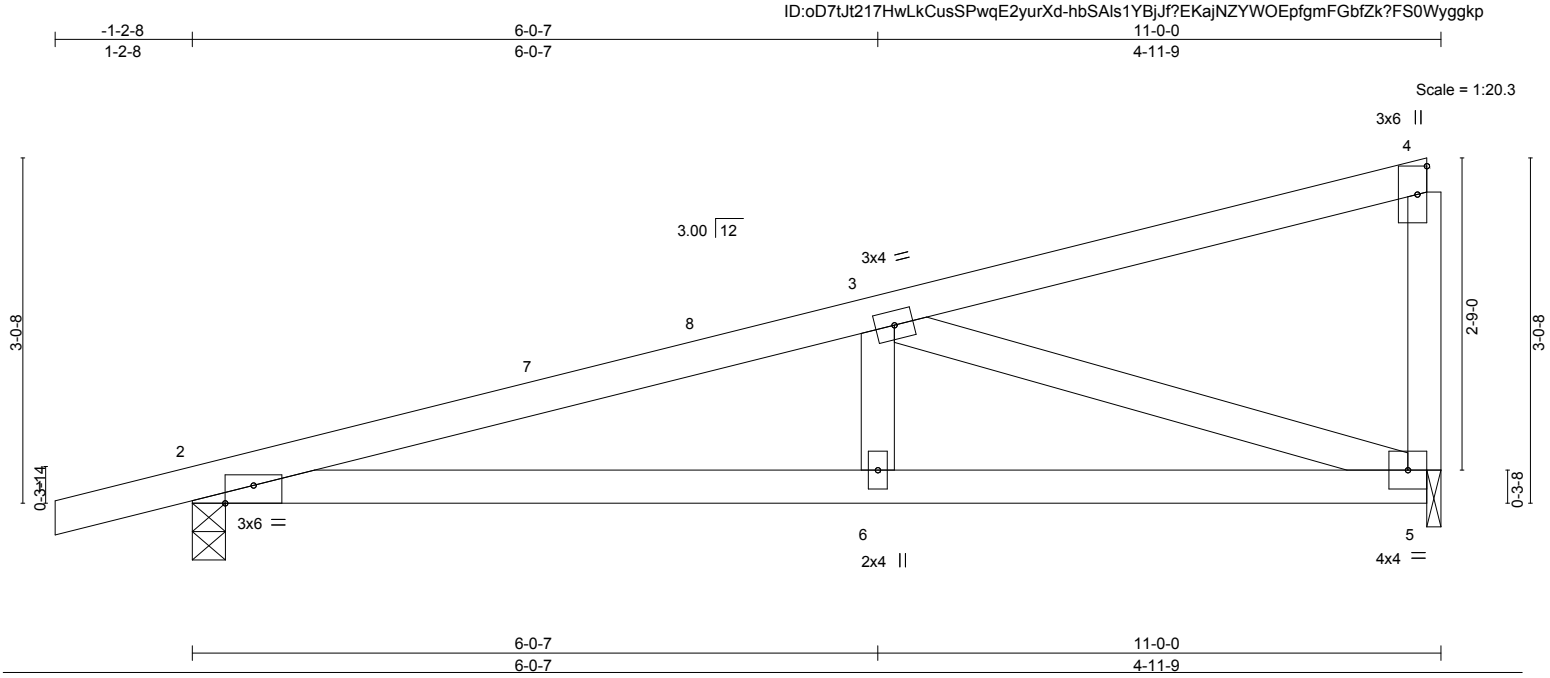


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	0.10	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(TL)	-0.11	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(TL)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-R							Weight: 47 lb	FT = 0%

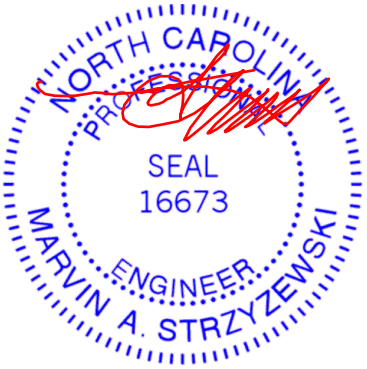
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-10-2 oc bracing.

REACTIONS. (lb/size) 2=515/0-3-8, 5=422/0-1-8
Max Horz 2=144(LC 3)
Max Uplift 2=-324(LC 3), 5=-275(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-926/960
BOT CHORD 2-6=-1034/855, 5-6=-1034/855
WEBS 3-6=-297/122, 3-5=-856/1031

NOTES- (6)
1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 4-7-6, Exterior(2) 4-7-6 to 10-10-1 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) * 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.
3) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=324, 5=275.
6) Harnett Co.



September 5,2018

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	F1	ROOF TRUSS	6	1	E12170074
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:47 2018 Page 1

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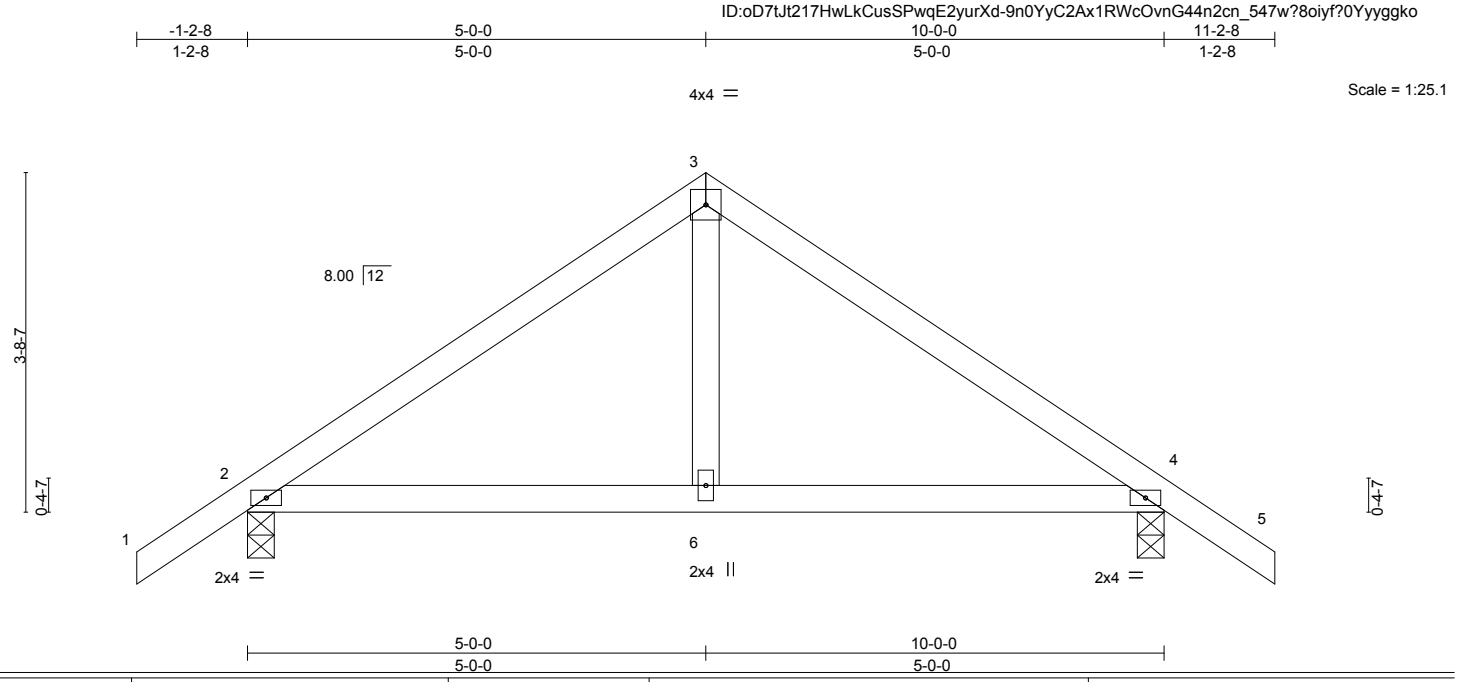


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.21	Vert(LL)	-0.01	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	-0.03	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-R							Weight: 42 lb	FT = 0%

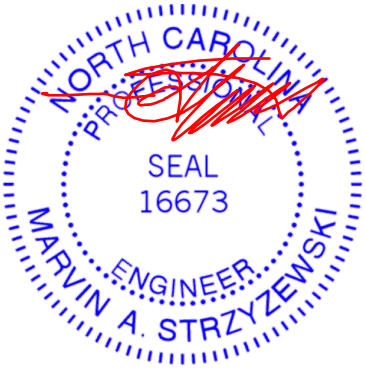
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

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.

REACTIONS. (lb/size) 2=470/0-3-8, 4=470/0-3-8
Max Horz 2=-93(LC 3)
Max Uplift 2=-85(LC 5), 4=-85(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-467/133, 3-4=-467/133
BOT CHORD 2-6=0/321, 4-6=0/321

NOTES- (5)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * 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.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
5) Harnett Co.



September 5,2018

ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	G1	MONO TRUSS	8	1	E12170075
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:47 2018 Page 1
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-1-2-8 6-0-0
1-2-8 6-0-0

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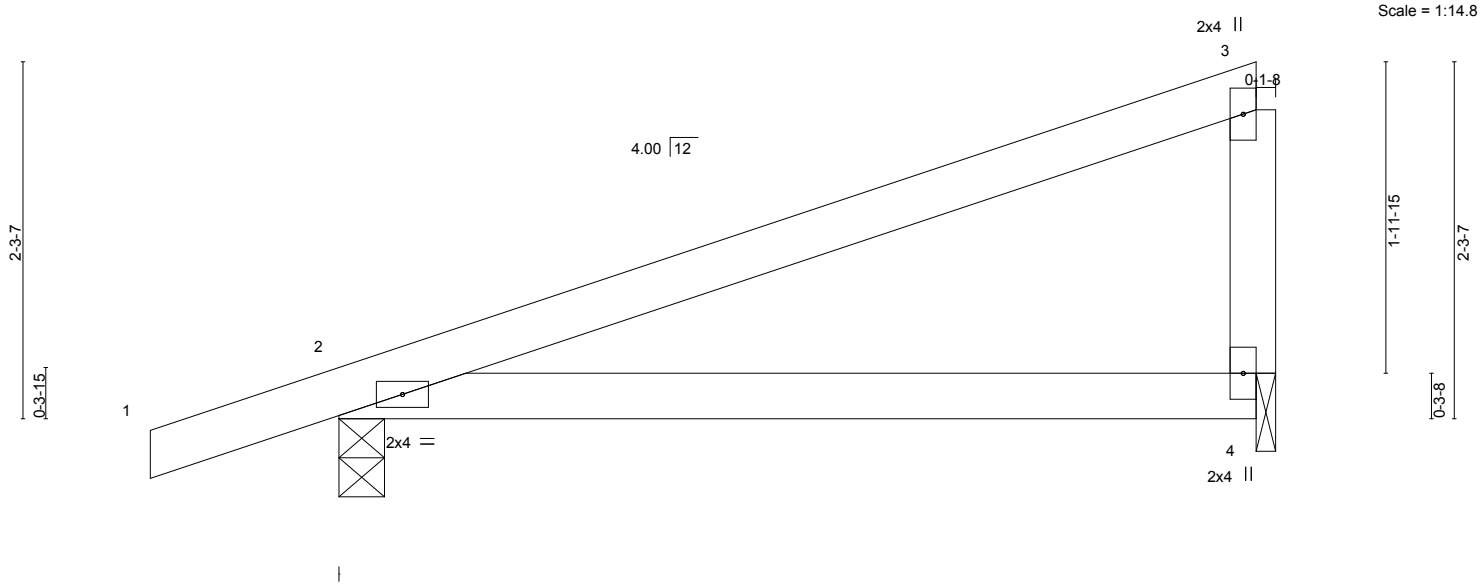


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.42	Vert(LL)	0.00	2	****	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(TL)	-0.08	2-4	>820	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-P							Weight: 22 lb	FT = 0%

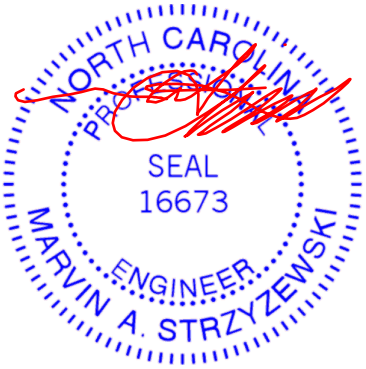
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=319/0-3-8, 4=217/0-1-8
Max Horz 2=82(LC 3)
Max Uplift 2=-149(LC 3), 4=-104(LC 3)

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

NOTES- (6)
1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) * 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.
3) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=149, 4=104.
6) Harnett Co.



September 5,2018

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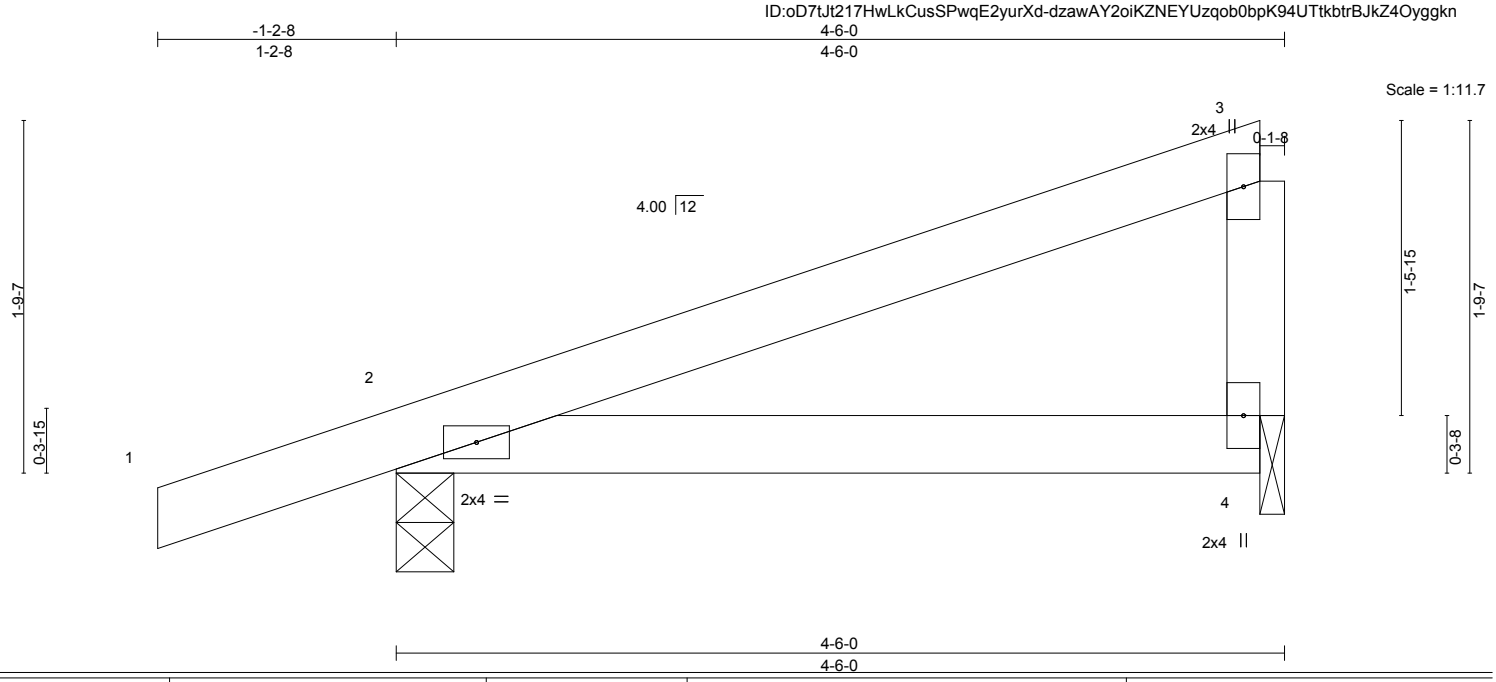
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cary Reconstruction/25 Crutchfield Dr.
J0718-3290	H1	MONO TRUSS	4	1	E12170076
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Sep 5 12:45:48 2018 Page 1
ID:oD7tJt217HwLkCusSPwqE2yurXd-dzawAY2oiKZNEYUzqob0bpK94UTtkbtrBJkZ4Oyggkn



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	0.00	2	****	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	-0.02	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-P							Weight: 17 lb	FT = 0%

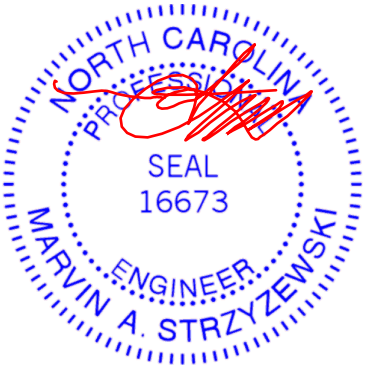
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=263/0-3-8, 4=154/0-1-8
Max Horz 2=66(LC 3)
Max Uplift 2=-127(LC 3), 4=-73(LC 3)

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

NOTES- (6)
1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) * 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.
3) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=127.
6) Harnett Co.



September 5,2018

ENGINEERING BY TRENCO A MiTek Affiliate
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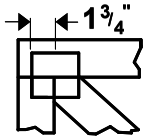
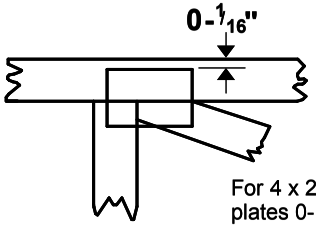
Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

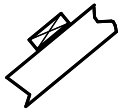
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

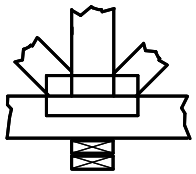
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

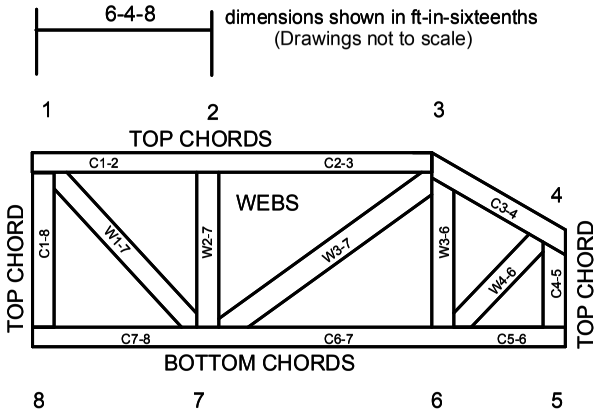


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek

ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.