ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: B0114-0187
Riverbirch Elev. C

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: E7240273 thru E7240299

My license renewal date for the state of North Carolina is December 31, 2014.

North Carolina COA: C-0844

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

January 10,2014

Lassiter, Frank

The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI-1 Chapter 2.
Engineering services provided by Truss Engineering Company.

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	A1	COMMON TRUSS	2	1	E7240273

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:08 2014 Page 1

ID:RqJAZok79a0X6krWVQ6UypzTsm5-Ph1?ImvrYlqcu4Xs9Ex4JEYJxPoC2XG7UIgm1dzwqyX

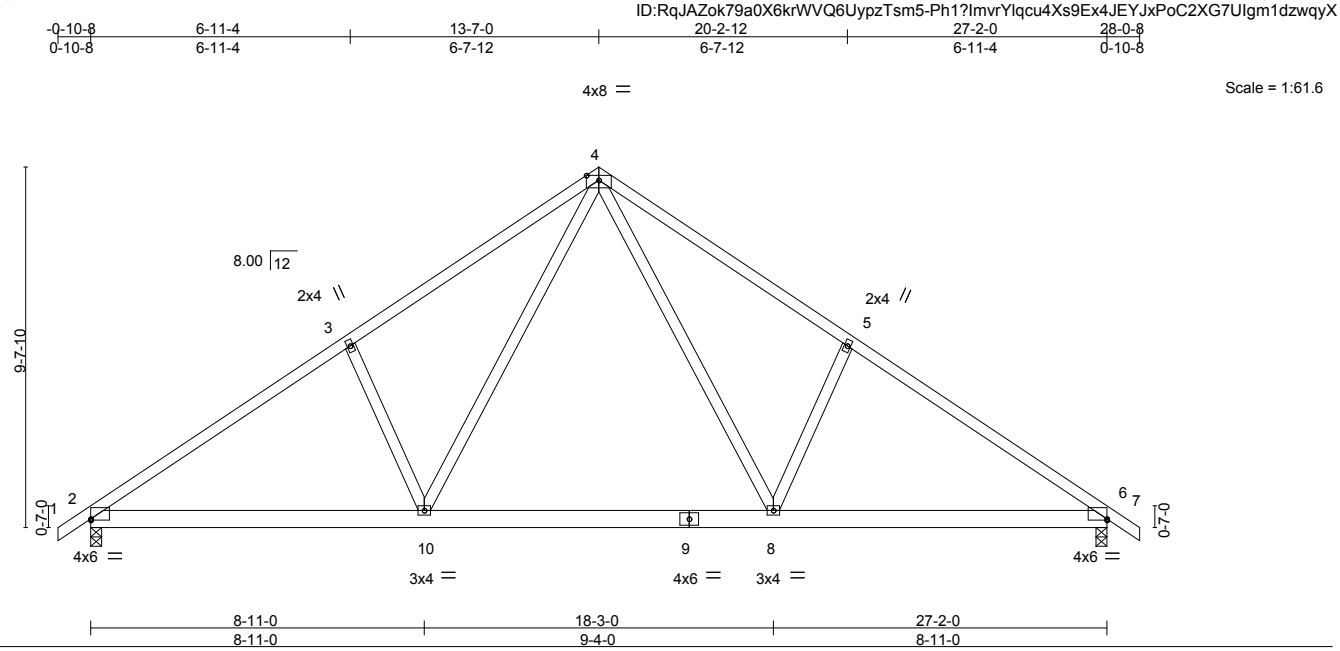


Plate Offsets (X,Y): [2:0-0-0,0-0-6], [6:0-0-0,0-0-6]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.46	Vert(LL)	-0.16	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.44	Vert(TL)	-0.25	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.50	Horz(TL)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 160 lb	FT = 20%

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 4-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

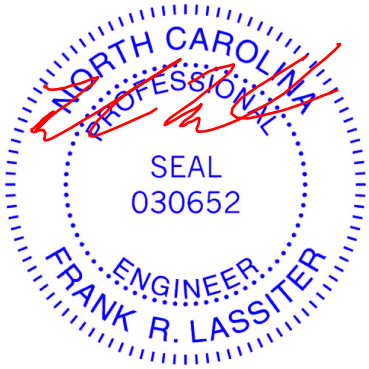
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1323/0-3-8 (min. 0-1-9), 6=1323/0-3-8 (min. 0-1-9)
Max Horz 2=345(LC 4)
Max Uplift 2=-266(LC 5), 6=-266(LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-1904/531, 3-4=-1728/640, 4-5=-1728/640, 5-6=-1904/531, 6-7=0/23
BOT CHORD 2-10=-264/1462, 8-10=-52/994, 6-8=-263/1462
WEBS 4-8=-247/803, 5-8=-317/325, 4-10=-247/803, 3-10=-317/325

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) 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 266 lb uplift at joint 2 and 266 lb uplift at joint 6.

LOAD CASE(S) Standard



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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	A2	COMMON TRUSS	6	1	E7240274

Job Reference (optional)

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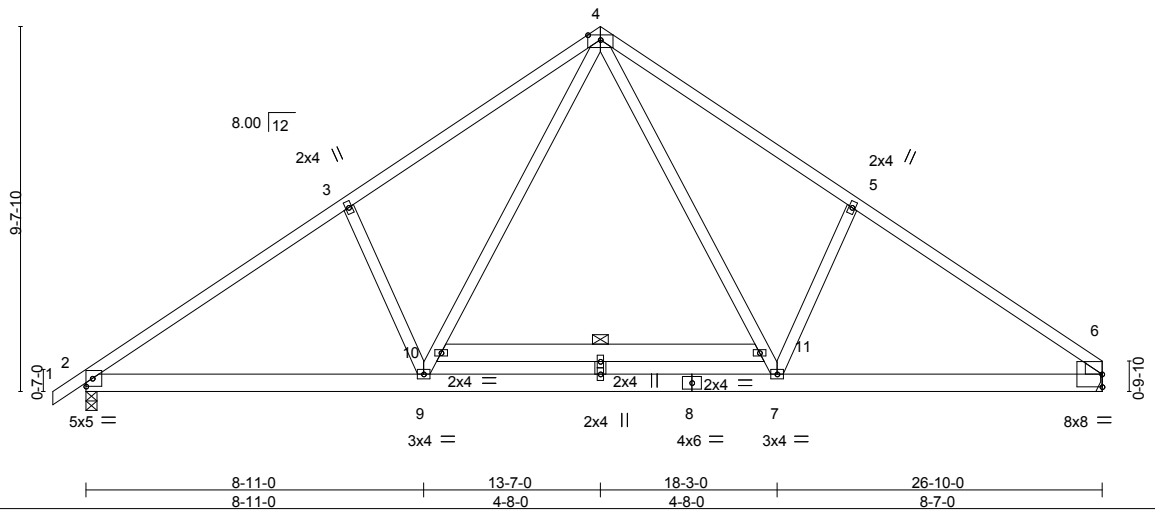
ID:RqJAZok79a0X6krWVQ6UypzTsm5-Ph1?ImvrYlqcu4Xs9Ex4JEYGwPo32Vn7UIgm1dzwqyX

-0-10-8	6-11-4	13-7-0	20-2-12	26-10-0
0-10-8	6-11-4	6-7-12	6-7-12	6-7-4

Scale = 1:60.8



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.65	Vert(LL)	0.08	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.39	Vert(TL)	-0.17	2-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.60	Horz(TL)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 178 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
10-11: 2x6 SP No.1
WEDGE
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-11

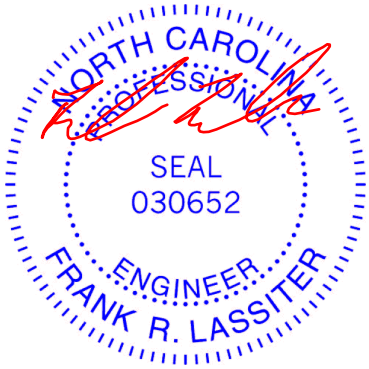
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1386/0-3-8 (min. 0-1-10), 6=1328/Mechanical
Max Horz 2=356(LC 4)
Max Uplift 2=-334(LC 5), 6=-274(LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-1977/677, 3-4=-1802/785, 4-5=-1777/781, 5-6=-1954/674
BOT CHORD 2-9=-419/1523, 7-9=-209/1209, 6-7=-410/1487
WEBS 3-9=-319/321, 9-10=-229/552, 4-10=-339/866, 4-11=-334/825, 7-11=-224/512, 5-7=-282/306, 10-11=-189/73

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 334 lb uplift at joint 2 and 274 lb uplift at joint 6.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-6=-60, 2-6=-20, 10-11=-60



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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C	E7240275
B0114-0187	A3	SPECIAL TRUSS	1	1	Job Reference (optional)	

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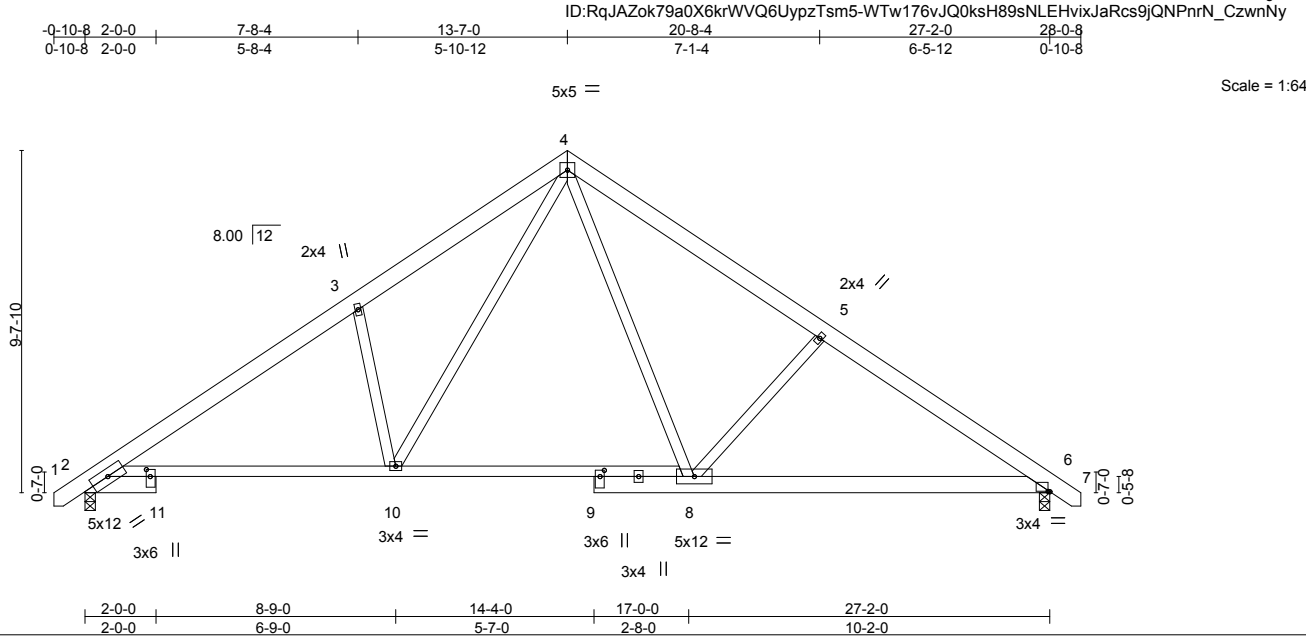


Plate Offsets (X,Y): [6:0-0-10,0-0-2], [9:0-2-2,0-1-7], [11:0-2-6,0-1-5]

LOADING (psf)		SPACING 2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.43	Vert(LL)	0.15	2-10	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.63	Vert(TL)	-0.36	2-10	>907	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(TL)	0.10	6	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 184 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
2-8: 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-2-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS (size) 2=0-3-8 (min. 0-1-8), 6=0-3-8 (min. 0-1-8)
Max Horz 2=341(LC 4)
Max Uplift 2=-259(LC 5), 6=-259(LC 6)
Max Grav 2=1128(LC 1), 6=1128(LC 1)

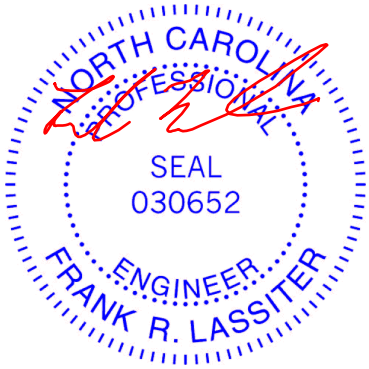
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-1624/545, 3-4=-1555/721, 4-5=-1335/565, 5-6=-1566/558, 6-7=0/23
BOT CHORD 2-11=-277/1263, 10-11=-269/1288, 9-10=-51/835, 8-9=-58/821, 6-8=-306/1233
WEBS 3-10=-439/359, 4-8=-161/503, 5-8=-358/337, 4-10=-345/755

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 259 lb uplift at joint 2 and 259 lb uplift at joint 6.
4) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S)

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-7=-60, 2-6=-20
2) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=78, 2-4=37, 4-6=37, 6-7=78, 2-6=-10
Horz: 1-2=-90, 2-4=-49, 4-6=49, 6-7=90
3) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60



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LOAD CASE(S)

Uniform Loads (plf)
Vert: 1-2=16, 2-4=-14, 4-6=24, 6-7=13, 2-6=-10
Horz: 1-2=-28, 2-4=2, 4-6=36, 6-7=25

4) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=13, 2-4=24, 4-6=-14, 6-7=16, 2-6=-10
Horz: 1-2=-25, 2-4=-36, 4-6=-2, 6-7=28

5) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=56, 2-4=31, 4-6=15, 6-7=6, 2-6=-10
Horz: 1-2=-68, 2-4=-43, 4-6=27, 6-7=18

6) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-4=15, 4-6=31, 6-7=56, 2-6=-10
Horz: 1-2=-18, 2-4=-27, 4-6=43, 6-7=68

7) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=56, 2-4=31, 4-6=15, 6-7=6, 2-6=-10
Horz: 1-2=-68, 2-4=-43, 4-6=27, 6-7=18

8) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-4=15, 4-6=31, 6-7=56, 2-6=-10
Horz: 1-2=-18, 2-4=-27, 4-6=43, 6-7=68

9) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-7=-20, 2-6=-20

10) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-60, 2-6=-20

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C	E7240276
B0114-0187	A4	HIP TRUSS	1	1	Job Reference (optional)	

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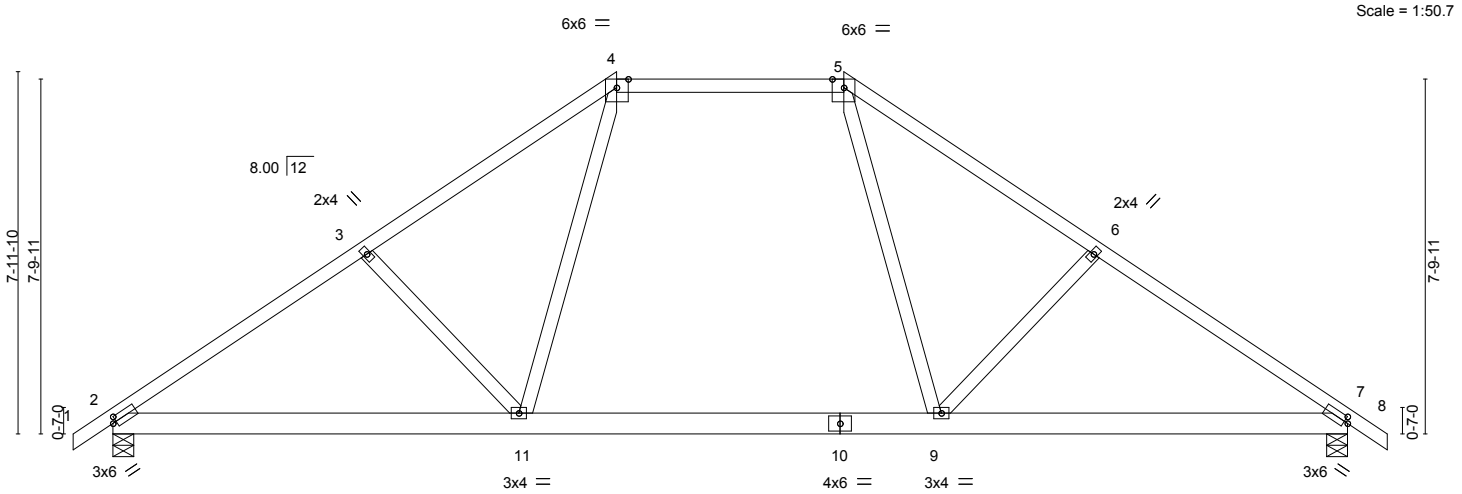
ID:RqJAZok79a0X6krWVQ6UypzTsm5-ttbNW6wTJ2yTWE63jySJrS5WCp7jn2iGiyPKa3zwqyW

-0-10-8	5-7-1	11-1-0	16-1-0	21-6-15	27-2-0	28-0-8
0-10-8	5-7-1	5-5-15	5-0-0	5-5-15	5-7-1	0-10-8

Scale = 1:50.7



9-1-0	18-0-15	27-2-0
9-1-0	8-11-15	9-1-1

Plate Offsets (X,Y): [2:0-1-0,0-1-8], [4:0-3-1,Edge], [5:0-3-1,Edge], [7:0-1-0,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.36	Vert(LL)	0.22	2-11	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.49	Vert(TL)	-0.25	9-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(TL)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 151 lb	FT = 20%

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 4-4-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

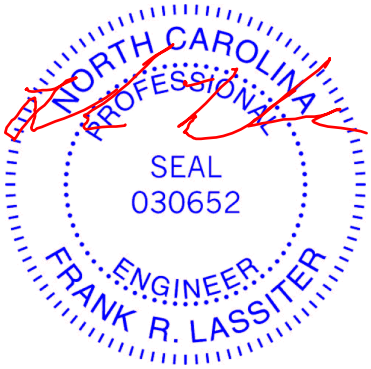
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1317/0-5-8 (min. 0-1-9), 7=1317/0-5-8 (min. 0-1-9)
Max Horz 2=-280(LC 3)
Max Uplift 2=-256(LC 5), 7=-256(LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-1882/563, 3-4=-1669/564, 4-5=-1168/517, 5-6=-1669/564, 6-7=-1882/563, 7-8=0/23
BOT CHORD 2-11=-312/1449, 9-11=-137/1168, 7-9=-312/1449
WEBS 3-11=-242/259, 4-11=-100/567, 5-9=-100/567, 6-9=-242/259

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 256 lb uplift at joint 2 and 256 lb uplift at joint 7.

LOAD CASE(S) Standard



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C	E7240277
B0114-0187	A4A	HIP TRUSS	1	1	Job Reference (optional)	

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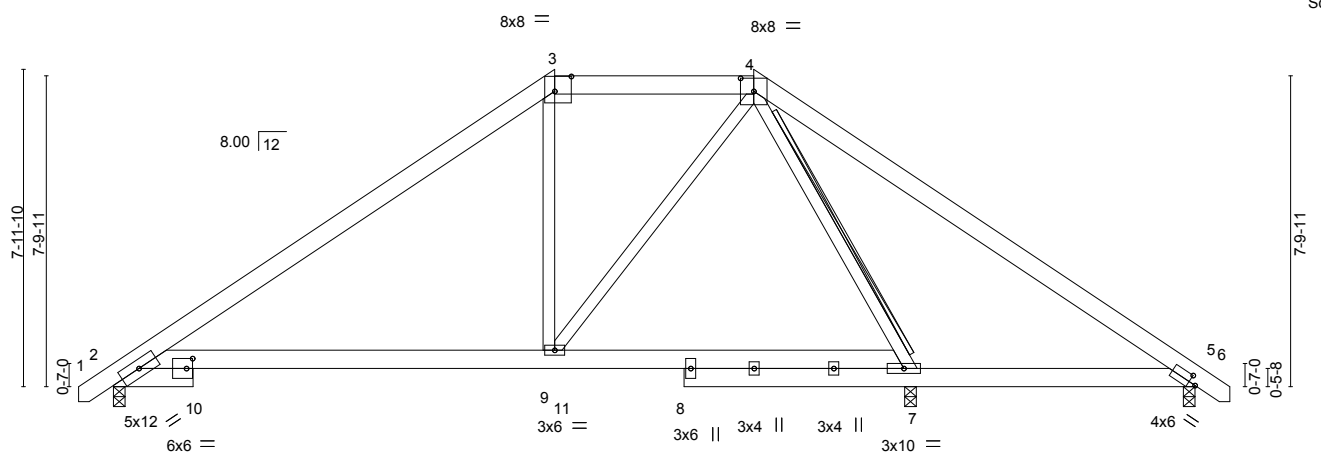
-0-10-8	2-0-0	6-5-4	11-1-0	16-1-0	21-7-8	27-2-0	28-0-8
0-10-8	2-0-0	4-5-4	4-7-12	5-0-0	5-6-8	5-6-8	0-10-8

Scale = 1:57.9



2-0-0	11-1-0	14-4-0	19-10-8	20-0-4	27-2-0
2-0-0	9-1-0	3-3-0	5-6-8	0-1-12	7-1-12

Plate Offsets (X,Y): [3:0-5-0,0-4-8], [4:0-4-0,0-3-15], [5:0-2-2,0-2-3], [10:0-1-13,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.63	Vert(LL)	-0.28	2-9	>844	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.88	Vert(TL)	-0.50	2-9	>479	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(TL)	0.09	7	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 193 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-11-7 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	T-Brace: 2x4 SP No.3 - 4-7 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

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

REACTIONS (size) 2=0-3-8 (min. 0-1-8), 7=0-3-8 (min. 0-2-1), 5=0-3-8 (min. 0-1-8)
Max Horz 2=-277(LC 3)
Max Uplift 2=-208(LC 5), 7=-147(LC 5), 5=-163(LC 6)
Max Grav 2=1182(LC 1), 7=1723(LC 1), 5=193(LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/23, 2-3=-1255/351, 3-4=-938/439, 4-5=-59/526, 5-6=0/23
BOT CHORD	2-10=-237/888, 9-10=-222/940, 9-11=-61/439, 8-11=-61/439, 7-8=-66/425, 5-7=-317/182
WEBS	3-9=-131/272, 4-9=-279/977, 4-7=-1503/381

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 208 lb uplift at joint 2, 147 lb uplift at joint 7 and 163 lb uplift at joint 5.
6) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S)

1) Dead + Roof Live (balanced) + Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 4-6=-60, 2-9=-60, 9-11=-20, 7-11=-60, 5-7=-20

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 030652 ENGINEER FRANK R. LASSITER

January 10,2014

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LOAD CASE(S)

2) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=78, 2-3=37, 3-4=42, 4-5=37, 5-6=78, 2-5=-10
   Horz: 1-2=-90, 2-3=-49, 4-5=49, 5-6=90
3) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=16, 2-3=-14, 3-4=39, 4-5=24, 5-6=13, 2-5=-10
   Horz: 1-2=-28, 2-3=2, 4-5=36, 5-6=25
4) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=13, 2-3=24, 3-4=39, 4-5=-14, 5-6=16, 2-5=-10
   Horz: 1-2=-25, 2-3=-36, 4-5=-2, 5-6=28
5) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=56, 2-3=31, 3-4=15, 4-5=15, 5-6=6, 2-5=-10
   Horz: 1-2=-68, 2-3=-43, 4-5=27, 5-6=18
6) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=6, 2-3=15, 3-4=15, 4-5=31, 5-6=56, 2-5=-10
   Horz: 1-2=-18, 2-3=-27, 4-5=43, 5-6=68
7) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=56, 2-3=31, 3-4=15, 4-5=15, 5-6=6, 2-5=-10
   Horz: 1-2=-68, 2-3=-43, 4-5=27, 5-6=18
8) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=6, 2-3=15, 3-4=15, 4-5=31, 5-6=56, 2-5=-10
   Horz: 1-2=-18, 2-3=-27, 4-5=43, 5-6=68
9) 1st Dead + Roof Live (unbalanced) + Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-4=-60, 4-6=-20, 2-9=-60, 9-11=-20, 7-11=-60, 5-7=-20
10) 2nd Dead + Roof Live (unbalanced) + Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
    Vert: 1-3=-20, 3-4=-60, 4-6=-60, 2-9=-60, 9-11=-20, 7-11=-60, 5-7=-20

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	A5	HIP TRUSS	1	1	E7240278

Job Reference (optional)

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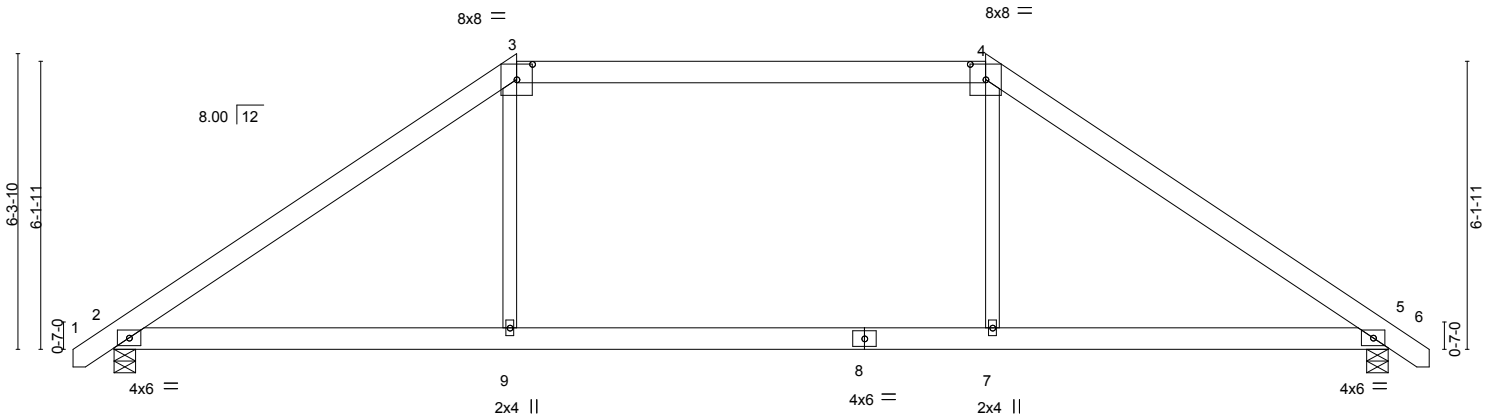
ID:RqJAZok79a0X6krWVQ6UypzTsm5-L48ljSx54M4K7NhFHfzYOfdgBCRlWVQPxc9t6WzwqyV

-0-10-8	8-7-0	18-7-0	27-2-0	28-0-8
0-10-8	8-7-0	10-0-0	8-7-0	0-10-8

Scale = 1:49.1



8-7-0	18-7-0	27-2-0
8-7-0	10-0-0	8-7-0

Plate Offsets (X,Y): [3:0-4-0,0-3-15], [4:0-4-0,0-3-15]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.41	Vert(LL)	0.24	7-9	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.63	Vert(TL)	-0.34	7-9	>939	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.20	Horz(TL)	0.05	5	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 157 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-3-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

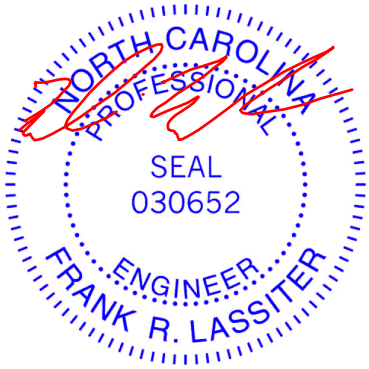
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=1333/0-5-8 (min. 0-1-9), 5=1333/0-5-8 (min. 0-1-9)
Max Horz 2=-214(LC 3)
Max Uplift 2=-285(LC 5), 5=-285(LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-1965/717, 3-4=-1506/713, 4-5=-1965/717, 5-6=0/23
BOT CHORD 2-9=-396/1518, 7-9=-396/1506, 5-7=-396/1518
WEBS 3-9=-47/494, 4-7=-47/494

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 285 lb uplift at joint 2 and 285 lb uplift at joint 5.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 4-6=-60, 2-9=-20, 7-9=-60, 5-7=-20



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Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C	E7240279
B0114-0187	A5A	HIP TRUSS	1	1	Job Reference (optional)	

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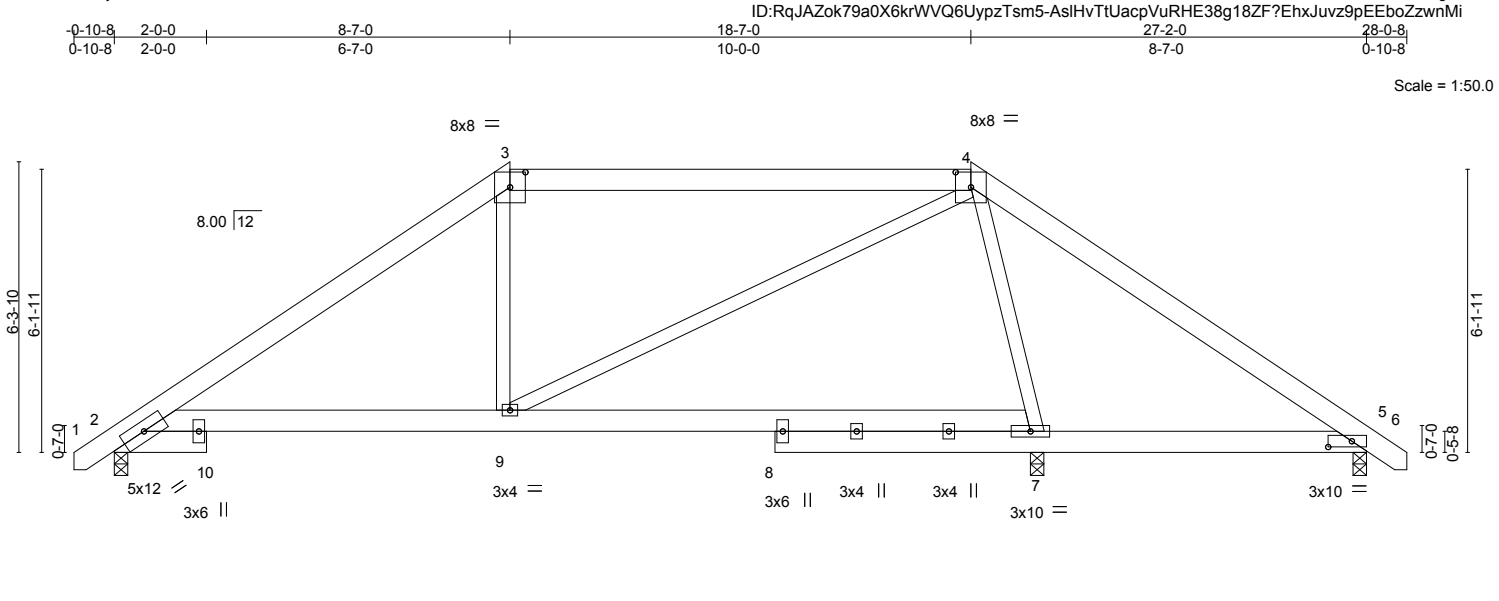

Plate Offsets (X,Y): [3:0-4-0,0-3-15], [4:0-4-0,0-3-15], [5:0-6-3,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.37	Vert(LL)	0.08	2-9	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.45	Vert(TL)	-0.14	2-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(TL)	0.04	7	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 189 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 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 6-0-0 oc bracing.

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

REACTIONS (size) 2=0-3-8 (min. 0-1-8), 7=0-3-8 (min. 0-1-8), 5=0-3-8 (min. 0-1-8)
Max Horz 2=-214(LC 3)
Max Uplift 2=-214(LC 5), 7=-87(LC 4), 5=-199(LC 6)
Max Grav 2=814(LC 1), 7=1215(LC 1), 5=250(LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/23, 2-3=-1100/438, 3-4=-814/488, 4-5=-76/254, 5-6=0/23
BOT CHORD	2-10=-343/798, 9-10=-338/813, 8-9=-106/190, 7-8=-111/189, 5-7=-100/50
WEBS	3-9=-71/186, 4-9=-268/781, 4-7=-1004/375

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 214 lb uplift at joint 2, 87 lb uplift at joint 7 and 199 lb uplift at joint 5.
6) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S)

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 4-6=-60, 2-5=-20
2) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=78, 2-3=37, 3-4=42, 4-5=37, 5-6=78, 2-5=-10
Horz: 1-2=-90, 2-3=-49, 4-5=49, 5-6=90

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LOAD CASE(S)

3) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=16, 2-3=-14, 3-4=39, 4-5=24, 5-6=13, 2-5=-10
Horz: 1-2=-28, 2-3=2, 4-5=36, 5-6=25

4) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=13, 2-3=24, 3-4=39, 4-5=-14, 5-6=16, 2-5=-10
Horz: 1-2=-25, 2-3=-36, 4-5=-2, 5-6=28

5) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=56, 2-3=31, 3-4=15, 4-5=15, 5-6=6, 2-5=-10
Horz: 1-2=-68, 2-3=-43, 4-5=27, 5-6=18

6) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=15, 3-4=15, 4-5=31, 5-6=56, 2-5=-10
Horz: 1-2=-18, 2-3=-27, 4-5=43, 5-6=68

7) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=56, 2-3=31, 3-4=15, 4-5=15, 5-6=6, 2-5=-10
Horz: 1-2=-68, 2-3=-43, 4-5=27, 5-6=18

8) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=15, 3-4=15, 4-5=31, 5-6=56, 2-5=-10
Horz: 1-2=-18, 2-3=-27, 4-5=43, 5-6=68

9) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 4-6=-20, 2-5=-20

10) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-60, 4-6=-60, 2-5=-20

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	A6	Hip Truss	1	1	E7240280

Job Reference (optional)

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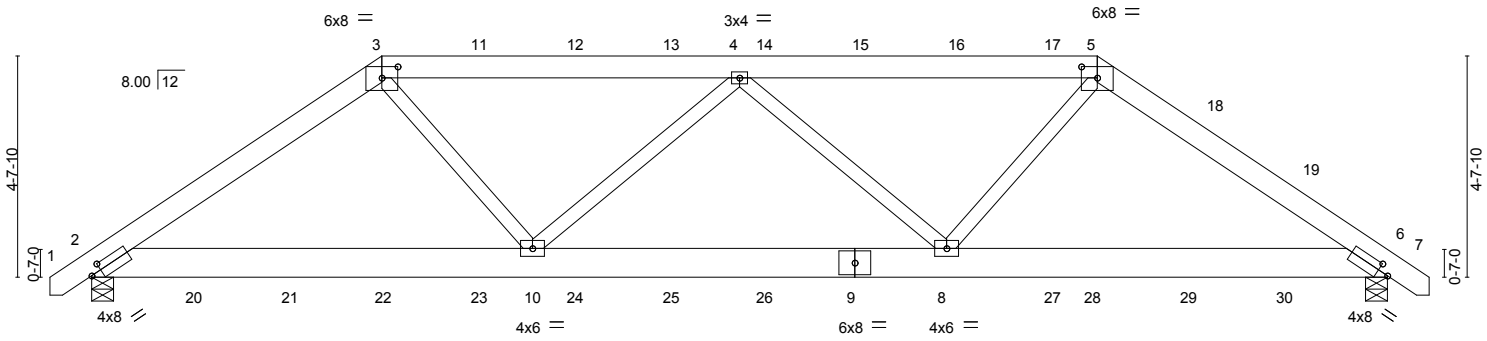
ID:RqJAZok79a0X6krWVQ6UypzTsm5-pGi8xoxkqgCBlXFRrNUnxtAqBcq6FvTZAGuReyzwqyU

-0-10-8	6-1-0	13-7-0	21-1-0	27-2-0	28-0-8
0-10-8	6-1-0	7-6-0	7-6-0	6-1-0	0-10-8

Scale: 1/4"=1'



9-2-14	17-11-2	27-2-0
9-2-14	8-8-3	9-2-14

Plate Offsets (X,Y): [2:0-2-11,0-1-13], [3:0-4-0,0-2-13], [5:0-4-0,0-2-13], [6:0-2-11,0-1-13]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.39	Vert(LL)	0.09	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.43	Vert(TL)	-0.16	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.41	Horz(TL)	0.05	6	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 190 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-0-14 oc bracing.

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

REACTIONS (lb/size) 2=1692/0-5-8 (min. 0-2-0), 6=1731/0-5-8 (min. 0-2-1)
Max Horz 2=152(LC 3)
Max Uplift 2=-786(LC 4), 6=-841(LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/26, 2-3=-2378/1246, 3-4=-2468/1281, 4-5=-2496/1298, 5-6=-2430/1295, 6-7=0/26
BOT CHORD 2-10=-1091/1918, 8-10=-1643/2859, 6-8=-1040/1955
WEBS 3-10=-369/929, 4-10=-594/630, 4-8=-535/564, 5-8=-317/903

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 786 lb uplift at joint 2 and 841 lb uplift at joint 6.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 128 lb up at 6-1-0, 68 lb down and 128 lb up at 8-1-12, 68 lb down and 128 lb up at 10-1-12, 68 lb down and 128 lb up at 12-1-12, 68 lb down and 128 lb up at 14-1-12, 68 lb down and 128 lb up at 16-1-12, 68 lb down and 128 lb up at 18-1-12, 68 lb down and 128 lb up at 20-1-12, 68 lb down and 128 lb up at 21-1-0, and 26 lb down and 44 lb up at 23-0-4, and 66 lb down and 74 lb up at 25-0-4 on top chord, and 54 lb down and 15 lb up at 2-1-12, 107 lb down and 57 lb up at 4-1-12, 25 lb down at 6-1-12, 25 lb down at 8-1-12, 25 lb down at 10-1-12, 25 lb down at 12-1-12, 25 lb down at 14-1-12, 25 lb down at 16-1-12, 25 lb down at 18-1-12, 25 lb down at 20-1-12, 25 lb down at 21-0-4, and 107 lb down and 57 lb up at 23-0-4, and 54 lb down and 15 lb up at 25-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 5-7=-60, 2-6=-20

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January 10,2014

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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-68(F) 5=-68(F) 9=-25(F) 8=-25(F) 11=-68(F) 12=-68(F) 13=-68(F) 14=-68(F) 15=-68(F) 16=-68(F) 17=-68(F) 18=14(F) 19=-26(F) 20=-54(F) 21=-107(F) 22=-25(F) 23=-25(F) 24=-25(F) 25=-25(F) 26=-25(F) 27=-25(F) 28=-25(F) 29=-107(F) 30=-54(F)

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C	E7240281
B0114-0187	A6A	HIP TRUSS	1	1	Job Reference (optional)	

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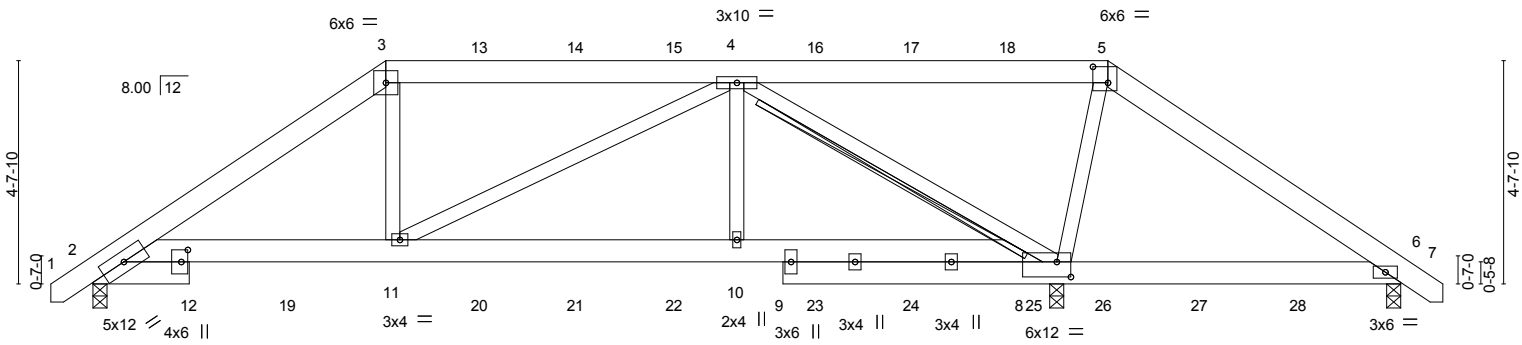
0-10-8	2-0-0	4-1-0	7-3-8	0-11-8	6-9-0	6-1-0	0-10-8

Scale: 1/4"=1'



2-0-0	6-1-0	13-4-8	14-4-0	19-10-8	20-0-4	27-2-0
2-0-0	4-1-0	7-3-8	0-11-8	5-6-8	0-1-12	7-1-12

Plate Offsets (X,Y): [5:0-3-12,0-4-0], [8:0-3-8,0-3-12], [12:0-3-0,0-1-10]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.44	Vert(LL)	0.07	2-11	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.58	Vert(TL)	-0.11	2-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.80	Horz(TL)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 192 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-11-9 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	T-Brace: 2x4 SP No.3 - 4-8 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

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

REACTIONS (size) 2=0-3-8 (min. 0-1-8), 8=0-3-8 (min. 0-2-9), 6=0-3-8 (min. 0-1-8)
Max Horz 2=-155(LC 2)
Max Uplift 2=-464(LC 4), 8=-1060(LC 3), 6=-85(LC 5)
Max Grav 2=1073(LC 8), 8=2175(LC 1), 6=165(LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/23, 2-3=-1613/817, 3-13=-1299/749, 13-14=-1299/749, 14-15=-1298/749, 4-15=-1298/749, 4-16=-326/566, 16-17=-326/565, 17-18=-326/565, 5-18=-326/564, 5-6=-193/400, 6-7=0/23
BOT CHORD	2-12=-740/1256, 12-19=-745/1287, 11-19=-745/1287, 11-20=-709/1049, 20-21=-709/1049, 21-22=-709/1049, 10-22=-709/1049, 9-10=-709/1049, 9-23=-706/1051, 23-24=-707/1047, 24-25=-710/1044, 8-25=-710/1043, 8-26=-249/131, 26-27=-251/130, 27-28=-254/131, 6-28=-258/131
WEBS	3-11=-13/305, 5-8=-865/562, 4-10=0/171, 4-11=-44/295, 4-8=-1937/1247

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 464 lb uplift at joint 2, 1060 lb uplift at joint 8 and 85 lb uplift at joint 6.
6) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 030652 ENGINEER FRANK R. LASSITER

January 10,2014

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

NOTES

7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 107 lb down and 155 lb up at 6-1-0, 67 lb down and 126 lb up at 8-0-12, 67 lb down and 126 lb up at 10-0-12, 67 lb down and 126 lb up at 12-0-12, 67 lb down and 126 lb up at 13-7-0, 68 lb down and 128 lb up at 15-0-4, 68 lb down and 128 lb up at 17-0-4, and 68 lb down and 128 lb up at 19-0-4, and 68 lb down and 128 lb up at 21-1-0 on top chord, and 42 lb down at 2-0-12, 107 lb down and 57 lb up at 4-0-12, 25 lb down at 6-0-12, 25 lb down at 8-0-12, 25 lb down at 10-0-12, 25 lb down at 12-0-12, 25 lb down at 13-7-0, 25 lb down at 15-0-4, 25 lb down at 17-0-4, 25 lb down at 19-0-4, 25 lb down at 21-0-4, and 107 lb down and 57 lb up at 23-0-4, and 54 lb down and 15 lb up at 25-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-5=-60, 5-7=-60, 2-6=-20
   Concentrated Loads (lb)
   Vert: 3=-67(B) 5=-68(B) 12=-42(B) 11=-25(B) 10=-25(B) 4=-67(B) 13=-67(B) 14=-67(B) 15=-67(B) 16=-68(B) 17=-68(B) 18=-68(B) 19=-107(B) 20=-25(B) 21=-25(B) 22=-25(B) 23=-25(B) 24=-25(B) 25=-25(B) 26=-25(B) 27=-107(B) 28=-54(B)
2) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=16, 2-3=-14, 3-5=39, 5-6=24, 6-7=13, 2-6=-10
   Horz: 1-2=-28, 2-3=2, 5-6=36, 6-7=25
   Drag: 3-4=-0, 4-5=0
   Concentrated Loads (lb)
   Vert: 3=155(B) 5=104(B) 12=-16(B) 11=-12(B) 10=-12(B) 4=102(B) 13=102(B) 14=102(B) 15=102(B) 16=104(B) 17=104(B) 18=104(B) 19=57(B) 20=-12(B) 21=-12(B) 22=-12(B) 23=-12(B) 24=-12(B) 25=-12(B) 26=-12(B) 27=57(B) 28=15(B)
3) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=13, 2-3=24, 3-5=39, 5-6=-14, 6-7=16, 2-6=-10
   Horz: 1-2=-25, 2-3=-36, 5-6=-2, 6-7=28
   Drag: 3-4=-0, 4-5=0
   Concentrated Loads (lb)
   Vert: 3=118(B) 5=104(B) 12=-16(B) 11=-12(B) 10=-12(B) 4=102(B) 13=102(B) 14=102(B) 15=102(B) 16=104(B) 17=104(B) 18=104(B) 19=57(B) 20=-12(B) 21=-12(B) 22=-12(B) 23=-12(B) 24=-12(B) 25=-12(B) 26=-12(B) 27=57(B) 28=15(B)
4) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=56, 2-3=31, 3-5=15, 5-6=15, 6-7=6, 2-6=-10
   Horz: 1-2=-68, 2-3=-43, 5-6=27, 6-7=18
   Drag: 3-4=-0, 4-5=0
   Concentrated Loads (lb)
   Vert: 3=110(B) 5=128(B) 12=-16(B) 11=-12(B) 10=-12(B) 4=126(B) 13=126(B) 14=126(B) 15=126(B) 16=128(B) 17=128(B) 18=128(B) 19=57(B) 20=-12(B) 21=-12(B) 22=-12(B) 23=-12(B) 24=-12(B) 25=-12(B) 26=-12(B) 27=57(B) 28=15(B)
5) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=6, 2-3=15, 3-5=15, 5-6=31, 6-7=56, 2-6=-10
   Horz: 1-2=-18, 2-3=-27, 5-6=43, 6-7=68
   Drag: 3-4=-0, 4-5=0
   Concentrated Loads (lb)
   Vert: 3=126(B) 5=128(B) 12=-16(B) 11=-12(B) 10=-12(B) 4=126(B) 13=126(B) 14=126(B) 15=126(B) 16=128(B) 17=128(B) 18=128(B) 19=57(B) 20=-12(B) 21=-12(B) 22=-12(B) 23=-12(B) 24=-12(B) 25=-12(B) 26=-12(B) 27=57(B) 28=15(B)
6) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=56, 2-3=31, 3-5=15, 5-6=15, 6-7=6, 2-6=-10
   Horz: 1-2=-68, 2-3=-43, 5-6=27, 6-7=18
   Drag: 3-4=-0, 4-5=0
   Concentrated Loads (lb)
   Vert: 3=110(B) 5=128(B) 12=-16(B) 11=-12(B) 10=-12(B) 4=126(B) 13=126(B) 14=126(B) 15=126(B) 16=128(B) 17=128(B) 18=128(B) 19=57(B) 20=-12(B) 21=-12(B) 22=-12(B) 23=-12(B) 24=-12(B) 25=-12(B) 26=-12(B) 27=57(B) 28=15(B)
7) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=6, 2-3=15, 3-5=15, 5-6=31, 6-7=56, 2-6=-10
   Horz: 1-2=-18, 2-3=-27, 5-6=43, 6-7=68
   Drag: 3-4=-0, 4-5=0
   Concentrated Loads (lb)
   Vert: 3=126(B) 5=128(B) 12=-16(B) 11=-12(B) 10=-12(B) 4=126(B) 13=126(B) 14=126(B) 15=126(B) 16=128(B) 17=128(B) 18=128(B) 19=57(B) 20=-12(B) 21=-12(B) 22=-12(B) 23=-12(B) 24=-12(B) 25=-12(B) 26=-12(B) 27=57(B) 28=15(B)
8) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-5=-60, 5-7=-20, 2-6=-20
   Concentrated Loads (lb)
   Vert: 3=-67(B) 5=-68(B) 12=-42(B) 11=-25(B) 10=-25(B) 4=-67(B) 13=-67(B) 14=-67(B) 15=-67(B) 16=-68(B) 17=-68(B) 18=-68(B) 19=-107(B) 20=-25(B) 21=-25(B) 22=-25(B) 23=-25(B) 24=-25(B) 25=-25(B) 26=-25(B) 27=-107(B) 28=-54(B)
9) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-20, 3-5=-60, 5-7=-60, 2-6=-20

Continued on page 3

LOAD CASE(S)

Concentrated Loads (lb)

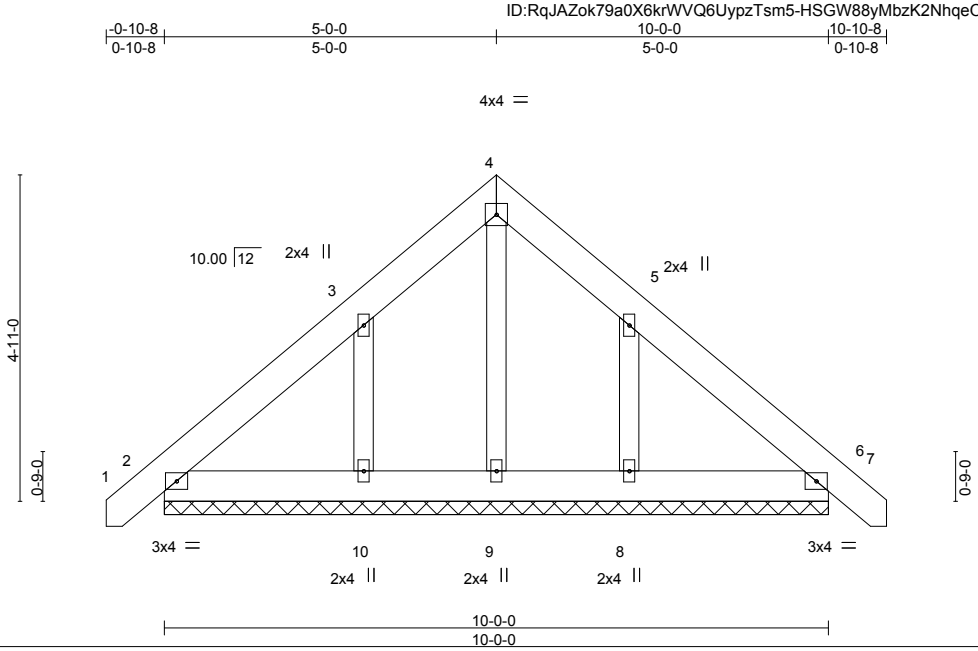
Vert: 3=-107(B) 5=-68(B) 12=-42(B) 11=-25(B) 10=-25(B) 4=-67(B) 13=-67(B) 14=-67(B) 15=-67(B) 16=-68(B) 17=-68(B) 18=-68(B) 19=-107(B) 20=-25(B) 21=-25(B) 22=-25(B) 23=-25(B) 24=-25(B) 25=-25(B) 26=-25(B) 27=-107(B) 28=-54(B)

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	B1GE	COMMON TRUSS	1	1	E7240282

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:12 2014 Page 1

ID:RqJAZok79a0X6krWVQ6UypzTsm5-HSGW88yMbzK2NhqeO4?0T4j5V0FT_R?iPwe_AOzwqyT



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.04	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.04	Vert(TL)	0.00	7	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 73 lb	FT = 20%

LUMBER
TOP CHORD 2x6 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.

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

REACTIONS (lb/size) 2=175/10-0-0 (min. 0-1-8), 6=175/10-0-0 (min. 0-1-8), 9=73/10-0-0 (min. 0-1-8), 10=233/10-0-0 (min. 0-1-8), 8=233/10-0-0 (min. 0-1-8)
Max Horz 2=208(LC 4)
Max Uplift 2=-52(LC 6), 6=-68(LC 6), 10=-239(LC 5), 8=-235(LC 6)
Max Grav 2=175(LC 1), 6=175(LC 1), 9=113(LC 6), 10=236(LC 9), 8=236(LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-148/121, 3-4=-79/150, 4-5=-79/150, 5-6=-95/68, 6-7=0/22
BOT CHORD 2-10=-37/166, 9-10=-37/166, 8-9=-37/166, 6-8=-37/166
WEBS 4-9=-80/0, 3-10=-163/240, 5-8=-163/236

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone 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) 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 52 lb uplift at joint 2, 68 lb uplift at joint 6, 239 lb uplift at joint 10 and 235 lb uplift at joint 8.

LOAD CASE(S) Standard

January 10,2014

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	C1	MONOPITCH TRUSS	5	1	E7240283

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:12 2014 Page 1

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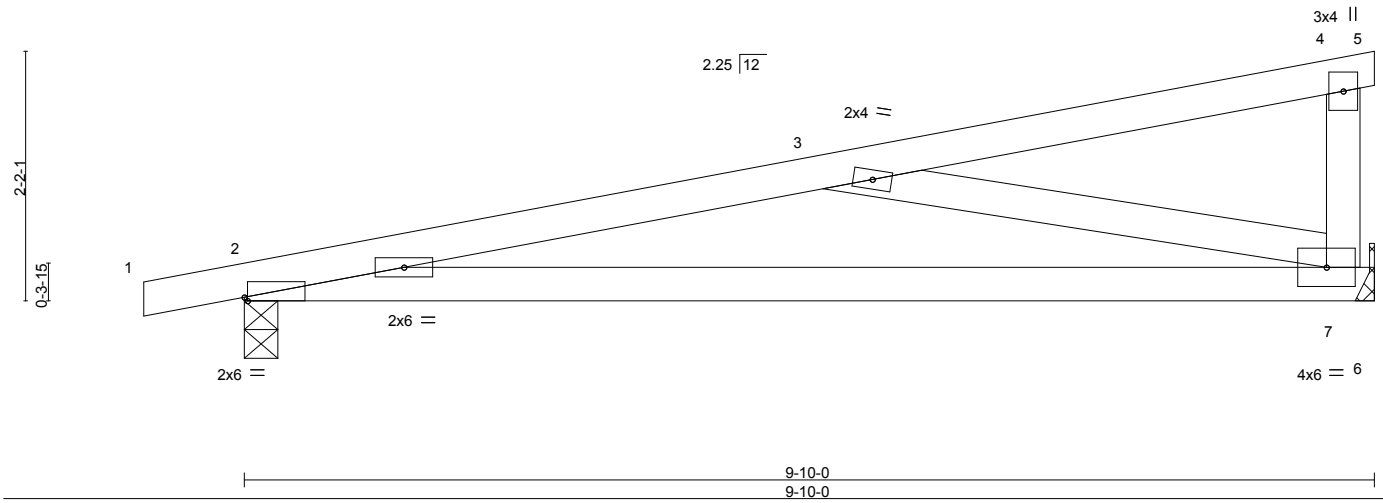


9-10-0 / 9-10-0

Plate Offsets (X,Y): [2:0-0-5,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.60	Vert(LL)	-0.03	2-7	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.42	Vert(TL)	-0.26	2-7	>427	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(TL)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 40 lb	FT = 20%

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 9-6-6 oc bracing.

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

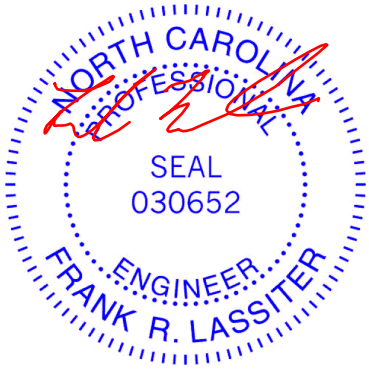
REACTIONS (lb/size) 7=384/Mechanical, 2=441/0-3-8 (min. 0-1-8)
Max Horz 2=90(LC 3)
Max Uplift 7=-109(LC 3), 2=-153(LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/8, 2-3=-917/373, 3-4=-166/0, 4-5=-1/0, 4-7=-113/90
BOT CHORD 2-7=-426/882, 6-7=0/0
WEBS 3-7=-761/442

NOTES

1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;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) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 7 and 153 lb uplift at joint 2.

LOAD CASE(S) Standard



January 10,2014

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	C1GE	GABLE	2	1	E7240284

Job Reference (optional)

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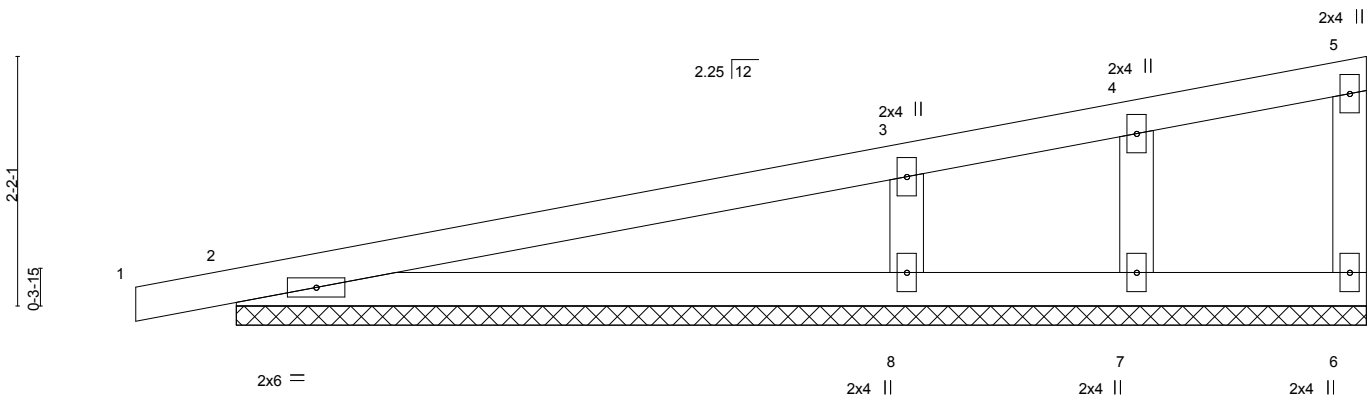


LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.28	Vert(LL)	0.02	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.17	Vert(TL)	0.04	1	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 36 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3
OTHERS	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.

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

REACTIONS (lb/size) 6=106/9-10-0 (min. 0-1-8), 2=249/9-10-0 (min. 0-1-8), 7=-28/9-10-0 (min. 0-1-8), 8=501/9-10-0 (min. 0-1-8)
Max Horz 2=126(LC 3)
Max Uplift 6=-57(LC 3), 2=-152(LC 3), 7=-28(LC 1), 8=-258(LC 3)
Max Grav 6=106(LC 1), 2=249(LC 1), 7=12(LC 3), 8=501(LC 1)

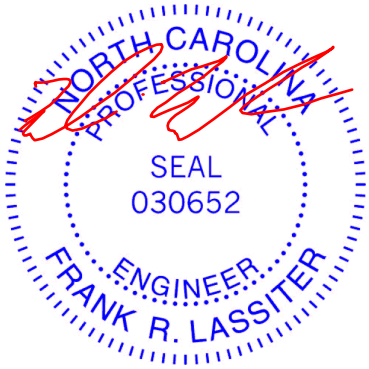
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/8, 2-3=-98/20, 3-4=-45/0, 4-5=-21/0, 5-6=-72/84
BOT CHORD	2-8=-15/16, 7-8=-15/16, 6-7=-15/16
WEBS	4-7=-1/19, 3-8=-346/387

NOTES

1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
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 57 lb uplift at joint 6, 152 lb uplift at joint 2, 28 lb uplift at joint 7 and 258 lb uplift at joint 8.

LOAD CASE(S) Standard



January 10,2014

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C	E7240285
B0114-0187	C2	MONOPITCH TRUSS	5	1	Job Reference (optional)	

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0-10-8 | 5-5-9 | 3-2-15 | 0-1-8 | 1-0-0

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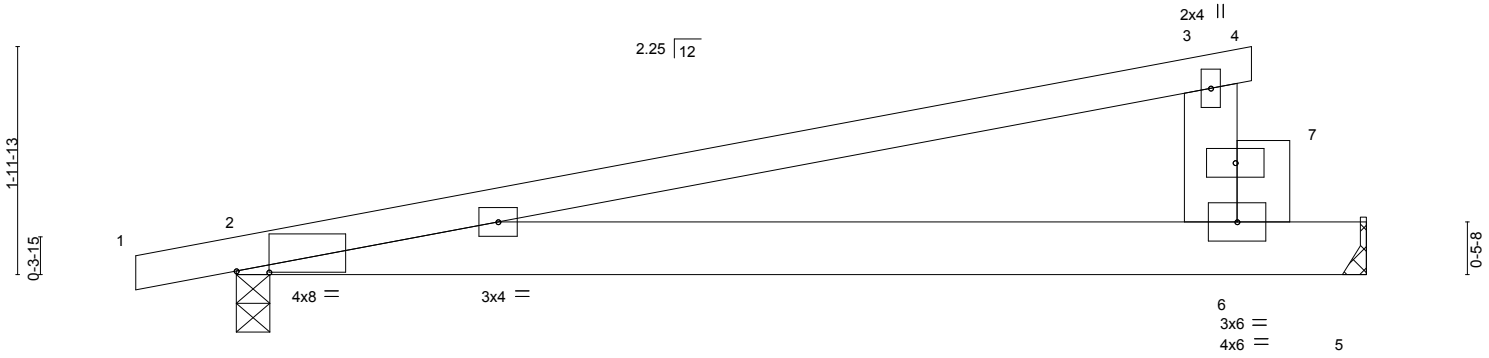


8-8-8 | 8-10-0 | 9-10-0

8-8-8 | 0-1-8 | 1-0-0

Plate Offsets (X,Y): [2:0-3-7,0-0-2]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.89	Vert(LL)	0.20	2-6	>564	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.71	Vert(TL)	-0.47	2-6	>247	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 42 lb	FT = 20%

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

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.

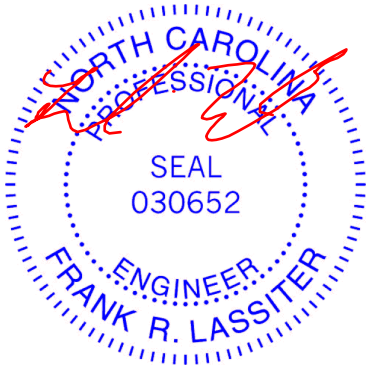
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=480/0-3-8 (min. 0-1-8), 5=645/Mechanical
Max Horz 2=84(LC 3)
Max Uplift 2=-164(LC 3), 5=-143(LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-87/0, 3-4=-4/0
BOT CHORD 2-6=-25/34, 5-6=0/0
WEBS 3-6=-229/170

NOTES
1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;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) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 164 lb uplift at joint 2 and 143 lb uplift at joint 5.
5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 300 lb down and 110 lb up at 9-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced) + Uninhab. Attic Storage + Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 2-6=-20, 5-6=-70
Concentrated Loads (lb)
Vert: 6=-300



January 10,2014

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	C3	MONOPITCH TRUSS	3	1	E7240286

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:13 2014 Page 1

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-0-10-8 / 0-10-8 — 4-1-12 / 4-1-12 — 9-10-0 / 5-8-4

Scale = 1:20.7

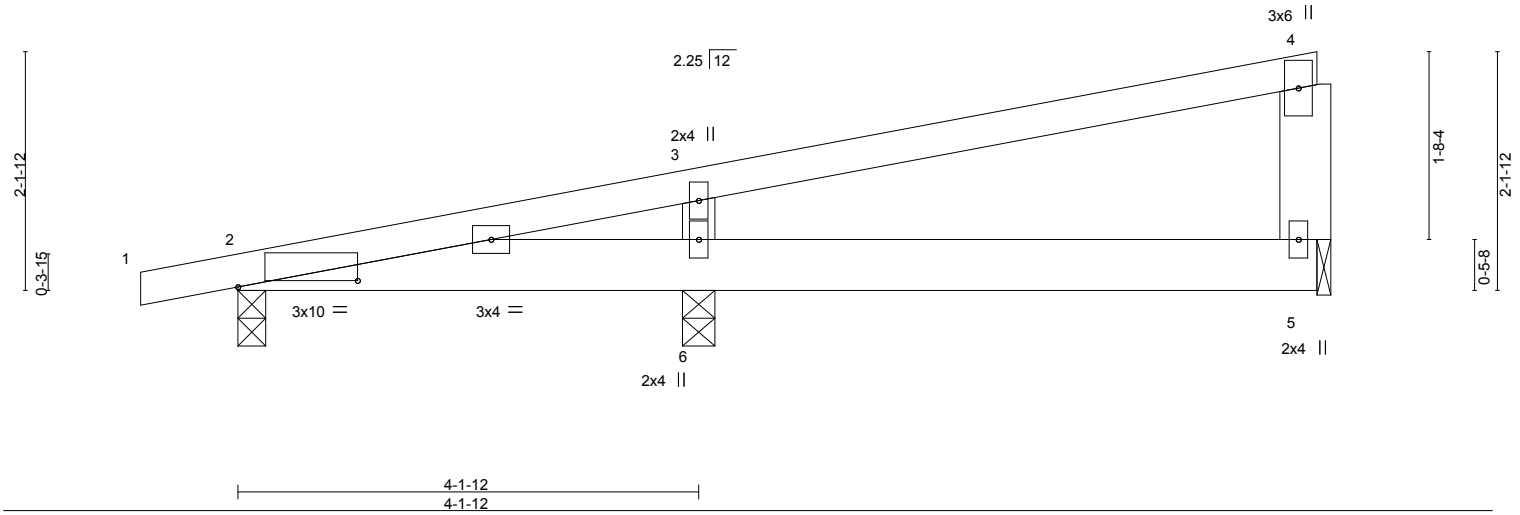


Plate Offsets (X,Y): [2:1-0-15,0-0-11]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.22	Vert(LL)	0.01	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.06	Vert(TL)	0.01	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 43 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
3-6: 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.

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

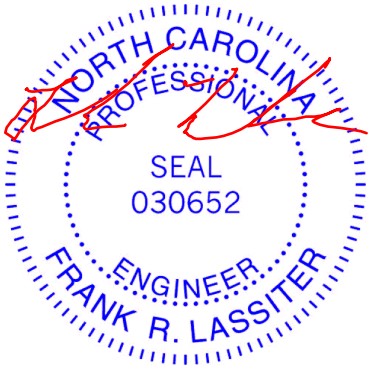
REACTIONS (lb/size) 2=203/0-3-0 (min. 0-1-8), 6=415/0-3-8 (min. 0-1-8), 5=200/0-1-8 (min. 0-1-8)
Max Horz 2=90(LC 3)
Max Uplift 2=-151(LC 3), 6=-190(LC 3), 5=-53(LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-128/0, 3-4=-140/17, 4-5=-147/106
BOT CHORD 2-6=-37/108, 5-6=-37/108
WEBS 3-6=-301/212

NOTES

1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(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 151 lb uplift at joint 2, 190 lb uplift at joint 6 and 53 lb uplift at joint 5.

LOAD CASE(S) Standard



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	C4	MONOPITCH TRUSS	1	1	E7240287

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:14 2014 Page 1

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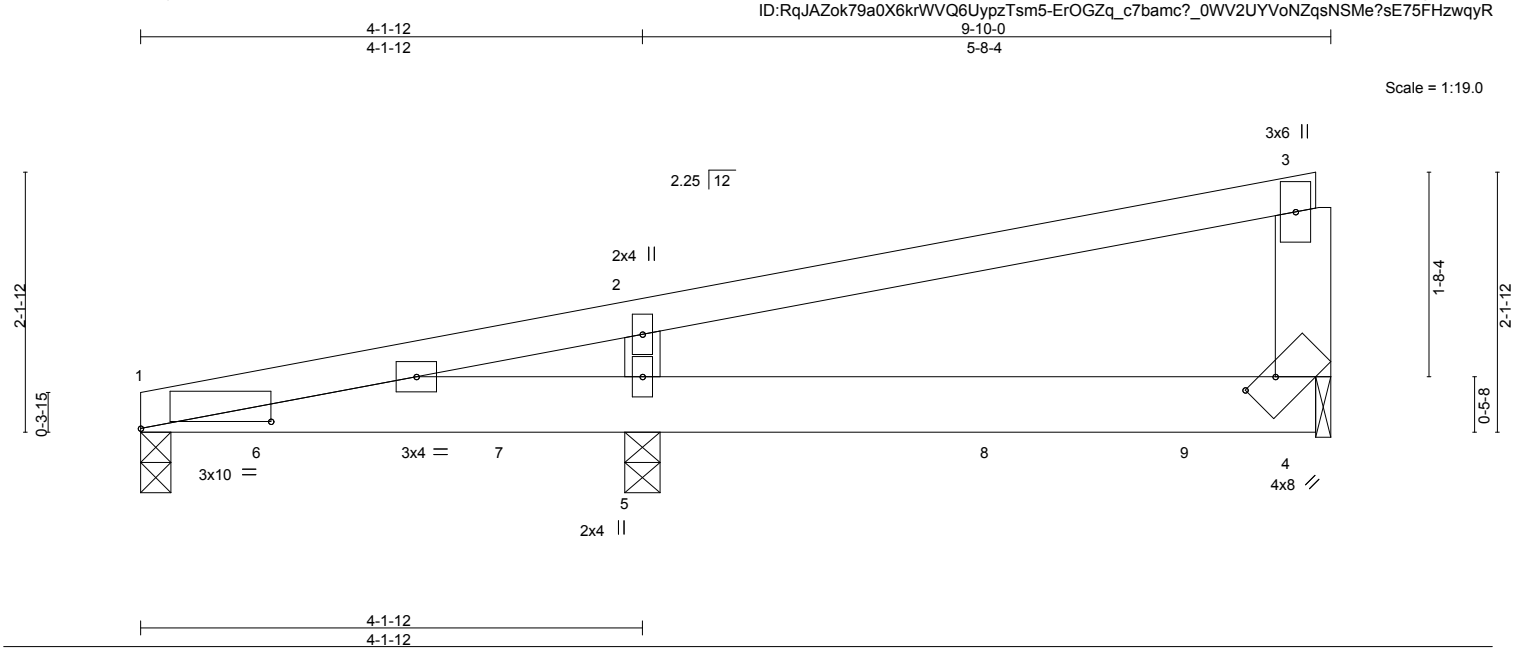


Plate Offsets (X,Y): [1:1-0-15,0-0-11], [4:0-3-1,0-1-3]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.26	Vert(LL)	-0.01	4-5	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.33	Vert(TL)	-0.03	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 41 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x6 SP No.1 *Except* 2-5: 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.

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

REACTIONS (lb/size) 1=405/0-3-0 (min. 0-1-8), 5=1031/0-3-8 (min. 0-1-8), 4=603/0-1-8 (min. 0-1-8)
Max Horz 1=76(LC 2)
Max Uplift 1=-86(LC 2), 5=-249(LC 2), 4=-147(LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

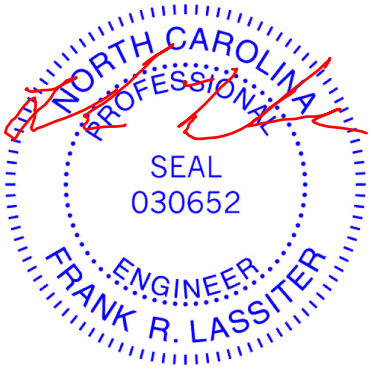
TOP CHORD	1-2=-278/15, 2-3=-298/58, 3-4=-116/78
BOT CHORD	1-5=-73/263, 4-5=-73/263
WEBS	2-5=-319/167

NOTES

1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); 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 86 lb uplift at joint 1, 249 lb uplift at joint 5 and 147 lb uplift at joint 4.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 320 lb down and 70 lb up at 1-1-4, 320 lb down and 70 lb up at 3-1-4, and 320 lb down and 70 lb up at 7-1-4, and 320 lb down and 70 lb up at 8-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 1-4=-20
   Concentrated Loads (lb)
   Vert: 6=-320(B) 7=-320(B) 8=-320(B) 9=-320(B)



January 10,2014

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	F1	COMMON TRUSS	1	1	E7240288

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:14 2014 Page 1

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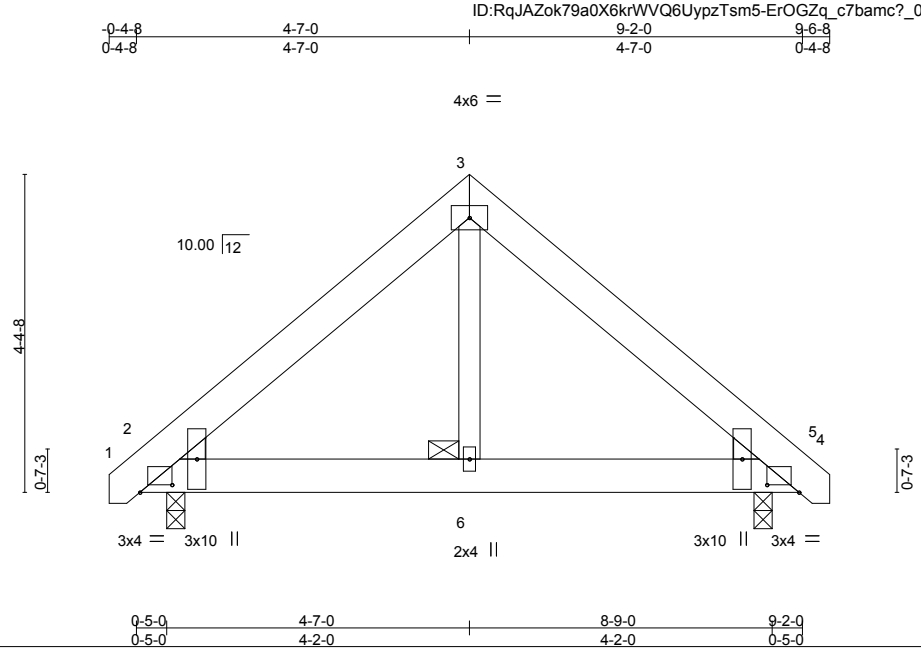


Plate Offsets (X,Y): [2:0-5-5,0-1-4], [4:0-5-5,0-1-4]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.18	Vert(LL)	-0.00	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.21	Vert(TL)	-0.01	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 59 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3, Right: 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.
JOINTS 1 Brace at Jt(s): 6

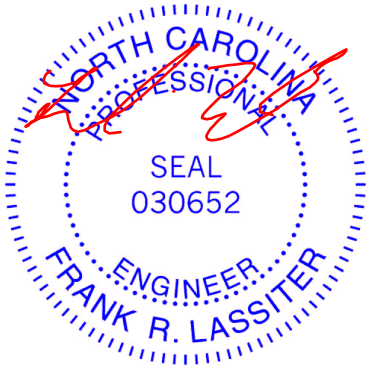
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 2=378/0-3-0 (min. 0-1-8), 4=858/0-3-0 (min. 0-1-8)
Max Horz 2=-142(LC 3)
Max Uplift 2=-73(LC 5), 4=-251(LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/10, 2-3=-401/171, 3-4=-401/171, 4-5=0/10
BOT CHORD 2-6=-27/246, 4-6=-27/246
WEBS 3-6=0/127

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) 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 73 lb uplift at joint 2 and 251 lb uplift at joint 4.
5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 480 lb down and 164 lb up at 8-11-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced) + Uninhab. Attic Storage + Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 2-4=-20
Concentrated Loads (lb)
Vert: 4=-480



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	F1GE	COMMON TRUSS	1	1	E7240289

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:14 2014 Page 1

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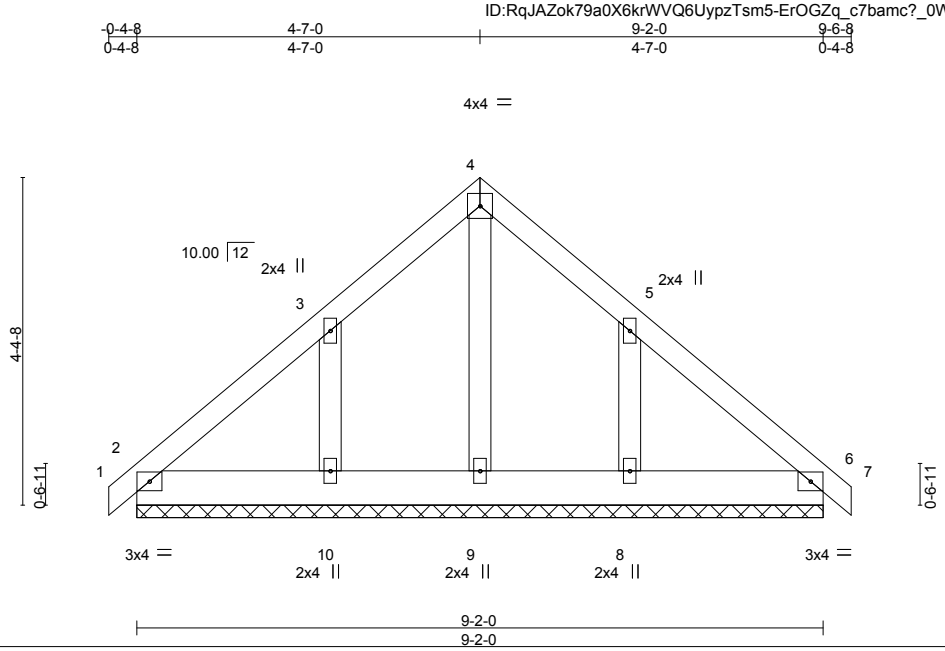


LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.06	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.03	Vert(TL)	0.00	6	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 53 lb	FT = 20%

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.

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

REACTIONS (lb/size) 2=127/9-2-0 (min. 0-1-8), 6=127/9-2-0 (min. 0-1-8), 9=89/9-2-0 (min. 0-1-8), 10=217/9-2-0 (min. 0-1-8), 8=217/9-2-0 (min. 0-1-8)
Max Horz 2=168(LC 4)
Max Uplift 2=-30(LC 3), 6=-11(LC 6), 10=-204(LC 5), 8=-203(LC 6)
Max Grav 2=127(LC 1), 6=127(LC 1), 9=89(LC 1), 10=220(LC 9), 8=220(LC 10)

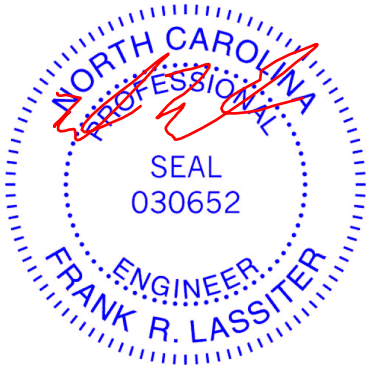
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/9, 2-3=-122/89, 3-4=-71/114, 4-5=-71/114, 5-6=-89/56, 6-7=0/9
BOT CHORD	2-10=-36/126, 9-10=-36/126, 8-9=-36/126, 6-8=-36/126
WEBS	4-9=-71/0, 3-10=-146/202, 5-8=-146/202

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone 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) 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 30 lb uplift at joint 2, 11 lb uplift at joint 6, 204 lb uplift at joint 10 and 203 lb uplift at joint 8.

LOAD CASE(S) Standard



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	F2	COMMON TRUSS	5	1	E7240290

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:15 2014 Page 1

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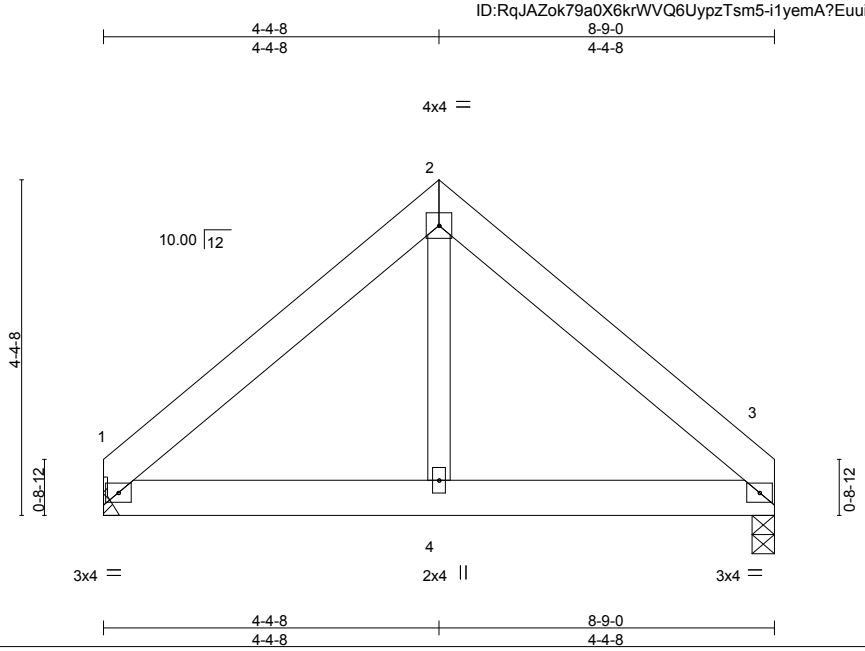


LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.12	Vert(LL)	-0.00	4	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.05	Vert(TL)	-0.01	1-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 54 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 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.

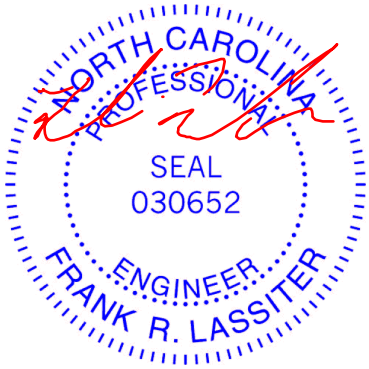
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 1=340/Mechanical, 3=340/0-3-8 (min. 0-1-8)
Max Horz 1=-144(LC 3)
Max Uplift 1=-60(LC 5), 3=-60(LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-333/109, 2-3=-334/109
BOT CHORD 1-4=-22/196, 3-4=-22/196
WEBS 2-4=0/102

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 1 and 60 lb uplift at joint 3.

LOAD CASE(S) Standard



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	J1	Jack-Open Truss	13	1	E7240291

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:15 2014 Page 1

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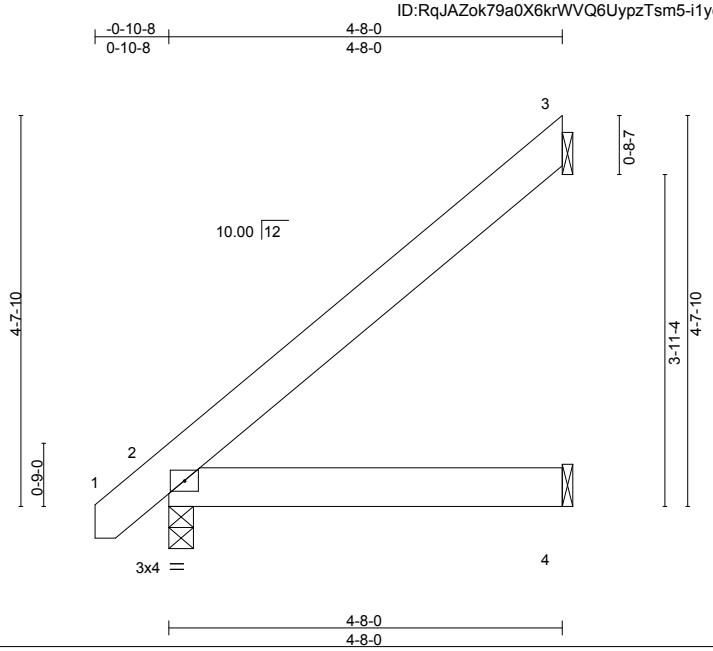


LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.13	Vert(LL)	0.00	2	****	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.04	Vert(TL)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 28 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1

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

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

REACTIONS (lb/size) 3=128/Mechanical, 2=238/0-3-8 (min. 0-1-8), 4=45/Mechanical
Max Horz 2=204(LC 5)
Max Uplift 3=-143(LC 5), 2=-24(LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-169/68
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;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) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 3 and 24 lb uplift at joint 2.

LOAD CASE(S) Standard

January 10,2014

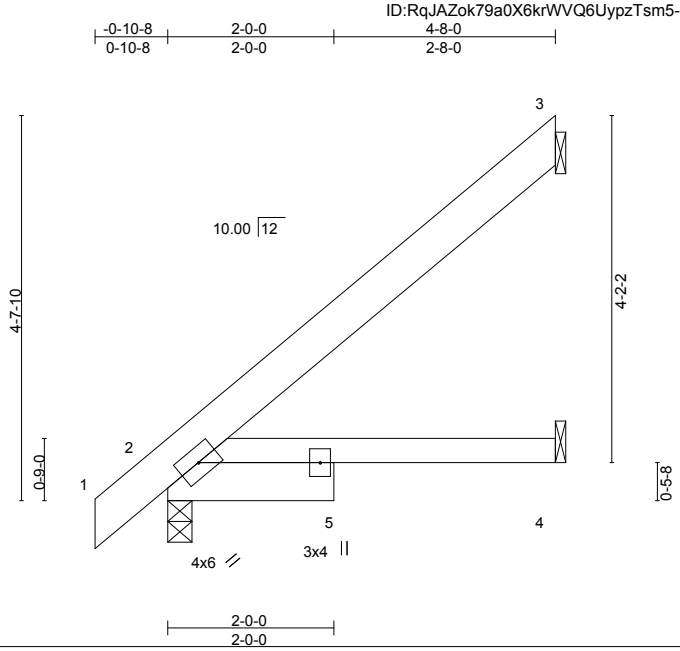
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	J1A	Jack-Open Truss	5	1	E7240292

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:15 2014 Page 1

ID:RqJAZok79a0X6krWVQ6UypzTsm5-i1yemA?EuuidE9ZD4CZj5jKbODGGBpr85usenjzwqyQ



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.12	Vert(LL)	0.00	2	****	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.10	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)							Weight: 29 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
2-4: 2x4 SP No.1

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS (lb/size) 3=127/Mechanical, 2=247/0-3-8 (min. 0-1-8), 4=45/Mechanical
Max Horz 2=210(LC 5)
Max Uplift 3=-141(LC 5), 2=-33(LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-170/67
BOT CHORD 2-4=-7/0

NOTES
1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;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) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 3 and 33 lb uplift at joint 2.

LOAD CASE(S) Standard

January 10,2014

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

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	J2	Jack-Closed Truss	3	1	E7240293

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:16 2014 Page 1

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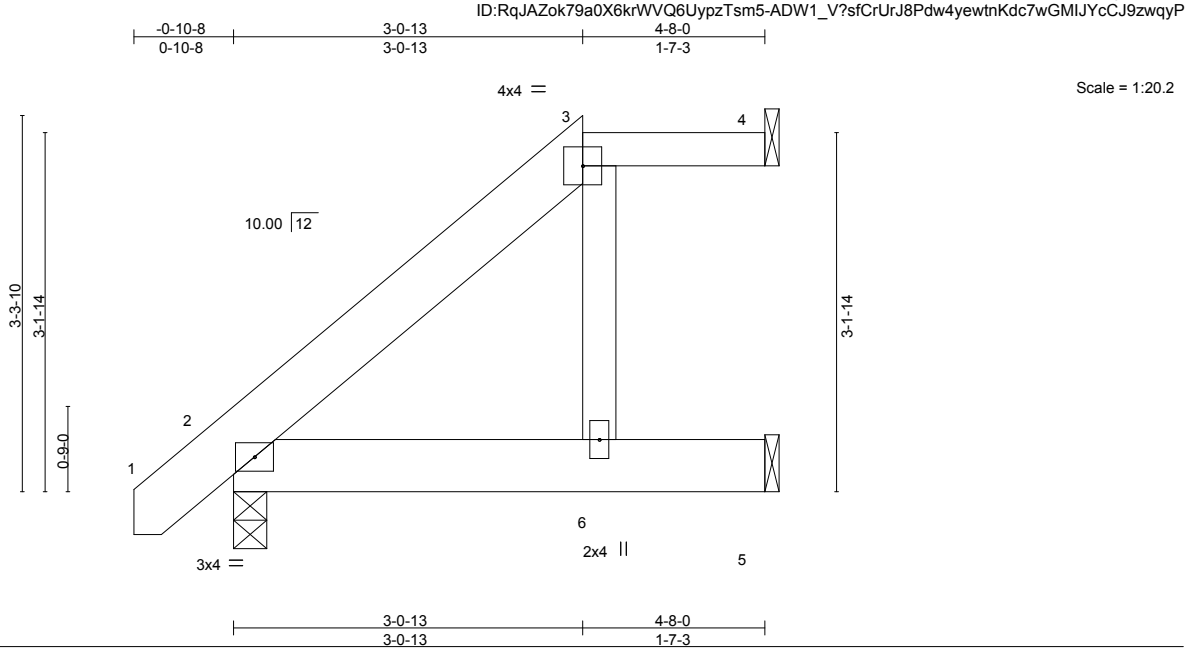


Scale = 1:20.2

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.05	Vert(LL)	-0.01	6	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.12	Vert(TL)	-0.02	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 29 lb	FT = 20%

LUMBER

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

BRACING

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

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

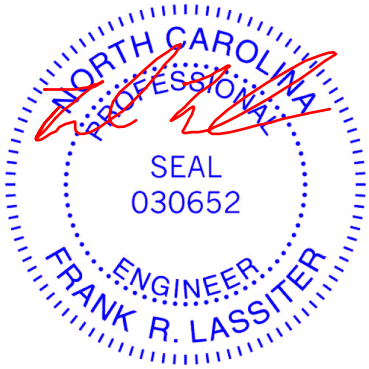
REACTIONS (lb/size) 4=46/Mechanical, 2=238/0-3-8 (min. 0-1-8), 5=127/Mechanical
Max Horz 2=148(LC 5)
Max Uplift 4=-30(LC 3), 2=-63(LC 5), 5=-47(LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-103/34, 3-4=-0/0
BOT CHORD 2-6=-8/6, 5-6=0/0
WEBS 3-6=-120/159

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 4, 63 lb uplift at joint 2 and 47 lb uplift at joint 5.

LOAD CASE(S) Standard



January 10,2014

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	J2A	JACK-CLOSED TRUSS	1	1	E7240294

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:16 2014 Page 1

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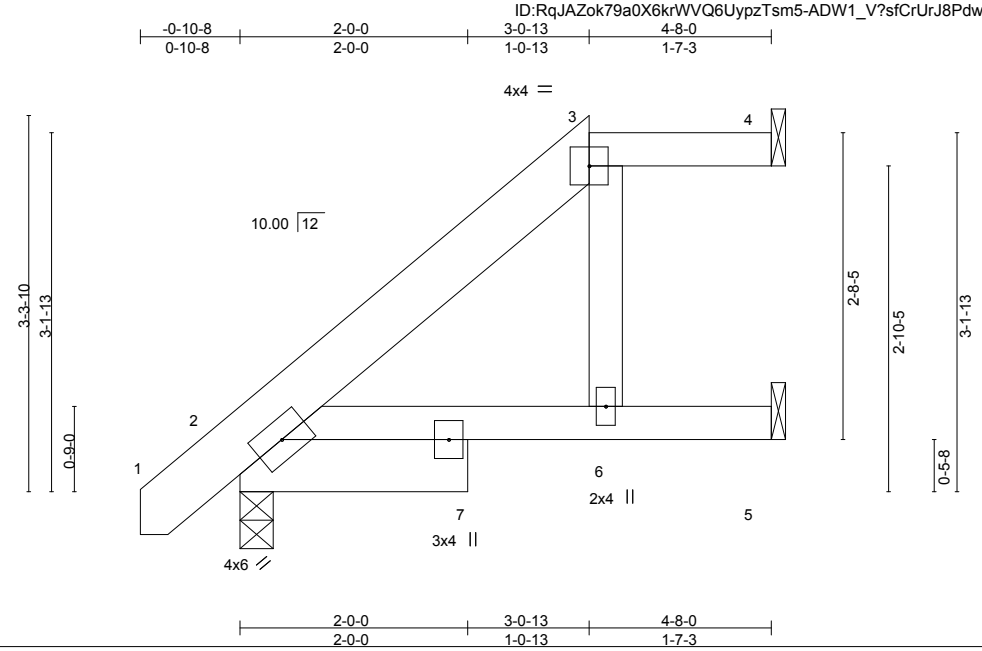


LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.05	Vert(LL)	0.04	6	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.29	Vert(TL)	-0.06	2-6	>969	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.05	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 29 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1 *Except*
3-4: 2x4 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
2-5: 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

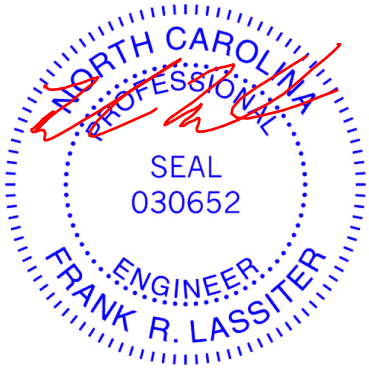
REACTIONS (lb/size) 4=46/Mechanical, 2=238/0-3-8 (min. 0-1-8), 5=127/Mechanical
Max Horz 2=148(LC 5)
Max Uplift 4=-30(LC 3), 2=-63(LC 5), 5=-47(LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-101/33, 3-4=-0/0
BOT CHORD 2-6=-10/7, 5-6=0/0
WEBS 3-6=-119/158

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 4, 63 lb uplift at joint 2 and 47 lb uplift at joint 5.

LOAD CASE(S) Standard



January 10,2014

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	J3	Jack-Closed Truss	3	1	E7240295

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:16 2014 Page 1

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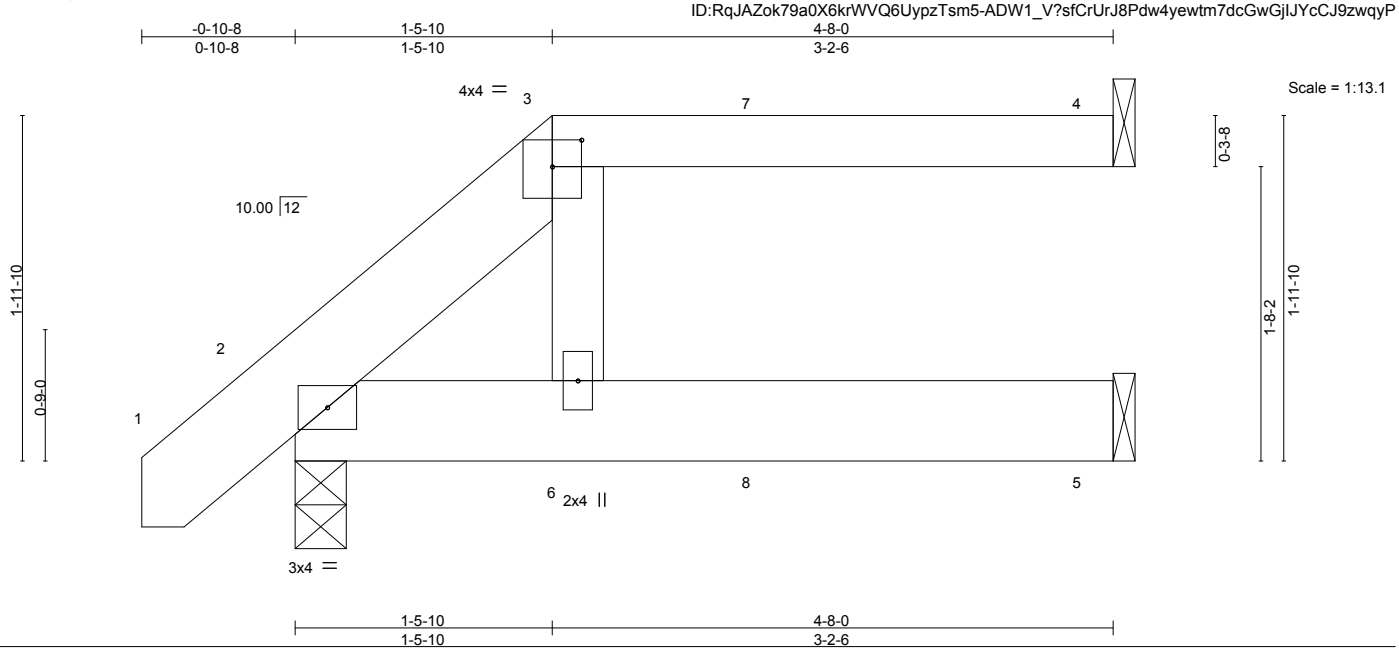


Plate Offsets (X,Y): [3:0-2-0,0-1-13]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.12	Vert(LL)	-0.01	6	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.11	Vert(TL)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(TL)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 25 lb	FT = 20%

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

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

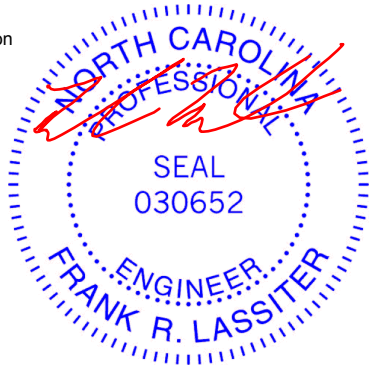
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 4=86/Mechanical, 2=228/0-3-8 (min. 0-1-8), 5=74/Mechanical
Max Horz 2=96(LC 4)
Max Uplift 4=-61(LC 2), 2=-85(LC 4), 5=-5(LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-57/12, 3-4=-2/2
BOT CHORD 2-6=-8/9, 5-6=0/0
WEBS 3-6=-93/82

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 4, 85 lb uplift at joint 2 and 5 lb uplift at joint 5.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1 lb down and 22 lb up at 2-8-12 on top chord, and 1 lb up at 1-6-6, and 1 lb up at 2-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 6=1(B) 7=20(B) 8=1(B)



January 10,2014

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	J3A	Jack-Closed Truss	1	1	E7240296

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:17 2014 Page 1

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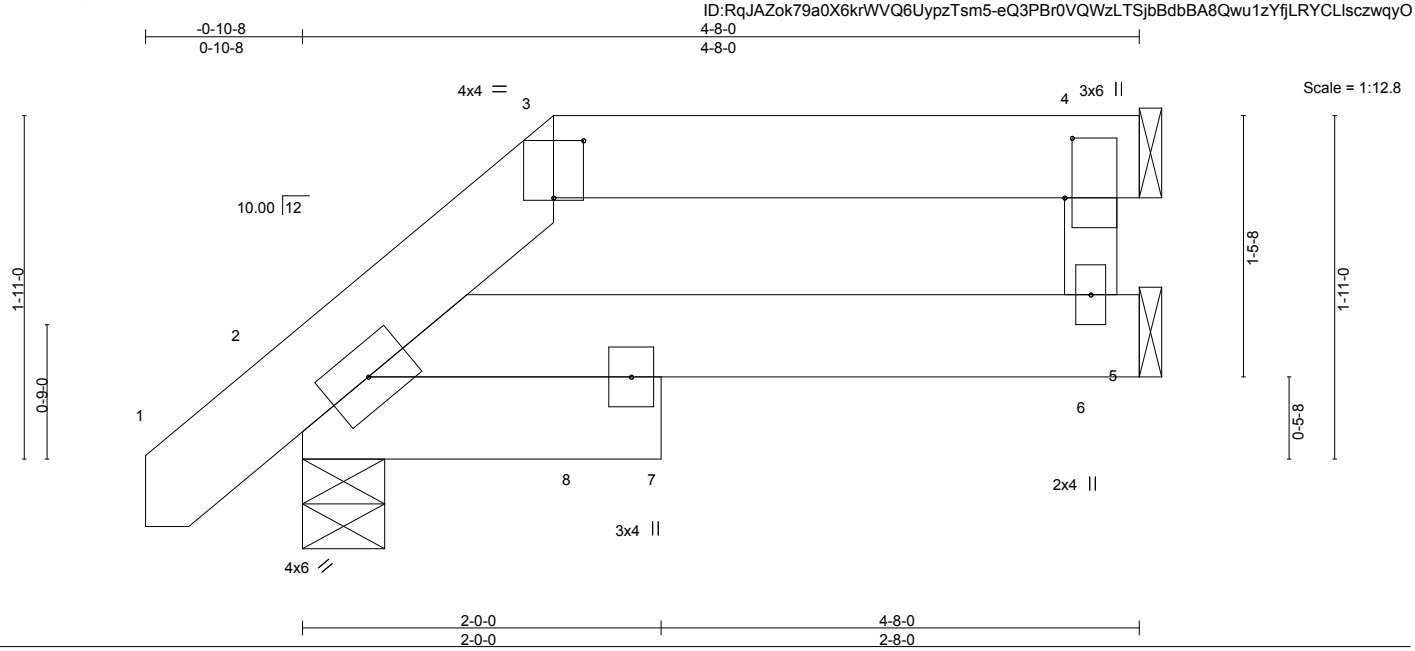


Plate Offsets (X,Y): [3:0-2-0,0-3-13], [4:0-4-0,0-0-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.19	Vert(LL)	0.00	2	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.04	Vert(TL)	-0.00	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 31 lb	FT = 20%

LUMBER

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

BRACING

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

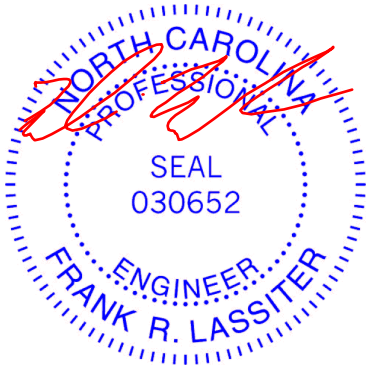
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 4=103/Mechanical, 6=62/Mechanical, 2=232/0-5-8 (min. 0-1-8)
Max Horz 2=91(LC 4)
Max Uplift 4=-63(LC 2), 2=-80(LC 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-168/58, 3-4=-85/37, 4-6=0/0
BOT CHORD 2-6=-45/85, 5-6=0/0

NOTES
1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 4 and 80 lb uplift at joint 2.
6) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1 lb up at 1-6-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 8=1(F)



January 10,2014

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	J4	Jack-Closed Truss	7	1	E7240297

Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:17 2014 Page 1

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-0-10-8 2-1-0
0-10-8 2-1-0

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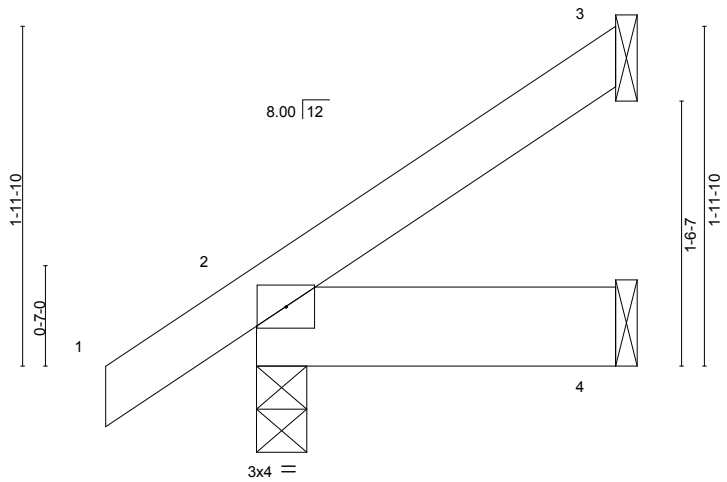


2-1-0
2-1-0

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.06	Vert(LL)	0.00	2	****	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.01	Vert(TL)	-0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 10 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

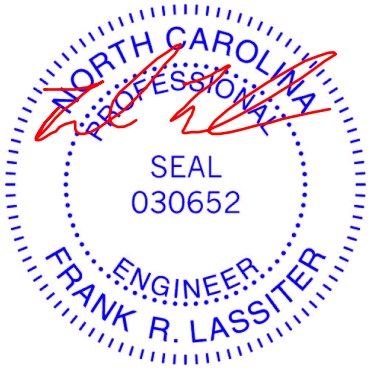
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 3=40/Mechanical, 2=153/0-3-8 (min. 0-1-8), 4=19/Mechanical
Max Horz 2=94(LC 5)
Max Uplift 3=-38(LC 5), 2=-69(LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-47/18
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;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) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 3 and 69 lb uplift at joint 2.

LOAD CASE(S) Standard



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C
B0114-0187	J4A	JACK-CLOSED TRUSS	1	1	E7240298
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:17 2014 Page 1

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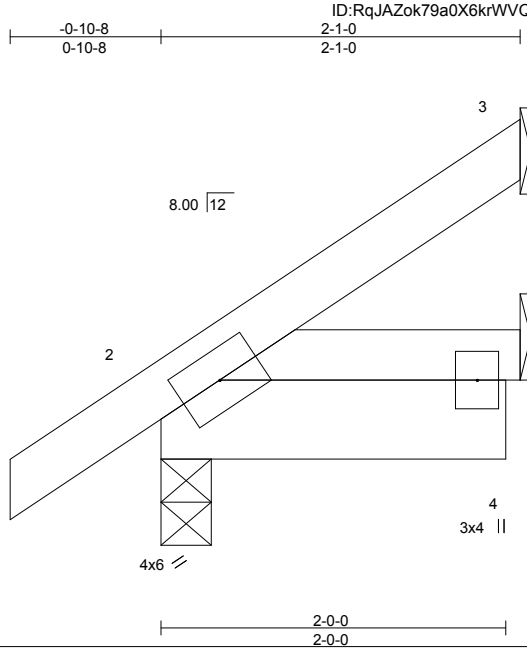


LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.08	Vert(LL)	-0.01	4	>999	360	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.01	Vert(TL)	-0.02	4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 13 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
2-4: 2x6 SP No.1

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

REACTIONS (lb/size) 3=60/Mechanical, 2=153/0-3-8 (min. 0-1-8)
Max Horz 2=94(LC 5)
Max Uplift 3=-28(LC 5), 2=-69(LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-40/31
BOT CHORD 2-4=-5/0

NOTES
1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Interior(1) zone;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) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 3 and 69 lb uplift at joint 2.

LOAD CASE(S) Standard

January 10,2014

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

Job	Truss	Truss Type	Qty	Ply	Riverbirch Elev. C	E7240299
B0114-0187	V1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 7.430 s Jul 25 2013 MiTek Industries, Inc. Fri Jan 10 06:43:18 2014 Page 1

ID:RqJAZok79a0X6krWVQ6UypzTsm5-6cdnPB17Bp5C5clnlL6QjLy6RRHTO7abns5IO2zwqyN

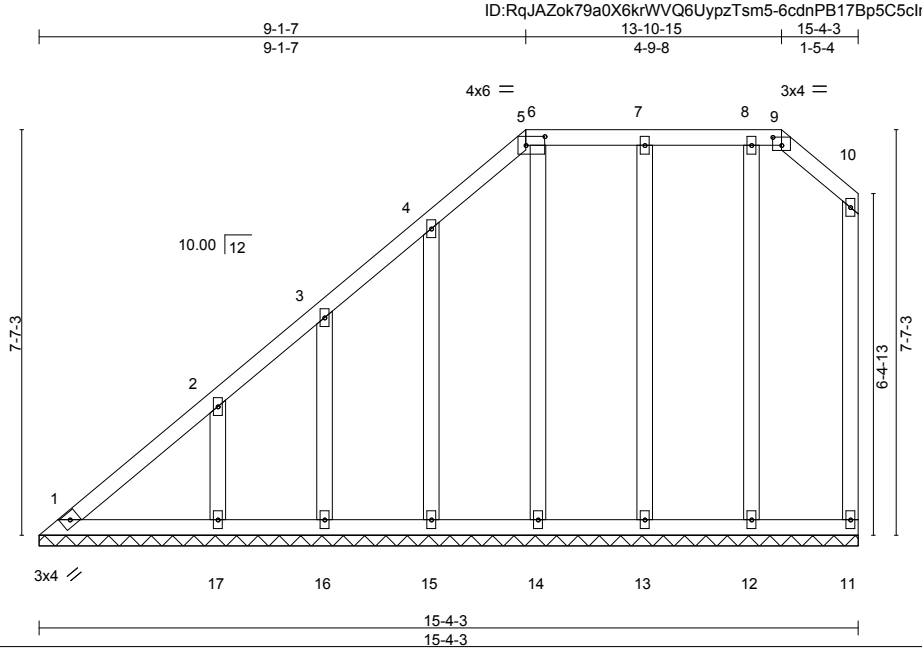


Plate Offsets (X,Y): [5:0-4-4,0-2-0], [9:0-2-0,0-1-13]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber Increase	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(TL)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 108 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.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.

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.

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

REACTIONS (lb/size) 1=98/15-4-3 (min. 0-1-12), 11=98/15-4-3 (min. 0-1-12), 12=245/15-4-3 (min. 0-1-12), 13=238/15-4-3 (min. 0-1-12), 14=242/15-4-3 (min. 0-1-12), 15=206/15-4-3 (min. 0-1-12), 16=126/15-4-3 (min. 0-1-12), 17=244/15-4-3 (min. 0-1-12)

Max Horz 1=406(LC 5)

Max Uplift 1=-34(LC 3), 11=-57(LC 6), 12=-72(LC 3), 13=-115(LC 3), 14=-104(LC 4), 15=-173(LC 5), 16=-139(LC 5), 17=-252(LC 5)

Max Grav 1=237(LC 5), 11=98(LC 1), 12=245(LC 1), 13=242(LC 10), 14=243(LC 9), 15=207(LC 9), 16=126(LC 1), 17=244(LC 9)

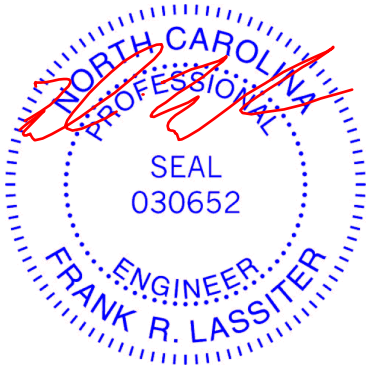
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-441/116, 2-3=-258/93, 3-4=-144/87, 4-5=-51/64, 5-6=-5/71, 6-7=-5/71, 7-8=-5/71, 8-9=-5/71, 9-10=-35/52, 10-11=-51/63
BOT CHORD	1-17=-2/2, 16-17=-2/2, 15-16=-2/2, 14-15=-2/2, 13-14=-2/2, 12-13=-2/2, 11-12=-2/2
WEBS	8-12=-120/94, 7-13=-125/135, 6-14=-118/124, 4-15=-123/191, 3-16=-104/167, 2-17=-168/251

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone 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) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 1, 57 lb uplift at joint 11, 72 lb uplift at joint 12, 115 lb uplift at joint 13, 104 lb uplift at joint 14, 173 lb uplift at joint 15, 139 lb uplift at joint 16 and 252 lb uplift at joint 17.

LOAD CASE(S) Standard



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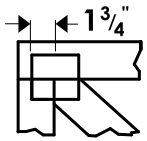
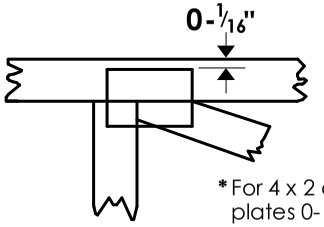
Symbols

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.

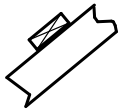
***Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

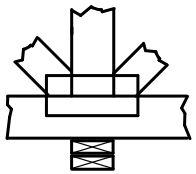
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

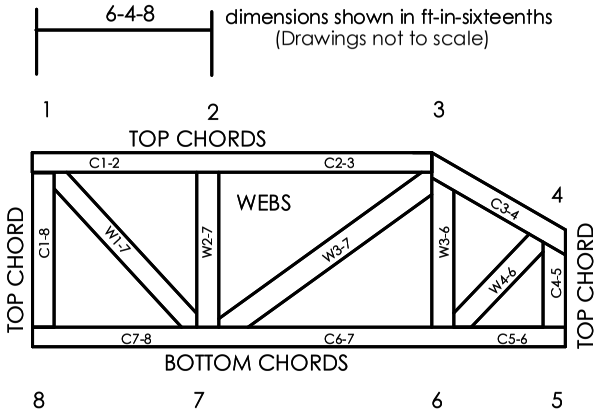


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

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

Southern Pine lumber designations are as follows:

SYP represents values as published by AWC in the 2005/2012 NDS
SP represents ALSC approved/new values with effective date of June 1, 2013

MiTek®

ENGINEERING BY TRENCO
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MiTek Engineering Reference Sheet: MII-7473 rev. 02/26/2013

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 T or 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.