ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0521-2783
Weaver/Lot 2W Williams Farm/Harnett

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: E15709107 thru E15709134

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844

May 10,2021

Strzyzewski, Marvin

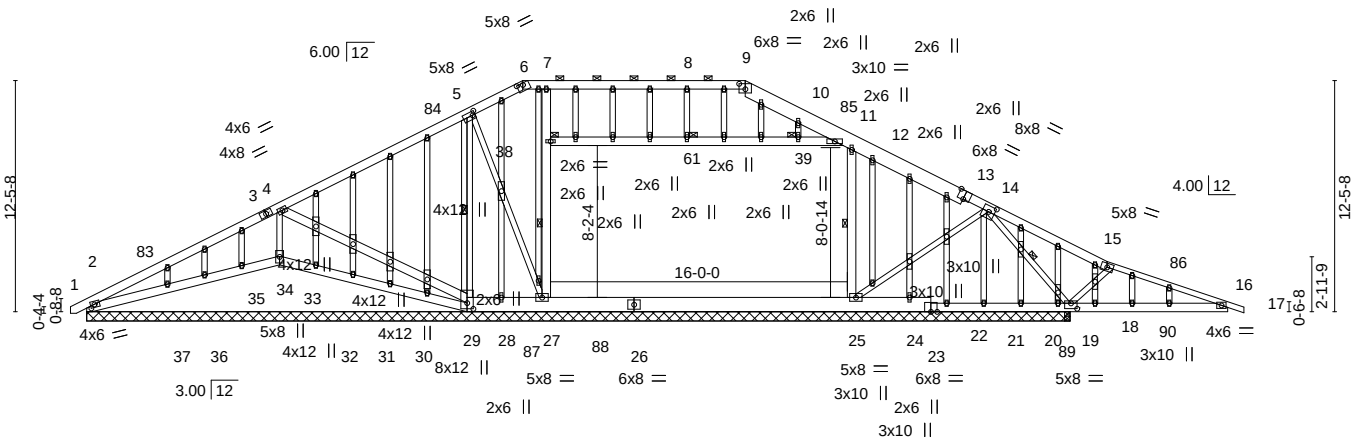
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A1GE	GABLE	1	1	E15709107
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:55:54 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-9Kmk23VSHFw8MebUuWMjeR9G3RXT4v529?kVOjzHz8Z

-0-10-8	24-4-9	36-4-7	49-4-0	55-10-8	62-4-8	63-3-0
0-10-8	23-6-1	11-11-14	12-11-9	6-6-8	6-6-0	0-10-8

Scale = 1:124.2



-0-10-8	21-4-8	53-8-12	62-4-8	63-3-0
0-10-8	20-6-0	32-4-4	8-7-12	0-10-8

Plate Offsets (X,Y)-- [2:0-2-9,0-2-0], [5:0-1-12,0-2-8], [6:0-4-0,0-1-2], [9:0-4-0,0-3-8], [13:0-4-0,Edge], [14:0-4-0,0-3-12], [18:0-4-0,0-3-8], [29:0-3-12,0-4-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.11	25-27	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.17	25-27	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	2-37	>999	240	Weight: 693 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except* 9-13: 2x10 SP No.1, 15-17: 2x4 SP No.1
BOT CHORD 2x6 SP No.1 *Except* 26-29,23-26: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except* 4-29,7-27,12-25,11-38: 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-10 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 27-38, 12-25, 5-29, 14-18
JOINTS 1 Brace at Jt(s): 38, 39, 61

REACTIONS. All bearings 53-0-0.
(lb) - Max Horz 2=246(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 37, 36 except 2=-142(LC 13), 34=-414(LC 12), 29=-153(LC 12), 25=-242(LC 13), 18=-923(LC 9), 28=-739(LC 18), 24=-645(LC 18), 19=-614(LC 3)
Max Grav All reactions 250 lb or less at joint(s) 37, 36, 35, 33, 32, 31, 30, 21, 20 except 2=342(LC 1), 34=1140(LC 1), 29=308(LC 20), 27=1286(LC 18), 25=1287(LC 21), 18=2210(LC 25), 18=2197(LC 1), 22=312(LC 18), 19=329(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-429/249, 4-5=-767/523, 5-6=-626/635, 9-10=-723/628, 10-11=-858/641, 11-12=-788/586, 12-14=-679/311, 14-15=-1003/1157, 15-16=-964/911, 6-7=-577/620, 7-8=-621/644, 8-9=-621/644
BOT CHORD 2-37=-93/336, 36-37=-61/302, 35-36=-75/320, 34-35=-71/313, 33-34=-72/315, 32-33=-72/317, 31-32=-72/317, 30-31=-72/317, 29-30=-73/315, 28-29=-52/565, 27-28=-48/572, 25-27=-42/574, 24-25=-75/400, 22-24=-88/400, 21-22=-75/400, 20-21=-75/400, 19-20=-75/400, 18-19=-75/400, 16-18=-800/998
WEBS 4-29=-58/348, 27-38=-322/181, 7-38=-280/158, 14-25=-322/519, 4-34=-980/572, 12-25=-702/623, 5-29=-313/237, 14-18=-1746/1161, 15-18=-251/218

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 23-6-1, Corner(3) 23-6-1 to 27-10-14, Exterior(2) 27-10-14 to 35-5-15, Corner(3) 35-5-15 to 39-10-12, Exterior(2) 39-10-12 to 62-4-8 zone; cantilever right exposed ;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.

NORTH CAROLINA PROFESSIONAL SEAL 16673 ENGINEER MARVIN A. STRZYZEWSKI

May 10,2021

Continued on page 2

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

NOTES-

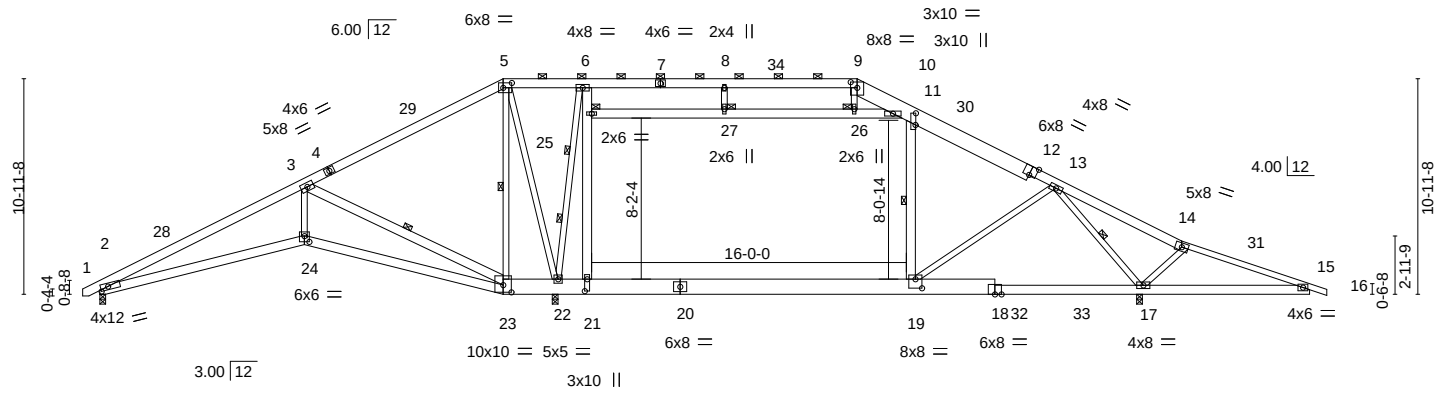
4) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 36 except (jt=lb) 2=142, 34=414, 29=153, 25=242, 18=923, 28=739, 24=645, 19=614.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A2	ROOF TRUSS	5	1	E15709108
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:55:56 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-5iuUTlXipsAsbylt0xOBksFXhE8fYgjLcJDcSbzHz8X

-0-10-8	10-4-12	20-6-0	25-0-0	31-9-0	38-5-15	41-0-0	48-5-8	55-0-0	61-6-0	62-4-8
0-10-8	10-4-12	10-1-4	4-6-0	6-9-0	6-9-0	2-6-1	7-5-8	6-6-8	6-6-0	0-10-8

Scale = 1:117.1



10-4-12	20-6-0	23-1-12	25-0-0	41-0-0	52-10-4	61-6-0
10-4-12	10-1-4	2-7-12	1-10-4	16-0-0	11-10-4	8-7-12

Plate Offsets (X,Y)-- [2:0-4-9,0-2-0], [5:0-5-4,0-3-0], [9:0-4-0,0-3-8], [11:0-7-2,0-0-4], [12:0-4-0,Edge], [19:0-4-0,0-5-8], [21:0-7-4,0-1-8], [23:0-5-0,0-4-7], [24:0-3-0,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.40	19-21	>897	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.69	19-21	>522	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.28	17	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.11	2-24	>999	240	Weight: 537 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except*
9-12: 2x10 SP No.1, 14-16: 2x4 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
20-23,18-20: 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
3-23,6-21,11-19,10-25: 2x6 SP No.1, 6-22: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins, except
2-0-0 oc purlins (4-3-8 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-23, 11-19, 5-23, 13-17
2 Rows at 1/3 pts 6-22
JOINTS 1 Brace at Jt(s): 25, 26, 27

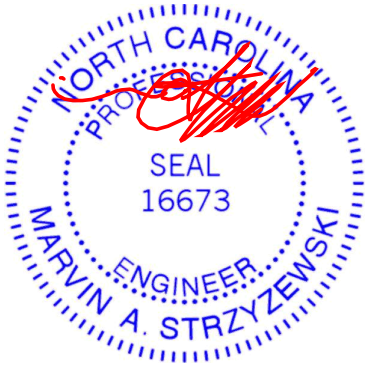
REACTIONS. (size) 2=0-3-8, 22=0-3-8, 17=0-3-8 (req. 0-3-9)
Max Horz 2=-141(LC 10)
Max Grav 2=1522(LC 2), 22=1856(LC 26), 17=2995(LC 27)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4764/135, 3-5=-1854/71, 9-10=-2219/74, 10-11=-2250/25, 11-13=-2554/0, 13-14=-862/1146, 14-15=-853/902, 5-6=-1794/53, 6-8=-2140/34, 8-9=-2145/33
BOT CHORD 2-24=0/4285, 23-24=0/4276, 22-23=0/1585, 21-22=0/2141, 19-21=0/2174, 17-19=0/1461, 15-17=-792/858
WEBS 3-23=-3000/310, 6-22=-2620/0, 21-25=0/2118, 6-25=0/2195, 13-19=-93/1100, 3-24=0/2269, 11-19=-259/554, 9-26=0/349, 5-23=-412/213, 5-22=0/1139, 13-17=-3312/507

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 20-6-0, Exterior(2) 20-6-0 to 24-7-8, Interior(1) 24-7-8 to 38-5-15, Exterior(2) 38-5-15 to 42-10-12, Interior(1) 42-10-12 to 62-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 10-11, 25-27, 26-27, 10-26; Wall dead load (5.0psf) on member(s).21-25, 11-19
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-21
9) WARNING: Required bearing size at joint(s) 17 greater than input bearing size.
10) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Continued on page 2



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A2	ROOF TRUSS	5	1	E15709108 Job Reference (optional)

NOTES-

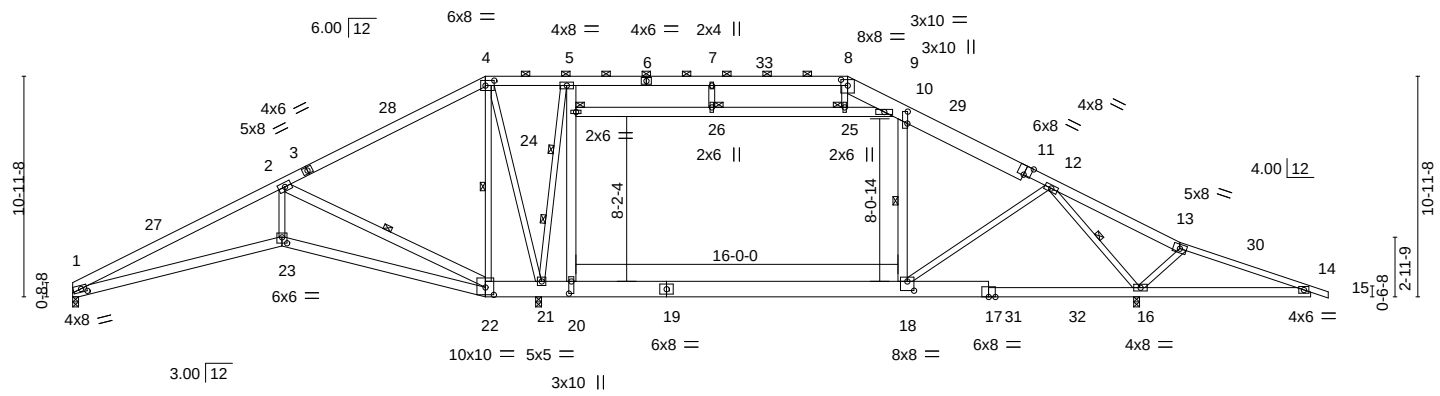
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A2A	ROOF TRUSS	1	1	E15709109
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:55:57 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-ZvSsh5XKaAIjD6J3ZfvQG3nfCeUyH7xUrzy9_2zHz8W

10-4-12	20-6-0	25-0-0	31-9-0	38-5-15	41-0-0	48-5-8	55-0-0	61-6-0	62-4-8
10-4-12	10-1-4	4-6-0	6-9-0	6-9-0	2-6-1	7-5-8	6-6-8	6-6-0	0-10-8

Scale = 1:114.5



10-4-12	20-6-0	23-1-12	25-0-0	41-0-0	52-10-4	61-6-0
10-4-12	10-1-4	2-7-12	1-10-4	16-0-0	11-10-4	8-7-12

Plate Offsets (X,Y)-- [1:0-3-7,0-2-0], [4:0-5-4,0-3-0], [8:0-4-0,0-3-8], [10:0-7-2,0-0-4], [11:0-4-0,Edge], [18:0-4-0,0-5-8], [20:0-7-4,0-1-8], [22:0-5-0,0-4-7], [23:0-3-0,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.40	18-20	>897	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.69	18-20	>522	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.28	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.11	23	>999	240	Weight: 535 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except*
8-11: 2x10 SP No.1, 13-15: 2x4 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
19-22,17-19: 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
2-22,5-20,10-18,9-24: 2x6 SP No.1, 5-21: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (4-3-8 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 2-22, 10-18, 4-22, 12-16
2 Rows at 1/3 pts 5-21
JOINTS 1 Brace at Jt(s): 24, 25, 26

REACTIONS. (size) 1=0-3-8, 21=0-3-8, 16=0-3-8 (req. 0-3-9)
Max Horz 1=-142(LC 10)
Max Grav 1=1478(LC 2), 21=1858(LC 26), 16=2995(LC 27)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4768/154, 2-4=-1854/71, 8-9=-2218/73, 9-10=-2249/23, 10-12=-2554/0, 12-13=-862/1146, 13-14=-853/902, 4-5=-1793/51, 5-7=-2140/32, 7-8=-2144/31
BOT CHORD 1-23=-9/4290, 22-23=-7/4281, 21-22=0/1585, 20-21=0/2141, 18-20=0/2173, 16-18=0/1461, 14-16=-792/858
WEBS 2-22=-3007/337, 5-21=-2621/0, 20-24=0/2118, 5-24=0/2195, 12-18=-93/1100, 2-23=0/2270, 10-18=-259/554, 8-25=0/349, 4-22=-412/213, 4-21=0/1139, 12-16=-3312/507

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 20-6-0, Exterior(2) 20-6-0 to 24-7-8, Interior(1) 24-7-8 to 38-5-15, Exterior(2) 38-5-15 to 42-10-12, Interior(1) 42-10-12 to 62-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 9-10, 24-26, 25-26, 9-25; Wall dead load (5.0psf) on member(s).20-24, 10-18
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
9) WARNING: Required bearing size at joint(s) 16 greater than input bearing size.
10) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 16673 ENGINEER MARVIN A. STRZYZEWSKI

May 10,2021

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

NOTES-

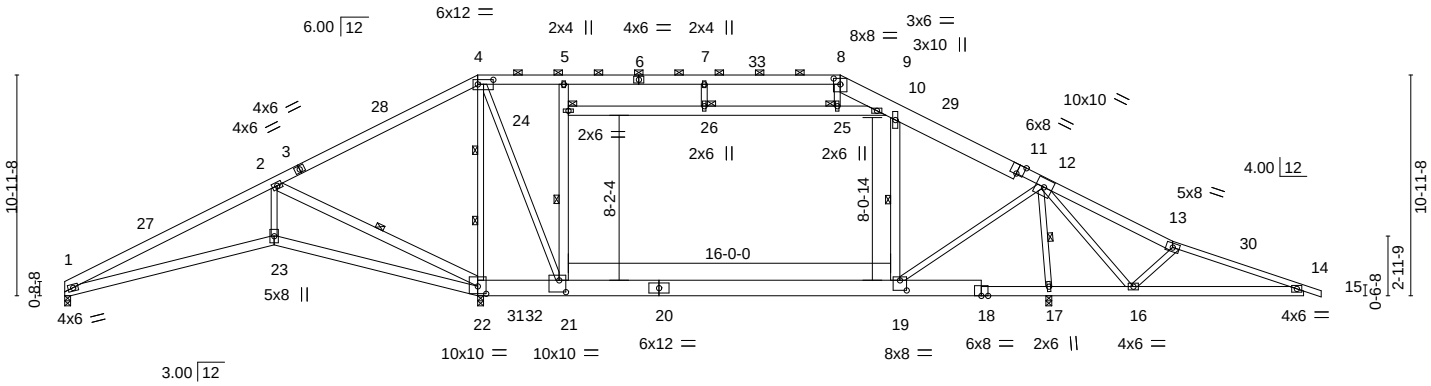
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A3	ROOF TRUSS	3	1	E15709110
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:55:58 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-250EuRYyLTQZqFuG7MQfpHKu12uz0dxe4dijXUzHz8V

10-4-12	20-6-0	20-7-12	25-0-0	31-9-0	38-5-15	41-0-0	48-5-8	55-0-0	61-6-0	62-4-8
10-4-12	10-1-4	0-1-12	4-4-4	6-9-0	6-9-0	2-6-1	7-5-8	6-6-8	6-6-0	0-10-8

Scale = 1:114.4



10-4-12	20-6-0	20-7-12	25-0-0	41-0-0	48-10-4	52-10-4	61-6-0
10-4-12	10-1-4	0-1-12	4-4-4	16-0-0	7-10-4	4-0-0	8-7-12

Plate Offsets (X,Y)-- [4:0-9-4,0-2-12], [8:0-4-0,0-3-8], [11:0-4-0,Edge], [19:0-4-0,0-6-0], [21:0-4-0,0-7-0], [22:0-5-0,0-4-7]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.32	19-21	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.50	19-21	>687	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.13	17	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	1-23	>999	240	Weight: 528 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except*
8-11: 2x10 SP No.1, 13-15: 2x4 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
20-22,18-20: 2x10 SP 2400F 2.0E, 14-18: 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
2-22,5-21,10-19,9-24: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-0 oc purlins, except 2-0-0 oc purlins (5-9-15 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 2-22, 21-24, 10-19, 12-17
2 Rows at 1/3 pts 4-22
JOINTS 1 Brace at Jt(s): 24, 25, 26

REACTIONS. (size) 1=0-3-8, 22=0-3-8, 17=0-3-8
Max Horz 1=-142(LC 10)
Max Grav 1=875(LC 24), 22=2457(LC 2), 17=3015(LC 27)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2249/0, 2-4=-510/93, 8-9=-1369/11, 9-10=-1336/0, 10-12=-1415/0, 12-13=-840/1215, 13-14=-832/976, 4-5=-1200/0, 5-7=-1221/0, 7-8=-1226/0
BOT CHORD 1-23=-20/1994, 22-23=-19/1986, 21-22=-26/642, 19-21=0/1221, 17-19=-1226/1170, 16-17=-1293/1186, 14-16=-861/840
WEBS 2-22=-1992/248, 21-24=-944/229, 5-24=-715/241, 12-19=-462/2640, 2-23=0/1165, 10-19=-907/518, 8-25=0/350, 12-16=-441/446, 4-22=-2328/44, 4-21=0/2414, 12-17=-3101/791

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 20-6-0, Exterior(2) 20-6-0 to 24-9-4, Interior(1) 24-9-4 to 38-5-15, Exterior(2) 38-5-15 to 42-10-12, Interior(1) 42-10-12 to 62-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 9-10, 24-26, 25-26, 9-25; Wall dead load (5.0psf) on member(s).21-24, 10-19
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-21
9) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 16673 MARVIN A. STRZYZEWSKI ENGINEER

May 10,2021

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

NOTES-

11) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A4	ROOF TRUSS	3	1	E15709111
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:55:59 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-WHZd5nZb6nYQSPTSh3xuLUs78S7Dl7fnJHRG3wzHz8U

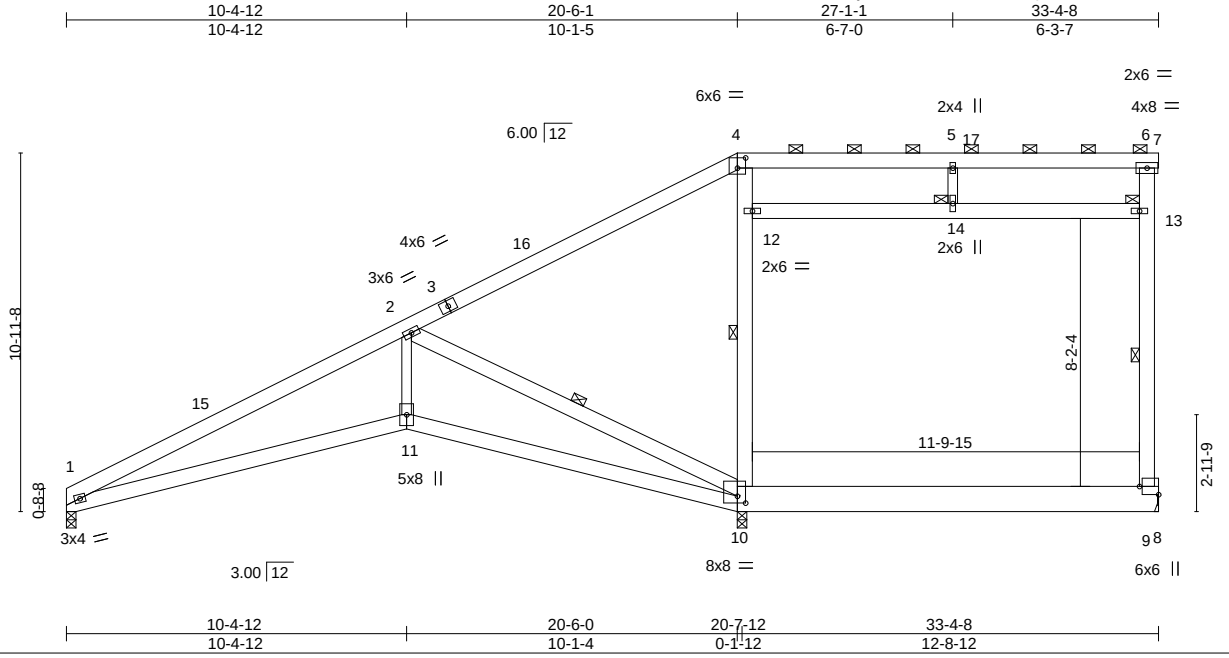


Plate Offsets (X,Y)-- [4:0-3-0,0-3-12], [9:Edge,0-7-0], [10:0-3-0,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.24	9-10	>629	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.35	9-10	>436	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.08	1-11	>999	240	Weight: 289 lb	FT = 20%

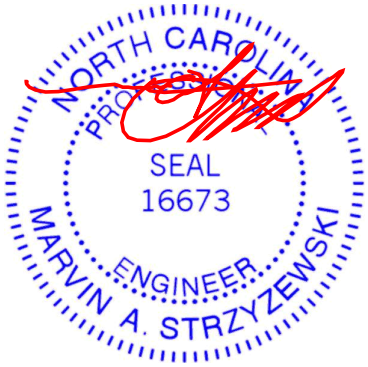
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
8-10: 2x10 SP No.1
WEBS 2x6 SP No.1 *Except*
2-11,5-14: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 9-13, 2-10, 10-12
JOINTS 1 Brace at Jt(s): 6, 13, 14

REACTIONS. (size) 9=Mechanical, 1=0-3-8, 10=0-3-8
Max Horz 1=343(LC 12)
Max Grav 9=1093(LC 2), 1=809(LC 1), 10=1861(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1961/301, 2-4=-333/203, 9-13=-523/107, 6-13=-371/100
BOT CHORD 1-11=-935/1730, 10-11=-933/1720
WEBS 2-11=-328/1031, 2-10=-1810/826, 10-12=-836/436, 4-12=-589/425

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 20-6-1, Exterior(2) 20-6-1 to 26-8-11, Interior(1) 26-8-11 to 33-4-8 zone;C-C for members and forces & MWFRS for reactions shown; 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 12-14, 13-14; Wall dead load (5.0psf) on member(s).10-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-10
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 1, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A4A	ROOF TRUSS	1	1	E15709112
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:00 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-_U7?J6aDt5gH4Z2eFnS7uPGarRkUZvwXxBpbNzHz8T

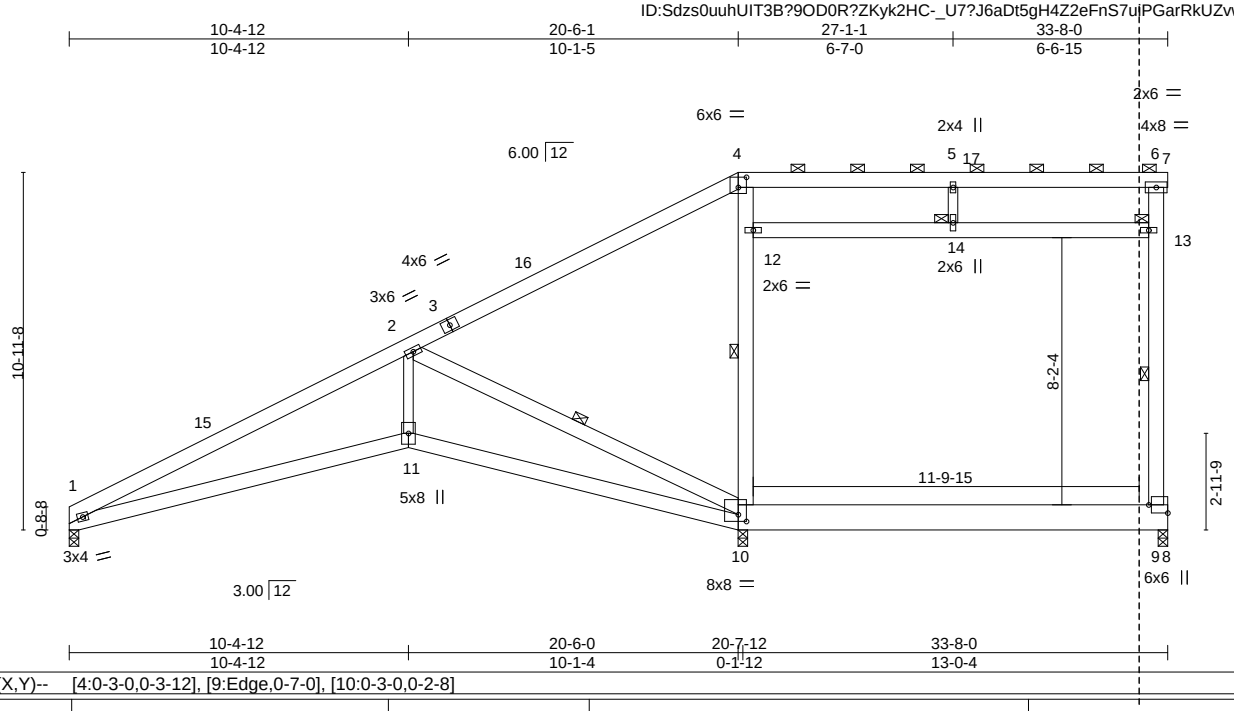


Plate Offsets (X,Y)-- [4:0-3-0,0-3-12], [9:Edge,0-7-0], [10:0-3-0,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.26	9-10	>589	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.38	9-10	>407	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.08	1-11	>999	240	Weight: 292 lb	FT = 20%

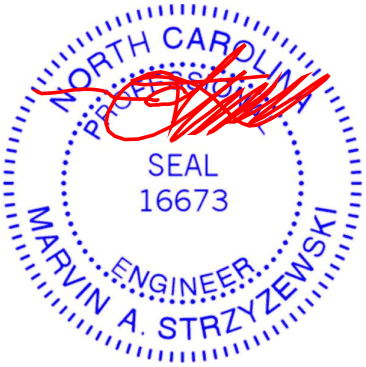
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
8-10: 2x10 SP No.1
WEBS 2x6 SP No.1 *Except*
2-11,5-14: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 9-13, 2-10, 10-12
JOINTS 1 Brace at Jt(s): 6, 13, 14

REACTIONS. (size) 9=0-3-8, 1=0-3-8, 10=0-3-8
Max Horz 1=343(LC 12)
Max Grav 9=1120(LC 2), 1=811(LC 1), 10=1883(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1965/303, 2-4=-332/200, 9-13=-536/110, 6-13=-382/106
BOT CHORD 1-11=-936/1733, 10-11=-935/1723
WEBS 2-11=-329/1032, 2-10=-1808/827, 10-12=-846/437, 4-12=-594/425

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 20-6-1, Exterior(2) 20-6-1 to 26-8-11, Interior(1) 26-8-11 to 33-8-0 zone;C-C for members and forces & MWFRS for reactions shown; 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 12-14, 13-14; Wall dead load (5.0psf) on member(s).10-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-10
7) Bearing at joint(s) 1, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Attic room checked for L/360 deflection.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A5	ROOF TRUSS	4	1	E15709113
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:01 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-SghNWSardOo8hjdqoU_MRvyRYFqGDx94mbwN7pzHz8S

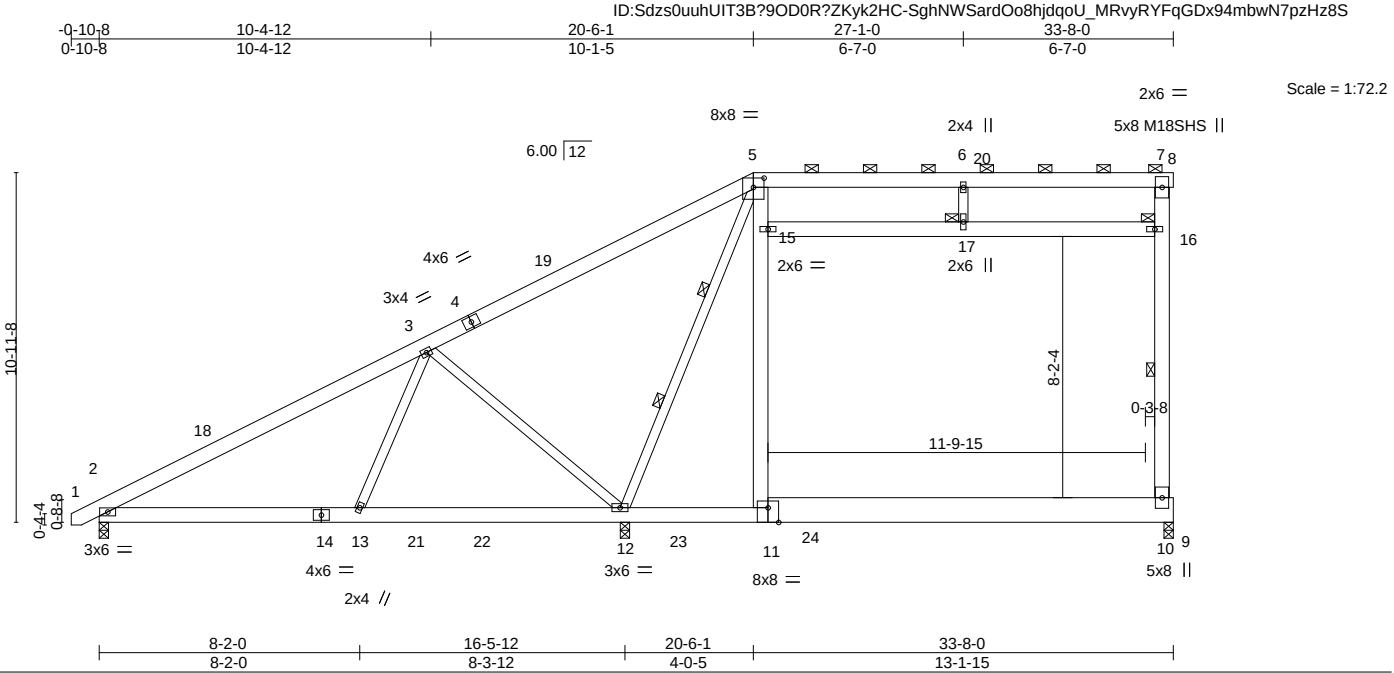


Plate Offsets (X,Y)-- [5:0-4-0,0-3-8], [11:0-4-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.21	10-11	>950	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.33	10-11	>623	240	M18SHS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	-0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.03	2-13	>999	240	Weight: 298 lb	FT = 20%

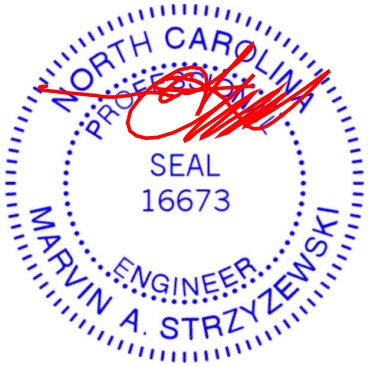
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
9-11: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
7-10,5-11,15-16: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 5-1-0 oc bracing.
WEBS 1 Row at midpt 10-16
2 Rows at 1/3 pts 5-12
JOINTS 1 Brace at Jt(s): 7, 16, 17

REACTIONS. (size) 10=0-3-8, 2=0-3-8, 12=0-3-8
Max Horz 2=346(LC 12)
Max Uplift 2=-35(LC 12)
Max Grav 10=1097(LC 2), 2=456(LC 1), 12=2480(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-371/313, 3-5=-371/892, 5-6=-272/6, 6-7=-272/6, 10-16=-549/112, 7-16=-402/109
BOT CHORD 2-13=-368/271, 12-13=-403/188
WEBS 11-15=0/1077, 5-15=0/1192, 5-12=-2060/141, 3-12=-815/356, 3-13=0/402

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 20-6-1, Exterior(2) 20-6-1 to 26-8-11, Interior(1) 26-8-11 to 33-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Ceiling dead load (10.0 psf) on member(s). 15-17, 16-17; Wall dead load (5.0psf) on member(s).11-15
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-11
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A6	ROOF TRUSS	2	2	E15709114
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:02 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-wsFlkobTOiw?JtC1MCVbz7UdEfBYyR5D?FgwgFzHz8R

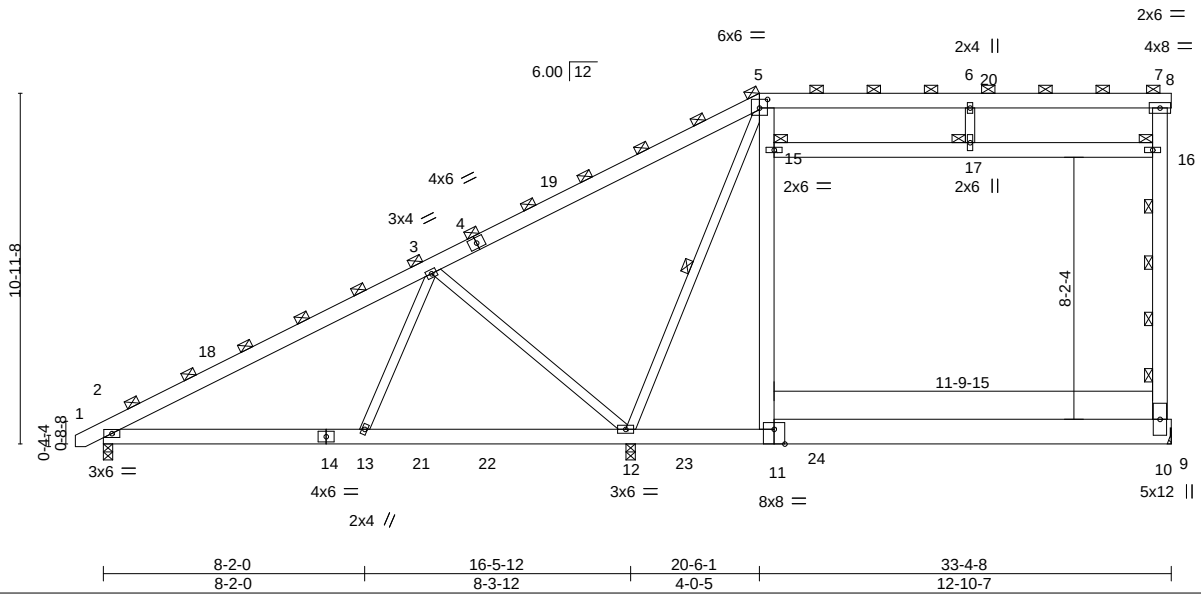


Plate Offsets (X,Y)-- [5:0-3-0,0-3-4], [11:0-4-0,Edge]

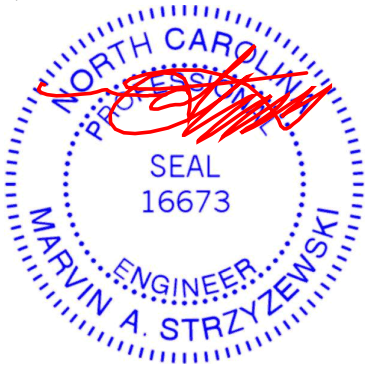
LOADING (psf)		SPACING- 3-6-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.17	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.26	10-11	>759	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.75	Horz(CT)	-0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	2-13	>999	240	Weight: 590 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
9-11: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
7-10,5-11,15-16: 2x6 SP No.1

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-12
JOINTS 1 Brace at Jt(s): 5, 7, 15, 16, 17

REACTIONS. (size) 10=Mechanical, 2=0-3-8, 12=0-3-8
Max Horz 2=605(LC 12)
Max Uplift 2=-59(LC 12)
Max Grav 10=1876(LC 2), 2=803(LC 1), 12=4284(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-656/519, 3-5=-656/1534, 5-6=-456/7, 6-7=-455/7, 10-16=-939/191, 7-16=-686/181
BOT CHORD 2-13=-640/485, 12-13=-701/341, 11-12=-322/319, 10-11=-268/290
WEBS 11-15=0/1830, 5-15=0/2028, 15-17=-229/418, 16-17=-229/418, 6-17=-73/268, 5-12=-3524/258, 3-12=-1429/624, 3-13=0/702



NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 20-6-1, Exterior(2) 20-6-1 to 26-8-11, Interior(1) 26-8-11 to 33-4-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 15-17, 16-17; Wall dead load (5.0psf) on member(s).11-15
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-11
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	A7GE	ROOF TRUSS	1	1	E15709115
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:04 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-sFNW9UdjwJAjYAMPUdX32YazQTyhQR?WSZ91k8zHz8P

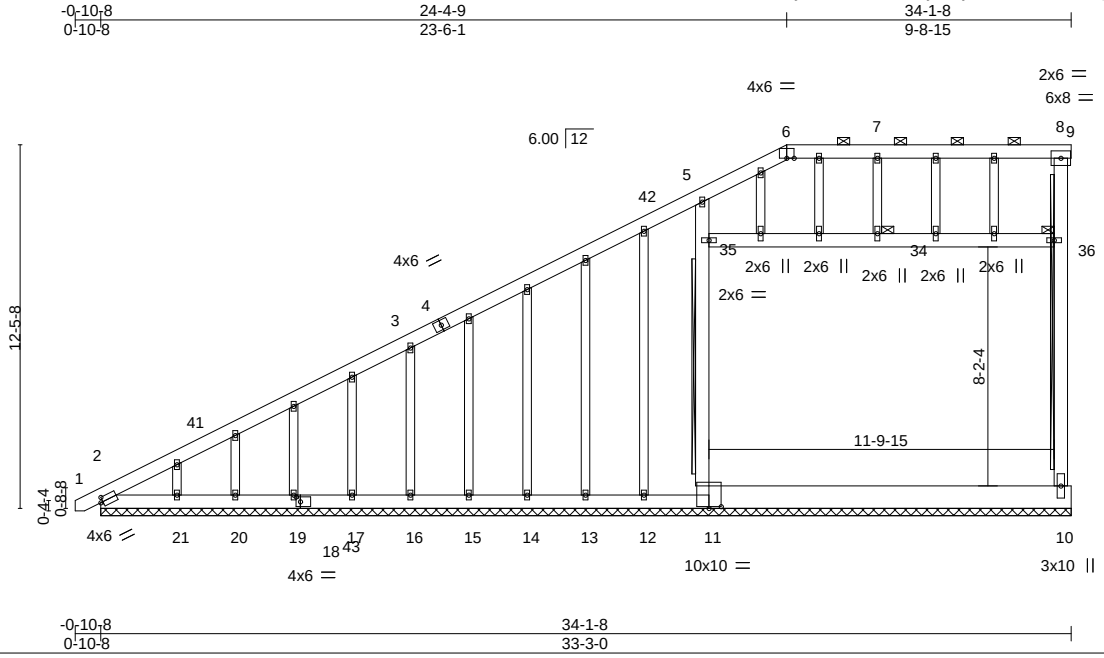


Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [11:0-5-0,0-0-12], [18:0-1-12,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	0.01	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 348 lb	FT = 20%

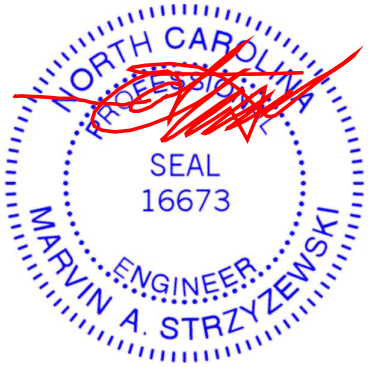
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
10-11: 2x10 SP No.1
WEBS 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 10-11.
WEBS T-Brace: 2x4 SPF No.2 - 10-36, 11-35
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.
JOINTS 1 Brace at Jt(s): 34, 36

REACTIONS. All bearings 33-3-0.
(lb) - Max Horz 2=567(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 20, 11 except 9=-507(LC 1), 10=-251(LC 8), 21=-184(LC 12), 16=-452(LC 12), 12=-401(LC 18)
Max Grav All reactions 250 lb or less at joint(s) 9, 2, 20, 19, 17, 15, 14, 13 except 10=1133(LC 2), 21=340(LC 1), 16=719(LC 1), 11=1408(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-855/398, 3-5=-531/284, 5-6=-327/68, 10-36=-1002/521, 8-36=-890/530
WEBS 3-16=-678/551, 11-35=-874/710, 5-35=-682/713, 34-35=-230/259, 34-36=-230/259

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 23-6-1, Corner(3) 23-6-1 to 27-10-13, Exterior(2) 27-10-13 to 33-3-0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Ceiling dead load (10.0 psf) on member(s). 34-35, 34-36; Wall dead load (5.0psf) on member(s).3-16, 11-35
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11 except (jt=lb) 9=507, 10=251, 21=184, 16=452, 12=401.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
13) Attic room checked for L/360 deflection.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	B1	PIGGYBACK ATTIC	1	1	E15709116
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:05 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-KRxuMqdMhdIaAKxc1K2Ibl69AsEn9tJghDuaHazHz8O

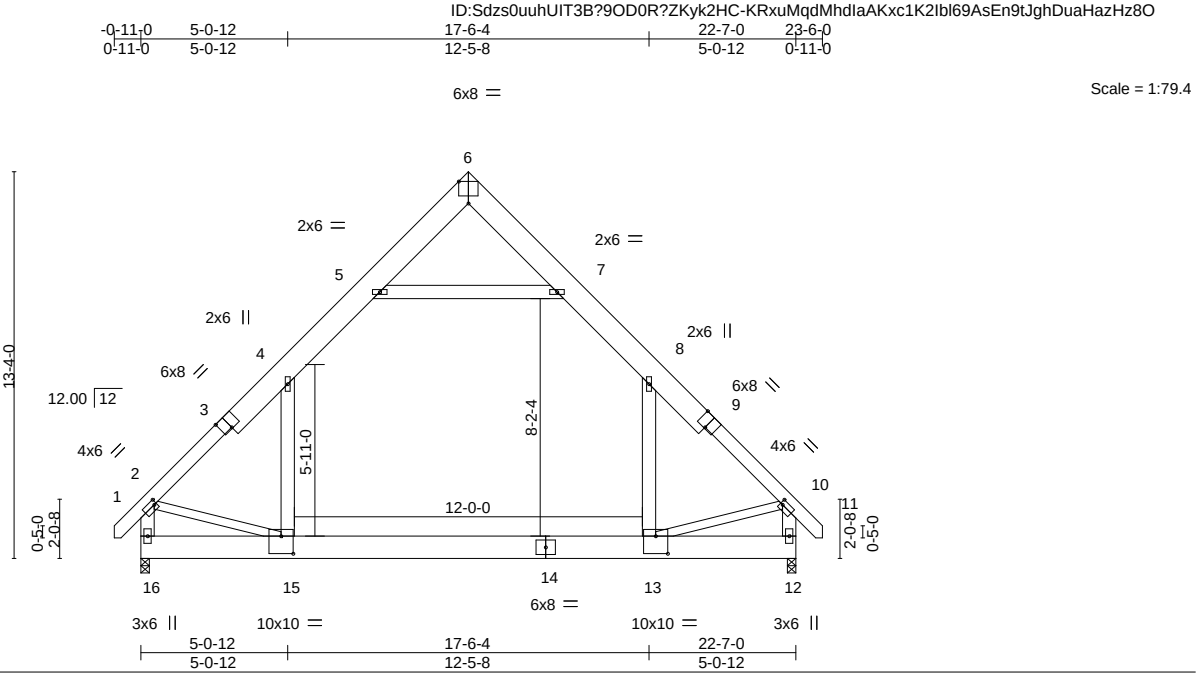


Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-0,0-2-0], [13:0-5-0,0-7-4], [15:0-5-0,0-7-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.16	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.26	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	13-15	>999	240	Weight: 268 lb	FT = 20%

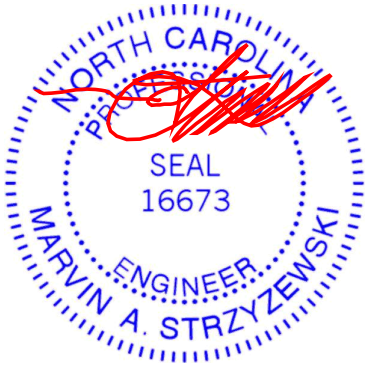
LUMBER-
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2

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

REACTIONS. (size) 16=0-3-8, 12=0-3-8
Max Horz 16=-339(LC 10)
Max Grav 16=1534(LC 21), 12=1534(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1750/0, 4-5=-1096/188, 7-8=-1096/188, 8-10=-1749/0, 2-16=-1719/46, 10-12=-1720/46
BOT CHORD 15-16=-328/473, 13-15=0/1137
WEBS 4-15=0/828, 8-13=0/828, 5-7=-1268/253, 2-15=0/1031, 10-13=0/1036

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -0-9-2 to 3-7-11, Exterior(2) 3-7-11 to 11-4-0, Corner(3) 11-4-0 to 15-8-13, Exterior(2) 15-8-13 to 23-5-2 zone; end vertical left and right exposed;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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
7) Attic room checked for L/360 deflection.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	B2	ATTIC	2	1	E15709117
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:06 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-pdVGZAe_SxQRoUVob2ZX8zfKjGa4uKgpwte8p0zHz8N

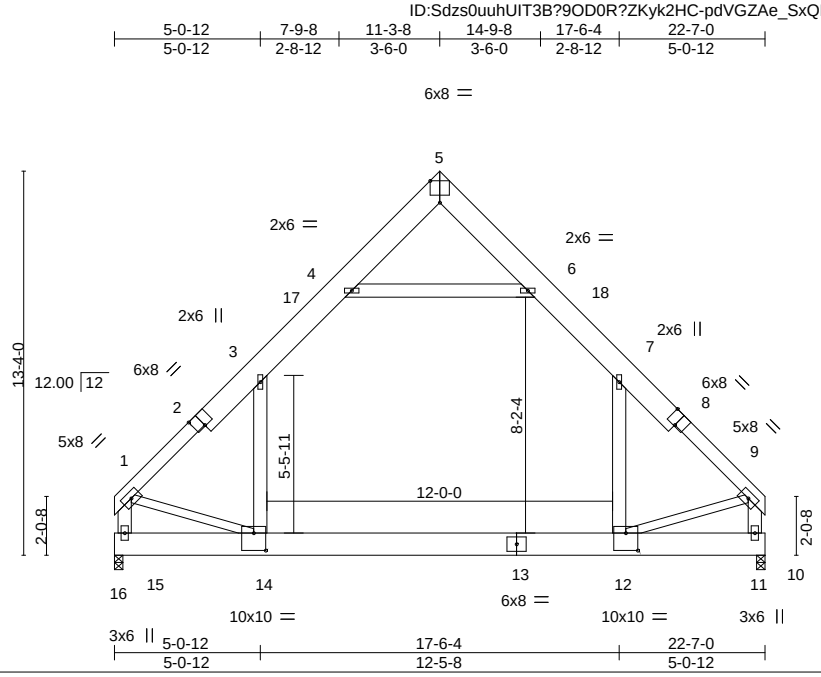


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [12:0-5-0,0-7-4], [14:0-5-0,0-7-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.16	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.25	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	12-14	>999	240	Weight: 263 lb	FT = 20%

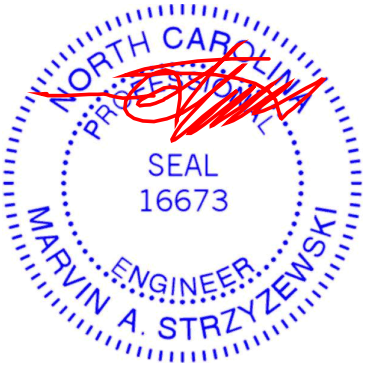
LUMBER-
TOP CHORD 2x10 SP No.1 *Except* 1-2,8-9: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 1-14,9-12: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 15=0-3-8, 11=0-3-8
Max Horz 15=257(LC 9)
Max Grav 15=1492(LC 21), 11=1492(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1704/0, 3-4=-1082/150, 6-7=-1082/150, 7-9=-1703/0, 1-15=-1681/0, 9-11=-1681/0
BOT CHORD 14-15=-285/363, 12-14=0/1097
WEBS 4-6=-1249/179, 3-14=0/788, 7-12=0/788, 1-14=0/1079, 9-12=0/1082

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-12 to 5-0-12, Interior(1) 5-0-12 to 11-4-0, Exterior(2) 11-4-0 to 15-8-13, Interior(1) 15-8-13 to 22-3-4 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
7) Attic room checked for L/360 deflection.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	B3	ATTIC	6	1	E15709118
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:07 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-Hq2enWfcDEYIPe4_9l4mgACVNgvGdnry8XNhLTzHz8M

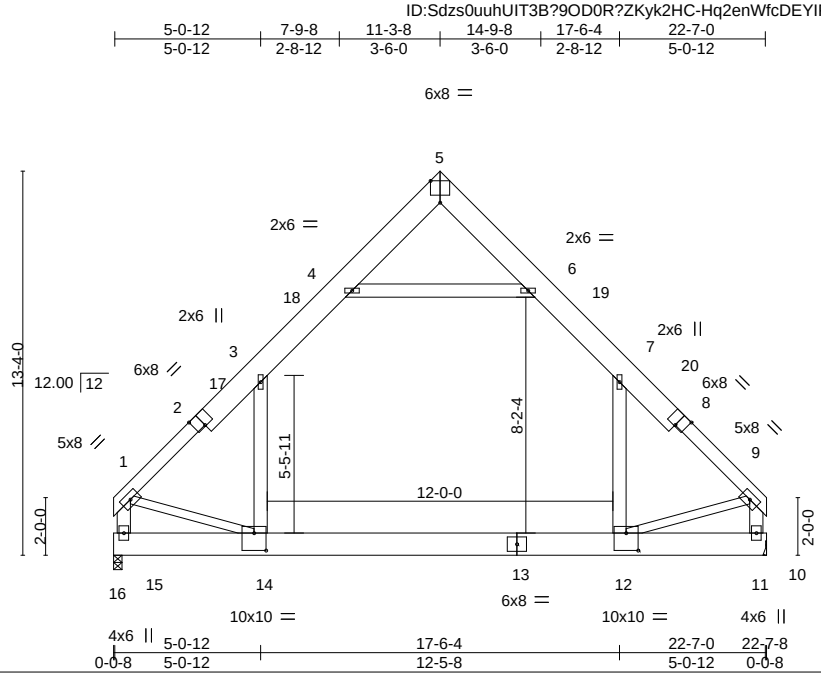


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [12:0-5-0,0-7-4], [14:0-5-0,0-7-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.16	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.25	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	12-14	>999	240	Weight: 264 lb	FT = 20%

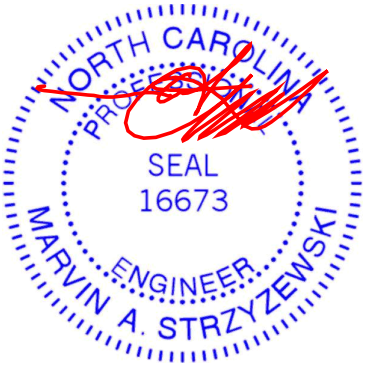
LUMBER-
TOP CHORD 2x10 SP No.1 *Except* 1-2,8-9: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 1-14,9-12: 2x4 SP No.2

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

REACTIONS. (size) 15=0-3-8, 11=Mechanical
Max Horz 15=258(LC 9)
Max Grav 15=1495(LC 21), 11=1495(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1717/0, 3-4=-1088/150, 6-7=-1087/150, 7-9=-1717/0, 1-15=-1680/0, 9-11=-1681/0
BOT CHORD 14-15=-286/369, 12-14=0/1106
WEBS 4-6=-1263/178, 3-14=0/794, 7-12=0/794, 1-14=0/1079, 9-12=0/1082

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 11-4-0, Exterior(2) 11-4-0 to 15-8-13, Interior(1) 15-8-13 to 22-3-12 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
7) Refer to girder(s) for truss to truss connections.
8) Attic room checked for L/360 deflection.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	B4	ATTIC	1	2	E15709119
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:09 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-DCAOCBhsIro0fyENGA7ElbHqpUai5khFcrsoQLzHz8K

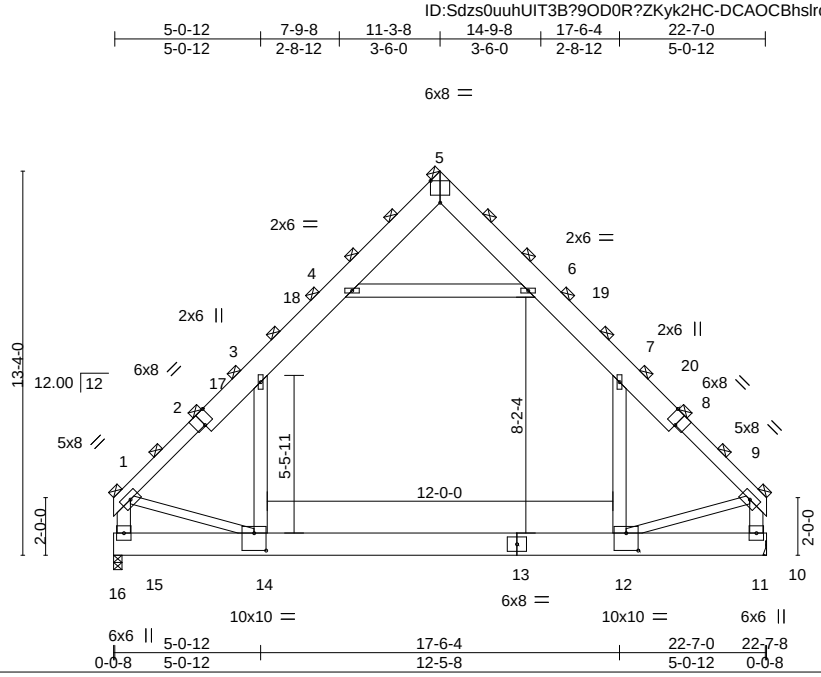


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [5:0-4-0,Edge], [8:0-4-0,Edge], [12:0-5-0,0-7-4], [14:0-5-0,0-7-4]

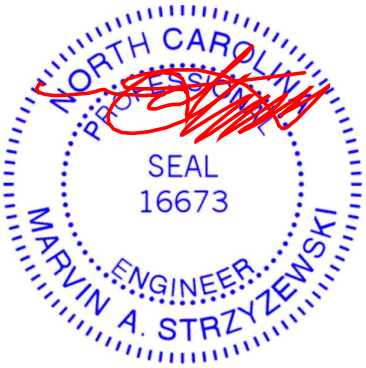
LOADING (psf)		SPACING- 4-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.16	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.25	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	12-14	>999	240	Weight: 528 lb	FT = 20%

LUMBER-
TOP CHORD 2x10 SP No.1 *Except*
1-2,8-9: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except*
1-14,9-12: 2x4 SP No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 15=0-3-8, 11=Mechanical
Max Horz 15=516(LC 9)
Max Grav 15=2990(LC 21), 11=2990(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-3434/0, 3-4=-2175/300, 4-5=-193/437, 5-6=-193/437, 6-7=-2175/300, 7-9=-3433/0, 1-15=-3360/0, 9-11=-3361/0
BOT CHORD 14-15=-572/738, 12-14=0/2212, 11-12=-99/306
WEBS 4-6=-2527/356, 3-14=0/1589, 7-12=0/1589, 1-14=0/2158, 9-12=0/2165



NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-1, Interior(1) 4-9-1 to 11-4-0, Exterior(2) 11-4-0 to 15-8-13, Interior(1) 15-8-13 to 22-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
9) Refer to girder(s) for truss to truss connections.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.

May 10,2021

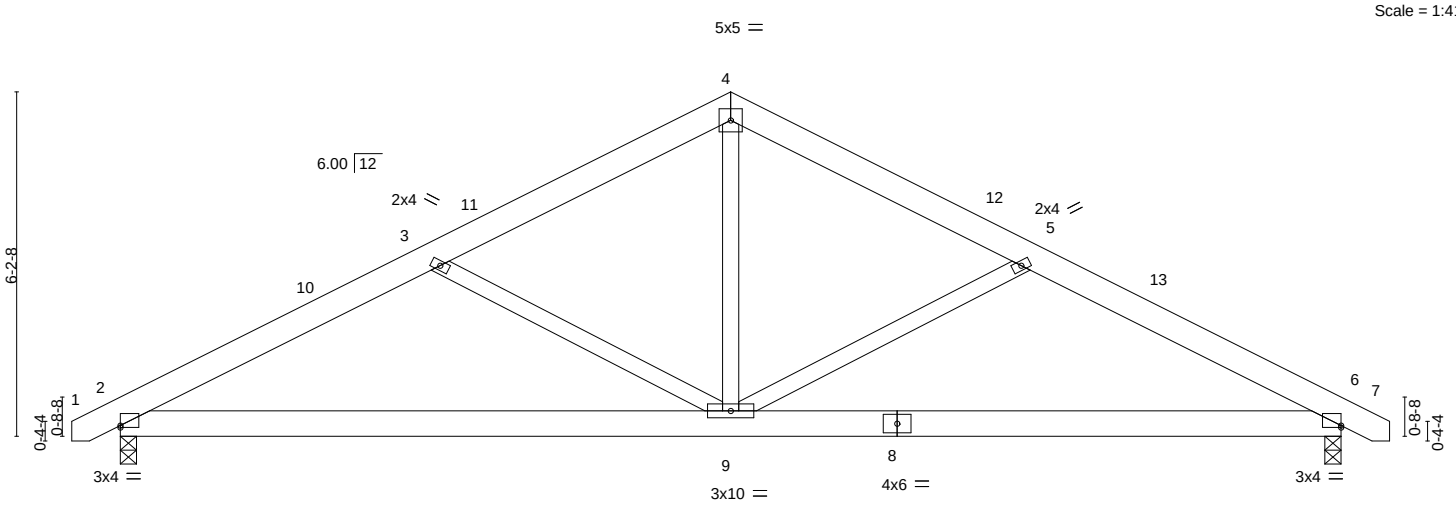
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	G1	QUEENPOST	6	1	E15709120
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:09 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-DCAOCBhslro0fyENGA7ElbHvNUfh5kzFcrsoQLzHz8K

0-10-8 5-9-3 11-0-0 16-2-13 22-0-0 22-10-8
0-10-8 5-9-3 5-2-13 5-2-13 5-9-3 0-10-8

Scale = 1:41.5



11-0-0 22-0-0
11-0-0 11-0-0

Plate Offsets (X,Y)-- [2:Edge,0-0-7], [6:0-0-0,0-0-7]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.07	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.15	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	9	>999	240	Weight: 139 lb	FT = 20%

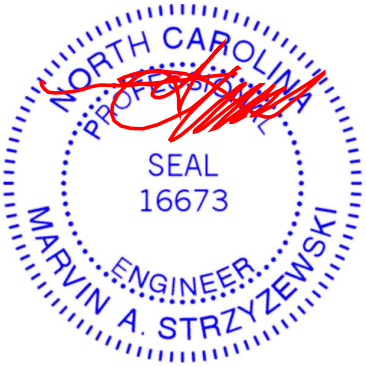
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=-76(LC 10)
Max Uplift 6=-64(LC 13), 2=-64(LC 12)
Max Grav 6=920(LC 1), 2=920(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1389/378, 3-4=-1062/288, 4-5=-1062/288, 5-6=-1389/378
BOT CHORD 2-9=-252/1174, 6-9=-256/1174
WEBS 3-9=-359/240, 4-9=-73/616, 5-9=-359/240

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-8-10 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 10,2021

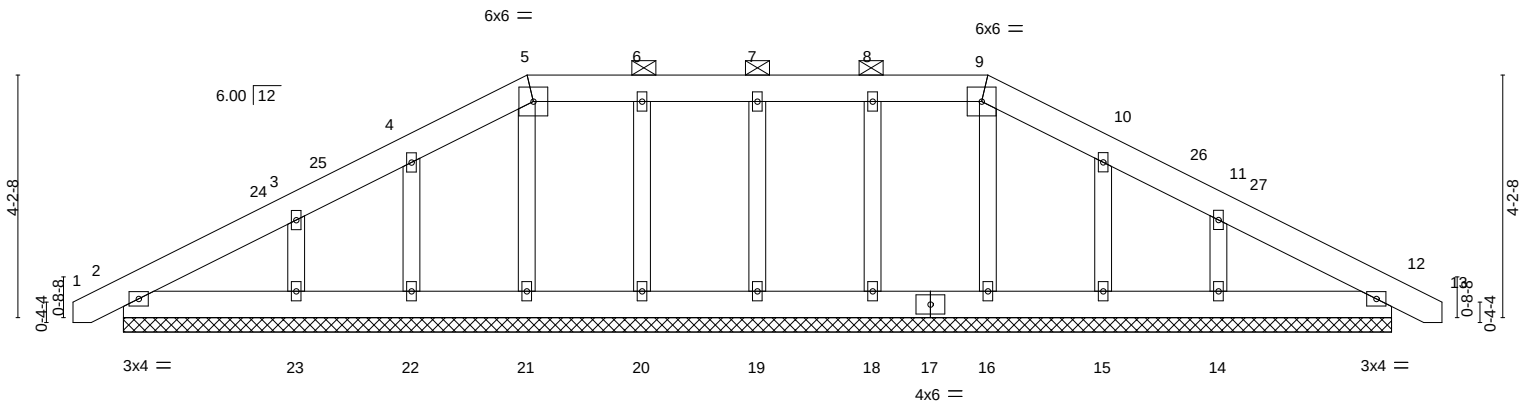
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	G1GE	HIP SUPPORTED GABLE	1	1	E15709121
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:11 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-9bI9dti6HT3juFOlOb9ir0MHKHRFZhNY39LvUEzHz8I

0-10-8 7-10-9 15-10-7 22-10-8 23-9-0
0-10-8 7-0-1 7-11-15 7-0-1 0-10-8

Scale = 1:40.0



0-10-8 22-10-8 23-9-0
0-10-8 22-0-0 0-10-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	12	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	12	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 147 lb	FT = 20%

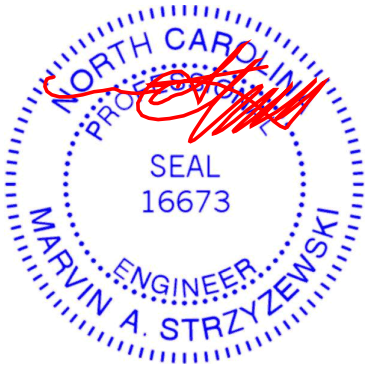
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 22-0-0.
(lb) - Max Horz 2=-79(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 15, 12 except 23=-109(LC 12), 14=-108(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 18, 19, 20, 21, 22, 23, 15, 14, 12

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 7-0-11, Corner(3) 7-0-11 to 11-5-8, Exterior(2) 11-5-8 to 14-11-5, Corner(3) 14-11-5 to 19-4-2, Exterior(2) 19-4-2 to 22-8-10 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 19, 20, 21, 22, 15, 12 except (jt=lb) 23=109, 14=108.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	G2GDR	FINK	1	3	E15709122
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:12 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-dnsXqDjl2mBaWPzyyIgxNEvMchdwI0ShIp5S0gzHz8H

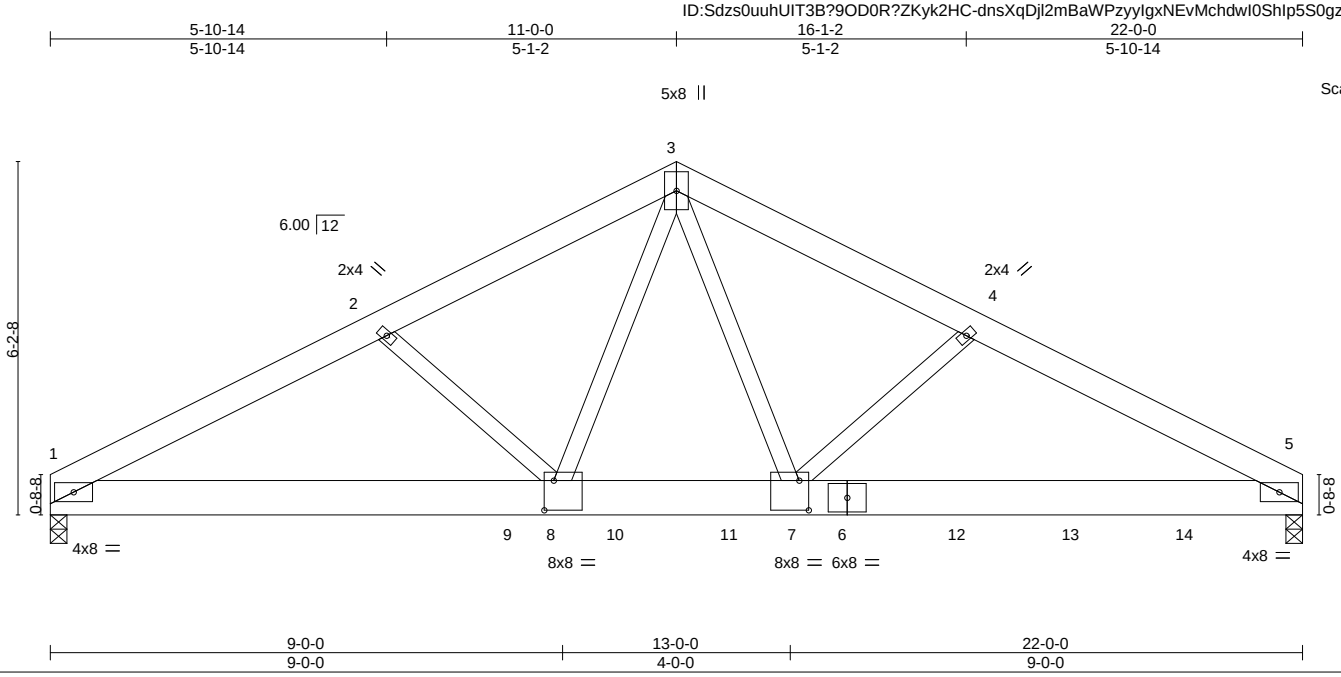


Plate Offsets (X,Y)-- [7:0-2-0,0-6-4], [8:0-2-0,0-6-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.13	5-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.27	5-7	>980	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.57	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.01	5-7	>999	240	Weight: 463 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2

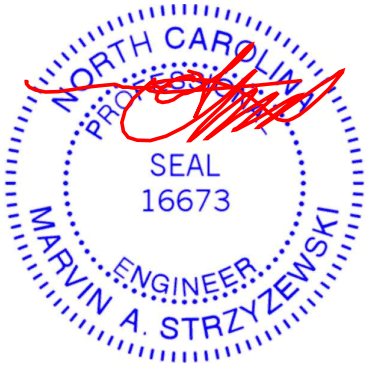
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=74(LC 5)
Max Grav 1=5332(LC 2), 5=7713(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-10455/0, 2-3=-10366/0, 3-4=-11456/0, 4-5=-11590/0
BOT CHORD 1-8=0/9151, 7-8=0/7954, 5-7=0/10206
WEBS 2-8=-149/373, 3-8=0/3676, 3-7=0/6393, 4-7=-194/296

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2881 lb down at 8-1-8, 1441 lb down at 9-11-4, 1441 lb down at 11-11-4, 1441 lb down at 13-11-4, 1441 lb down at 15-11-4, and 1441 lb down at 17-11-4, and 1441 lb down at 19-11-4 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): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-20, 1-3=-60, 3-5=-60
Concentrated Loads (lb)
Vert: 6=-1177(F) 9=-2354(F) 10=-1177(F) 11=-1177(F) 12=-1177(F) 13=-1177(F) 14=-1177(F)



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	P1	COMMON	4	1	E15709123
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:13 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-5_Qv2ZkNp4JR7ZY8V0BAwRSZs53M1ZRrXSq?Z6zHz8G

-0-10-8 8-0-0 16-0-0 16-10-8
0-10-8 8-0-0 8-0-0 0-10-8

Scale = 1:31.3

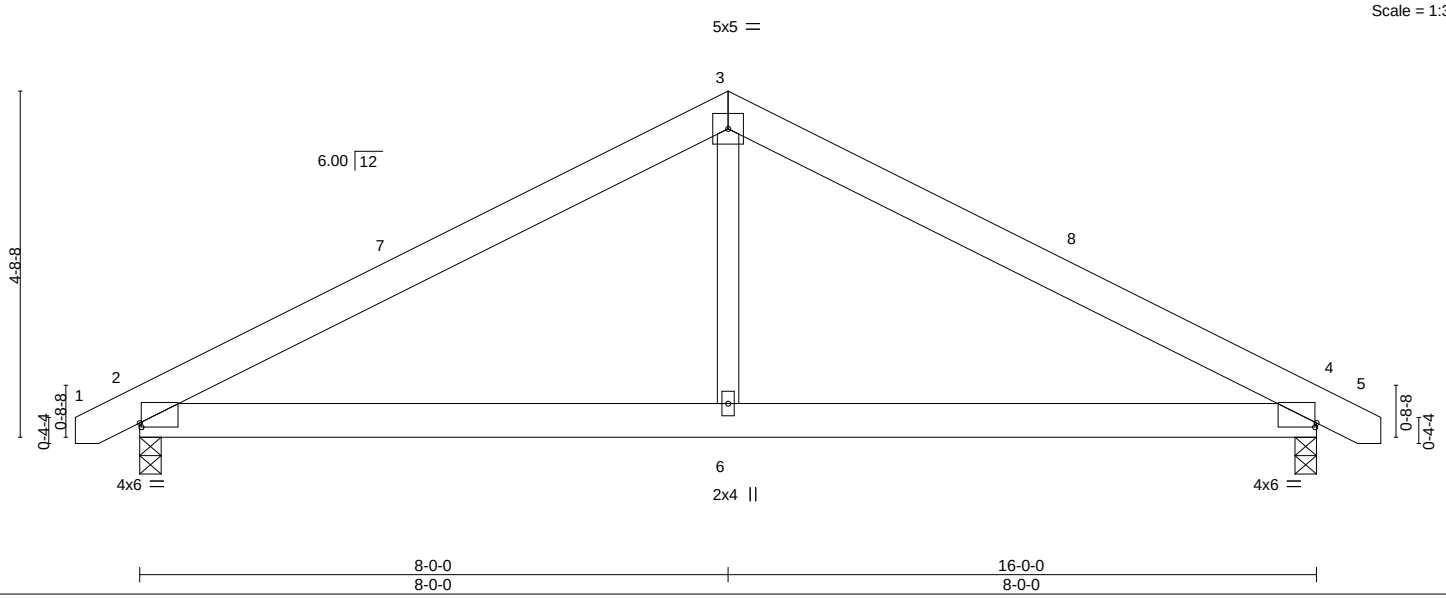


Plate Offsets (X,Y)-- [2:0-0-4,0-0-11], [4:0-0-4,0-0-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	0.06	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 90 lb	FT = 20%

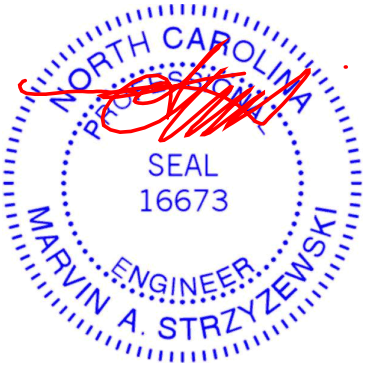
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-6-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-57(LC 10)
Max Uplift 2=-142(LC 9), 4=-142(LC 8)
Max Grav 2=680(LC 1), 4=680(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-873/842, 3-4=-873/840
BOT CHORD 2-6=-615/675, 4-6=-615/675
WEBS 3-6=-478/381

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 16-8-10 zone; porch left and right exposed;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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=142, 4=142.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	P1GE	GABLE	1	1	E15709124
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:14 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-aAzHFvk?aORIlj7K3jjPSf_kbVPbm1S_l6aZ5ZzHz8F

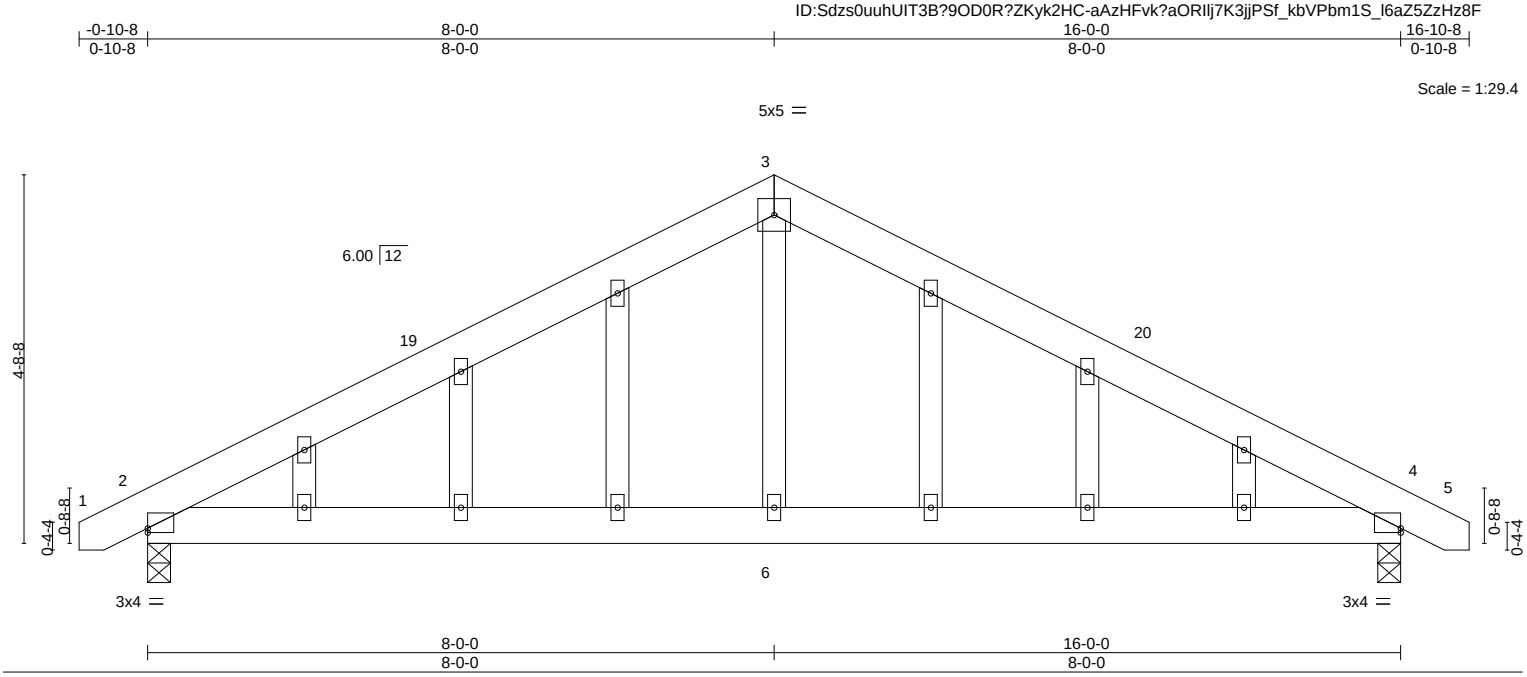


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [4:0-0-0,0-0-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.02	4-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.03	2-6	>999	240	Weight: 106 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

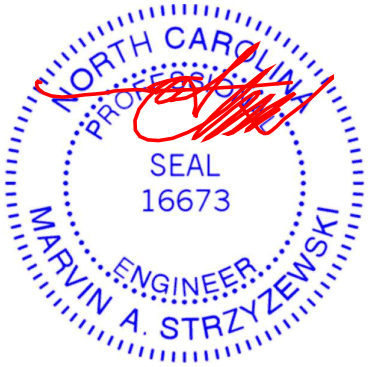
REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-88(LC 17)
Max Uplift 2=-153(LC 12), 4=-153(LC 13)
Max Grav 2=680(LC 1), 4=680(LC 1)

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

TOP CHORD	2-3=-873/238, 3-4=-873/236
BOT CHORD	2-6=-77/675, 4-6=-77/675
WEBS	3-6=0/381

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 16-8-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=153, 4=153.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 10,2021

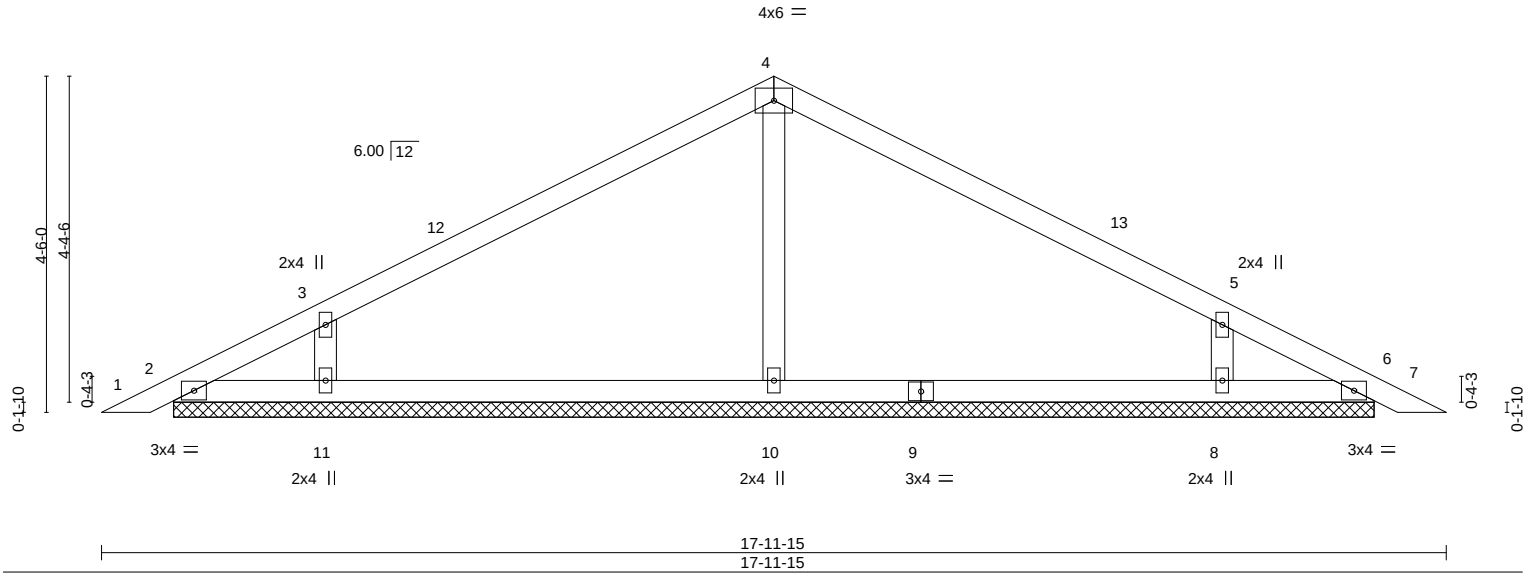
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	PB1	PIGGYBACK	8	1	E15709125
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:15 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-2MXgSFldKhZ9NtiXdREe?sXv_ulQVUf8_mJ6d?zHz8E

8-11-15 17-11-15
8-11-15 9-0-0

Scale = 1:30.8



17-11-15
17-11-15

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 62 lb	FT = 20%

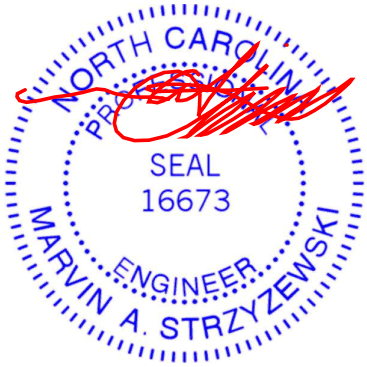
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 16-0-12.
(lb) - Max Horz 2=56(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 11=-105(LC 12), 8=-105(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 10=428(LC 1), 11=440(LC 23), 8=440(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-10=-298/101, 3-11=-356/260, 5-8=-356/263

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 8-11-15, Exterior(2) 8-11-15 to 13-4-12, Interior(1) 13-4-12 to 17-8-0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 11=105, 8=105.
6) Non Standard bearing condition. Review required.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 10,2021

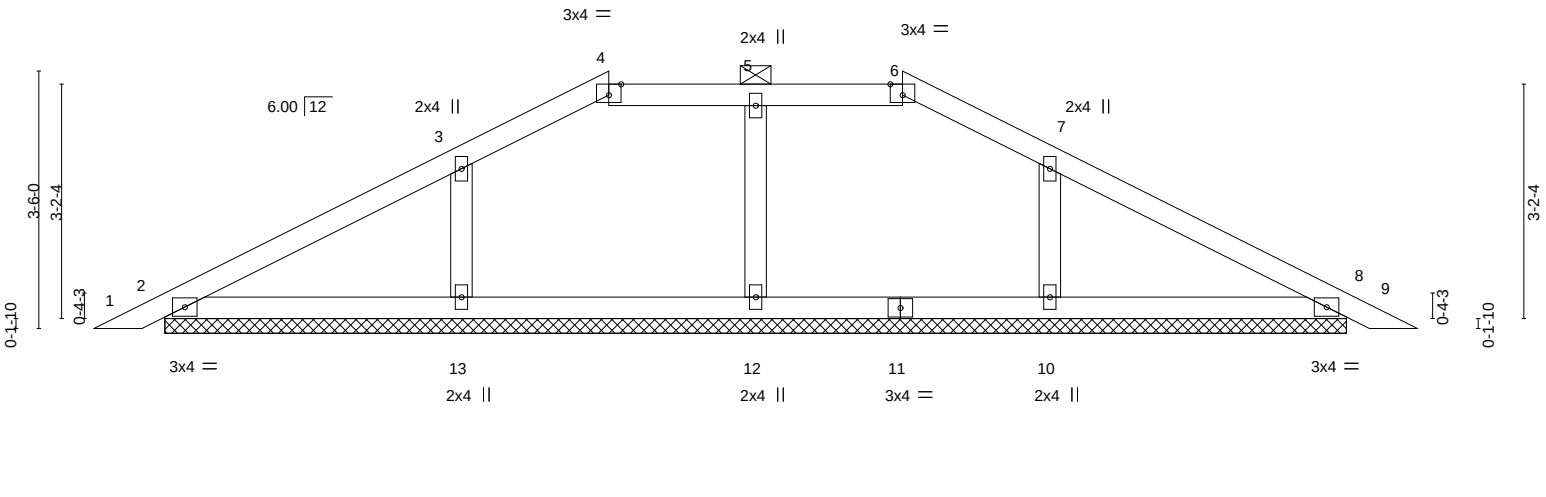
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	PB1A	GABLE	1	1	E15709126
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:16 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-WZ52gbmF5?h0_1GjB8ltY445VI7BEyiHDQ3g9RzHz8D

7-0-0 10-11-15 17-11-15
7-0-0 3-11-15 7-0-0

Scale = 1:31.3



17-11-15
17-11-15

Plate Offsets (X,Y)-- [4:0-2-0,Edge], [6:0-2-0,Edge], [7:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.00	9	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.01	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 62 lb	FT = 20%

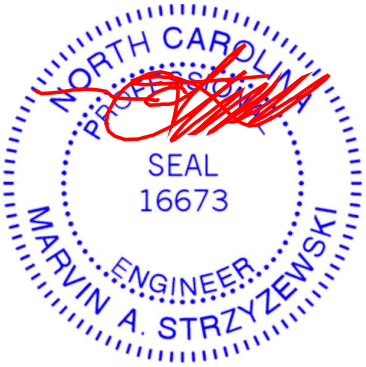
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 16-0-12.
(lb) - Max Horz 2=42(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 13, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 8 except 12=255(LC 1), 13=342(LC 23), 10=342(LC 24)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-15 to 4-11-15, Interior(1) 4-11-15 to 7-0-0, Exterior(2) 7-0-0 to 17-0-6, Interior(1) 17-0-6 to 17-8-0 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) Provide adequate drainage to prevent water ponding.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 13, 10, 8.
9) Non Standard bearing condition. Review required.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

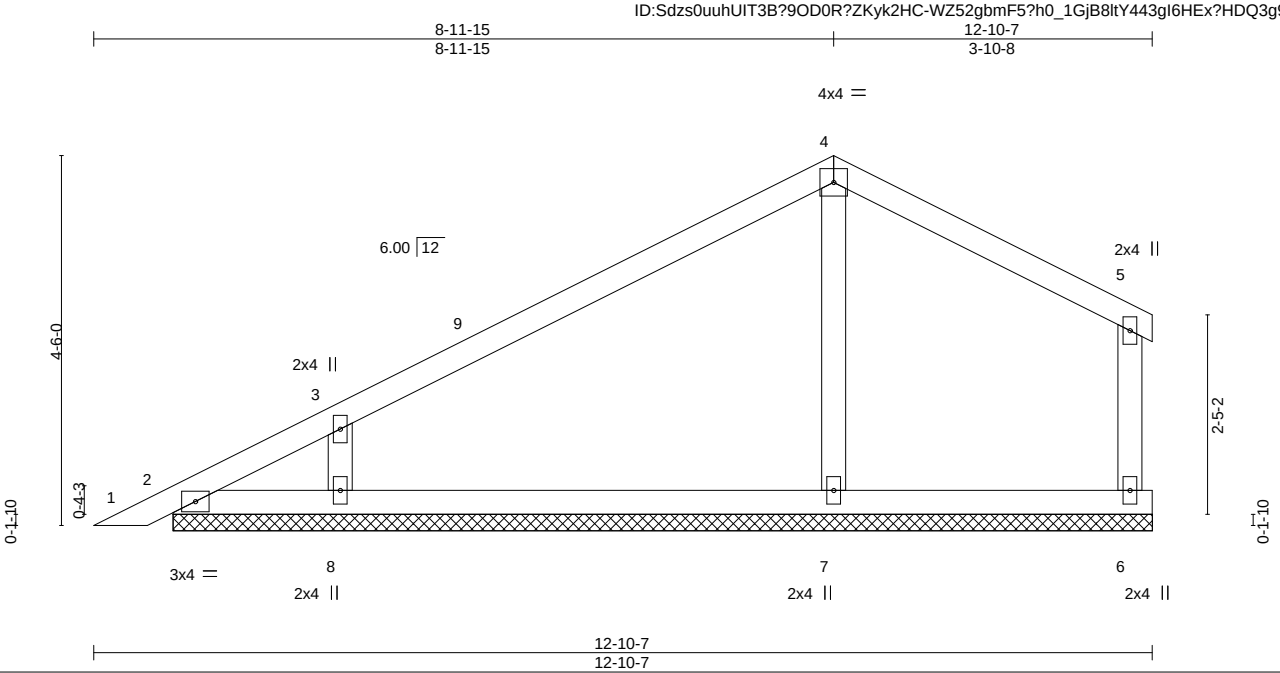


May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	PB2	PIGGYBACK	3	1	E15709127
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:16 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-WZ52gbmF5?h0_1GjB8ltY443gI6HEx?HDQ3g9RzHz8D



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 49 lb	FT = 20%

LUMBER-

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

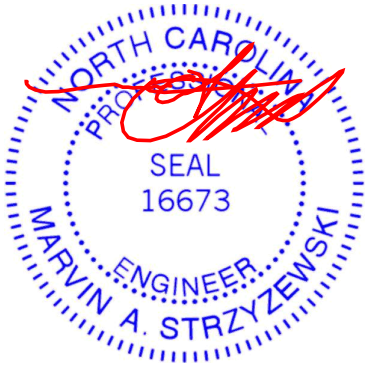
BRACING-

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

REACTIONS. All bearings 11-10-14.
(lb) - Max Horz 2=102(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=-103(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 6, 2 except 7=387(LC 1), 8=447(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-277/173, 3-8=-356/285

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 8-11-15, Exterior(2) 8-11-15 to 12-7-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7 except (jt=lb) 8=103.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

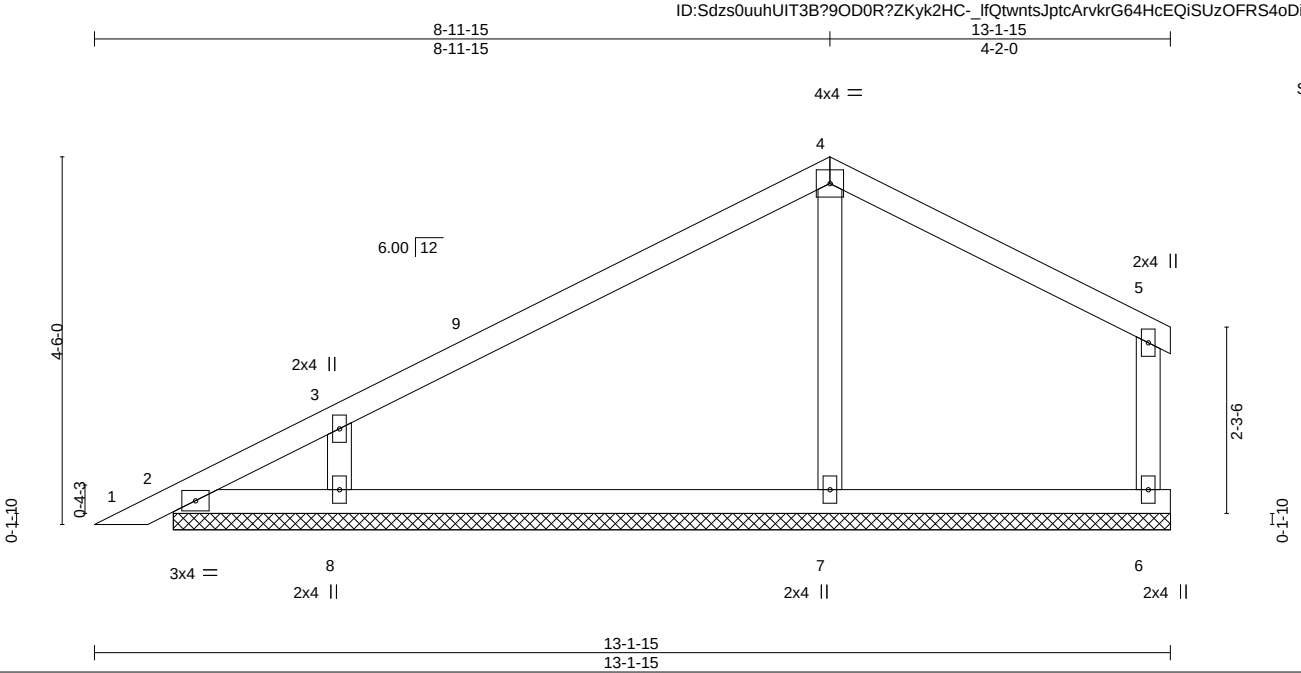


May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	PB3	PIGGYBACK	5	1	E15709128
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:17 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-_lfQtwntsJptcArvkrG64HcEQiSUzOFRS4oDiuzHz8C



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 50 lb	FT = 20%

LUMBER-

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

BRACING-

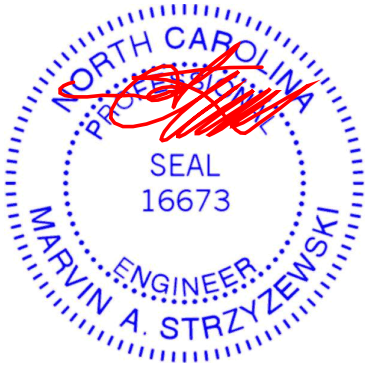
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-2-6.
(lb) - Max Horz 2=99(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=-104(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 6, 2 except 7=390(LC 1), 8=447(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-279/166, 3-8=-356/282

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 8-11-15, Exterior(2) 8-11-15 to 12-10-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7 except (jt=lb) 8=104.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

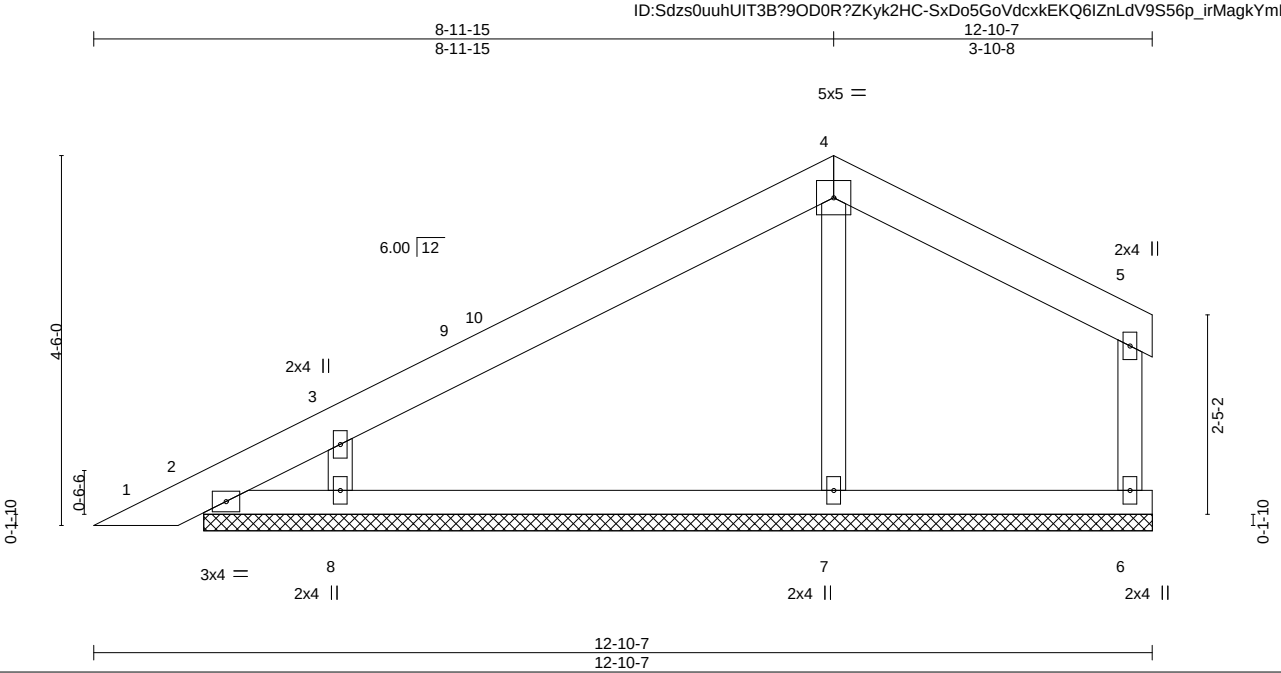


May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	PB4	PIGGYBACK	1	2	E15709129
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:18 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-SxDo5GoVdcxkEKQ6IZnLdV9S56p_irMagkYmEKzHz8B



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 121 lb	FT = 20%

LUMBER-

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

BRACING-

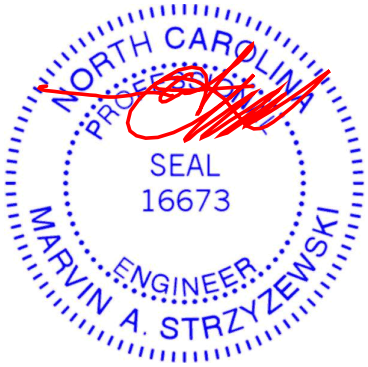
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 11-6-7.
(lb) - Max Horz 2=99(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=-111(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 6, 2 except 7=391(LC 1), 8=455(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-282/182, 3-8=-349/301

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-6-2 to 4-10-15, Interior(1) 4-10-15 to 8-11-15, Exterior(2) 8-11-15 to 12-7-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7 except (jt=lb) 8=111.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

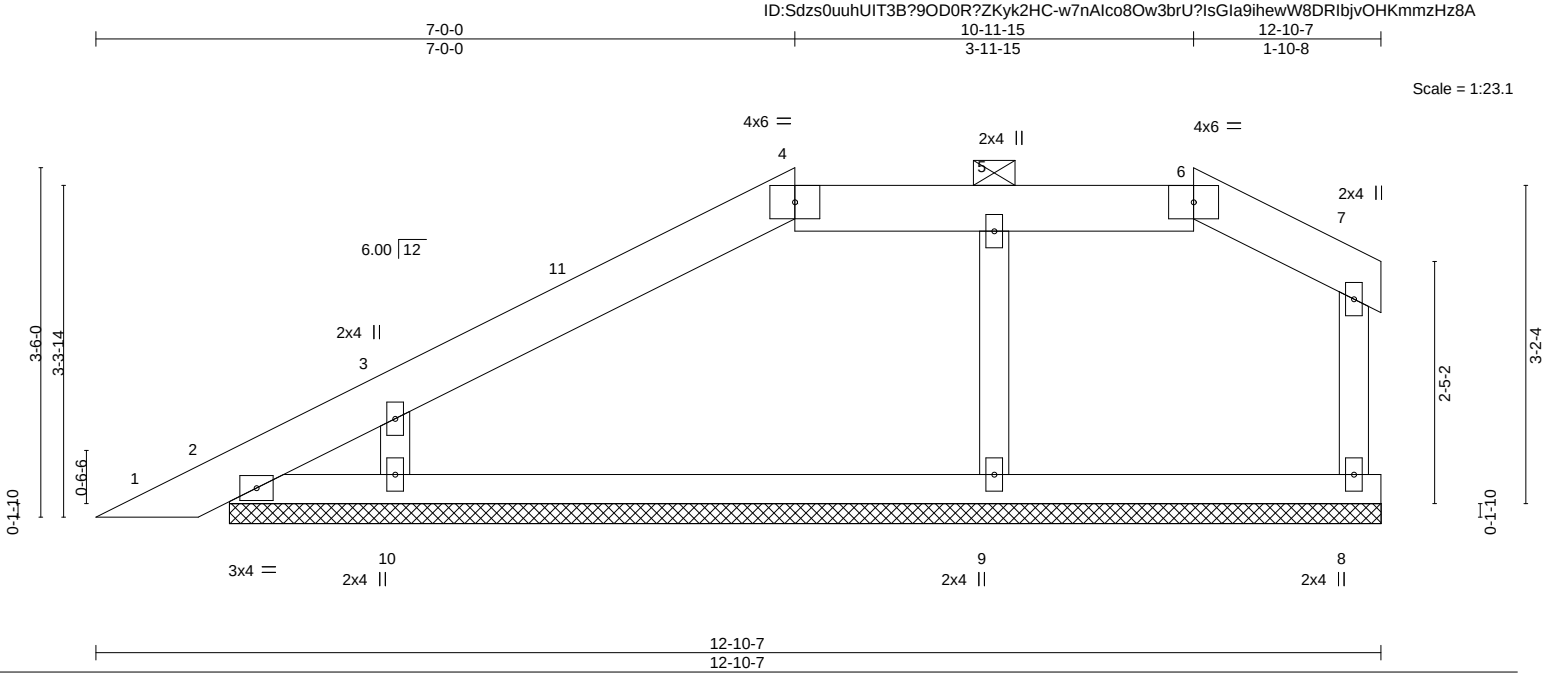


May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	PB4A	PIGGYBACK	1	2	E15709130
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:19 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-w7nAIco8Ow3brU?IsGIa9ihewW8DRIbjvOHKmmzHz8A



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 115 lb	FT = 20%

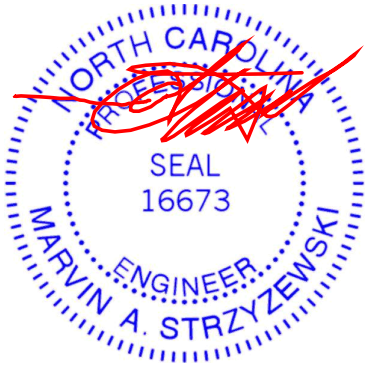
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 11-6-7.
(lb) - Max Horz 2=86(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 9, 10
Max Grav All reactions 250 lb or less at joint(s) 8, 2 except 9=434(LC 1), 10=417(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-9=-328/249, 3-10=-309/312

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-6-2 to 4-10-15, Interior(1) 4-10-15 to 7-0-0, Exterior(2) 7-0-0 to 12-7-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2, 9, 10.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	VP1	VALLEY	1	1	E15709131
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:20 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-OKLZWypm9EBSTeaUQ_ppiwEnMvUTAlXt821tICzHz89

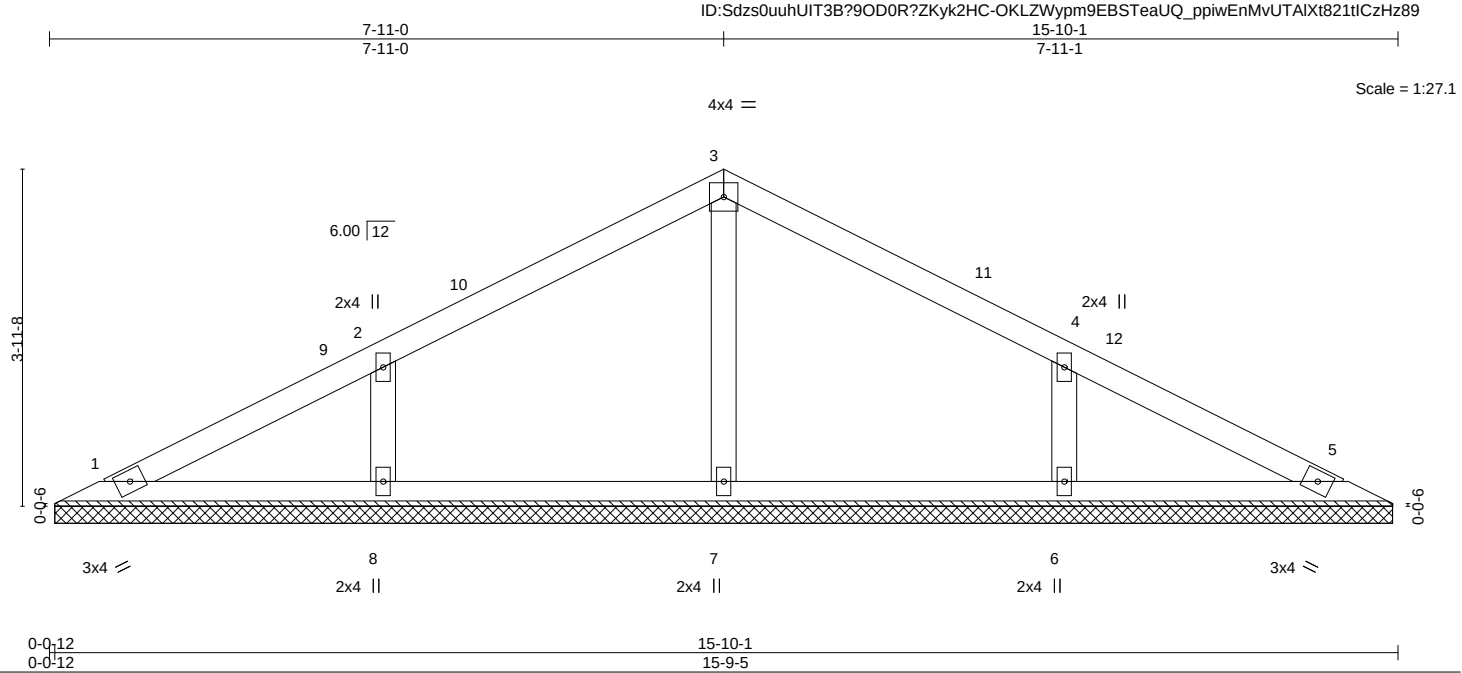


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 57 lb	FT = 20%

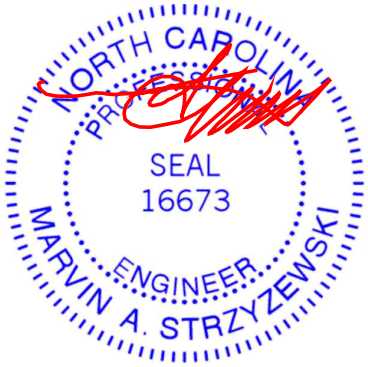
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 15-8-9.
(lb) - Max Horz 1=-48(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=272(LC 1), 8=344(LC 23), 6=344(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-260/202, 4-6=-260/202

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 7-11-0, Exterior(2) 7-11-0 to 12-3-13, Interior(1) 12-3-13 to 15-2-4 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
6) Non Standard bearing condition. Review required.

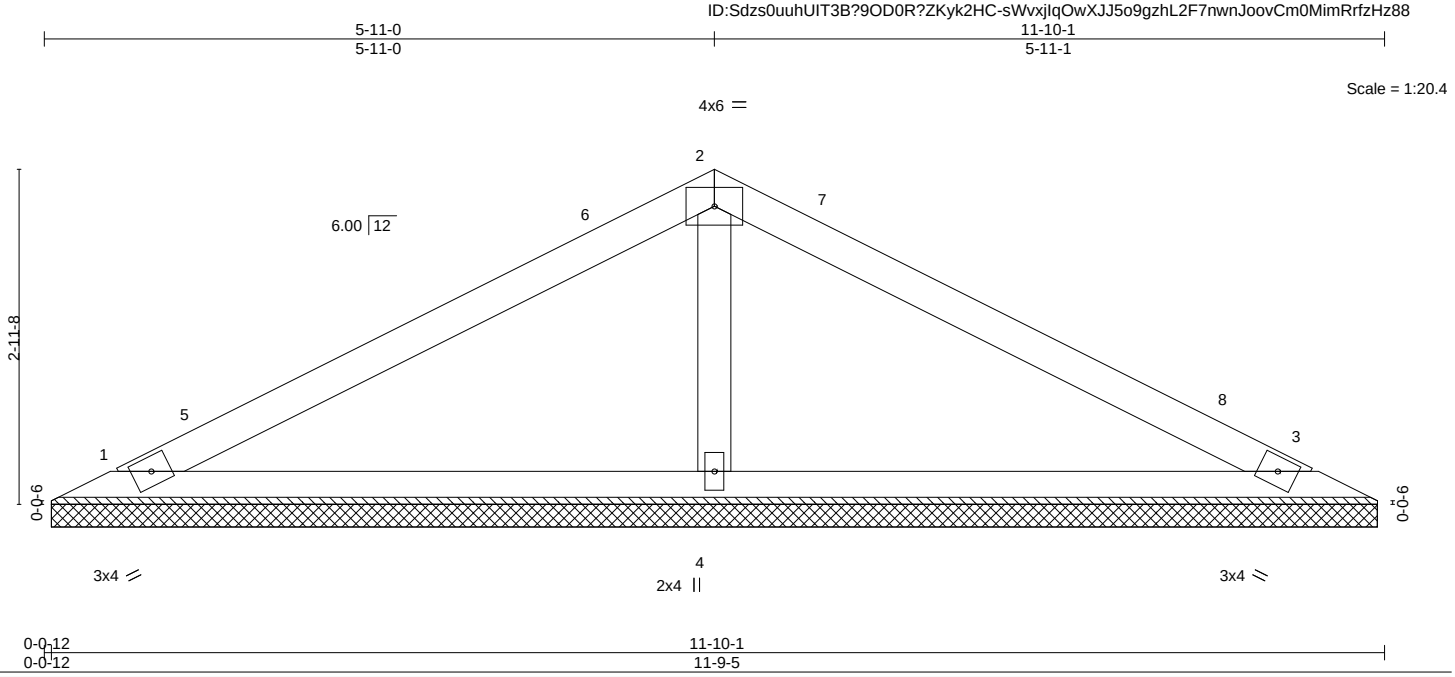


May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	VP2	VALLEY	1	1	E15709132
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:21 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-sWvxjIqOwXJJ5o9gzhL2F7nwnJoovCm0MimRrfzHz88



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%

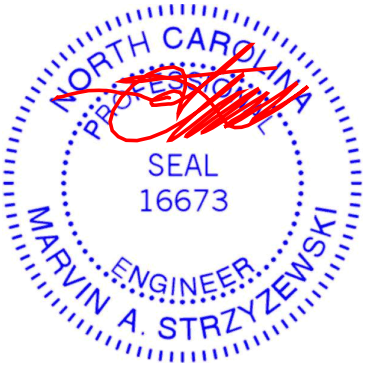
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=11-8-9, 3=11-8-9, 4=11-8-9
Max Horz 1=35(LC 11)
Max Uplift 1=-26(LC 12), 3=-32(LC 13)
Max Grav 1=195(LC 23), 3=195(LC 24), 4=456(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-302/187

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 5-11-0, Exterior(2) 5-11-0 to 10-3-13, Interior(1) 10-3-13 to 11-2-4 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.



May 10,2021

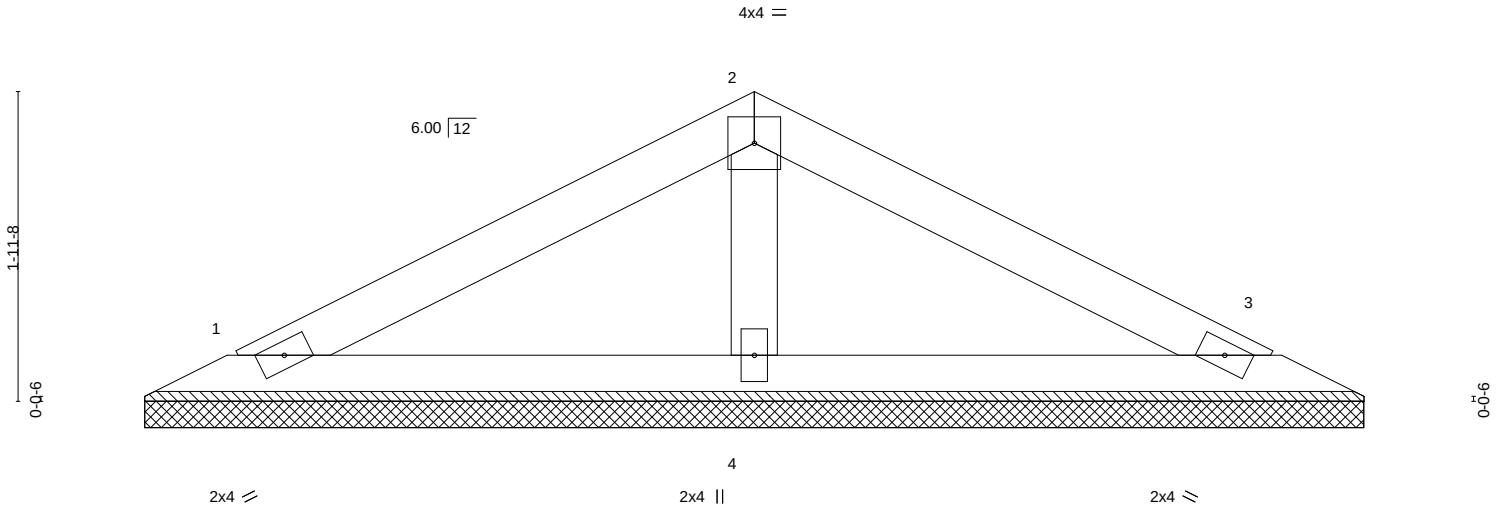
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	VP3	VALLEY	1	1	E15709133
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:21 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-sWvxjIqOwXJJ5o9gzhL2F7ny6JqjvC80MimRrfzHz88

3-11-0 7-10-1
3-11-0 3-11-1

Scale = 1:14.6



0-0-12 7-10-1
0-0-12 7-9-5

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

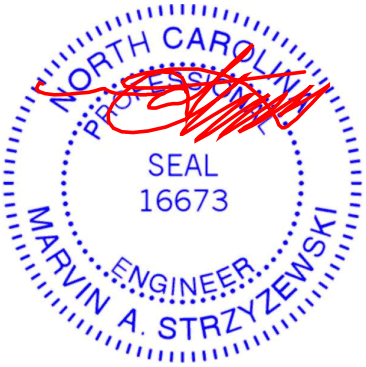
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=7-8-9, 3=7-8-9, 4=7-8-9
Max Horz 1=-21(LC 8)
Max Uplift 1=-21(LC 12), 3=-25(LC 13)
Max Grav 1=133(LC 1), 3=133(LC 1), 4=256(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.



May 10,2021

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2W Williams Farm/Harnett
J0521-2783	VP4	VALLEY	1	1	E15709134
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Mon May 10 07:56:22 2021 Page 1
ID:Sdzs0uuhUIT3B?9OD0R?ZKyk2HC-LiSJwer0hrRAiyktXPsHnLJ9jjBIeflAbMW_N5zHz87

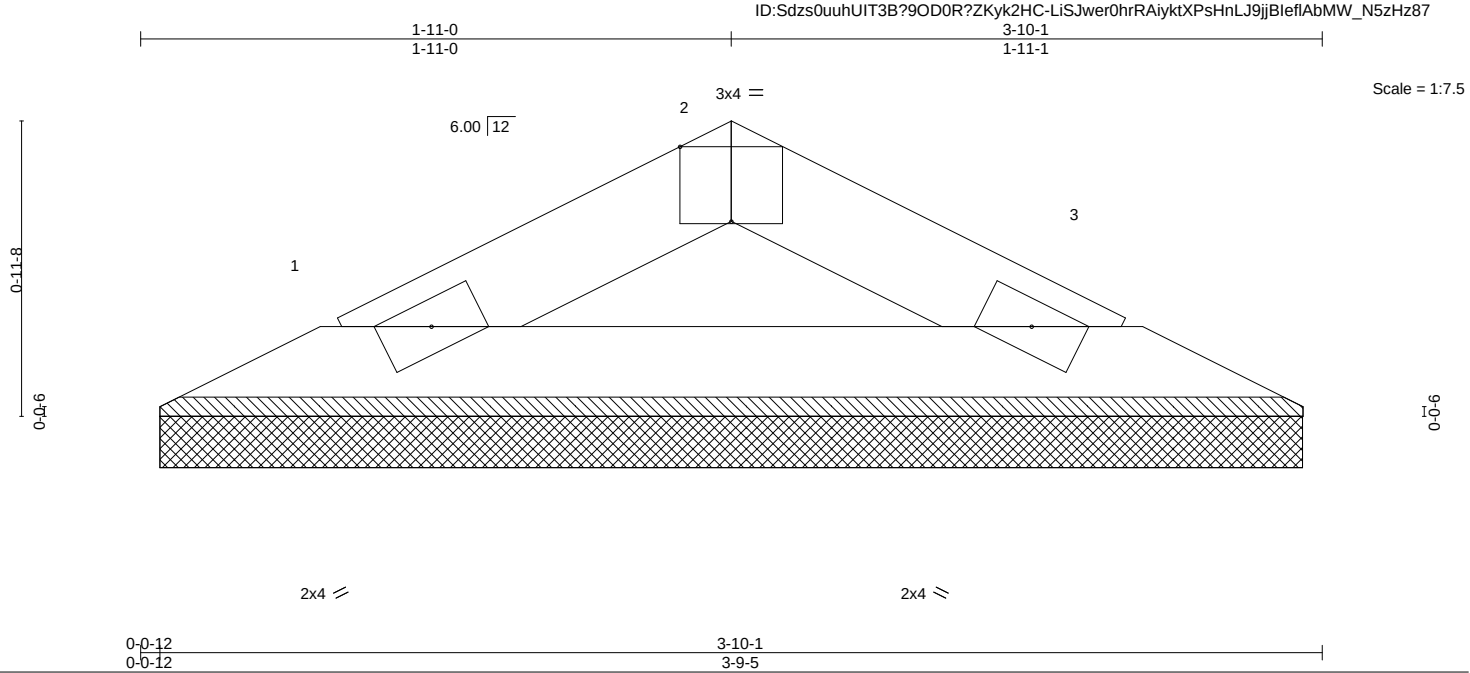


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

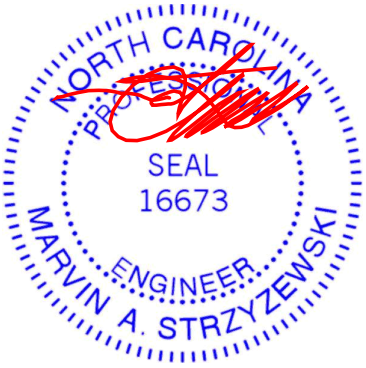
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-8-9, 3=3-8-9
Max Horz 1=8(LC 9)
Max Uplift 1=-6(LC 12), 3=-6(LC 13)
Max Grav 1=101(LC 1), 3=101(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.

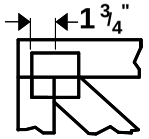


May 10,2021

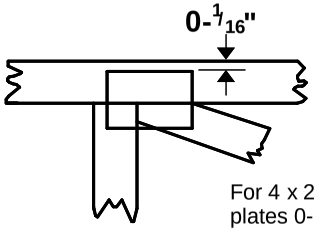
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

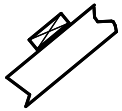
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

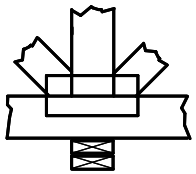
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

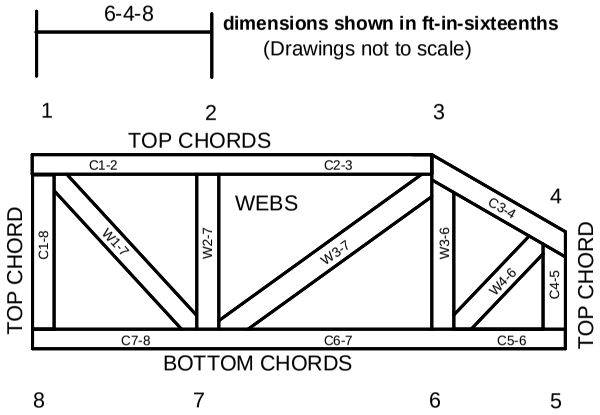


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek
ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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