ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0721-4251
Cates\Lot 702 Lexington Plantation

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: J0721-4251
Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 22 individual, dated Truss Design Drawings and 0 Additional Drawings.

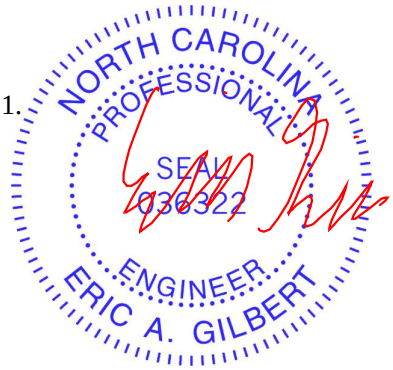
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E15906388	A1	7/6/2021	21	E15906408	VA3	7/6/2021
2	E15906389	A2	7/6/2021	22	E15906409	VA4	7/6/2021
3	E15906390	A2A	7/6/2021				
4	E15906391	A3	7/6/2021				
5	E15906392	A4GDR	7/6/2021				
6	E15906393	B1	7/6/2021				
7	E15906394	B1GE	7/6/2021				
8	E15906395	B2	7/6/2021				
9	E15906396	J03	7/6/2021				
10	E15906397	J03A	7/6/2021				
11	E15906398	J07	7/6/2021				
12	E15906399	J07A	7/6/2021				
13	E15906400	J07B	7/6/2021				
14	E15906401	J07C	7/6/2021				
15	E15906402	M1	7/6/2021				
16	E15906403	M1GE	7/6/2021				
17	E15906404	P1	7/6/2021				
18	E15906405	P1GE	7/6/2021				
19	E15906406	VA1	7/6/2021				
20	E15906407	VA2	7/6/2021				

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

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844



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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

July 06, 2021

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	A1	COMMON	9	1	E15906388
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:13 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-ZiNU0TrthY8UP8sEgJ78CNZe84RY445ZgMANXIz_r4u

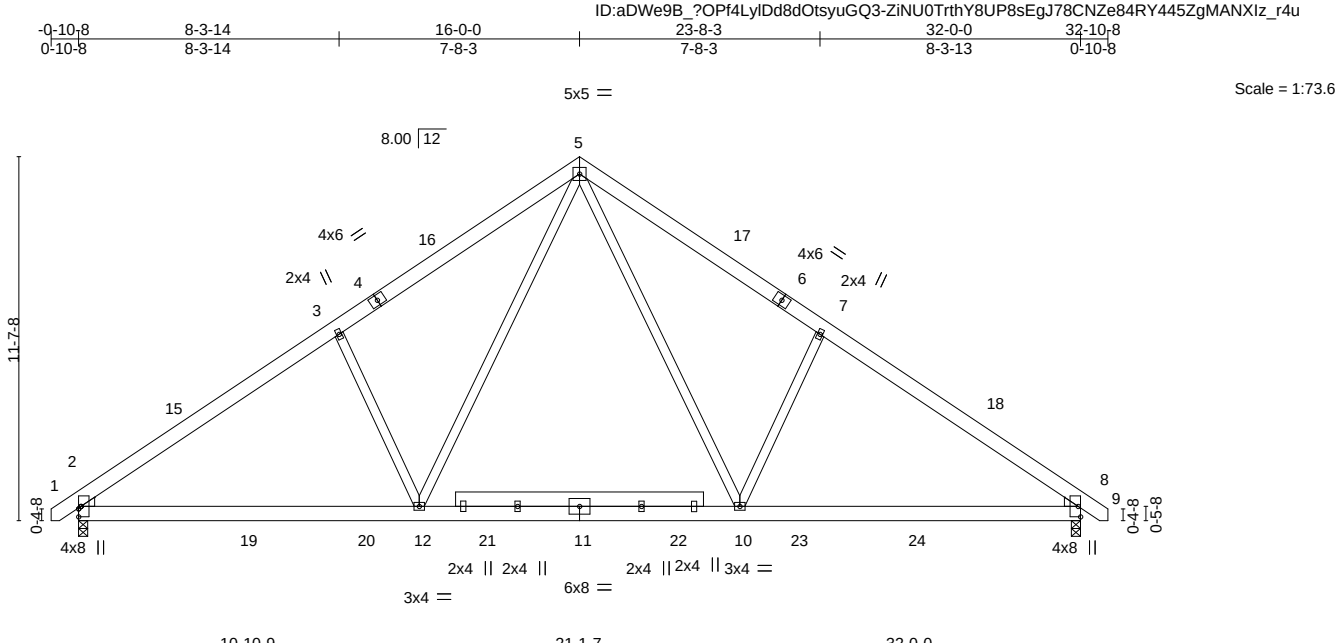


Plate Offsets (X,Y)-- [2:0-0-15,0-0-15], [2:0-0-15,0-0-15]

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	0.38	Vert(LL)	-0.12	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.21	2-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	2-12	>999	240	Weight: 243 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=298(LC 11)
Max Uplift 2=-131(LC 12), 8=-131(LC 13)
Max Grav 2=1542(LC 19), 8=1542(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2052/465, 3-5=-1920/583, 5-7=-1921/583, 7-8=-2052/465
BOT CHORD 2-12=-228/1789, 10-12=0/1188, 8-10=-227/1591
WEBS 5-10=-220/1004, 7-10=-541/356, 5-12=-220/1003, 3-12=-541/356

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 16-0-0, Exterior(2) 16-0-0 to 20-4-13, Interior(1) 20-4-13 to 32-8-15 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 30.0psf 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=131, 8=131.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 6,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ***ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information*** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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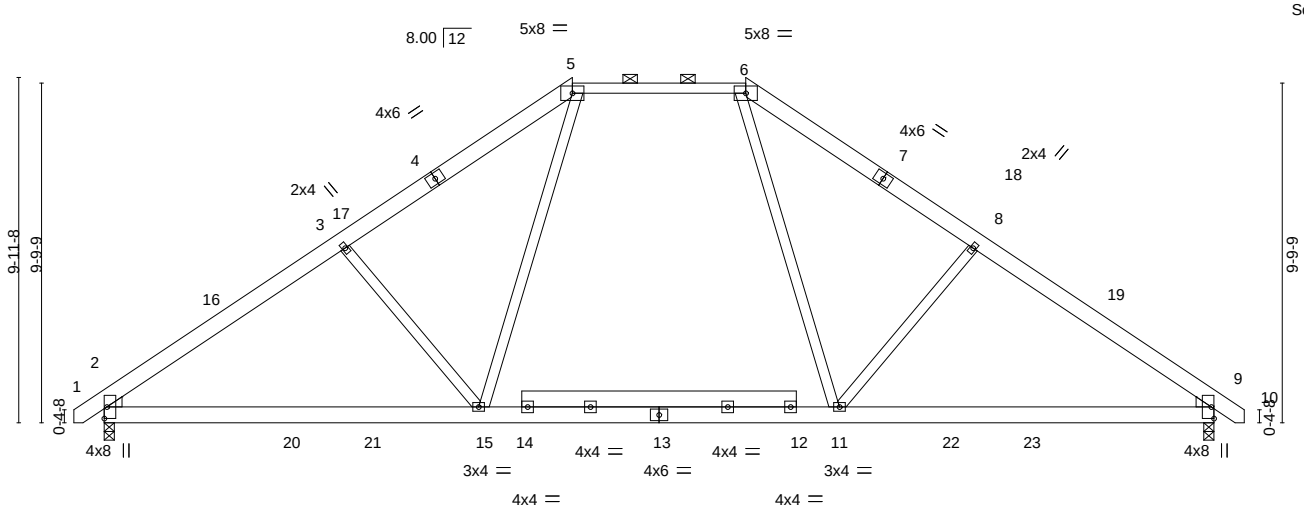
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	A2	HIP	1	1	E15906389
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:14 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-1vxsDpsVSsGL1IRQE0eNlb5oeUkXpbYiv0vw3kz_r4t

-0-10-8 6-11-6 13-6-0 18-6-0 25-0-11 32-0-0 32-10-8
0-10-8 6-11-6 6-6-11 5-0-0 6-6-11 6-11-5 0-10-8

Scale = 1:66.4



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)	-0.23	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.31	9-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.23	2-15	>999	240	Weight: 230 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except* 5-6: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except* 12-14: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-6 oc purlins, except 2-0-0 oc purlins (5-5-7 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=-253(LC 10)
Max Uplift 2=-120(LC 12), 9=-120(LC 13)
Max Grav 2=1482(LC 19), 9=1482(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1975/543, 3-5=-1780/568, 5-6=-1212/509, 6-8=-1780/568, 8-9=-1975/543
BOT CHORD 2-15=-328/1700, 11-15=-101/1260, 9-11=-317/1536
WEBS 3-15=-443/318, 5-15=-106/749, 6-11=-106/750, 8-11=-443/318

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 13-6-0, Exterior(2) 13-6-0 to 24-8-11, Interior(1) 24-8-11 to 32-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=120, 9=120.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 6,2021

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Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	A2A	HIP	1	1	E15906390
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:15 2021 Page 1
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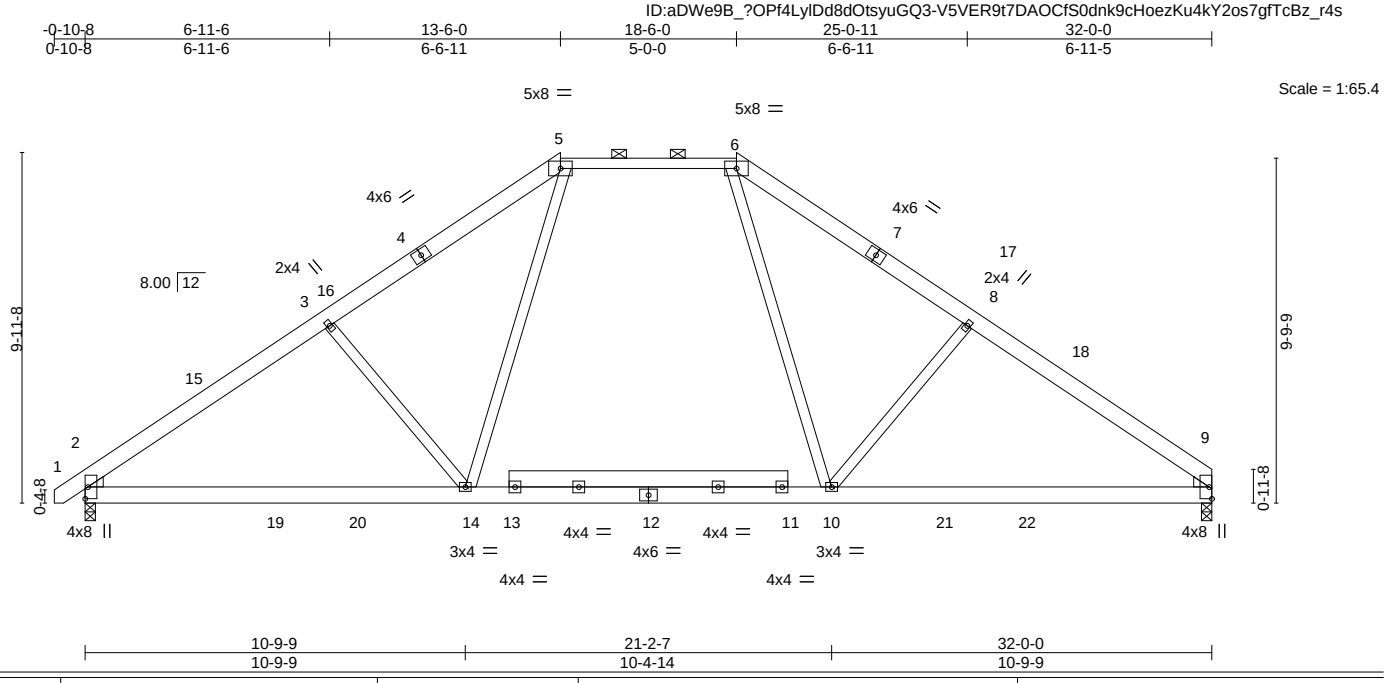

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.24	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.32	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.23	2-14	>999	240	Weight: 228 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except* 5-6: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except* 11-13: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-2 oc purlins, except 2-0-0 oc purlins (5-5-6 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=253(LC 9)
Max Uplift 2=-120(LC 12), 9=-105(LC 13)
Max Grav 2=1483(LC 19), 9=1431(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1977/543, 3-5=-1781/568, 5-6=-1214/512, 6-8=-1783/577, 8-9=-1978/552
BOT CHORD 2-14=-328/1700, 10-14=-102/1260, 9-10=-321/1539
WEBS 3-14=-443/317, 5-14=-107/749, 6-10=-114/753, 8-10=-443/322

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 13-6-0, Exterior(2) 13-6-0 to 24-8-11, Interior(1) 24-8-11 to 31-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=120, 9=105.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 6,2021

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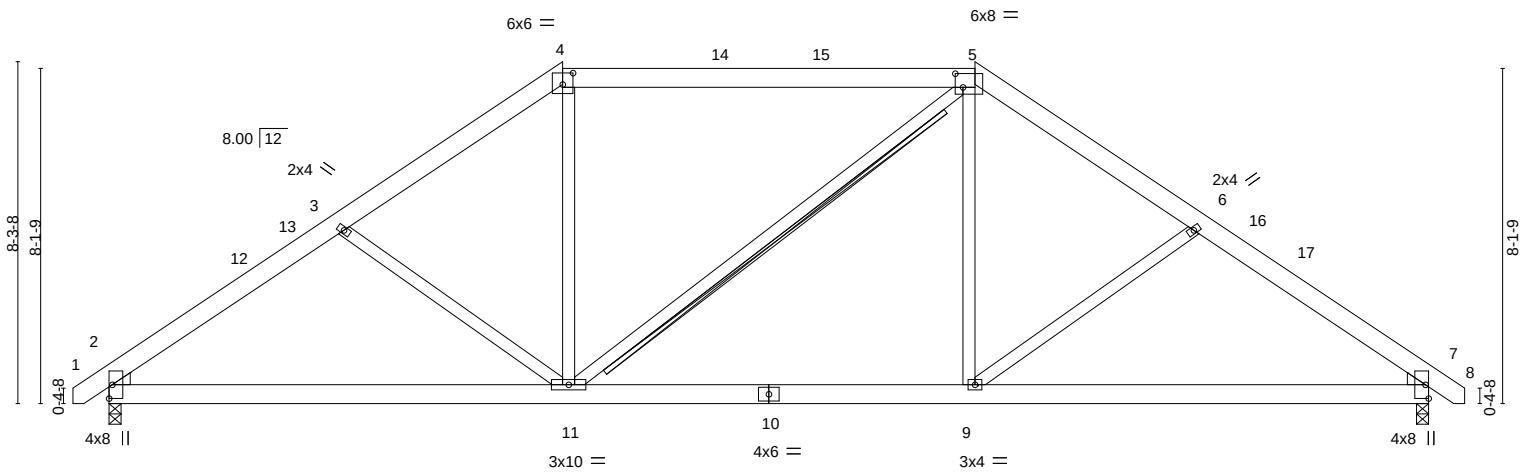
Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	A3	HIP	2	1	E15906391
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:16 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-zH3ceVul_TW3GcapLRgrq0A6oIUYHVn?MKO18dz_r4r

-0-10-8	5-8-6	11-0-0	16-0-0	21-0-0	26-3-11	32-0-0	32-10-8
0-10-8	5-8-6	5-3-11	5-0-0	5-0-0	5-3-11	5-8-5	0-10-8

Scale = 1:55.9



11-0-0	21-0-0	32-0-0
11-0-0	10-0-0	11-0-0

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

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	0.54	Vert(LL)	-0.10	7-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.21	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.03	11	>999	240	Weight: 226 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-5 oc purlins, except 2-0-0 oc purlins (5-7-10 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 5-11
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.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-207(LC 10)
Max Uplift 2=-106(LC 12), 7=-106(LC 13)
Max Grav 2=1322(LC 1), 7=1322(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1767/570, 3-4=-1541/537, 4-5=-1228/525, 5-6=-1540/537, 6-7=-1767/571
BOT CHORD 2-11=-365/1362, 9-11=-173/1227, 7-9=-354/1352
WEBS 3-11=-320/224, 4-11=0/455, 5-9=-5/481, 6-9=-320/224

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 11-0-0, Exterior(2) 11-0-0 to 17-2-11, Interior(1) 17-2-11 to 21-0-0, Exterior(2) 21-0-0 to 27-2-11, Interior(1) 27-2-11 to 32-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=106, 7=106.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

July 6,2021

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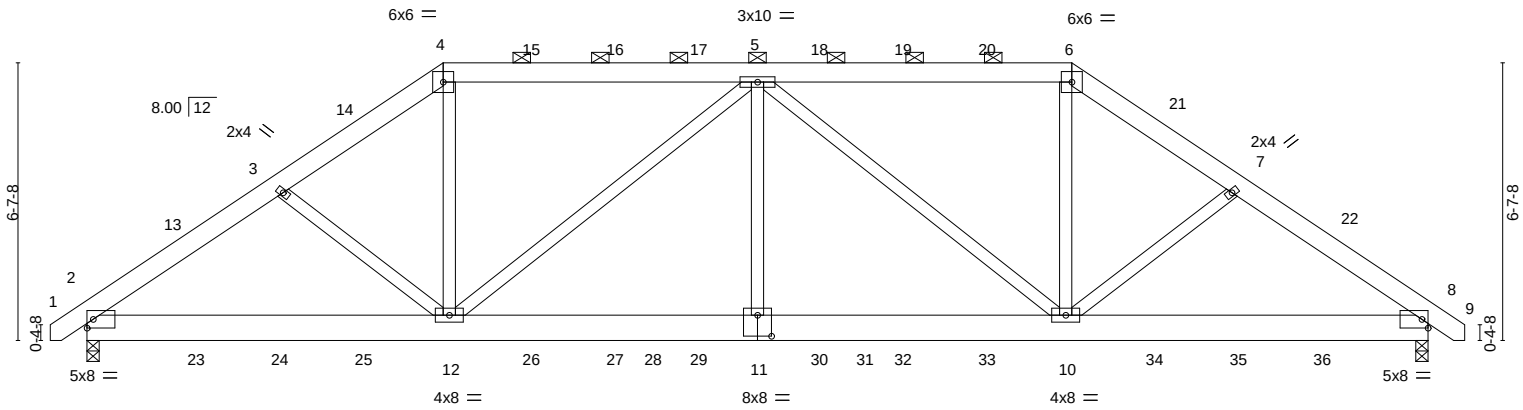
Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	A4GDR	HIP GIRDER	2	2	E15906392
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:19 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-NsklGWweHOue73JO0ZEYSeoftVX0UqVR2Hdhlyz_r4o

-0-10-8	4-8-3	8-6-0	16-0-0	23-6-0	27-3-14	32-0-0	32-10-8
0-10-8	4-8-3	3-9-14	7-6-0	7-6-0	3-9-14	4-8-2	0-10-8

Scale = 1:55.0



8-6-0	16-0-0	23-6-0	32-0-0
8-6-0	7-6-0	7-6-0	8-6-0

Plate Offsets (X,Y)-- [11:0-4-0,0-6-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.05	11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.10	11	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	11	>999	240	Weight: 506 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1
WEBS 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. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-165(LC 25)
Max Uplift 2=-877(LC 8), 8=-877(LC 9)
Max Grav 2=2678(LC 1), 8=2678(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3745/1364, 3-4=-3541/1344, 4-5=-2962/1173, 5-6=-2961/1173, 6-7=-3541/1344, 7-8=-3745/1364
BOT CHORD 2-12=-1159/2970, 11-12=-1545/3890, 10-11=-1545/3890, 8-10=-999/2902
WEBS 3-12=-149/269, 4-12=-293/1322, 5-12=-1197/608, 5-11=0/560, 5-10=-1197/607, 6-10=-293/1323, 7-10=-149/269

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: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=877, 8=877.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 116 lb down and 120 lb up at 2-6-12, 74 lb down and 73 lb up at 4-6-12, 31 lb down and 44 lb up at 6-6-12, 183 lb down and 196 lb up at 8-6-0, 188 lb down and 192 lb up at 10-6-12, 188 lb down and 192 lb up at 12-6-12, 188 lb down and 192 lb up at 14-6-12, 188 lb down and 192 lb up at 16-0-0, 188 lb down and 192 lb up at 17-5-4, 188 lb down and 192 lb up at 19-5-4, 188 lb down and 192 lb up at 21-5-4, 183 lb down and 196 lb up at 23-6-0, 31 lb down and 44 lb up at 25-5-4, and 74 lb down and 73 lb up at 27-5-4, and 116 lb down and 120 lb up at 29-5-4 on top chord, and 123 lb down at 2-6-12, 145 lb down and 42 lb up at 4-6-12, 193 lb down and 94 lb up at 6-6-12, 91 lb down at 8-6-12, 91 lb down at 10-6-12, 91 lb down at 12-6-12, 91 lb down at 14-6-12, 91 lb down at 16-0-0, 91 lb down at 17-5-4, 91 lb down at 19-5-4, 91 lb down at 21-5-4, 91 lb down at 23-5-4, 193 lb down and 94 lb up at 25-5-4, and 145 lb down and 42 lb up at 27-5-4, and 123 lb down at 29-5-4 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: 1-4=-60, 4-6=-60, 6-9=-60, 2-8=-20
   Concentrated Loads (lb)
   Vert: 4=-133(F) 6=-133(F) 12=-45(F) 3=-34(F) 11=-45(F) 5=-133(F) 10=-45(F) 7=-34(F) 13=-76(F) 15=-133(F) 16=-133(F) 17=-133(F) 18=-133(F) 19=-133(F) 20=-133(F) 22=-76(F) 23=-104(F) 24=-145(F) 25=-193(F) 26=-45(F) 27=-45(F) 29=-45(F) 30=-45(F) 32=-45(F) 33=-45(F) 34=-193(F) 35=-145(F) 36=-104(F)

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Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	B1	COMMON	7	1	E15906393
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:20 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-r3I7UsxG2i0UlDuaaHln_sLnMvrFDHebHxMEHOz_r4n

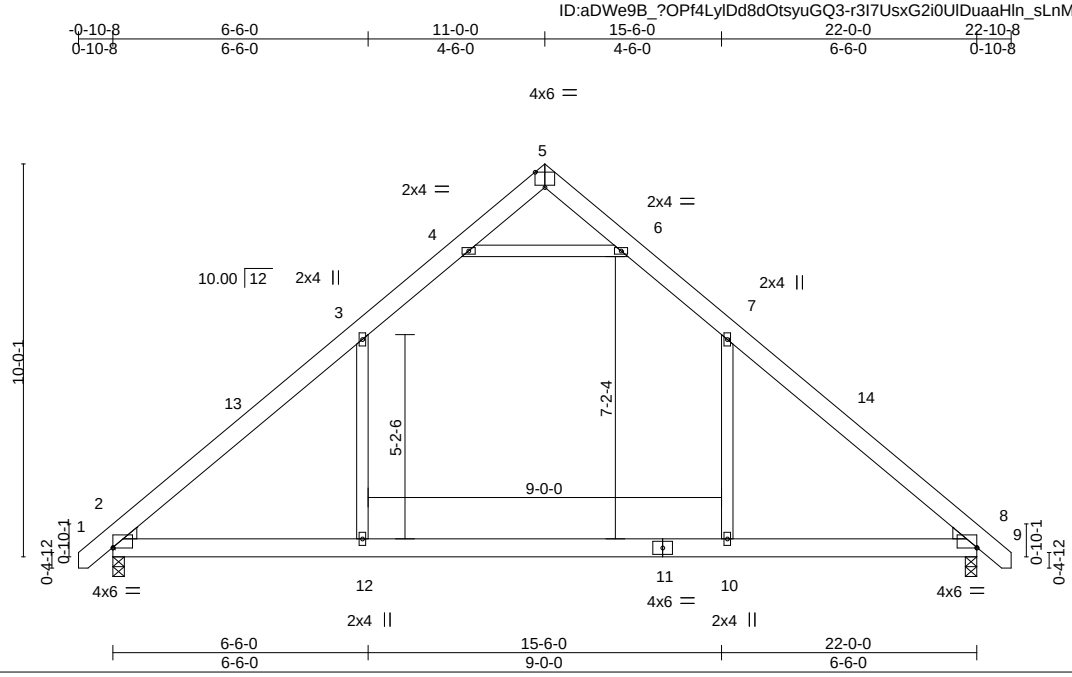

Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [5:0-3-0,Edge], [8:Edge,0-0-3]

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)	-0.22	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.33	10-12	>787	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.16	2-12	>999	240	Weight: 148 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-262(LC 10)
Max Uplift 2=-85(LC 12), 8=-85(LC 13)
Max Grav 2=1057(LC 19), 8=1057(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1364/255, 3-4=-829/332, 4-5=-107/366, 5-6=-107/366, 6-7=-828/332, 7-8=-1364/255
BOT CHORD 2-12=-10/916, 10-12=-10/916, 8-10=-10/916
WEBS 3-12=0/522, 7-10=0/522, 4-6=-1305/539

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 11-0-0, Exterior(2) 11-0-0 to 15-7-12, Interior(1) 15-7-12 to 22-9-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 6,2021

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Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	B1GE	GABLE	1	1	E15906394
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:22 2021 Page 1
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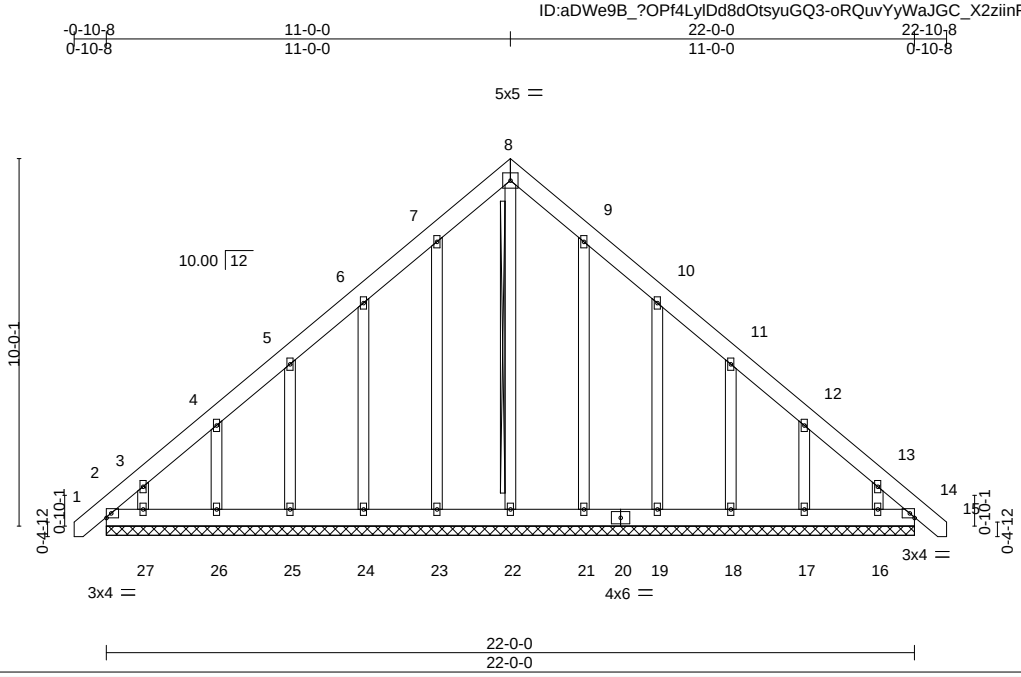

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 199 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 8-22
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.

REACTIONS. All bearings 22-0-0.
(lb) - Max Horz 2=327(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 14, 23, 21 except 2=-157(LC 10), 24=-142(LC 12), 25=-127(LC 12), 26=-137(LC 12), 27=-185(LC 12), 19=-145(LC 13), 18=-127(LC 13), 17=-136(LC 13), 16=-172(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 14, 22, 23, 24, 25, 26, 27, 21, 19, 18, 17, 16 except 2=291(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-434/274, 3-4=-295/216, 13-14=-370/250
BOT CHORD 2-27=-186/290, 26-27=-186/290, 25-26=-186/290, 24-25=-186/290, 23-24=-186/290, 22-23=-186/290, 21-22=-186/290, 19-21=-186/290, 18-19=-186/290, 17-18=-186/290, 16-17=-186/290, 14-16=-186/290

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-1 to 3-7-12, Exterior(2) 3-7-12 to 11-0-0, Corner(3) 11-0-0 to 15-4-13, Exterior(2) 15-4-13 to 22-9-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 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) 14, 23, 21 except (jt=lb) 2=157, 24=142, 25=127, 26=137, 27=185, 19=145, 18=127, 17=136, 16=172.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

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Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	B2	COMMON	4	1	E15906395
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:23 2021 Page 1
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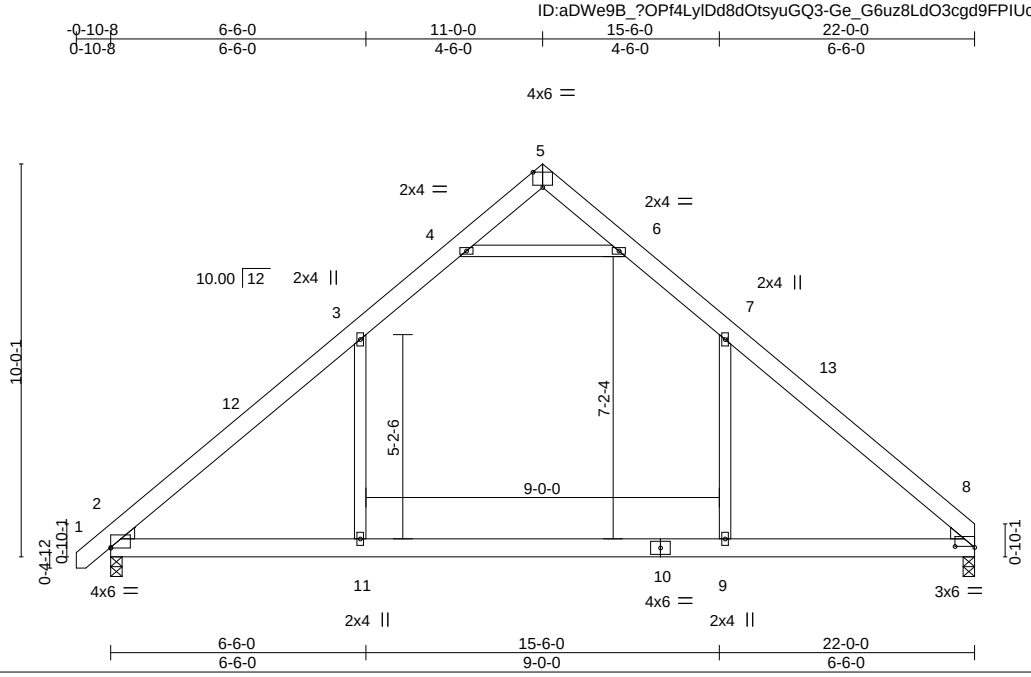

Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [5:0-3-0,Edge], [8:0-6-0,0-0-5]

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	0.58	Vert(LL)	-0.22	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.33	9-11	>779	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.16	2-11	>999	240	Weight: 145 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=259(LC 11)
Max Uplift 8=-69(LC 13), 2=-85(LC 12)
Max Grav 8=1005(LC 20), 2=1058(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1368/257, 3-4=-829/332, 4-5=-115/370, 5-6=-108/370, 6-7=-830/337, 7-8=-1358/253
BOT CHORD 2-11=-25/913, 9-11=-25/913, 8-9=-25/913
WEBS 3-11=0/525, 7-9=0/512, 4-6=-1313/557

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 11-0-0, Exterior(2) 11-0-0 to 15-7-12, Interior(1) 15-7-12 to 21-10-4 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 30.0psf 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 6,2021

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	J03	JACK-OPEN	8	1	E15906396
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:24 2021 Page 1
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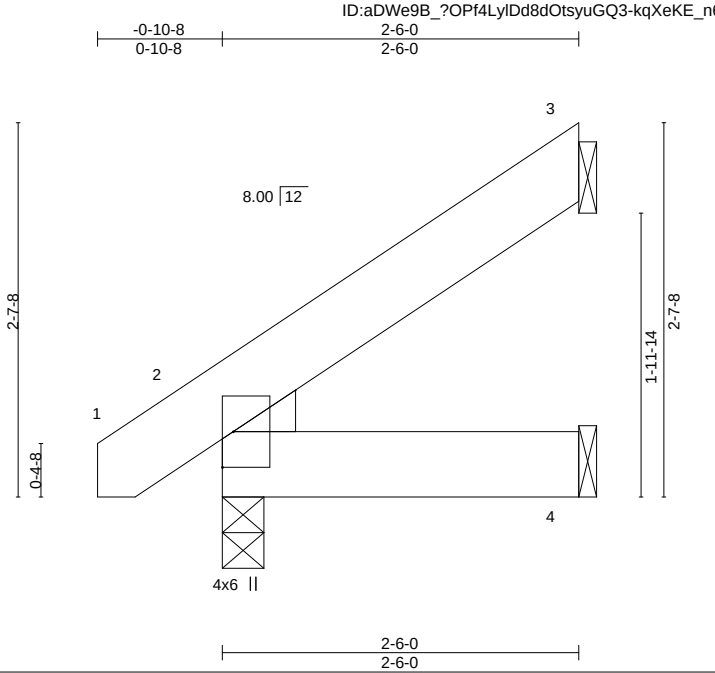

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEDGE
Left: 2x4 SP No.2

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=77(LC 12)
Max Uplift 3=-59(LC 12)
Max Grav 3=73(LC 19), 2=155(LC 1), 4=46(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 6,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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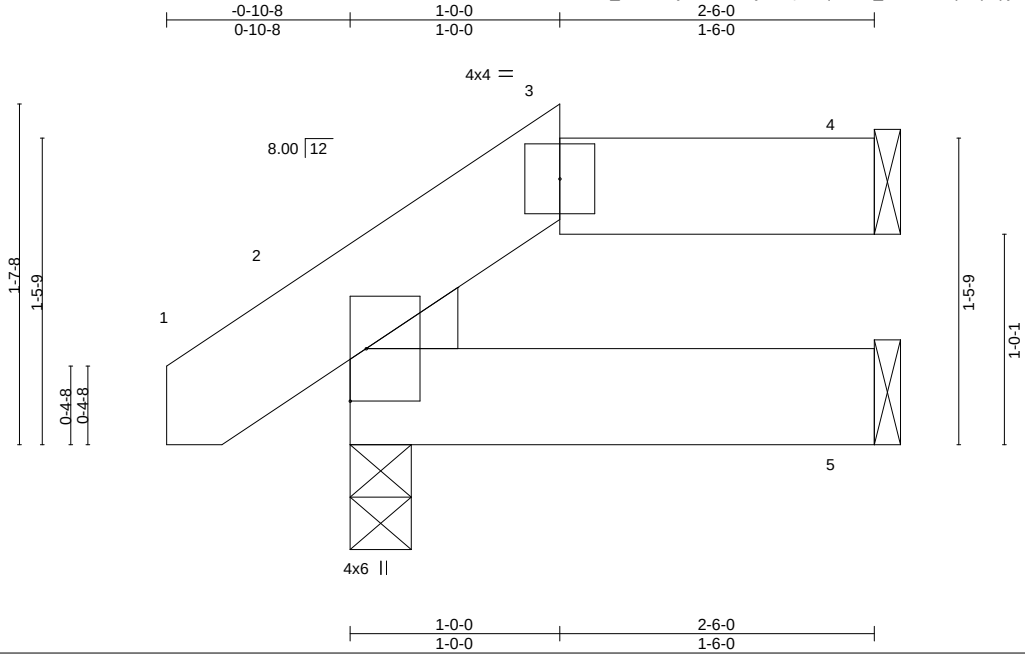
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	J03A	JACK-OPEN	4	1	E15906397
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:24 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-kqXeKE_n6xWwEqCLp7pj9iWbrWJJ9AmACZKSQ9z_r4j



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)	-0.00	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	-0.00	2	>999	240	Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEDGE
Left: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-6-0 oc purlins, except 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=38(LC 12)
Max Uplift 4=-25(LC 9), 2=-18(LC 12)
Max Grav 4=58(LC 1), 2=155(LC 1), 5=42(LC 3)

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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 6,2021

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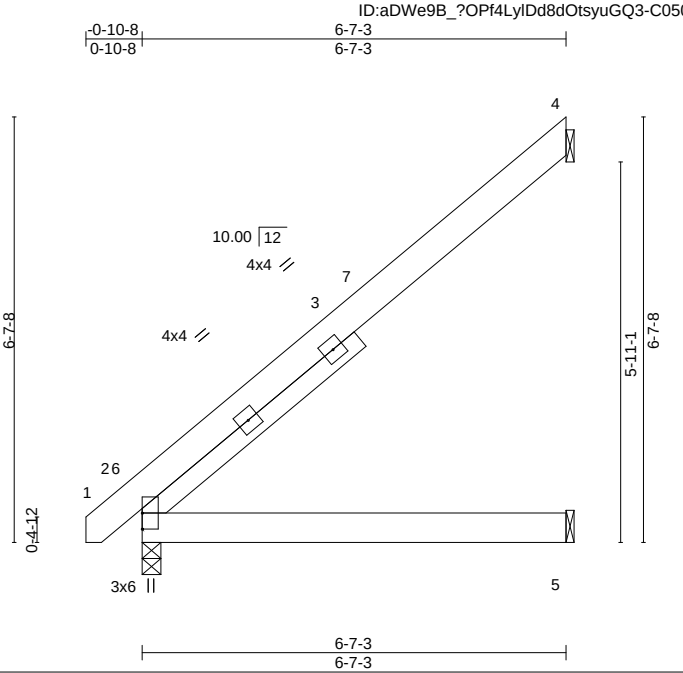
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	J07	JACK-OPEN	18	1	E15906398
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:25 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-C050Xa_PtEenr_mYNqLyhv2h3wd6ud0KQD4?ybz_r4i



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	0.38	Vert(LL)	-0.02	2-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.05	2-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 45 lb	FT = 20%

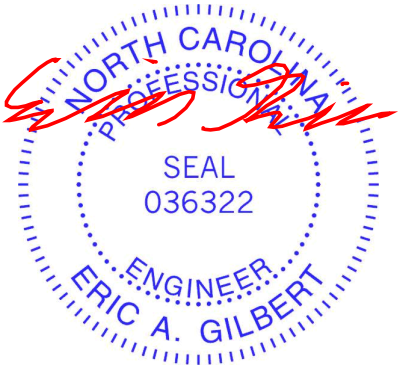
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
SLIDER Left 2x4 SP No.2 4-4-1

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=220(LC 12)
Max Uplift 4=-180(LC 12)
Max Grav 4=235(LC 19), 2=309(LC 1), 5=131(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 6-6-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=180.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 6,2021

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

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	J07A	HALF HIP	4	1	E15906399
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:26 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-gDfOkw?1eYmeT8LkxXsBE7buHKyPd3jTftpZU2z_r4h

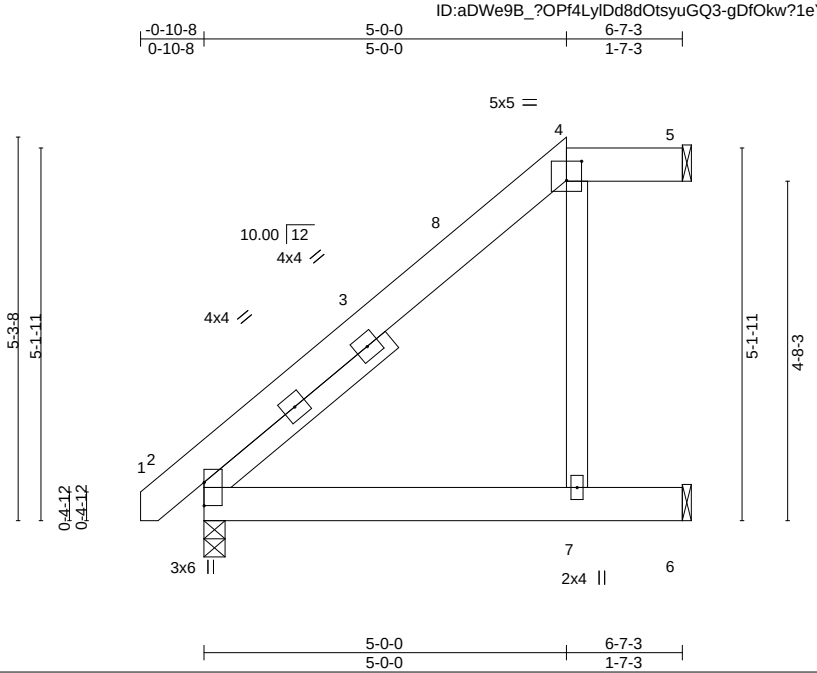

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [4:0-2-8,0-3-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.02	2-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.06	2-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.04	2-7	>999	240	Weight: 49 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 3-3-9

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=171(LC 12)
Max Uplift 5=-19(LC 8), 6=-74(LC 12)
Max Grav 5=46(LC 1), 2=309(LC 1), 6=223(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-282/274

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 5-0-0, Exterior(2) 5-0-0 to 6-6-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 6,2021

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

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	J07B	HALF HIP	4	1	E15906400
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:27 2021 Page 1
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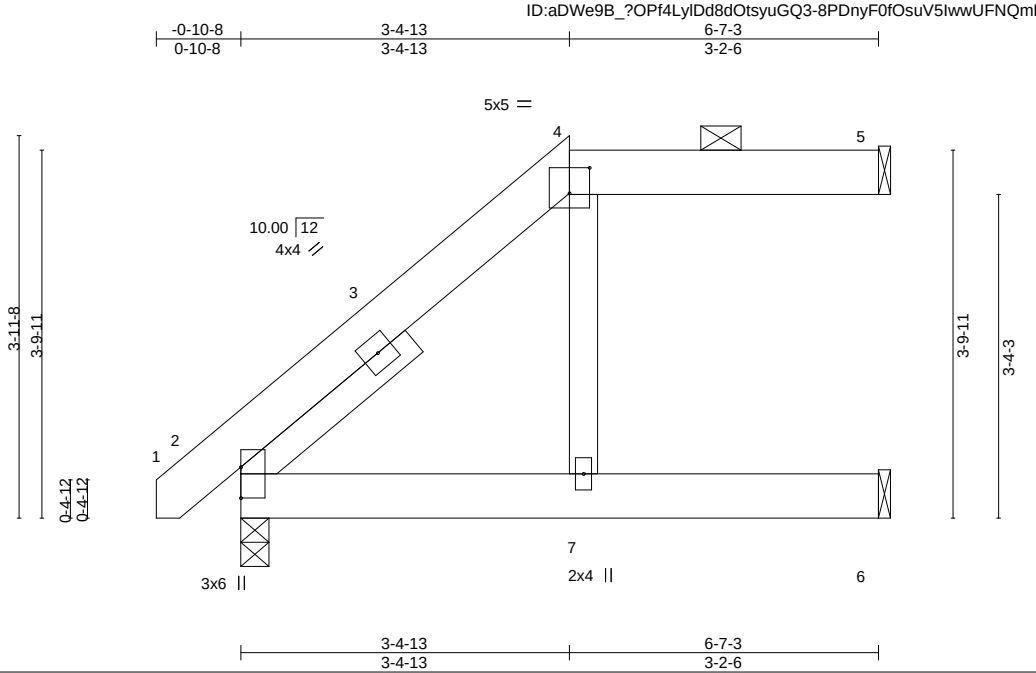

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [4:0-2-8,0-3-3]

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	0.11	Vert(LL)	-0.04	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.08	7	>987	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.08	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.06	7	>999	240	Weight: 44 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=123(LC 12)
Max Uplift 5=-38(LC 8), 2=-12(LC 12), 6=-22(LC 12)
Max Grav 5=94(LC 1), 2=309(LC 1), 6=165(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-237/256

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 6,2021

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

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	J07C	HALF HIP GIRDER	4	1	E15906401 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:28 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-cbn99b1H990MjSV72yufJYgF47fE5zdm7BIfZwz_r4f

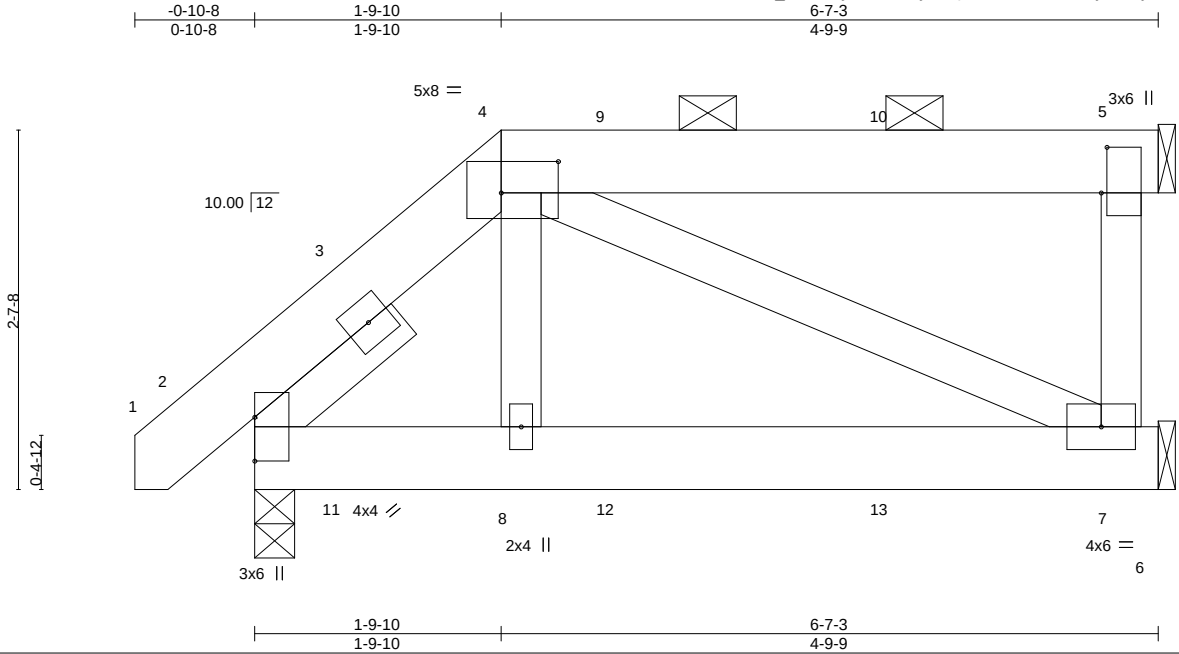

Plate Offsets (X,Y)-- [4:0-5-0,0-2-12], [5:0-4-0,0-0-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.00	8	>999	240	Weight: 49 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 1-4-2

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.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 7=Mechanical, 2=0-3-8
Max Horz 2=79(LC 8)
Max Uplift 5=-84(LC 4), 2=-55(LC 8)
Max Grav 5=136(LC 1), 7=163(LC 3), 2=312(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-299/51

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 24 lb down and 52 lb up at 0-7-15, and 80 lb down and 63 lb up at 2-7-15, and 81 lb down and 63 lb up at 4-7-15 on top chord, and 14 lb down at 0-7-15, and 11 lb down at 2-7-15, and 11 lb down at 4-7-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-60, 2-6=-20
Concentrated Loads (lb)
Vert: 3=-1(F) 11=-8(F) 12=-3(F) 13=-3(F)

July 6,2021

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

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	M1	MONOPITCH	9	1	E15906402
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:29 2021 Page 1
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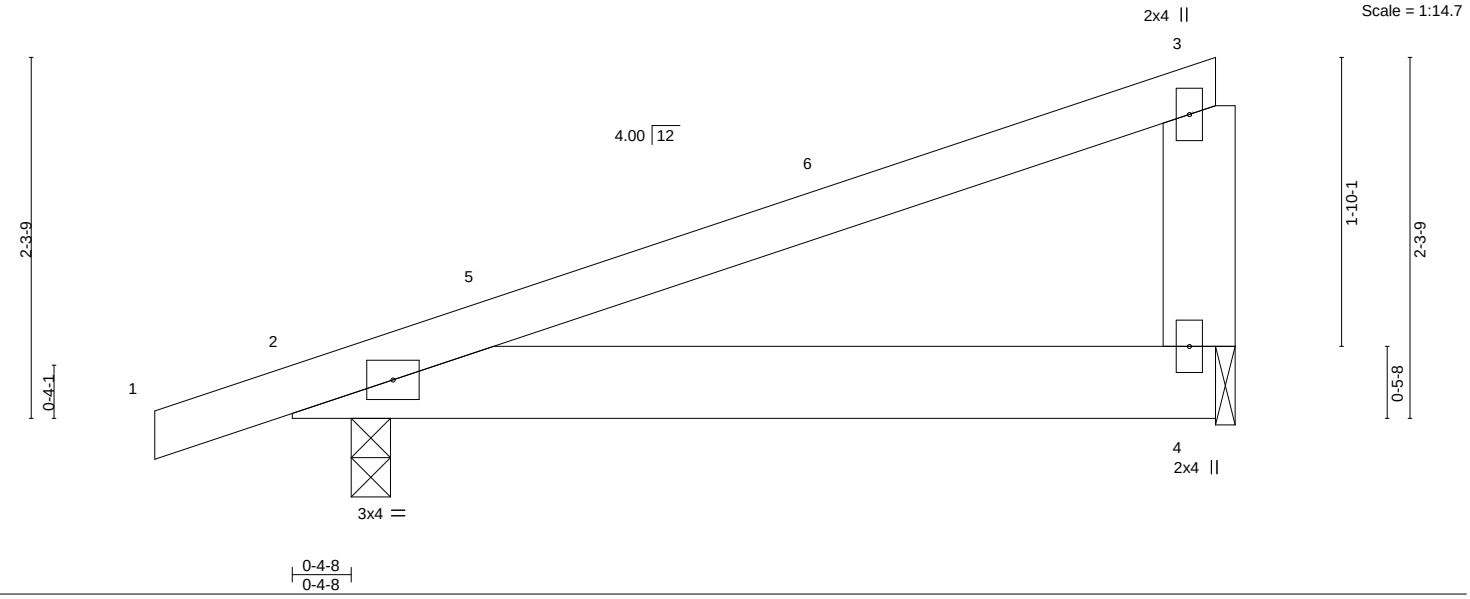

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.03	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.03	2-4	>999	240	Weight: 28 lb	FT = 20%

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

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

REACTIONS. (size) 4=0-1-8, 2=0-3-0
Max Horz 2=86(LC 8)
Max Uplift 4=-112(LC 8), 2=-139(LC 8)
Max Grav 4=221(LC 1), 2=291(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 5-9-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=112, 2=139.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 6,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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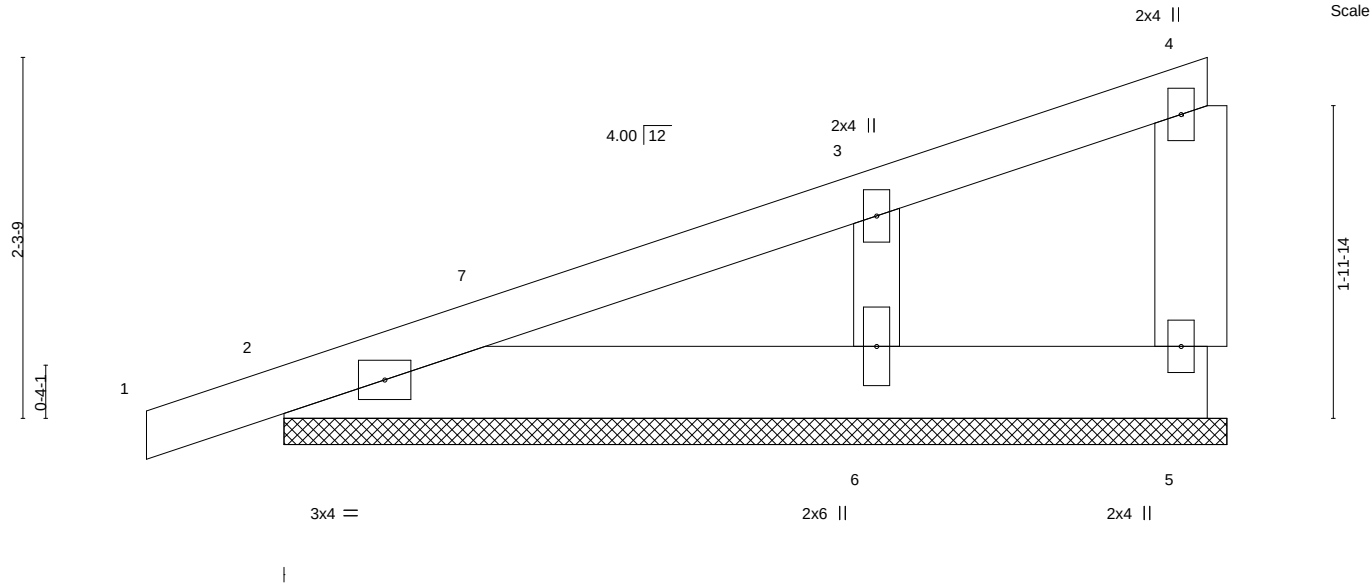
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	M1GE	GABLE	1	1	E15906403
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:30 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-Z_vvaH2XhnH4ylfVANw7OzmbVxMOZt73aVnmdpz_r4d

-0-10-8 0-10-8 | 6-0-0 6-0-0

Scale = 1:14.7



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	0.15	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 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.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=6-0-0, 2=6-0-0, 6=6-0-0
Max Horz 2=121(LC 8)
Max Uplift 5=-16(LC 8), 2=-79(LC 8), 6=-123(LC 12)
Max Grav 5=31(LC 1), 2=183(LC 1), 6=300(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-222/411

NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-9-4, Exterior(2) 3-9-4 to 5-9-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2 except (jt=lb) 6=123.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 6,2021

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

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	P1	COMMON	5	1	E15906404
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:31 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-1ATHod3AS4PxavEij5RMxAIjgLeQILWCp9XJAFz_r4c

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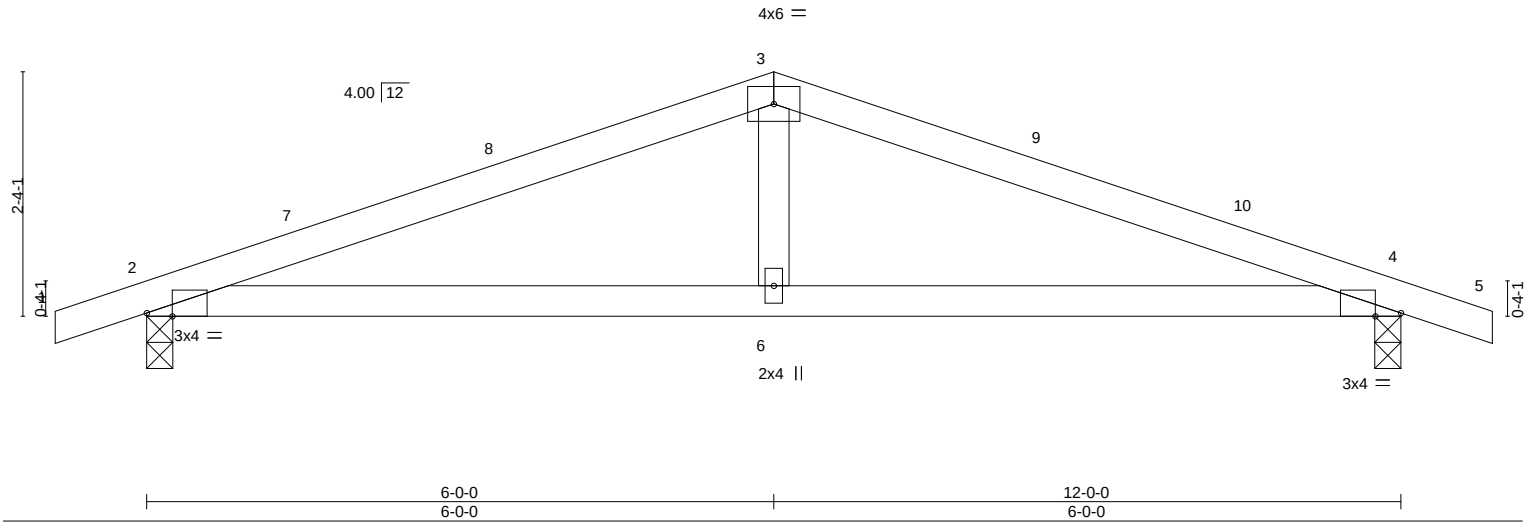
0-10-8 6-0-0 6-0-0 0-10-8

Scale = 1:22.0



6-0-0 12-0-0
6-0-0 6-0-0

Plate Offsets (X,Y)-- [2:0-2-15,Edge], [4:0-2-15,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	0.37	Vert(LL)	0.10	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 42 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 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 6-2-6 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-3-0
Max Horz 2=31(LC 16)
Max Uplift 2=-246(LC 8), 4=-246(LC 9)
Max Grav 2=530(LC 1), 4=530(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-866/1072, 3-4=-866/1072
BOT CHORD 2-6=-927/765, 4-6=-927/765
WEBS 3-6=-409/282

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 12-10-8 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=246, 4=246.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 6,2021

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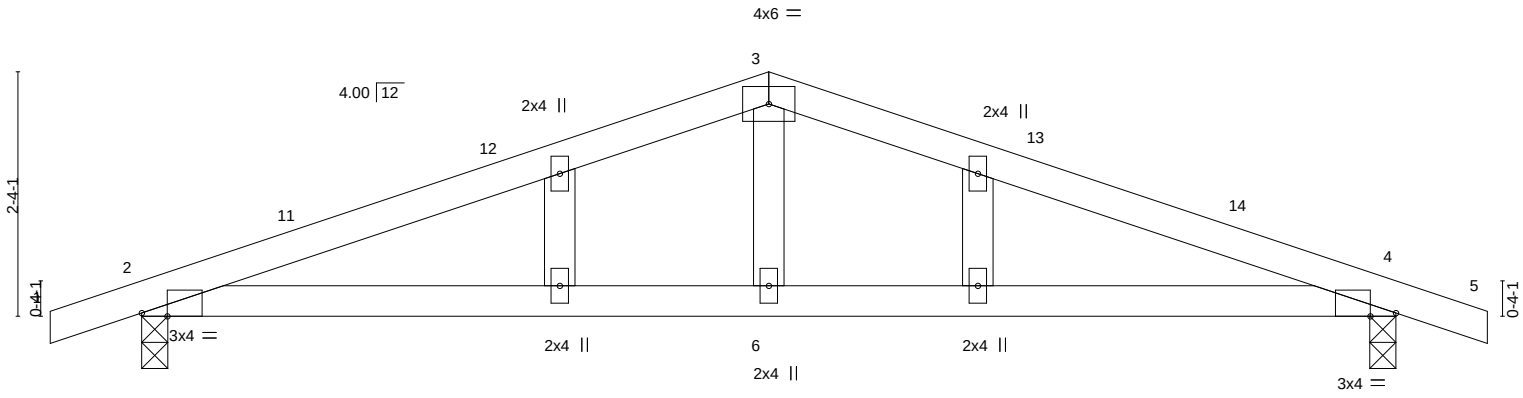
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	P1GE	GABLE	1	1	E15906405
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:32 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-VM0f?z4oDOXnB3puHozbTOruQk_f1omM1pHtiiz_r4b

-0-10-8 | 6-0-0 | 12-0-0 | 12-10-8
0-10-8 | 6-0-0 | 6-0-0 | 0-10-8

Scale = 1:22.0



6-0-0 | 12-0-0
6-0-0 | 6-0-0

Plate Offsets (X,Y)-- [2:0-2-15,Edge], [4:0-2-15,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	0.37	Vert(LL)	0.10	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 46 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.
BOT CHORD Rigid ceiling directly applied or 6-2-6 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-3-0
Max Horz 2=52(LC 12)
Max Uplift 2=-343(LC 8), 4=-343(LC 9)
Max Grav 2=530(LC 1), 4=530(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-866/1072, 3-4=-866/1072
BOT CHORD 2-6=-927/765, 4-6=-927/765
WEBS 3-6=-409/282

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 12-10-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable studs spaced at 2-0-0 oc.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=343, 4=343.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

July 6,2021

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

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	VA1	GABLE	1	1	E15906406
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:33 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-zZa2DJ5Q_ifepDO4rVUq0bO7P8OKmFPVGT0QE8z_r4a

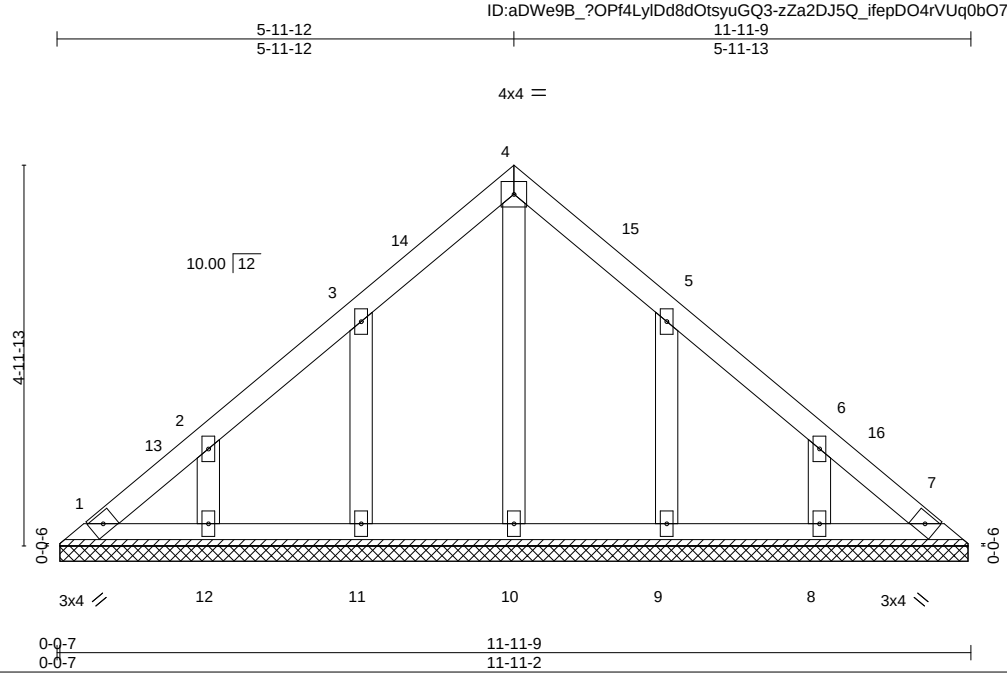

Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	7	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 11-10-11.
(lb) - Max Horz 1=-155(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-136(LC 12), 12=-127(LC 12), 9=-135(LC 13), 8=-128(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 5-11-12, Exterior(2) 5-11-12 to 10-4-9, Interior(1) 10-4-9 to 11-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=136, 12=127, 9=135, 8=128.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 6,2021

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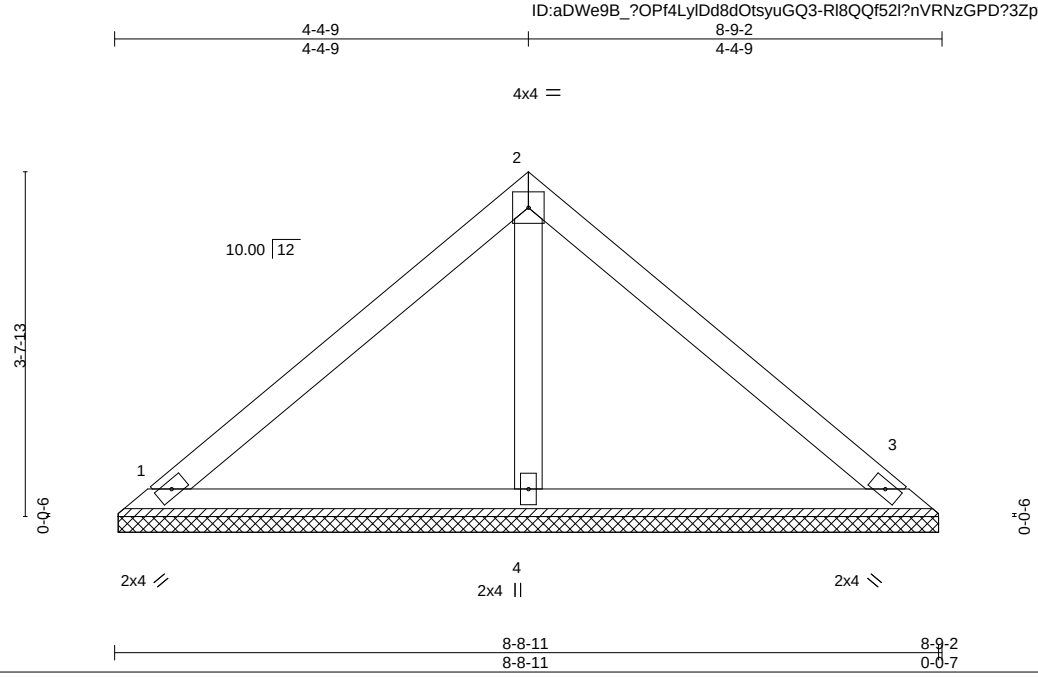
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	VA2	VALLEY	1	1	E15906407
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:34 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-Rl8QQf52l?nVRNzGPD?3ZpwFnYi2ViifV7m_maz_r4Z



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	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 33 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=8-8-4, 3=8-8-4, 4=8-8-4
Max Horz 1=-88(LC 8)
Max Uplift 1=-36(LC 13), 3=-45(LC 13)
Max Grav 1=184(LC 1), 3=184(LC 1), 4=268(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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) 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) 1, 3.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

July 6,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ***ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information*** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	VA3	VALLEY	1	1	E15906408
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:35 2021 Page 1
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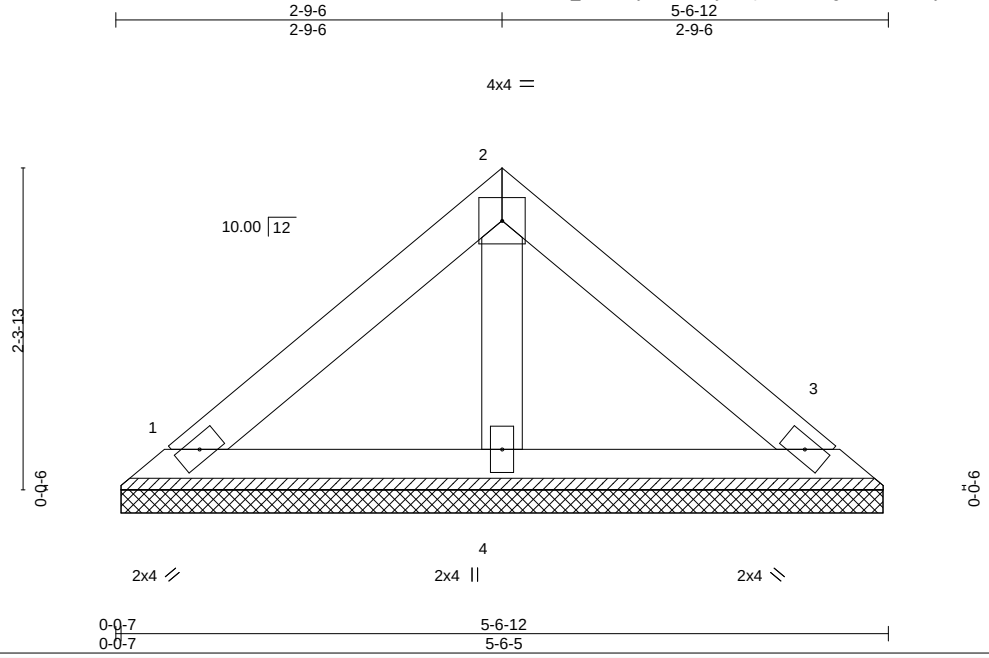

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 20 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 5-6-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-5-13, 3=5-5-13, 4=5-5-13
Max Horz 1=53(LC 9)
Max Uplift 1=-22(LC 13), 3=-27(LC 13)
Max Grav 1=110(LC 1), 3=110(LC 1), 4=160(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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Job	Truss	Truss Type	Qty	Ply	Cates\Lot 702 Lexington Plantation
J0721-4251	VA4	VALLEY	1	1	E15906409
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jul 6 08:38:36 2021 Page 1
ID:aDWe9B_?OPf4LylDd8dOtsyuGQ3-N8GArK7IHd1Dgg6fWe1XeE0e5MP2zckxyRF4rTz_r4X

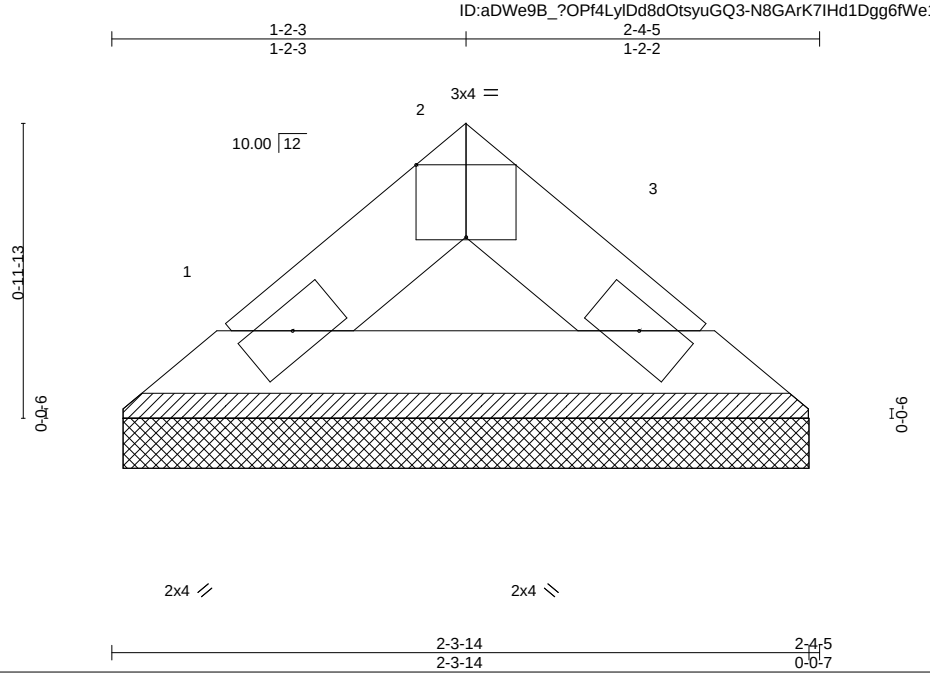

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	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: 6 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 2-4-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-3-7, 3=2-3-7
Max Horz 1=-17(LC 8)
Max Uplift 1=-5(LC 12), 3=-5(LC 13)
Max Grav 1=62(LC 1), 3=62(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 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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) 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) 1, 3.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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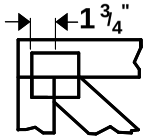
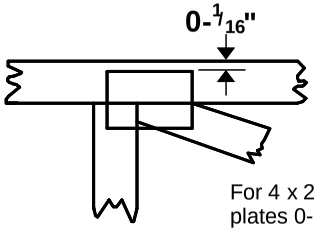
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

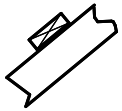
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

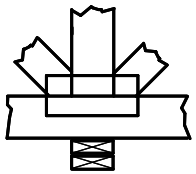
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

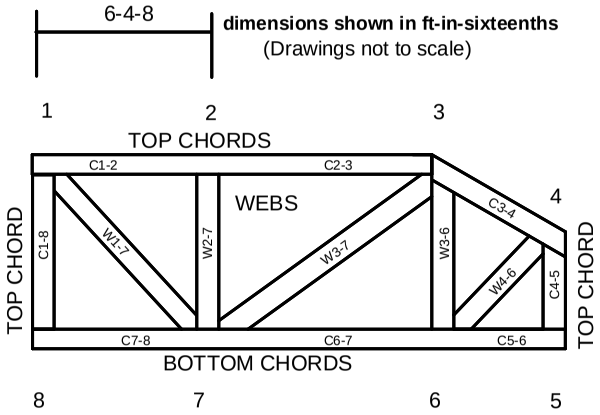


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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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.