ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0322-1506
Cates\Lot 738 Lexington Plantation

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: J0322-1506
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 30 individual, dated Truss Design Drawings and 0 Additional Drawings.

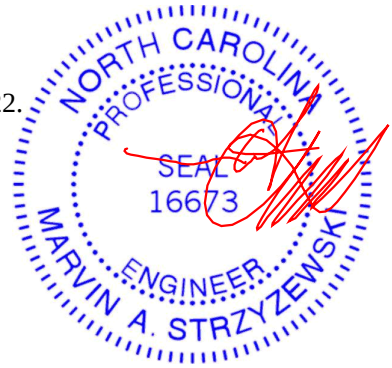
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E15961602	A1GE	7/21/2021	21	E15961622	M2	7/21/2021
2	E15961603	A2	7/21/2021	22	E15961623	M3	7/21/2021
3	E15961604	A3	7/21/2021	23	E15961624	P1	7/21/2021
4	E15961605	A4	7/21/2021	24	E15961625	P1GE	7/21/2021
5	E15961606	A5GE	7/21/2021	25	E15961626	VC1	7/21/2021
6	E15961607	B1	7/21/2021	26	E15961627	VC2	7/21/2021
7	E15961608	B1A	7/21/2021	27	E15961628	VC3	7/21/2021
8	E15961609	B1GE	7/21/2021	28	E15961629	VC4	7/21/2021
9	E15961610	C1GE	7/21/2021	29	E15961630	VC5	7/21/2021
10	E15961611	C2GDR	7/21/2021	30	E15961631	VC6	7/21/2021
11	E15961612	D1	7/21/2021				
12	E15961613	D1GE	7/21/2021				
13	E15961614	J04	7/21/2021				
14	E15961615	J06GE	7/21/2021				
15	E15961616	J08	7/21/2021				
16	E15961617	J08A	7/21/2021				
17	E15961618	J08B	7/21/2021				
18	E15961619	J08C	7/21/2021				
19	E15961620	M1	7/21/2021				
20	E15961621	M1GDR	7/21/2021				

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: Strzyzewski, Marvin

My license renewal date for the state of North Carolina is December 31, 2022.

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 21, 2021

Strzyzewski, Marvin

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 738 Lexington Plantation
J0322-1506	A1GE	GABLE	1	1	E15961602
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:14 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-oBxJFK6LqQp9BEGjyeyLG0oZDUhR2VseuA4Tgdyvq4V

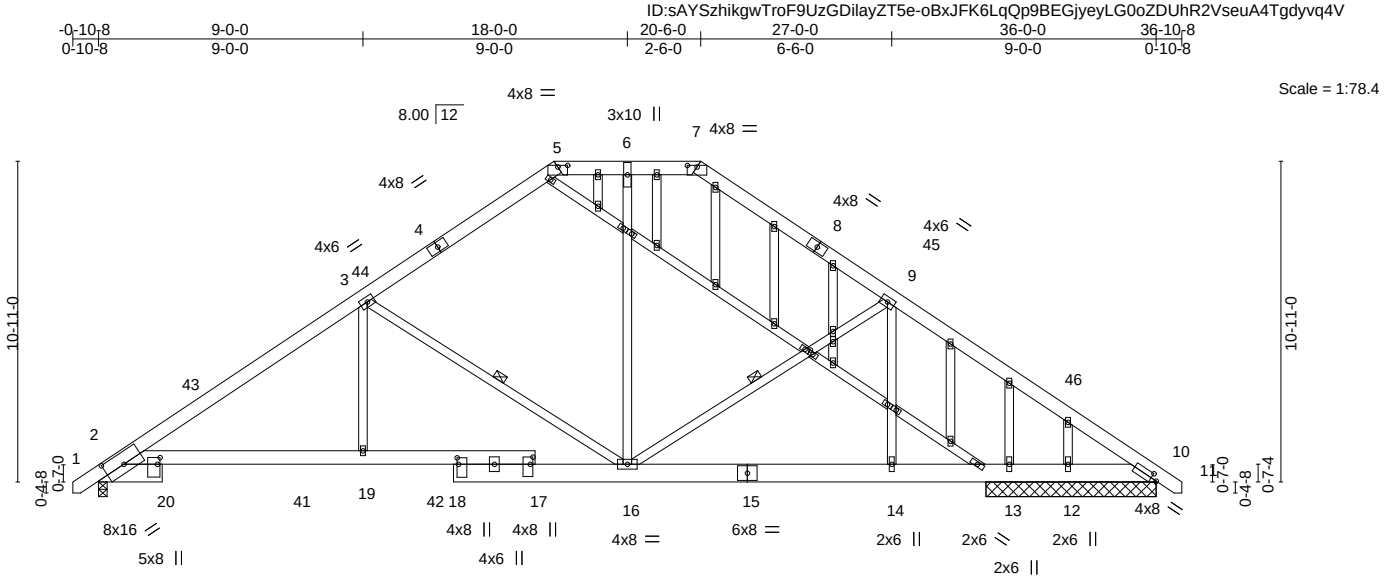


Plate Offsets (X,Y)-- [2:0-8-0,0-4-10], [5:0-4-0,0-0-10], [7:0-4-0,0-0-10], [10:0-2-7,0-2-0], [17:0-2-15,0-1-1], [18:0-2-10,0-0-9], [20:0-2-12,0-1-1], [22:0-1-14,0-1-0]

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	0.55	Vert(LL)	-0.12	2-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.26	2-19	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.14	2-19	>999	240	Weight: 337 lb	FT = 20%

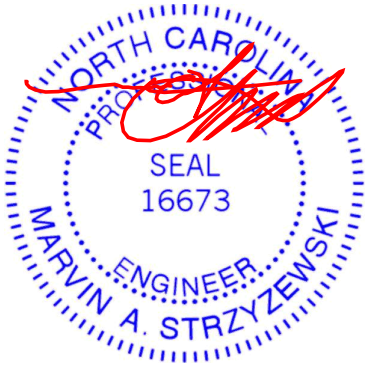
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1 *Except*
2-17: 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-16, 9-16

REACTIONS. All bearings 5-9-8 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=327(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 13 except 2=-311(LC 10), 10=-201(LC 11), 12=-244(LC 17)
Max Grav All reactions 250 lb or less at joint(s) 12 except 2=1405(LC 1), 10=1053(LC 1), 13=723(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2201/568, 3-5=-1346/502, 7-9=-1342/501, 9-10=-1654/448, 5-6=-1068/484, 6-7=-1069/484
BOT CHORD 2-19=-431/1894, 16-19=-424/1894, 14-16=-188/1241, 13-14=-188/1241, 12-13=-188/1241, 10-12=-188/1241
WEBS 3-16=-1091/449, 6-16=-178/817, 3-19=-5/623, 9-16=-377/320

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 9-4-14, Exterior(2) 9-4-14 to 26-7-2, Interior(1) 26-7-2 to 32-4-2, Exterior(2) 32-4-2 to 36-8-15 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 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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 2=311, 10=201, 12=244.



July 21,2021

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 738 Lexington Plantation
J0322-1506	A2	FINK	2	1	E15961603
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:16 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-kZ33g?8cL13tQYQ633?pLRtyKHNcWOUxMUZalVyvq4T

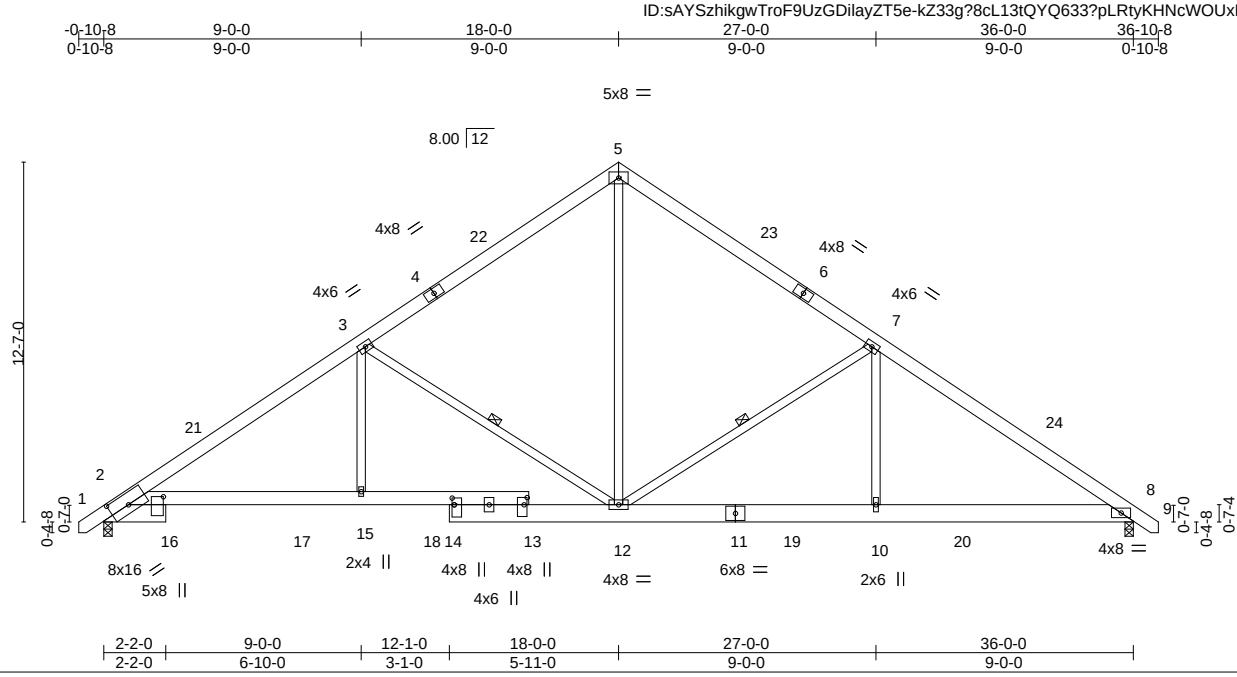


Plate Offsets (X,Y)-- [2:0-8-0,0-4-10], [13:0-3-1,0-1-4], [14:0-3-6,10-2-1], [14:0-2-13,0-0-14]

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)	-0.11	2-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.25	2-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.10	2-15	>999	240	Weight: 283 lb	FT = 20%

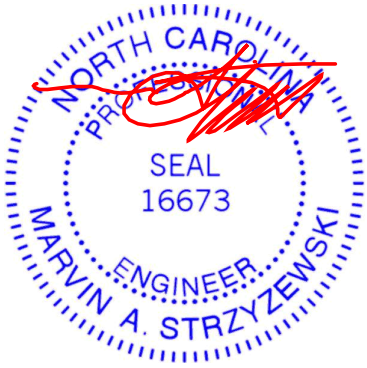
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1 *Except*
2-13: 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 2-15.
WEBS 1 Row at midpt 3-12, 7-12

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=300(LC 9)
Max Uplift 2=-124(LC 10), 8=-124(LC 11)
Max Grav 2=1526(LC 17), 8=1547(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2475/532, 3-5=-1484/475, 5-7=-1479/475, 7-8=-2256/494
BOT CHORD 2-15=-277/2187, 12-15=-268/2187, 10-12=-234/1756, 8-10=-234/1756
WEBS 3-12=-1197/350, 5-12=-248/1097, 7-10=0/427, 3-15=0/654, 7-12=-933/313

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=5.0psf; h=15ft; 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 13-7-3, Exterior(2) 13-7-3 to 22-4-13, Interior(1) 22-4-13 to 32-4-2, Exterior(2) 32-4-2 to 36-8-15 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 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=124, 8=124.



July 21,2021

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 738 Lexington Plantation
J0322-1506	A3	FINK	2	1	E15961604
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:17 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-CmdStL8E6LBk2i?IdnW2ufQ8shnXFpJ5a8J8Hxyvq4S

-0-10-8 6-6-0 13-0-0 18-0-0 23-0-0 29-6-0 36-0-0 36-10-8
0-10-8 6-6-0 6-6-0 5-0-0 5-0-0 6-6-0 6-6-0 0-10-8

Scale = 1:75.3

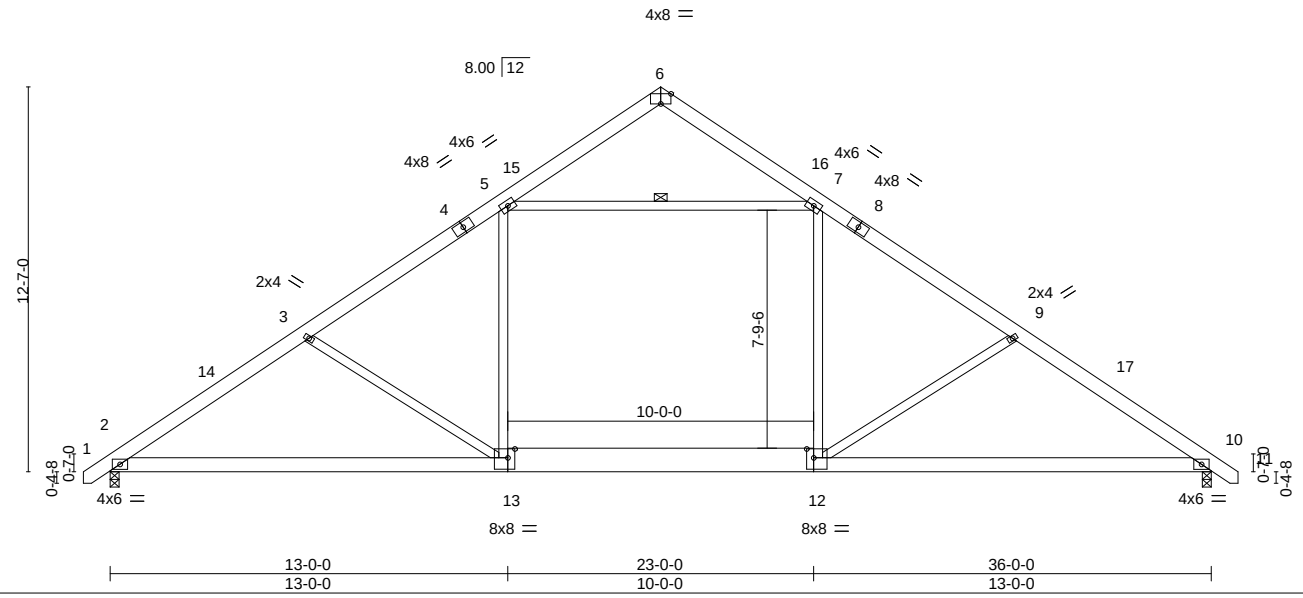


Plate Offsets (X,Y)-- [6:0-4-0,Edge], [12:0-2-12,0-3-8], [13:0-2-12,0-3-8]

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	0.27	Vert(LL)	-0.38	2-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.53	2-13	>815	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.33	2-13	>999	240	Weight: 268 lb	FT = 20%

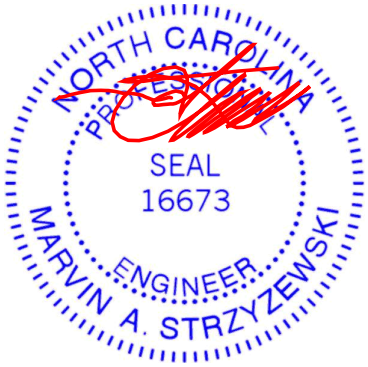
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
12-13: 2x10 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-7

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=300(LC 9)
Max Uplift 2=-124(LC 10), 10=-124(LC 11)
Max Grav 2=1603(LC 17), 10=1603(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2343/533, 3-5=-2076/478, 5-6=-342/147, 6-7=-342/147, 7-9=-2078/478, 9-10=-2341/533
BOT CHORD 2-13=-303/2096, 12-13=-95/1732, 10-12=-303/1870
WEBS 5-13=-13/655, 7-12=-13/654, 5-7=-1459/430, 3-13=-453/248, 9-12=-453/248

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=5.0psf; h=15ft; 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 13-7-3, Exterior(2) 13-7-3 to 22-4-13, Interior(1) 22-4-13 to 32-4-2, Exterior(2) 32-4-2 to 36-8-15 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=124, 10=124.



July 21,2021

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 738 Lexington Plantation
J0322-1506	A4	FINK	10	1	E15961605
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:19 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-88lCI1AUeyRSH?8hlBYWz4VUCVTrjjlO2SoEMqyvq4Q

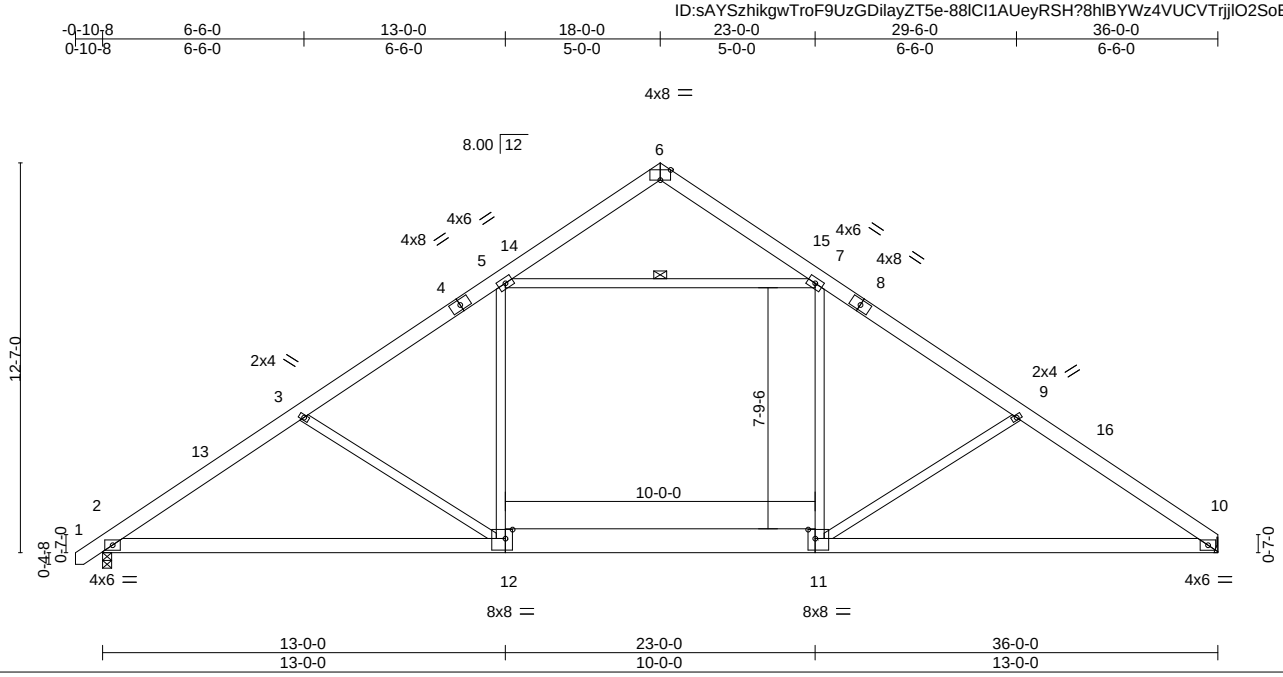


Plate Offsets (X,Y)-- [6:0-4-0,Edge], [11:0-2-12,0-3-8], [12:0-2-12,0-3-8]

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	0.28	Vert(LL)	-0.40	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.55	10-11	>775	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.34	10-11	>999	240	Weight: 266 lb	FT = 20%

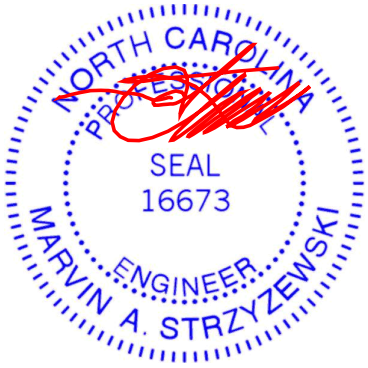
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
11-12: 2x10 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-7

REACTIONS. (size) 2=0-3-8, 10=Mechanical
Max Horz 2=296(LC 7)
Max Uplift 2=-124(LC 10), 10=-112(LC 11)
Max Grav 2=1607(LC 17), 10=1556(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2350/538, 3-5=-2086/483, 5-6=-343/149, 6-7=-340/148, 7-9=-2089/485, 9-10=-2365/550
BOT CHORD 2-12=-331/2097, 11-12=-124/1735, 10-11=-350/1901
WEBS 5-12=-14/656, 7-11=-21/667, 5-7=-1467/434, 3-12=-451/248, 9-11=-468/266

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=5.0psf; h=15ft; 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 13-7-3, Exterior(2) 13-7-3 to 22-4-13, Interior(1) 22-4-13 to 31-6-7, Exterior(2) 31-6-7 to 35-11-4 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) 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) except (jt=lb) 2=124, 10=112.



July 21,2021

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

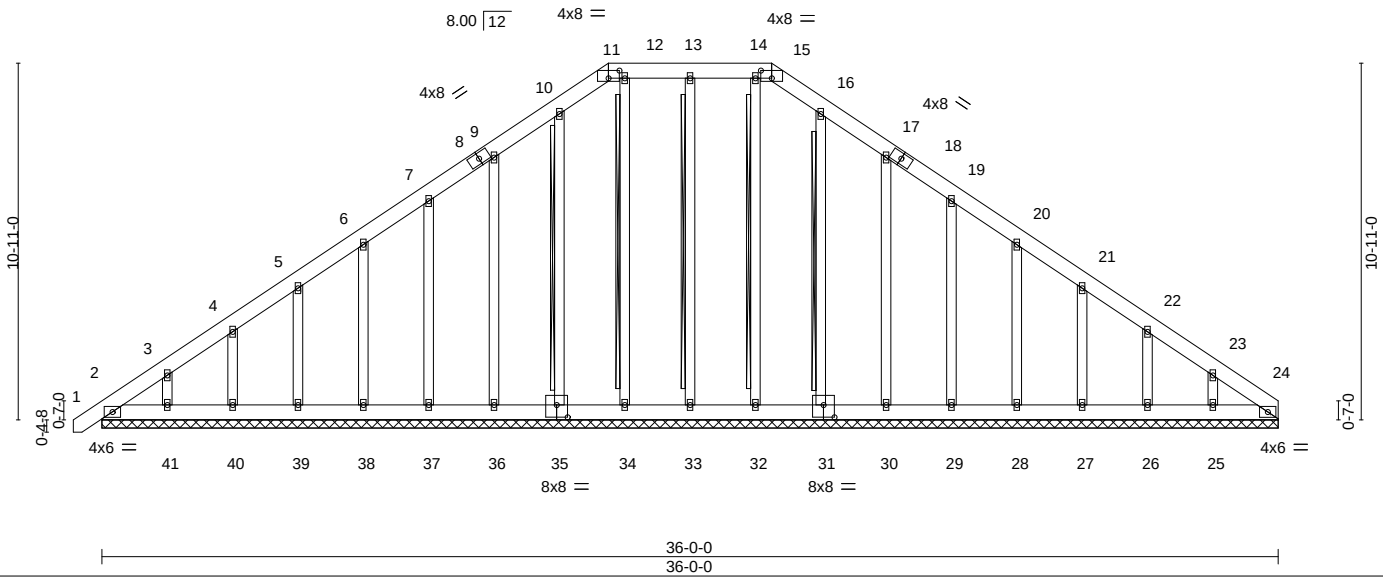
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 738 Lexington Plantation
J0322-1506	A5GE	HIP SUPPORTED GABLE	1	1	E15961606
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:21 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-5XsyjjCkAZhAXJI3sca_2VauHIIoBmfgVmHLQjyvq4O

-0-10-8 0-10-8 | 15-6-0 15-6-0 | 20-6-0 4-11-15 | 36-0-0 15-6-0

Scale = 1:70.5



36-0-0
36-0-0

Plate Offsets (X,Y)-- [11:0-4-0,0-2-13], [15:0-4-0,0-2-13], [31:0-4-0,0-4-8], [35:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 335 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 - 14-32, 13-33, 12-34, 10-35 , 16-31
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 36-0-0.
(lb) - Max Horz 2=322(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 32, 33, 34, 35, 37, 38, 39, 40, 31, 29, 28, 27, 26, 24 except 36=-103(LC 10), 41=-106(LC 10), 30=-105(LC 11), 25=-112(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 2, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-327/259, 9-10=-233/274, 10-11=-261/295, 11-12=-242/281, 12-13=-242/281, 13-14=-242/281, 14-15=-242/281, 15-16=-261/295, 16-17=-233/259

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-15 to 3-7-14, Exterior(2) 3-7-14 to 11-1-4, Corner(3) 11-1-4 to 24-10-12, Exterior(2) 24-10-12 to 31-7-3, Corner(3) 31-7-3 to 36-0-0 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) 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, 32, 33, 34, 35, 37, 38, 39, 40, 31, 29, 28, 27, 26, 24 except (jt=lb) 36=103, 41=106, 30=105, 25=112.
11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

NORTH CAROLINA PROFESSIONAL SEAL 16673 ENGINEER MARVIN A. STRZYZEWSKI

July 21,2021

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

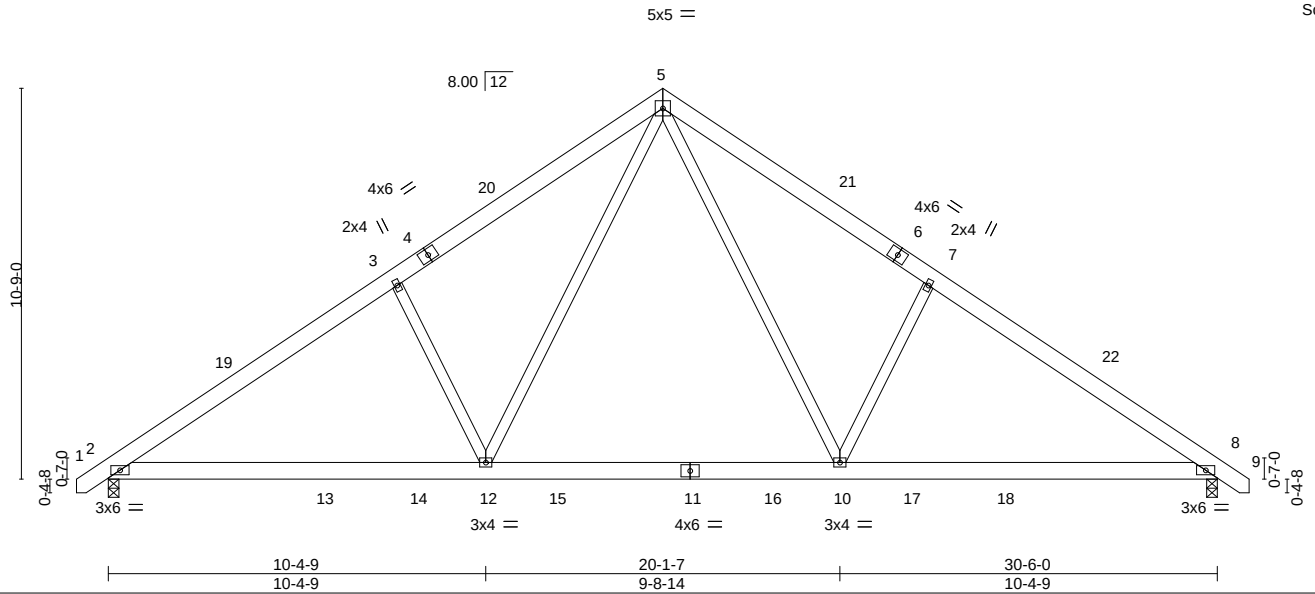
ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 738 Lexington Plantation	E15961607
J0322-1506	B1	FINK	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:22 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-ZjQLx3CNxtp18TtGQK6Dbi7?miY3w9lqkP0vz9yvq4N

-0-10-8	7-11-6	15-3-0	22-6-11	30-6-0	31-4-8
0-10-8	7-11-6	7-3-11	7-3-11	7-11-6	0-10-8

Scale: 3/16"=1'



10-4-9	20-1-7	30-6-0
10-4-9	9-8-14	10-4-9

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	0.26	Vert(LL)	-0.09	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.17	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	2-12	>999	240	Weight: 211 lb	FT = 20%

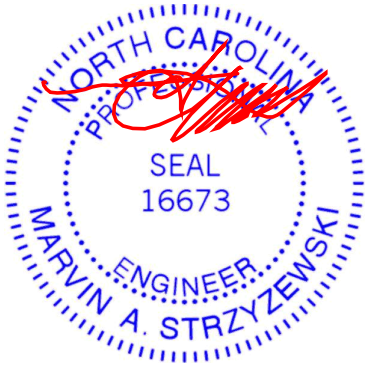
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-6-9 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=256(LC 9)
Max Uplift 2=-106(LC 10), 8=-106(LC 11)
Max Grav 2=1340(LC 17), 8=1340(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1842/433, 3-5=-1714/527, 5-7=-1714/527, 7-8=-1842/433
BOT CHORD 2-12=-203/1626, 10-12=0/1052, 8-10=-203/1453
WEBS 3-12=-513/306, 5-12=-197/877, 5-10=-197/877, 7-10=-513/306

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=5.0psf; h=15ft; 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 10-10-3, Exterior(2) 10-10-3 to 19-7-13, Interior(1) 19-7-13 to 26-10-2, Exterior(2) 26-10-2 to 31-2-15 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 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=106, 8=106.



July 21,2021

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 738 Lexington Plantation
J0322-1506	B1A	FINK	4	1	E15961608
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:23 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-1v_j8PD?iBxumdSS_1dS7wf9l6o1fcAzz3mSVbyvq4M

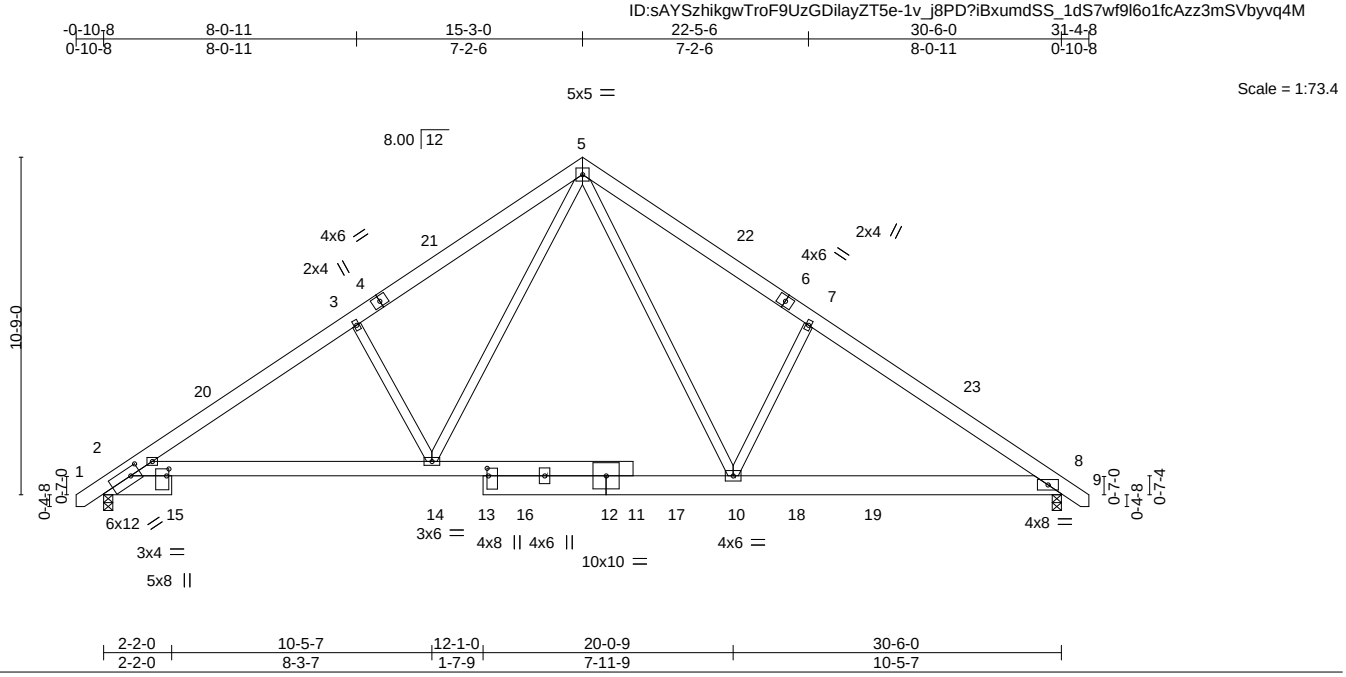


Plate Offsets (X,Y)-- [2:0-3-12,0-3-1], [13:0-2-14,0-0-8], [15:0-2-10,0-0-14]

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)	-0.11	2-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.26	2-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.09	2-14	>999	240	Weight: 239 lb	FT = 20%

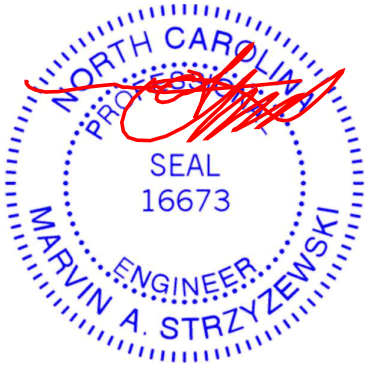
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1 *Except*
2-11: 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-13 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=-256(LC 8)
Max Uplift 2=-107(LC 10), 8=-107(LC 11)
Max Grav 2=1276(LC 17), 8=1315(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1953/462, 3-5=-1809/543, 5-7=-1669/528, 7-8=-1818/433
BOT CHORD 2-14=-232/1736, 10-14=0/1068, 8-10=-198/1416
WEBS 3-14=-536/299, 5-14=-213/1015, 5-10=-193/808, 7-10=-510/302

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=5.0psf; h=15ft; 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 10-10-3, Exterior(2) 10-10-3 to 19-7-13, Interior(1) 19-7-13 to 26-10-2, Exterior(2) 26-10-2 to 31-2-15 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 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=107, 8=107.



July 21,2021

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

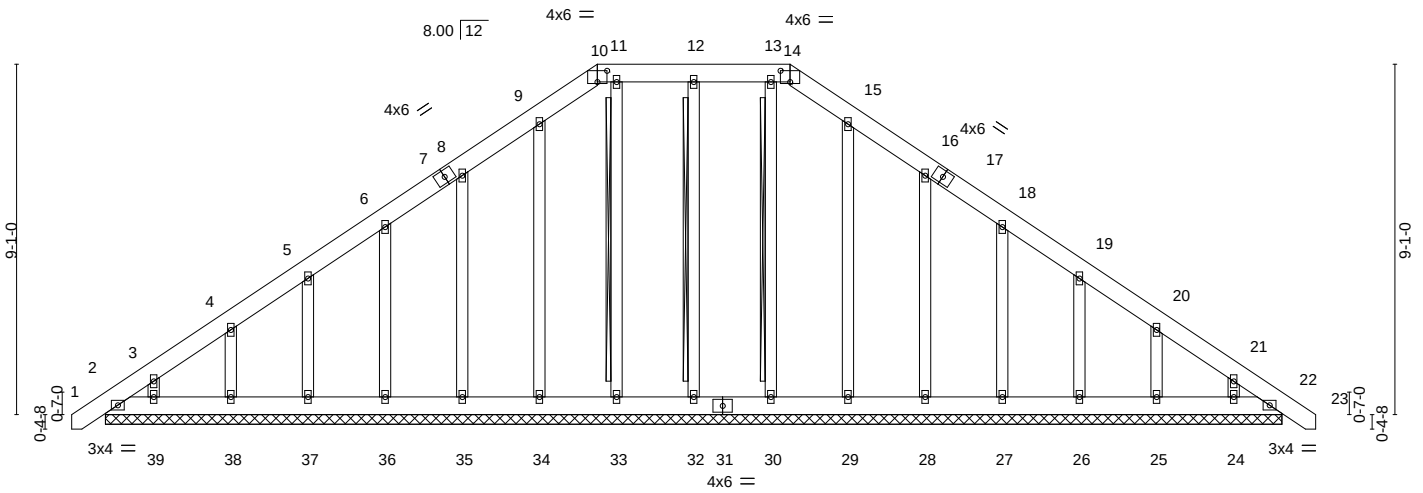
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 738 Lexington Plantation
J0322-1506	B1GE	HIP SUPPORTED GABLE	1	1	E15961609
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:25 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-zI6TZ4FFEoBb?wcq5SfwCLlaOvfp7bLGQNFZZUyvq4K

-0-10-8 0-10-8 | 12-9-0 12-9-0 | 17-9-0 4-11-15 | 30-6-0 12-9-0 | 31-4-8 0-10-8

Scale = 1:59.7



30-6-0
30-6-0

Plate Offsets (X,Y)-- [10:0-3-0,0-3-8], [14:0-3-0,0-3-8]

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	0.04	Vert(LL)	0.00	22	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	22	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	22	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 265 lb	FT = 20%

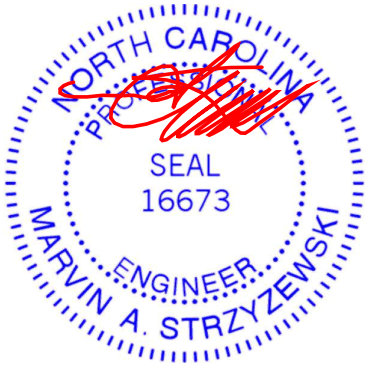
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

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 - 13-30, 12-32, 11-33
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 30-6-0.
(lb) - Max Horz 2=-271(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 30, 32, 33, 34, 36, 37, 38, 39, 29, 27, 26, 25, 24, 22 except 35=-101(LC 10), 28=-103(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 2, 30, 32, 33, 34, 35, 36, 37, 38, 39, 29, 28, 27, 26, 25, 24, 22

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-275/218, 9-10=-213/251, 14-15=-213/251

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-15 to 3-7-14, Exterior(2) 3-7-14 to 8-4-4, Corner(3) 8-4-4 to 22-1-12, Exterior(2) 22-1-12 to 26-10-2, Corner(3) 26-10-2 to 31-2-15 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, 30, 32, 33, 34, 36, 37, 38, 39, 29, 27, 26, 25, 24, 22 except (jt=lb) 35=101, 28=103.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 22.
12) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



July 21,2021

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 738 Lexington Plantation
J0322-1506	C1GE	HIP STRUCTURAL GABLE	1	1	E15961610
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:27 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-vhEE_mGVmPRJFElDDthOHmqqHjG7bT0ZthkfeMyvq4I

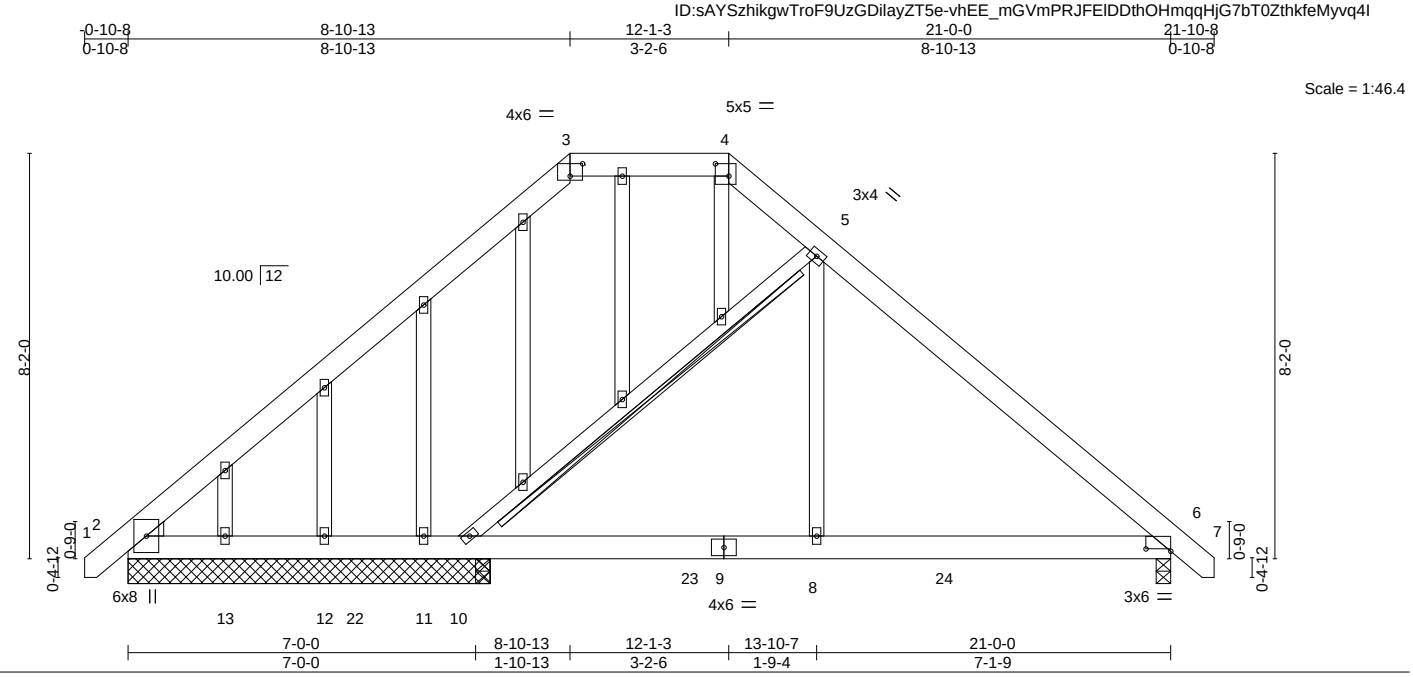


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [4:0-3-4,0-3-0], [6:0-6-0,0-0-9]

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	0.34	Vert(LL)	-0.02	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.04	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	6-8	>999	240	Weight: 173 lb	FT = 20%

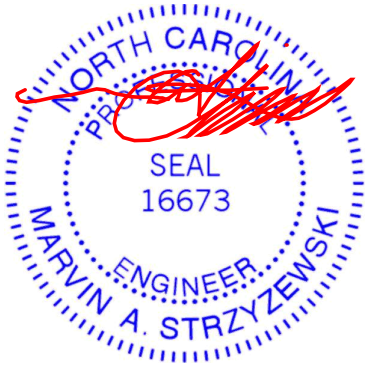
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2

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 - 5-10
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 7-3-8 except (jt=length) 6=0-3-8.
(lb) - Max Horz 2=-243(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12 except 11=-199(LC 3), 13=-397(LC 10), 6=-156(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 12 except 2=373(LC 21), 13=468(LC 17), 10=587(LC 3), 10=358(LC 1), 6=765(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-637/224, 3-4=-350/292, 4-5=-398/292, 5-6=-837/263
BOT CHORD 2-13=-225/401, 12-13=-225/401, 11-12=-225/401, 10-11=-225/401, 8-10=-47/556, 6-8=-48/553
WEBS 5-10=-506/209, 5-8=0/345

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12 except (jt=lb) 11=199, 13=397, 6=156.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



July 21,2021

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 738 Lexington Plantation
J0322-1506	C2GDR	HIP GIRDER	1	3	E15961611
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:29 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-s3L_PSImI1i1UYvcKIksNBvCYXwK3J7sL?DmiFyvq4G

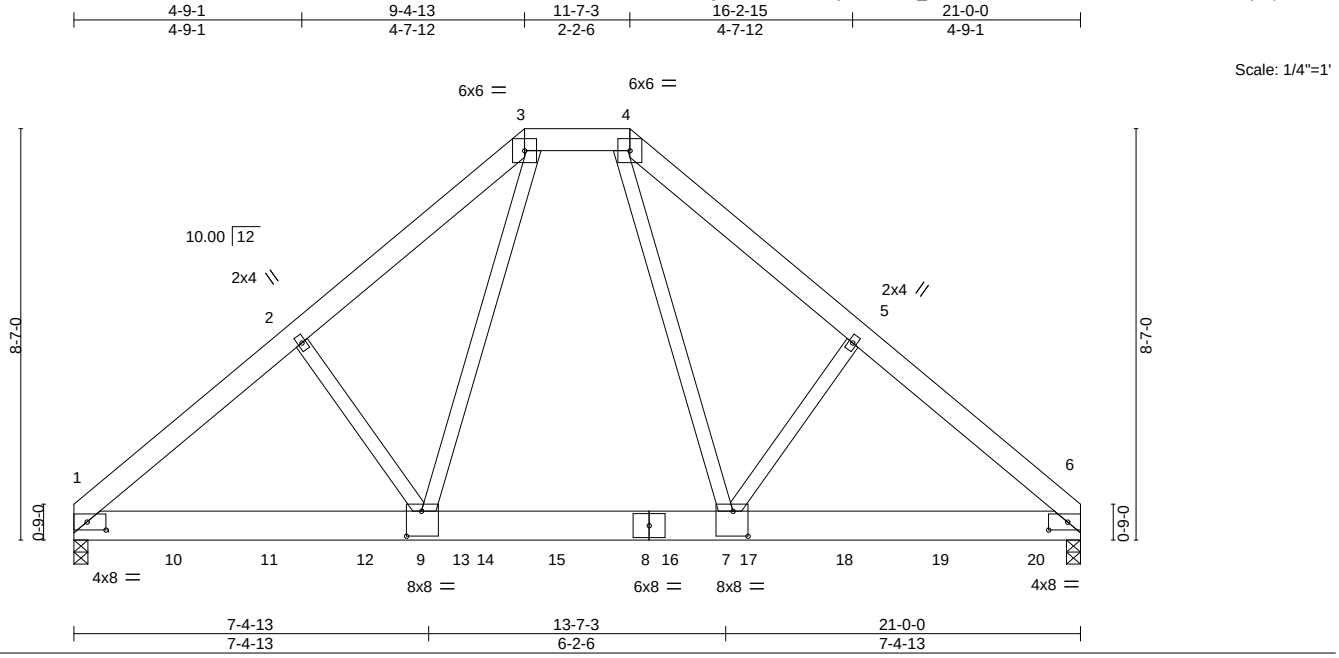


Plate Offsets (X,Y)-- [1:0-4-12,0-2-0], [6:0-4-12,0-2-0], [7:0-3-12,0-6-4], [9:0-3-12,0-6-4]

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	0.22	Vert(LL)	-0.07	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.14	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	6-7	>999	240	Weight: 495 lb	FT = 20%

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

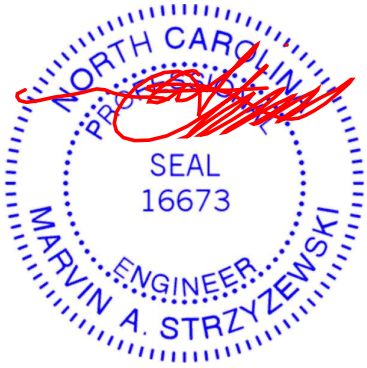
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 6=0-3-8
Max Horz 1=-192(LC 25)
Max Uplift 1=-629(LC 8), 6=-693(LC 9)
Max Grav 1=7646(LC 2), 6=8430(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8939/762, 2-3=-8777/807, 3-4=-5275/532, 4-5=-8798/808, 5-6=-8962/763
BOT CHORD 1-9=-589/6665, 7-9=-407/5275, 6-7=-520/6686
WEBS 2-9=-266/304, 3-9=-505/5589, 4-7=-508/5632, 5-7=-266/294

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 - 2 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 Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; 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) 1=629, 6=693.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1457 lb down and 132 lb up at 2-0-12, 1457 lb down and 132 lb up at 4-0-12, 1457 lb down and 132 lb up at 6-0-12, 1449 lb down and 132 lb up at 8-0-12, 1427 lb down and 132 lb up at 10-0-12, 1436 lb down and 132 lb up at 12-0-12, 1457 lb down and 132 lb up at 14-0-12, 1457 lb down and 132 lb up at 16-0-12, and 1457 lb down and 132 lb up at 18-0-12, and 1459 lb down and 130 lb up at 20-0-12 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



July 21,2021

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.
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

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-60, 4-6=-60, 1-6=-20

Concentrated Loads (lb)

Vert: 8=-1411(B) 10=-1411(B) 11=-1411(B) 12=-1411(B) 13=-1411(B) 15=-1411(B) 17=-1411(B) 18=-1411(B) 19=-1411(B) 20=-1413(B)

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 738 Lexington Plantation
J0322-1506	D1	COMMON	1	1	E15961612
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:29 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-s3L_PSImI1i1UYvcKIksNBvCkX_A3P2sL?DmiFyvq4G

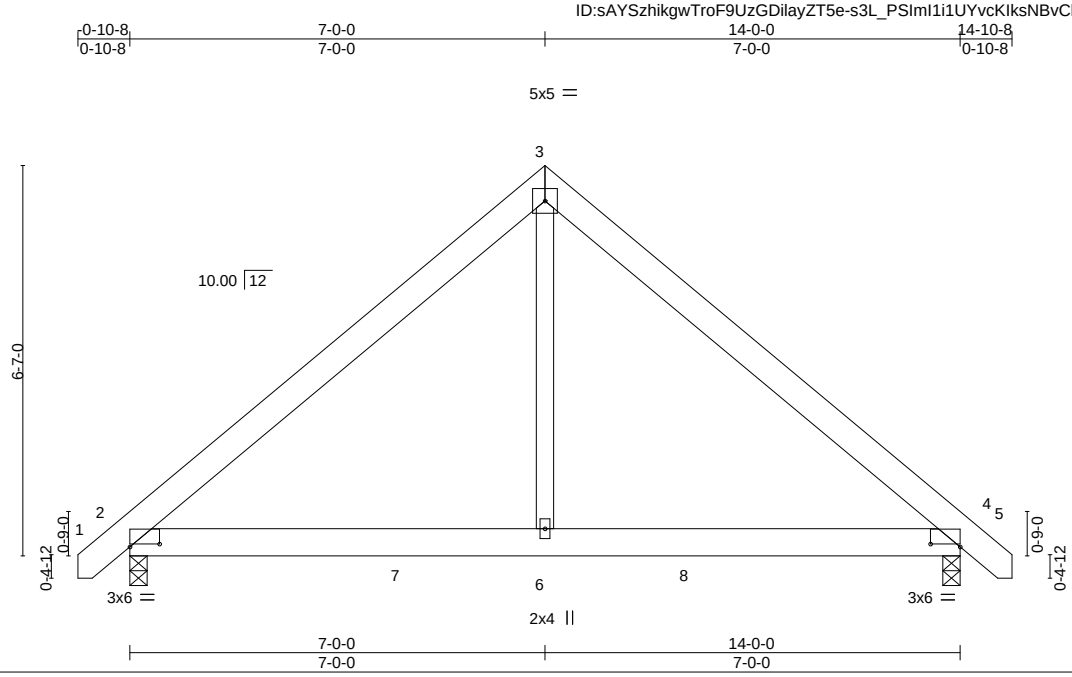


Plate Offsets (X,Y)-- [2:0-6-0,0-0-9], [4:0-6-0,0-0-9]

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	0.21	Vert(LL)	-0.01	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.01	2-6	>999	240	Weight: 90 lb	FT = 20%

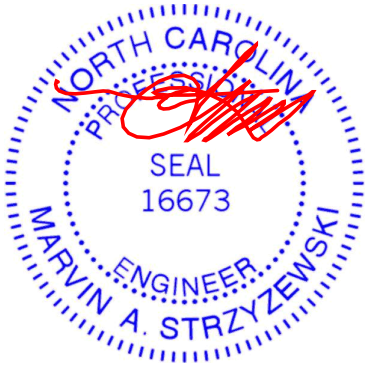
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-155(LC 8)
Max Uplift 2=-49(LC 10), 4=-49(LC 11)
Max Grav 2=624(LC 17), 4=624(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-676/185, 3-4=-676/185
BOT CHORD 2-6=0/455, 4-6=0/455
WEBS 3-6=0/354

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=5.0psf; 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, 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, 4.



July 21,2021

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 738 Lexington Plantation
J0322-1506	D1GE	HIP SUPPORTED GABLE	1	1	E15961613
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:30 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-KGvMcoJO2Kqu6iUou?F5vOSQPwM0osx?afyKFhyvq4F

-0-10-8 5-4-13 8-7-3 14-0-0 14-10-8
0-10-8 5-4-13 3-2-6 5-4-13 0-10-8

Scale = 1:30.9

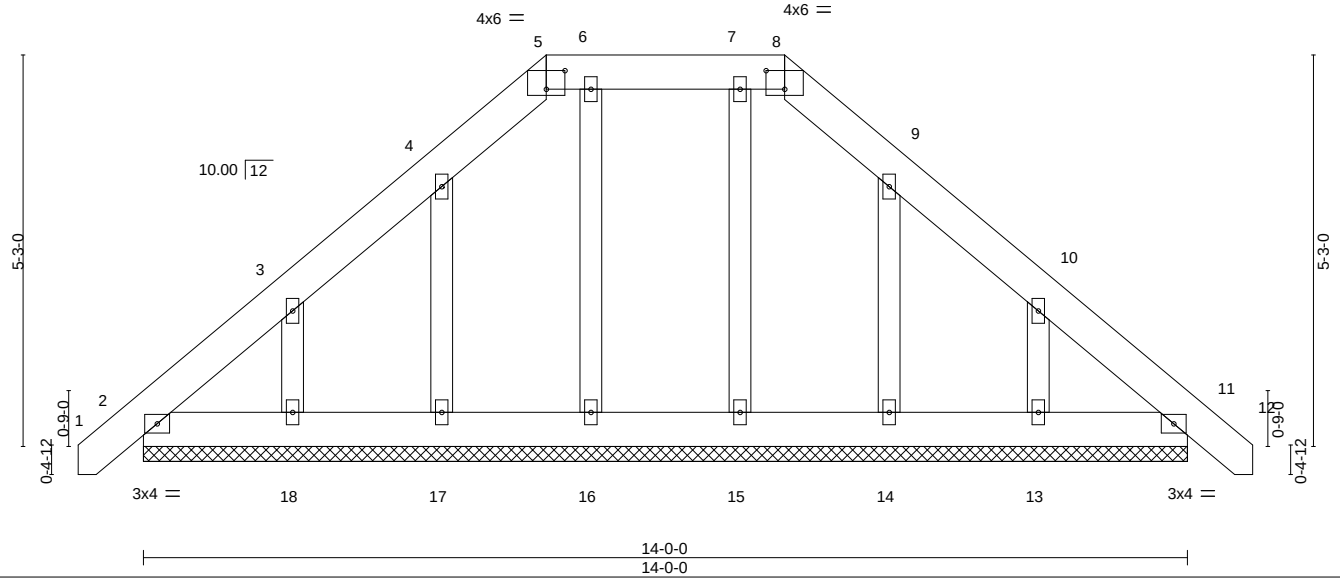


Plate Offsets (X,Y)-- [5:0-3-0,0-3-0], [8:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	0.00	11	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 106 lb	FT = 20%

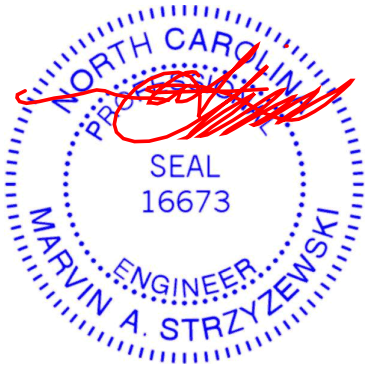
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

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.

REACTIONS. All bearings 14-0-0.
(lb) - Max Horz 2=-156(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 11, 15, 16, 17, 14 except 18=-145(LC 10), 13=-144(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 2, 11, 15, 16, 17, 18, 14, 13

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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, 11, 15, 16, 17, 14 except (jt=lb) 18=145, 13=144.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



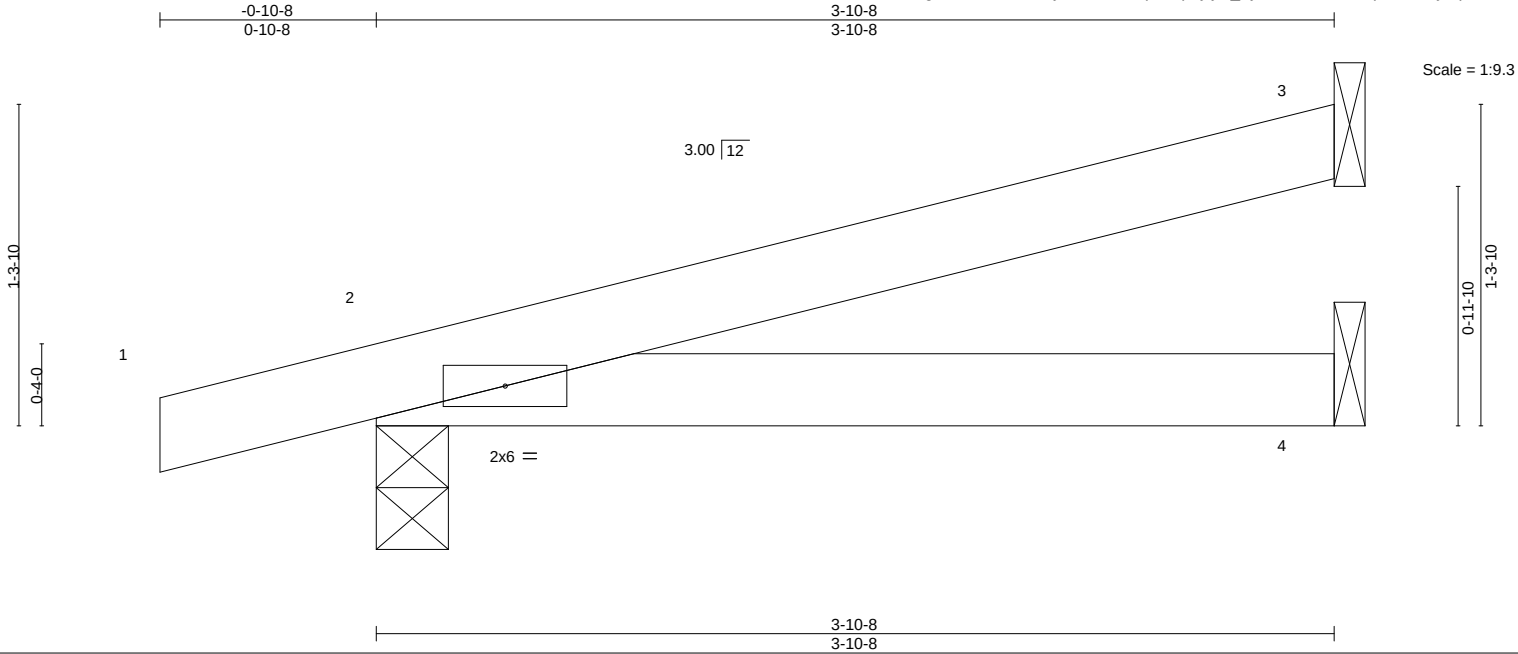
July 21,2021

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 738 Lexington Plantation
J0322-1506	J04	JACK-OPEN	3	1	E15961614
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:31 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-oSTkp8J0peyljr3_SjmKSc?Z5KhfXJp9oJitn7yvq4E



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	0.16	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	2-4	>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: 13 lb	FT = 20%

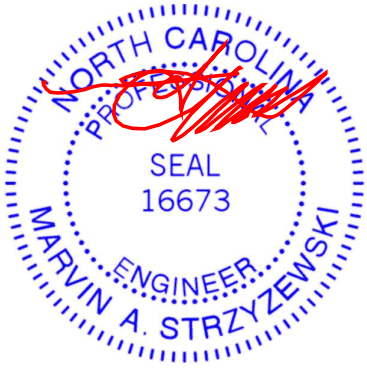
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-8 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=41(LC 6)
Max Uplift 3=-40(LC 10), 2=-57(LC 6)
Max Grav 3=101(LC 1), 2=216(LC 1), 4=73(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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch right 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) 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, 2.



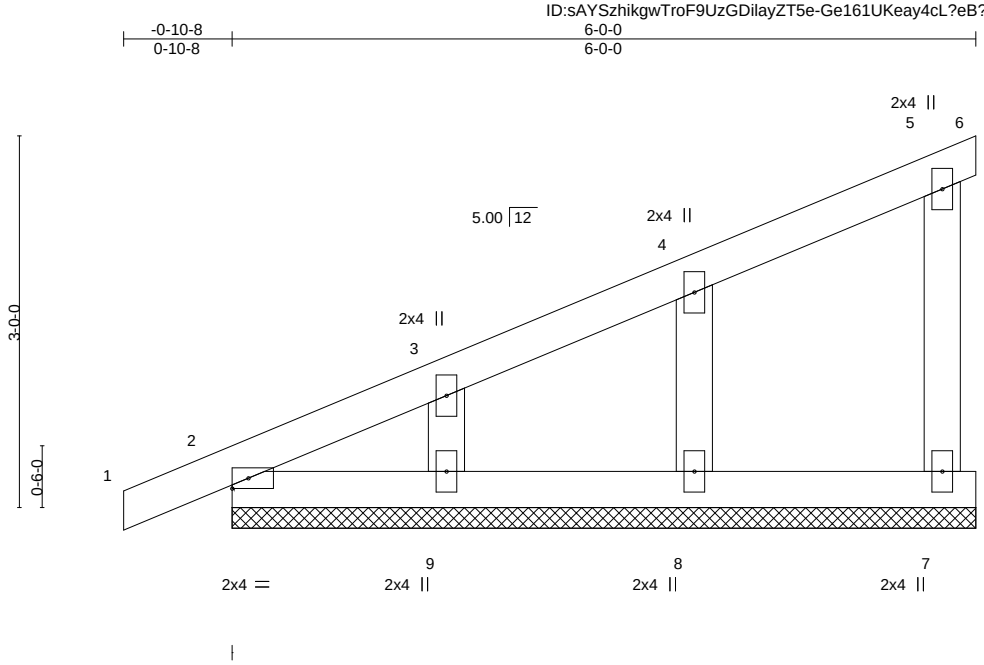
July 21,2021

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 738 Lexington Plantation
J0322-1506	J06GE	MONOPITCH SUPPORTED	1	1	E15961615
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:32 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-Ge161UKeay4cL?eB?QHZ_pXmRk2KGmUI1zRQJayvq4D



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	0.05	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 27 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-

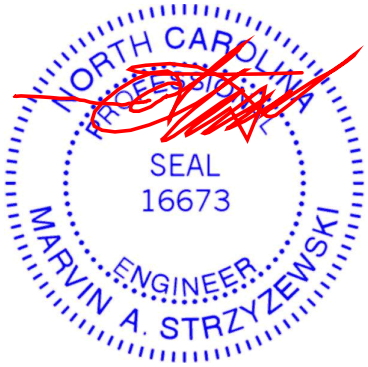
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 6-0-0.
(lb) - Max Horz 2=133(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 2, 8, 9
Max Grav All reactions 250 lb or less at joint(s) 6, 7, 2, 8, 9

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-8-12, Exterior(2) 3-8-12 to 6-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 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) 6, 7, 2, 8, 9.



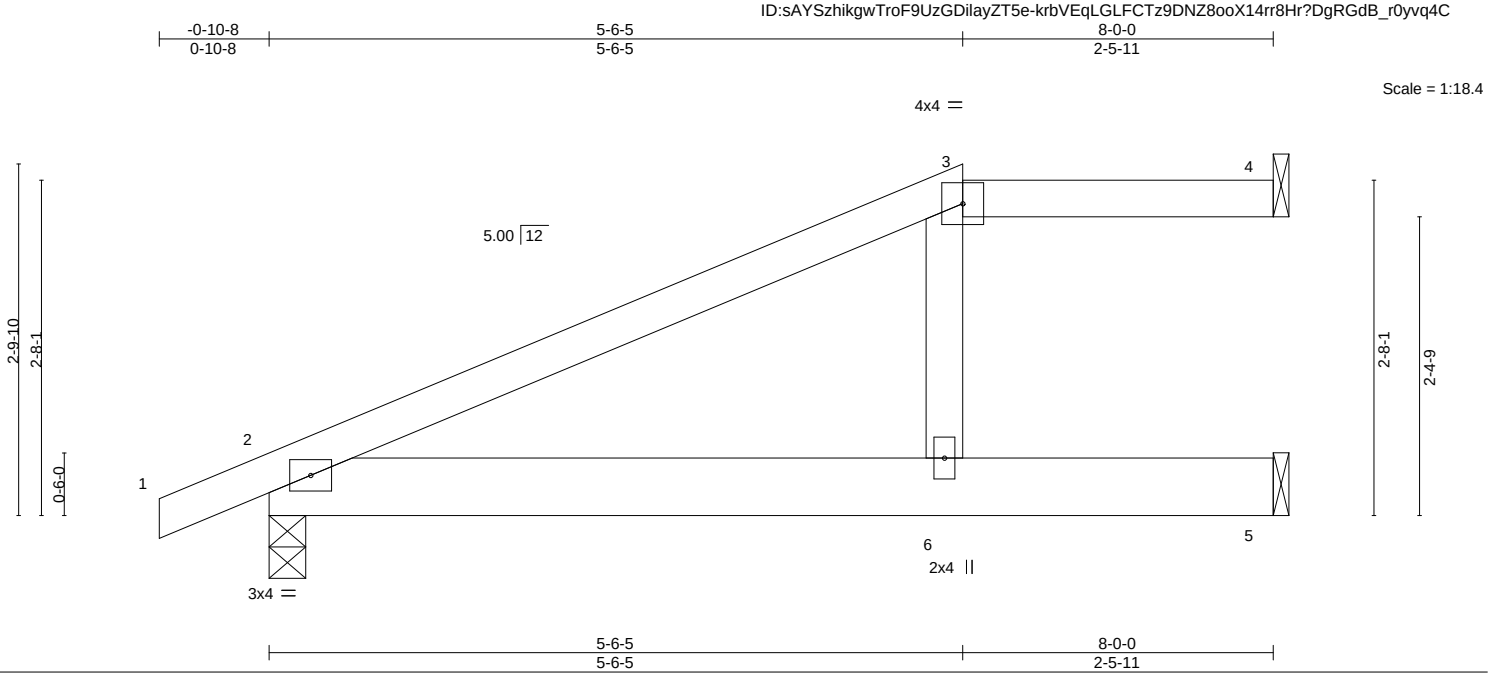
July 21,2021

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 738 Lexington Plantation
J0322-1506	J08	JACK-OPEN	1	1	E15961616
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:33 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-krbVEqLGLFCTz9DNZ8ooX14rr8Hr?DgRGdB_r0yvq4C



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)	-0.07	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.15	2-6	>617	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.08	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.19	2-6	>480	240	Weight: 36 lb	FT = 20%

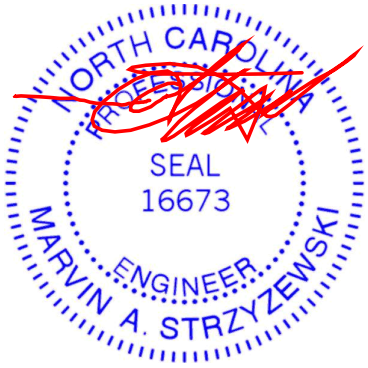
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=82(LC 10)
Max Uplift 4=-25(LC 6), 2=-119(LC 6), 5=-95(LC 7)
Max Grav 4=72(LC 1), 2=377(LC 1), 5=235(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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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, 5 except (jt=lb) 2=119.



July 21,2021

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

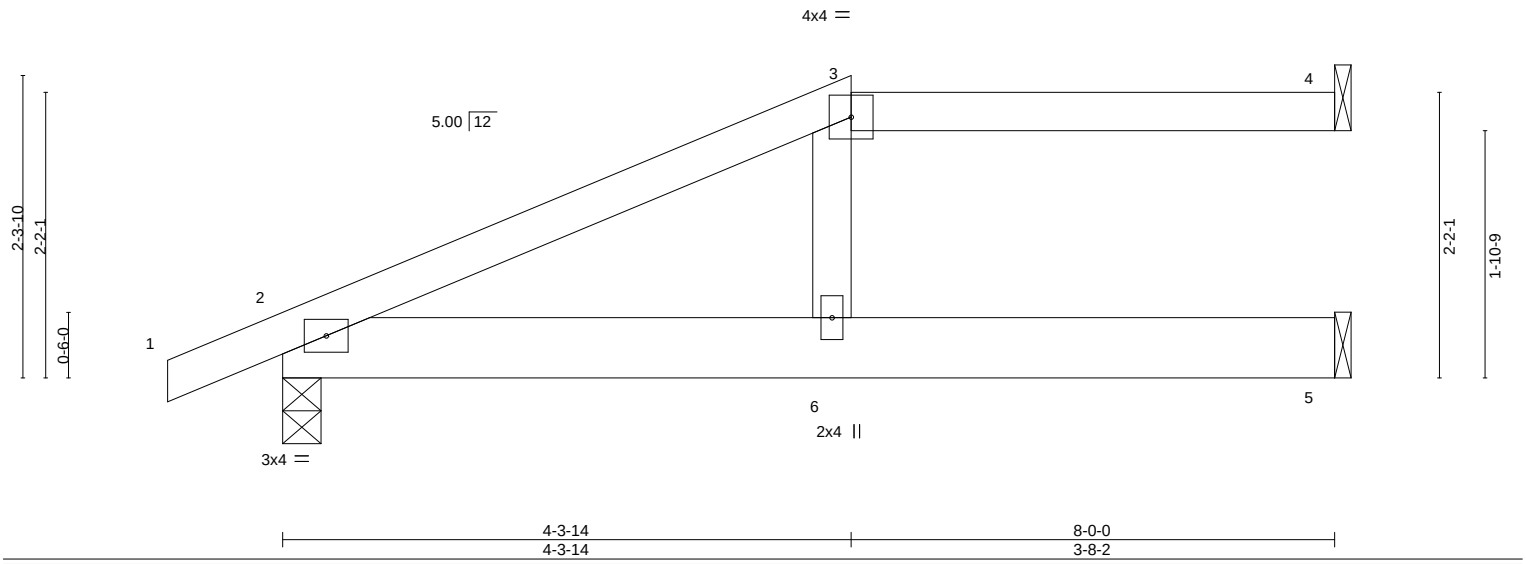
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 738 Lexington Plantation
J0322-1506	J08A	JACK-OPEN	1	1	E15961617
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:34 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-C19tS9Mu6ZKKaJoZ7rJ14Ed3LYdakgwbUHwXOSyvq4B

-0-10-8 4-3-14 8-0-0
0-10-8 4-3-14 3-8-2

Scale = 1:17.5



4-3-14 8-0-0
4-3-14 3-8-2

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)	-0.08	6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.17	6	>551	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.10	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.21	6	>450	240	Weight: 35 lb	FT = 20%

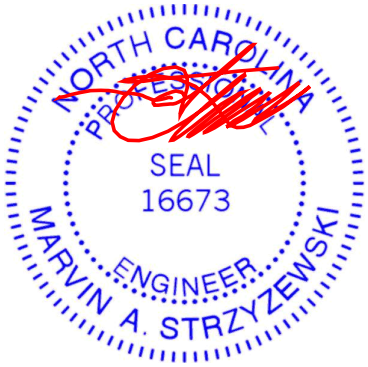
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=66(LC 10)
Max Uplift 4=-37(LC 6), 2=-126(LC 6), 5=-86(LC 7)
Max Grav 4=108(LC 1), 2=377(LC 1), 5=199(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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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, 5 except (jt=lb) 2=126.



July 21,2021

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

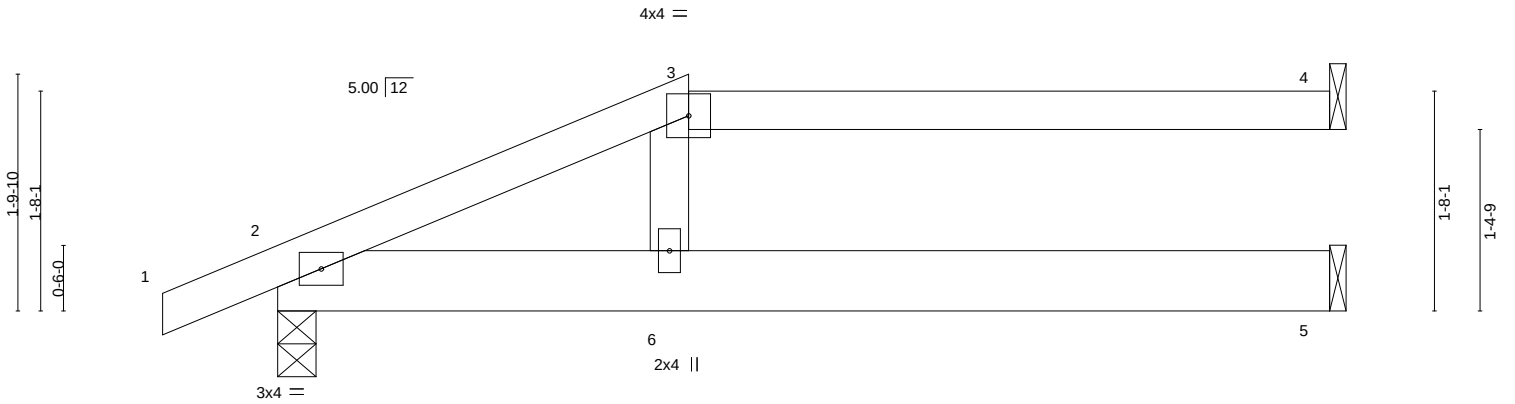
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 738 Lexington Plantation	
J0322-1506	J08B	JACK-OPEN	1	1	Job Reference (optional)	E15961618

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:34 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-C19tS9Mu6ZKKaJoZ7rJ14Ed1fYdukgxbUHwXOSyvq4B

-0-10-8 / 0-10-8 | 3-1-8 / 3-1-8 | 8-0-0 / 4-10-8

Scale = 1:17.5



3-1-8 / 3-1-8 | 8-0-0 / 4-10-8

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	0.33	Vert(LL)	-0.07	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.16	5-6	>590	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.09	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.20	5-6	>477	240	Weight: 34 lb	FT = 20%

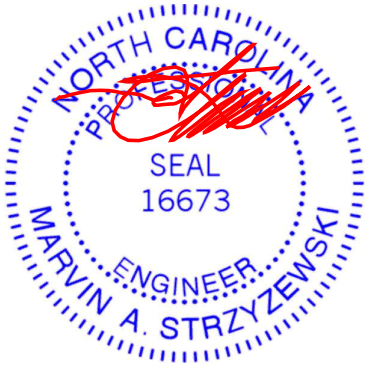
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=50(LC 10)
Max Uplift 4=-50(LC 6), 2=-134(LC 6), 5=-76(LC 7)
Max Grav 4=144(LC 1), 2=377(LC 1), 5=184(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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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, 5 except (jt=lb) 2=134.



July 21,2021

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

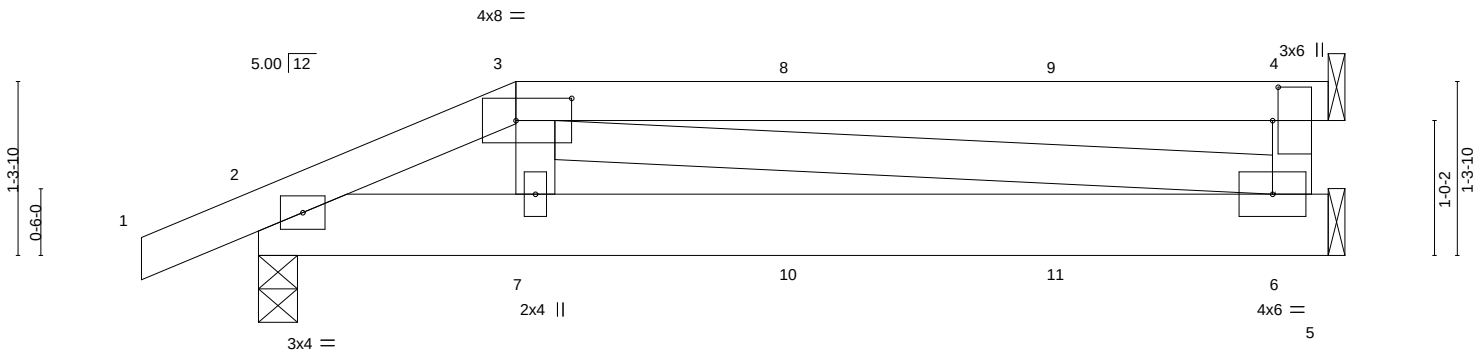
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 738 Lexington Plantation
J0322-1506	J08C	Half Hip Girder	1	1	E15961619 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:37 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-dcq?4BOnPUiuRmW8oztkhtFSPliQxy51BF9B?nyvq48

-0-10-8 1-11-2 8-0-0
0-10-8 1-11-2 6-0-14

Scale = 1:17.2



1-11-2 8-0-0
1-11-2 6-0-14

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

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	0.74	Vert(LL)	-0.02	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.01	6-7	>999	240	Weight: 42 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 6=Mechanical, 2=0-3-8
Max Horz 2=37(LC 27)
Max Uplift 4=-81(LC 4), 2=-74(LC 4)
Max Grav 4=219(LC 1), 6=237(LC 3), 2=454(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-672/43
BOT CHORD 2-7=-45/567, 6-7=-32/583
WEBS 3-7=0/271, 3-6=-590/32

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 59 lb down and 53 lb up at 1-11-2, and 42 lb down and 53 lb up at 4-0-12, and 42 lb down and 53 lb up at 6-0-12 on top chord, and 33 lb down at 2-0-12, and 33 lb down at 4-0-12, and 33 lb down at 6-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 3=-41(B) 7=-17(B) 8=-41(B) 9=-41(B) 10=-17(B) 11=-17(B)

NORTH CAROLINA PROFESSIONAL SEAL 16673 MARVIN A. STRZYZEWSKI ENGINEER

July 21,2021

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 738 Lexington Plantation
J0322-1506	M1	MONOPITCH	4	1	E15961620
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:38 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-5oOOHXPPAoql3w5KMhOzE4nlm90egQTBPvulXDyvq47

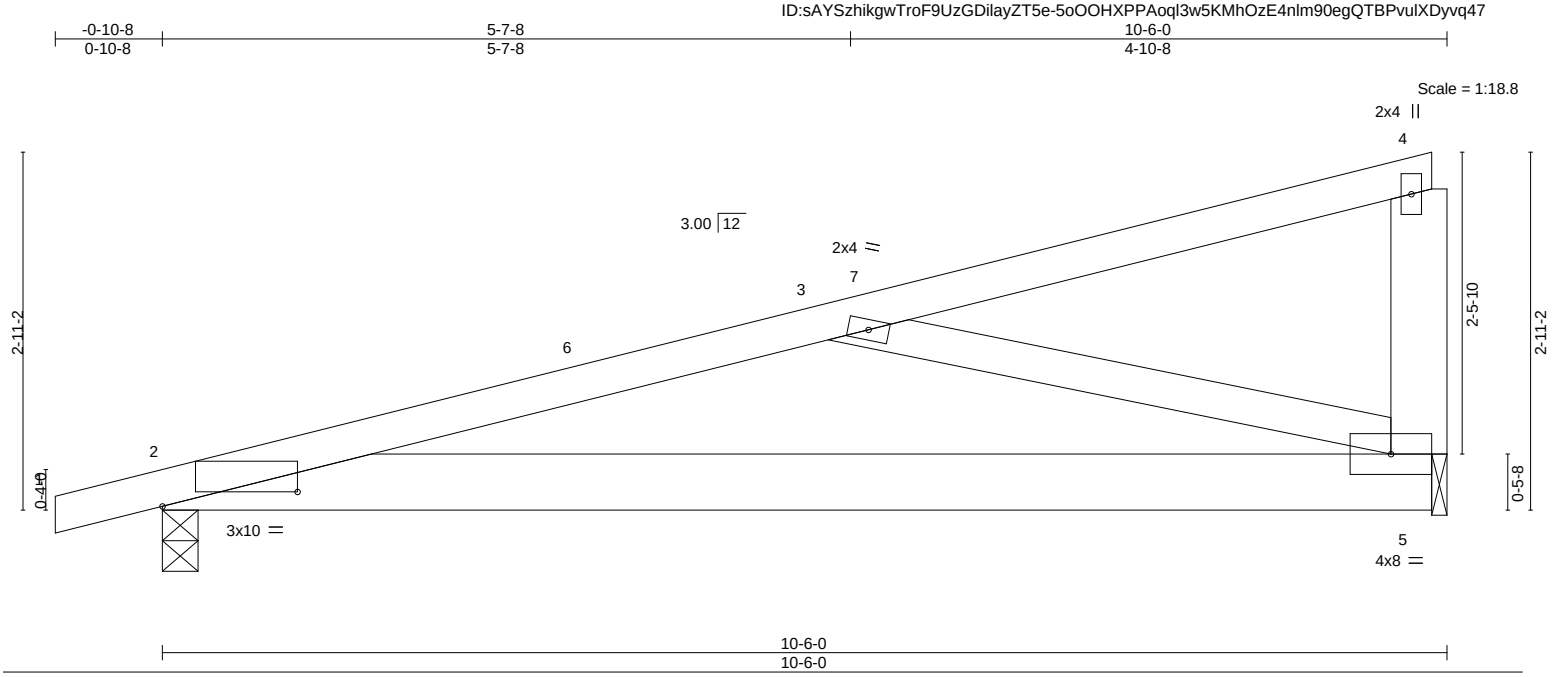


Plate Offsets (X,Y)-- [2:1-1-4,0-1-7]

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	0.26	Vert(LL)	-0.09	2-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.19	2-5	>654	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.20	2-5	>594	240	Weight: 54 lb	FT = 20%

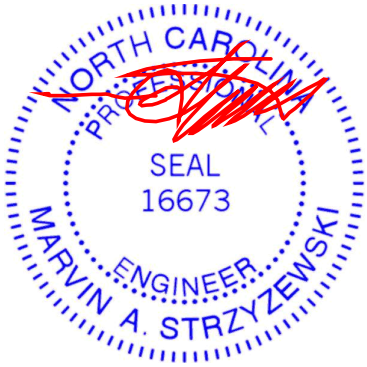
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
3-5: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-1-10 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=0-1-8
Max Horz 2=95(LC 6)
Max Uplift 2=-195(LC 6), 5=-175(LC 6)
Max Grav 2=469(LC 1), 5=402(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-780/565
BOT CHORD 2-5=-650/725
WEBS 3-5=-682/541

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; 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 5-10-7, Exterior(2) 5-10-7 to 10-3-4 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) 5 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) 5.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=195, 5=175.



July 21,2021

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 738 Lexington Plantation
J0322-1506	M1GDR	MONOPITCH GIRDER	1	1	E15961621
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:39 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-Z_ymVtQ1x5ych4gXwOvCnIKqeZKhPnoKeZeI3gyvq46

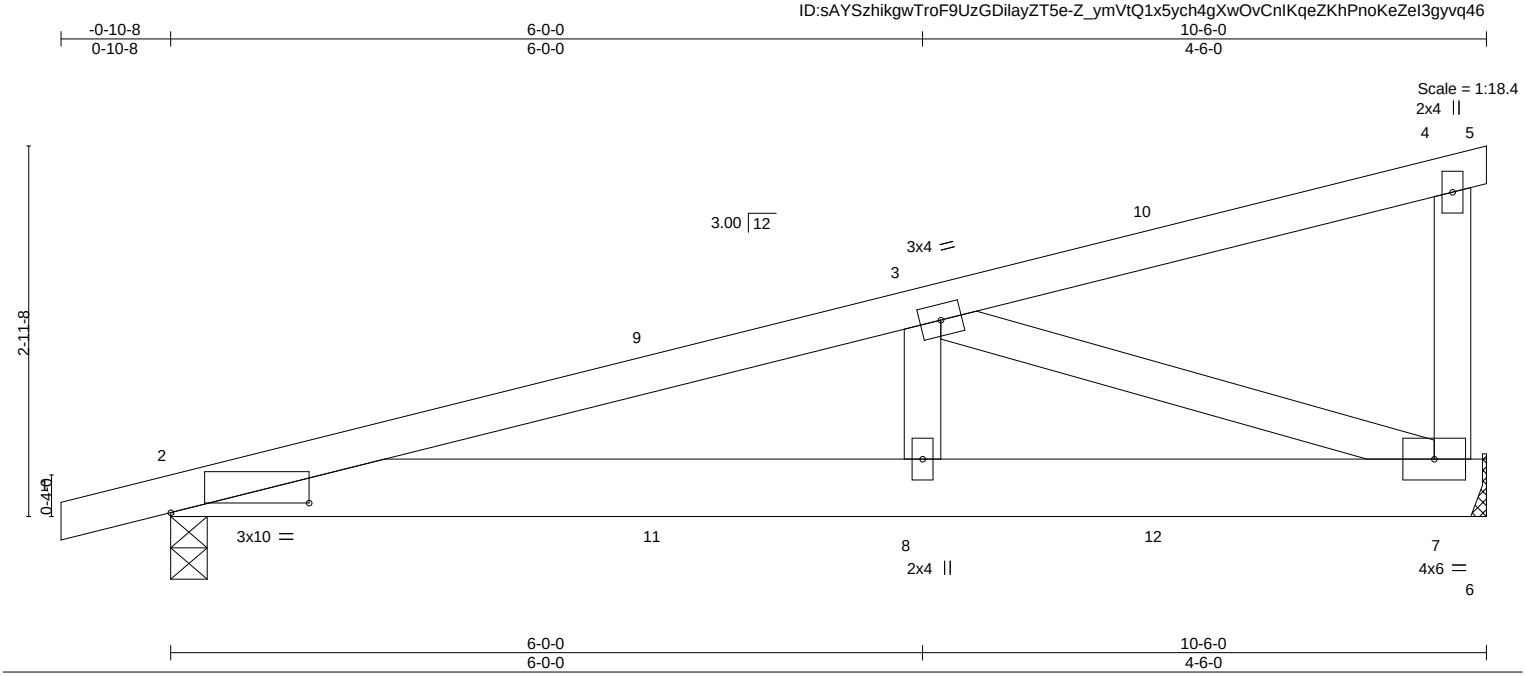


Plate Offsets (X,Y)-- [2:1-1-4,0-0-15]

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	0.63	Vert(LL)	-0.05	2-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.10	2-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	2-8	>999	240	Weight: 53 lb	FT = 20%

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

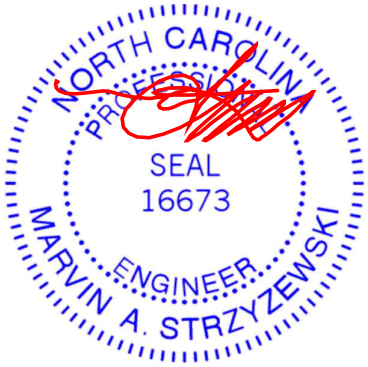
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=96(LC 19)
Max Uplift 7=-398(LC 4), 2=-255(LC 4)
Max Grav 7=1088(LC 1), 2=811(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1916/542
BOT CHORD 2-8=-578/1807, 7-8=-578/1807
WEBS 3-8=-127/619, 3-7=-1869/594

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; 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) 7=398, 2=255.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 159 lb down and 94 lb up at 3-11-4, 84 lb down and 62 lb up at 5-11-4, and 48 lb down and 50 lb up at 7-11-4, and 31 lb down and 33 lb up at 9-11-4 on top chord, and 197 lb down at 3-11-4, 144 lb down and 96 lb up at 5-11-4, and 179 lb down and 106 lb up at 7-11-4, and 220 lb down and 111 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-20, 2-6=-20
Concentrated Loads (lb)
Vert: 4=-31(F) 7=-220(F) 3=-84(F) 8=-143(F) 9=-159(F) 10=-48(F) 11=-155(F) 12=-179(F)



July 21,2021

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 738 Lexington Plantation
J0322-1506	M2	MONOPITCH	4	1	E15961622
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:40 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-1BW8iDQfiP4TIEFjT6QRJVt4_ymG8O1TtDNsb6yvq45

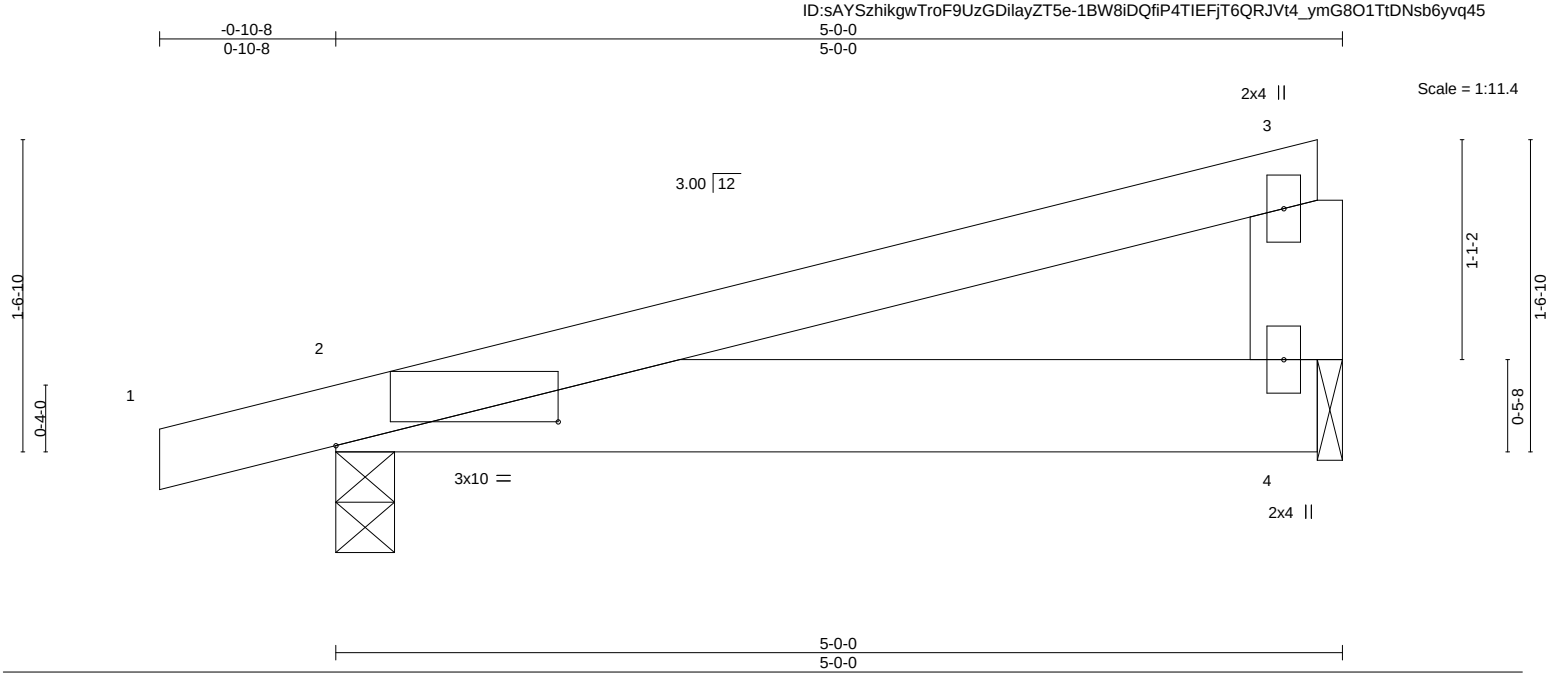


Plate Offsets (X,Y)-- [2:1-1-4,0-1-7]

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	0.27	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	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)	0.01	2-4	>999	240	Weight: 22 lb	FT = 20%

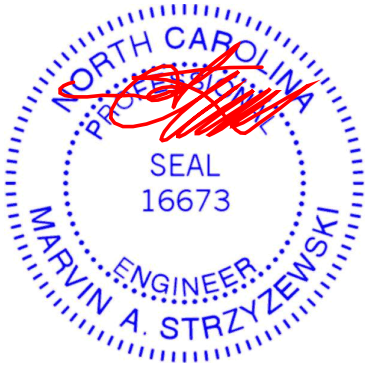
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1

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

REACTIONS. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=50(LC 6)
Max Uplift 2=-113(LC 6), 4=-76(LC 6)
Max Grav 2=253(LC 1), 4=178(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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 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) 4 except (jt=lb) 2=113.



July 21,2021

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 738 Lexington Plantation
J0322-1506	M3	MONOPITCH	4	1	E15961623
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:40 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-1BW8iDQfiP4TIEFjT6QRJVt6uynp8O1TtDNsb6yvq45

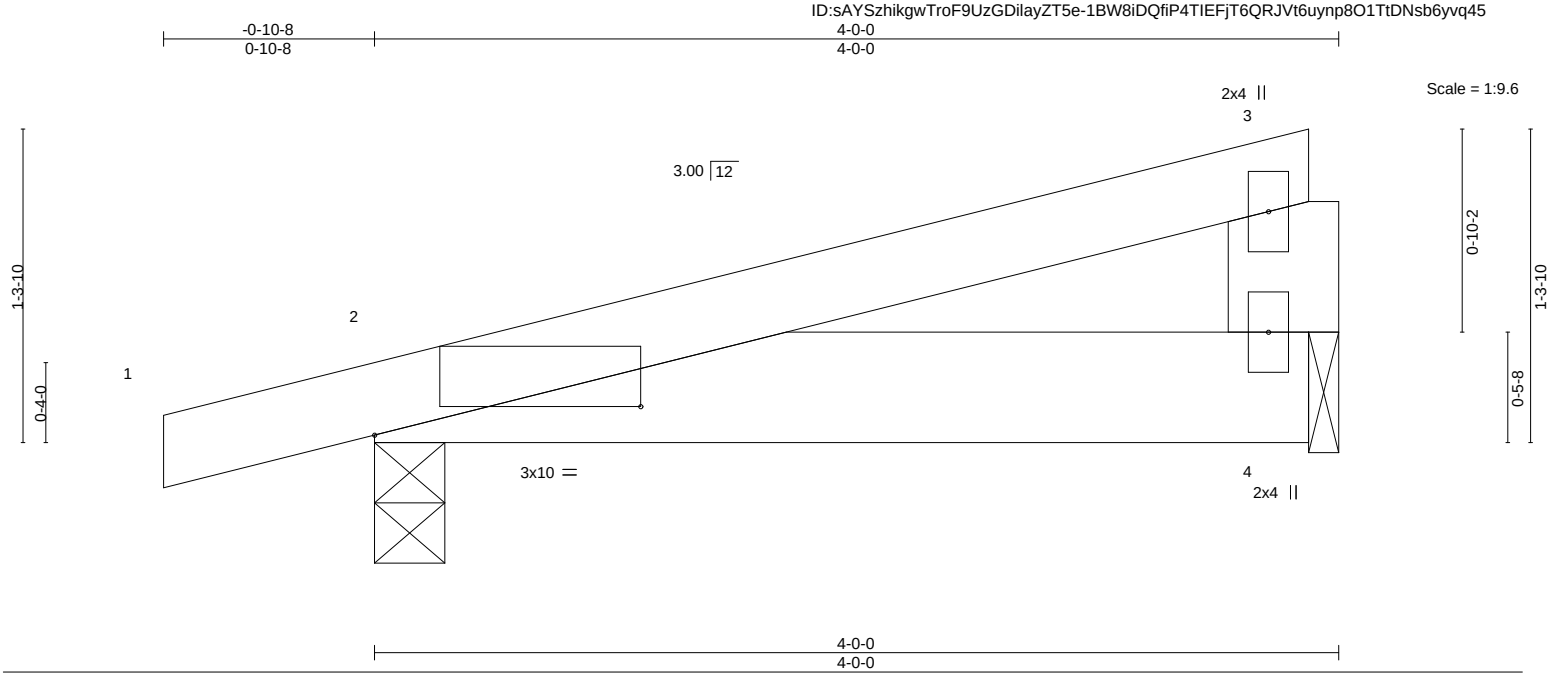


Plate Offsets (X,Y)-- [2:1-1-4,0-1-7]

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	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	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)	0.01	2-4	>999	240	Weight: 18 lb	FT = 20%

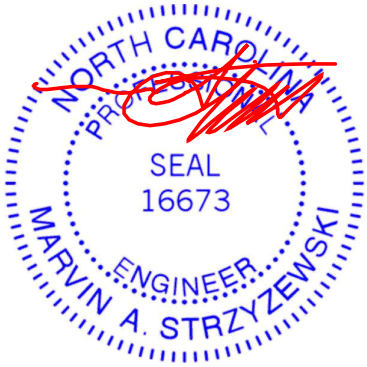
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1

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

REACTIONS. (size) 4=0-1-8, 2=0-3-8
Max Horz 2=42(LC 6)
Max Uplift 4=-58(LC 6), 2=-99(LC 6)
Max Grav 4=136(LC 1), 2=215(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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 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) 4, 2.



July 21,2021

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

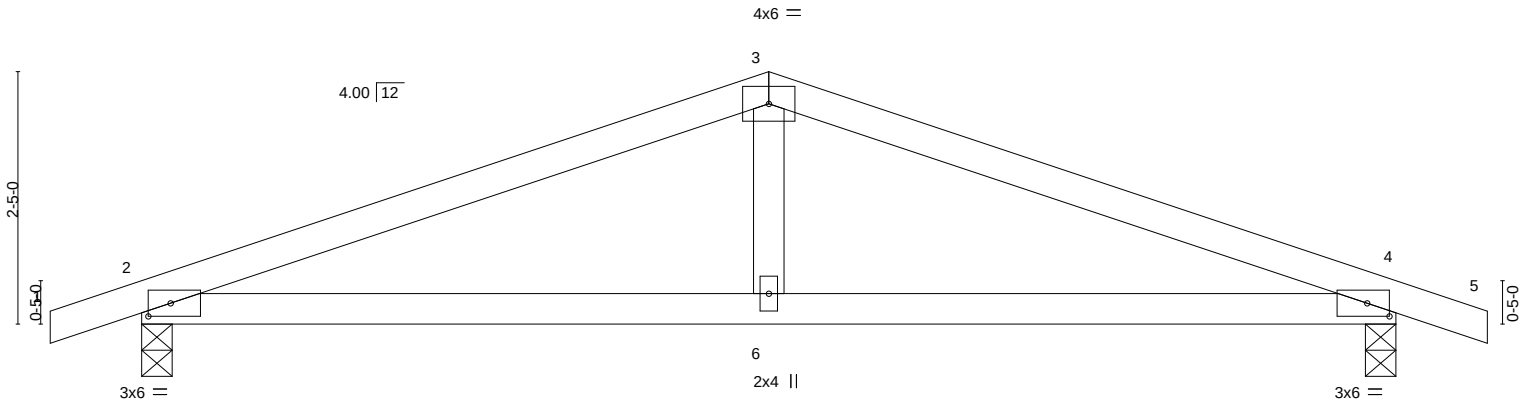
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 738 Lexington Plantation
J0322-1506	P1	COMMON	5	1	E15961624
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:41 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-VN4WwZRHTjCKwOqv1pxgsjPECM37trId5t7P8Yyvq44

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

Scale = 1:22.0



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

Plate Offsets (X,Y)-- [2:0-2-9,0-1-8], [4:0-2-9,0-1-8]

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	0.37	Vert(LL)	0.08	2-6	>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%

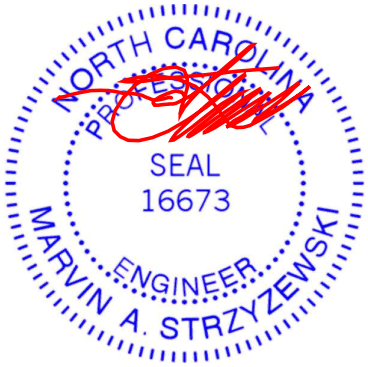
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-27(LC 11)
Max Uplift 2=-217(LC 6), 4=-217(LC 7)
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=-836/979, 3-4=-836/979
BOT CHORD 2-6=-837/732, 4-6=-837/732
WEBS 3-6=-372/281

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 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=217, 4=217.



July 21,2021

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

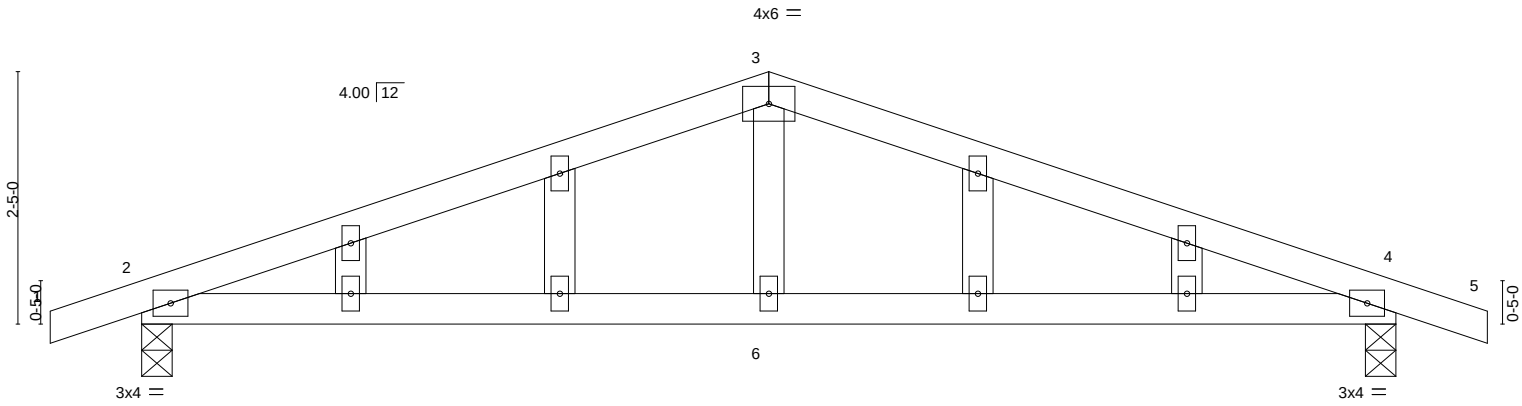
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates\Lot 738 Lexington Plantation
J0322-1506	P1GE	GABLE	1	1	E15961625
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:42 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-zZeu7uSwE0KBYYP6bXSvOwyOymOMcIYmKXsyg?yvq43

-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

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)	-0.03	2-6	>999	360	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		Wind(LL)	0.03	2-6	>999	240	Weight: 48 lb	FT = 20%

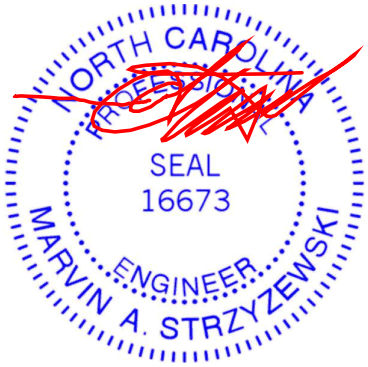
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-46(LC 11)
Max Uplift 2=-174(LC 6), 4=-174(LC 7)
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=-836/341, 3-4=-836/341
BOT CHORD 2-6=-234/732, 4-6=-234/732
WEBS 3-6=0/281

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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=174, 4=174.



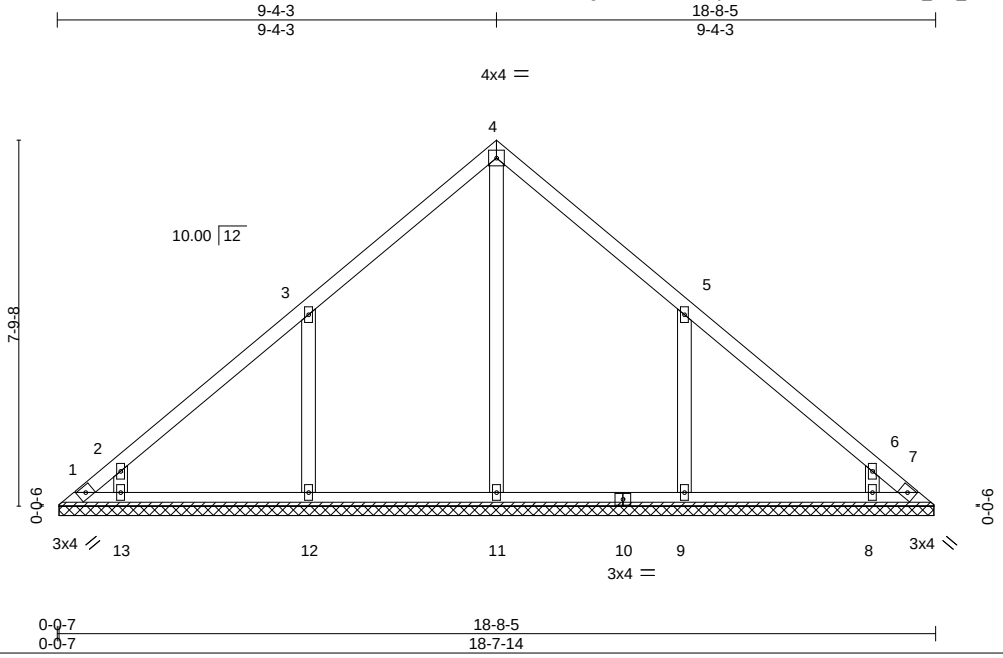
July 21,2021

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 738 Lexington Plantation
J0322-1506	VC1	Valley	1	1	E15961626
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:43 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-SmBHLETY?KS2Ah_I9E_8x8UcBAm8LjWwZBcWCRyvq42



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	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 86 lb	FT = 20%

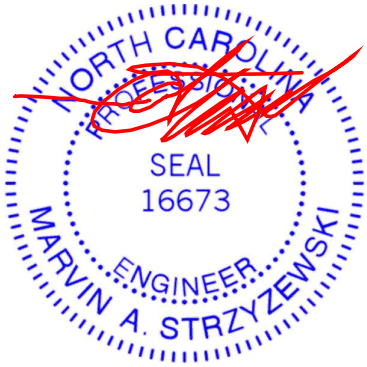
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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 18-7-7.
(lb) - Max Horz 1=-179(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-125(LC 8), 12=-149(LC 10), 13=-111(LC 10), 9=-149(LC 11), 8=-111(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=366(LC 20), 12=444(LC 17), 13=286(LC 17), 9=444(LC 18), 8=286(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-356/272, 2-13=-288/224, 5-9=-356/272, 6-8=-288/224

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=5.0psf; 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) 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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=125, 12=149, 13=111, 9=149, 8=111.



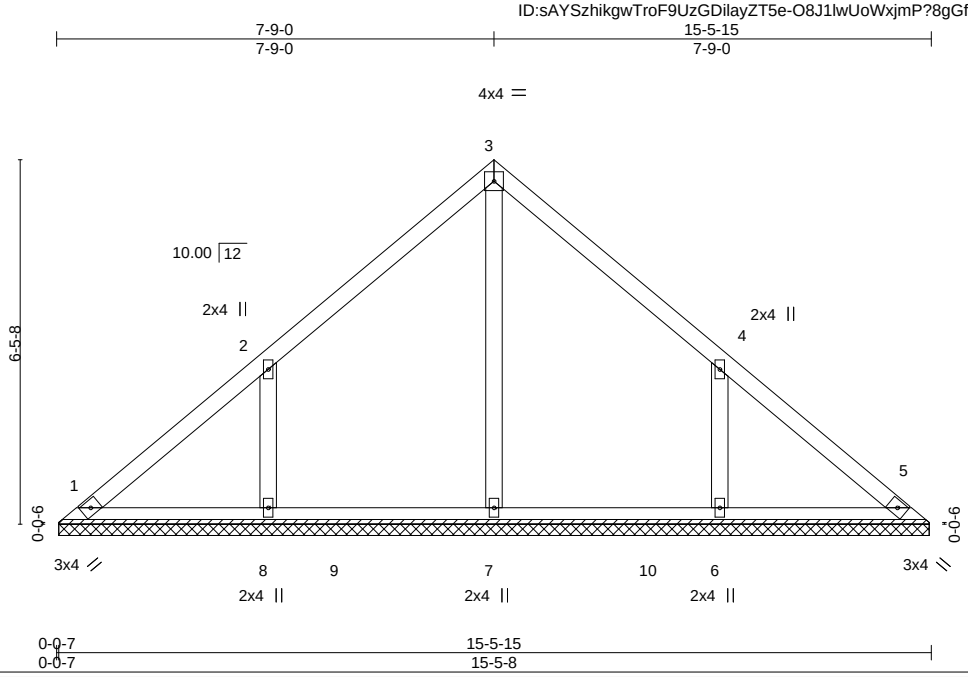
July 21,2021

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 738 Lexington Plantation
J0322-1506	VC2	Valley	1	1	E15961627
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:45 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-O8J1lwUoWxjmP?8gGf0c0ZaynzTqpelD0U5cHKyvq40



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	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 68 lb	FT = 20%

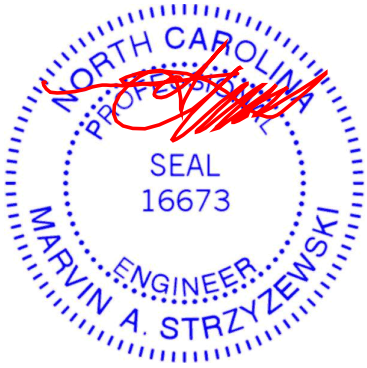
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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 15-5-1.
(lb) - Max Horz 1=-147(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-149(LC 10), 6=-149(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=347(LC 17), 8=407(LC 17), 6=407(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-351/269, 4-6=-351/269

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=5.0psf; 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) 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=149, 6=149.



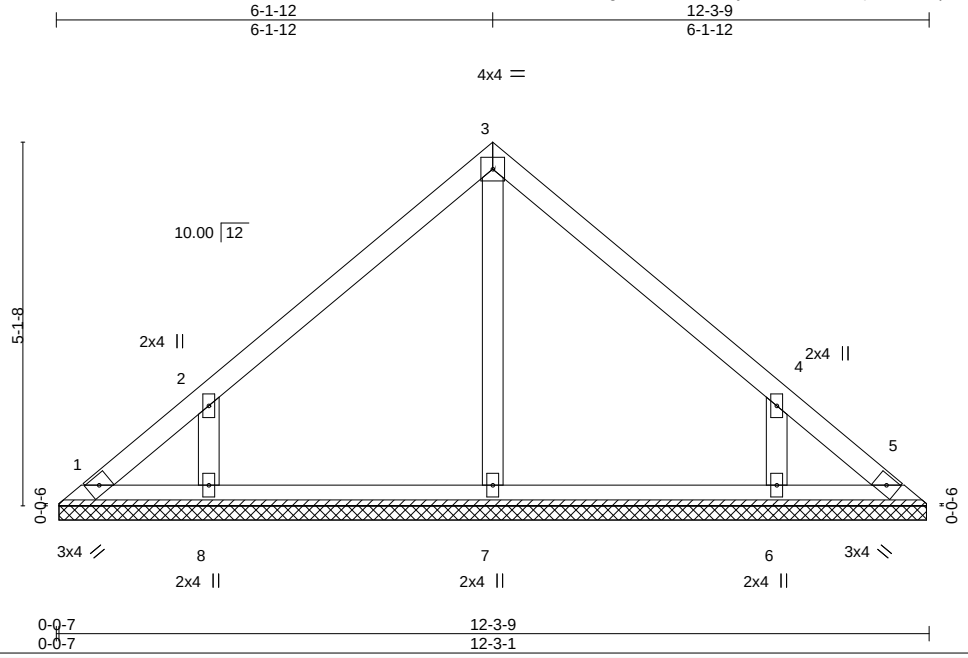
July 21,2021

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 738 Lexington Plantation
J0322-1506	VC3	Valley	1	1	E15961628
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:46 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-sLtPzGVQHFrd19itqMXrZm67jNpaY6ZMF8qApmyvq4?



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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%

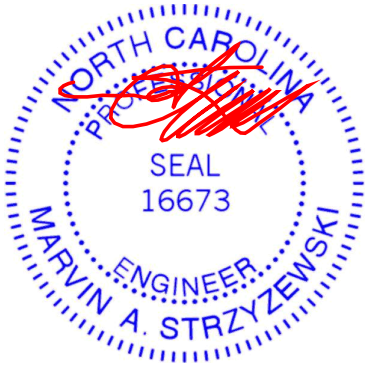
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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 12-2-10.
(lb) - Max Horz 1=-115(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-130(LC 10), 6=-130(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=325(LC 17), 6=325(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-312/248, 4-6=-312/248

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=5.0psf; 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) 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, 5 except (jt=lb) 8=130, 6=130.



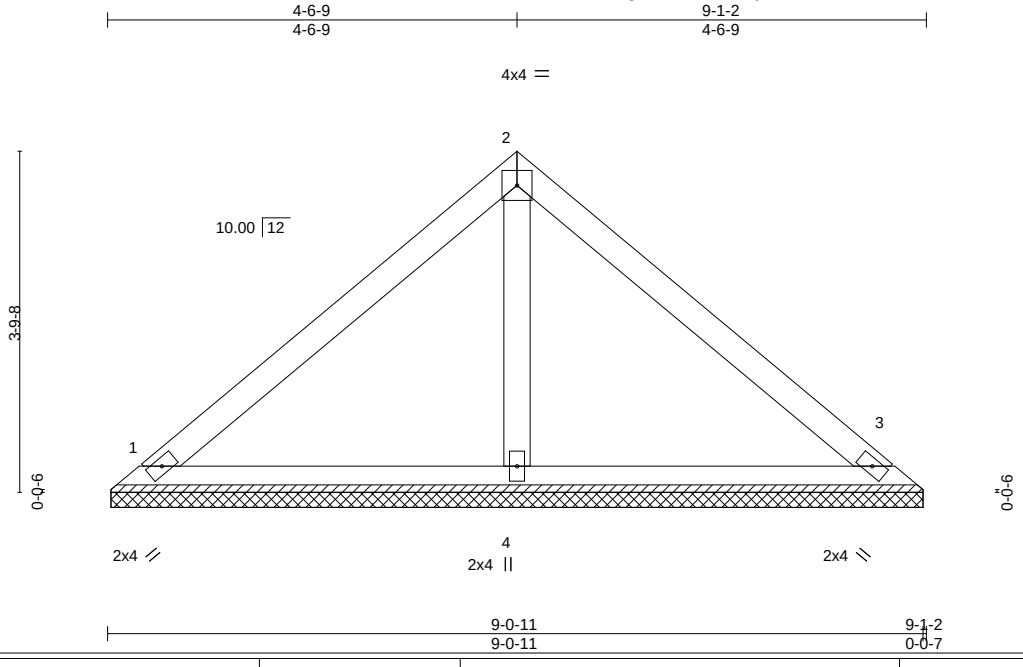
July 21,2021

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 738 Lexington Plantation
J0322-1506	VC4	Valley	1	1	E15961629
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:47 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-KXRnAcW22ZzUeJH3O4245_flkn9EHZ8VUoajLCyvq4_



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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 34 lb	FT = 20%

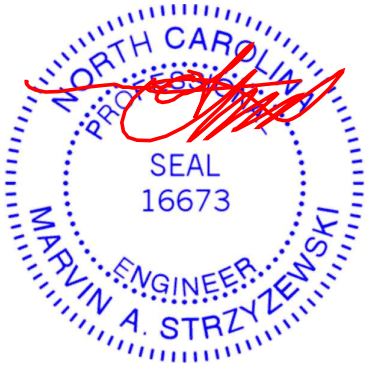
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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=9-0-4, 3=9-0-4, 4=9-0-4
Max Horz 1=83(LC 7)
Max Uplift 1=-23(LC 11), 3=-30(LC 11)
Max Grav 1=177(LC 1), 3=177(LC 1), 4=309(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=5.0psf; 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) 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.



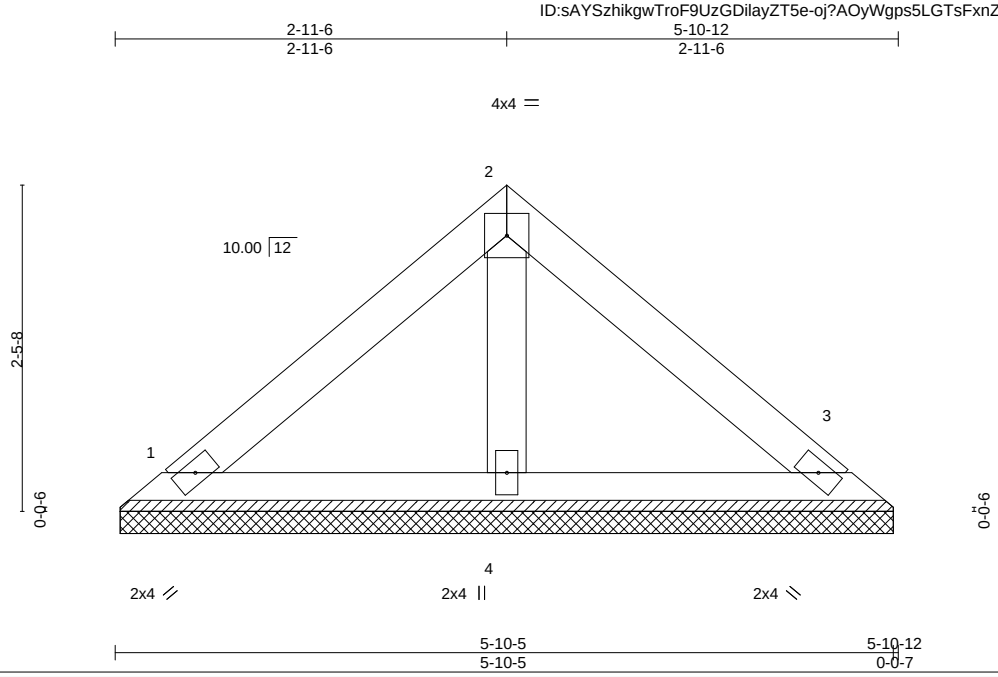
July 21,2021

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 738 Lexington Plantation
J0322-1506	VC5	Valley	1	1	E15961630
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:48 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-oj?AOyWgps5LGTsFxnZJeBCUqBVi0?ofiSJHseyvq3z



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	0.05	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: 21 lb	FT = 20%

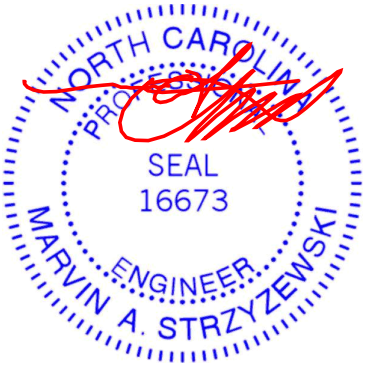
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=5-9-13, 3=5-9-13, 4=5-9-13
Max Horz 1=-51(LC 6)
Max Uplift 1=-20(LC 11), 3=-24(LC 11)
Max Grav 1=118(LC 1), 3=118(LC 1), 4=172(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=5.0psf; 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) 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.



July 21,2021

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 738 Lexington Plantation
J0322-1506	VC6	Valley	1	1	E15961631
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Jul 21 13:52:48 2021 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-oj?AOyWgps5LGTsFxnZJeBCV2BV?0?0fiSJHseyvq3z

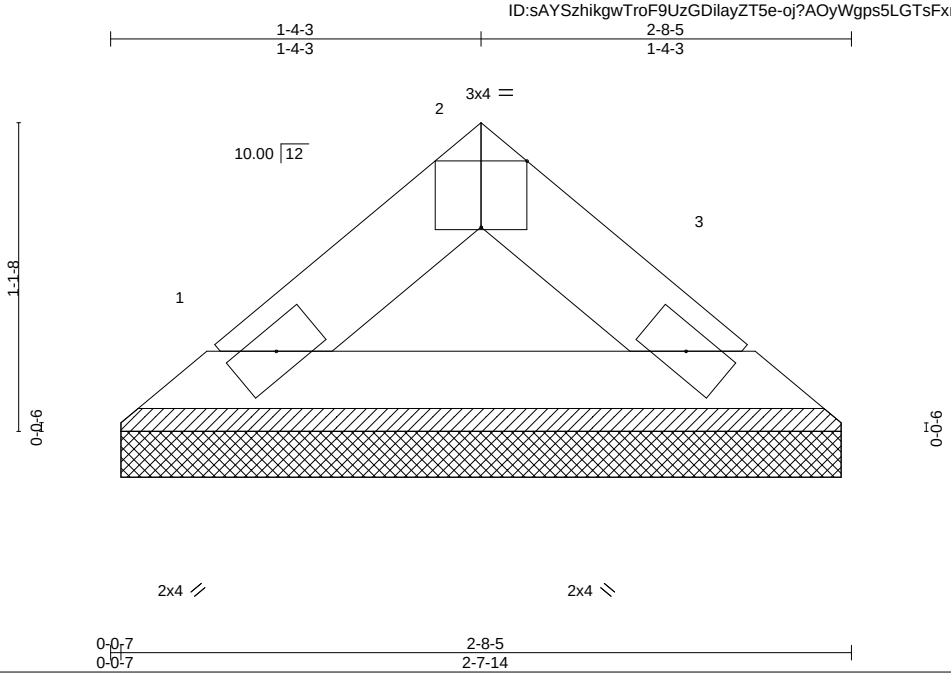


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.03	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: 8 lb	FT = 20%

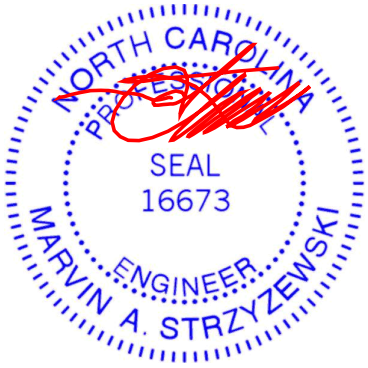
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-7-7, 3=2-7-7
Max Horz 1=19(LC 7)
Max Uplift 1=-5(LC 10), 3=-5(LC 11)
Max Grav 1=76(LC 1), 3=76(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=5.0psf; 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) 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.



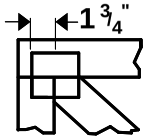
July 21,2021

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

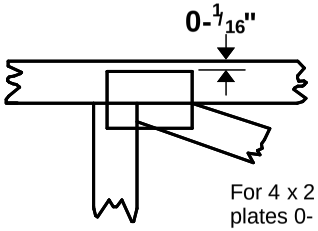
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

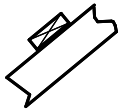
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

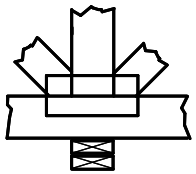
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

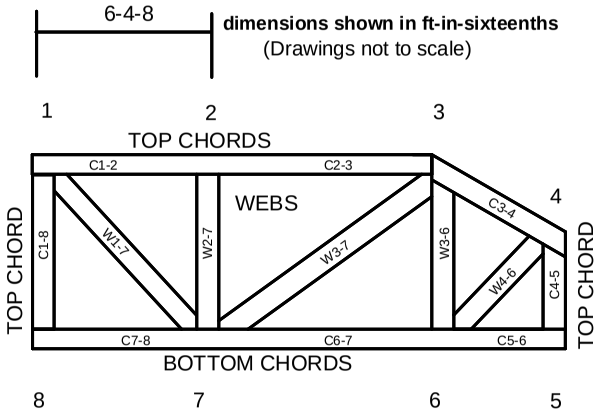


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

© 2012 MiTek® All Rights Reserved

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.