ENGINEERING BY
TRENCO
A MiTek Affiliate

RE: J0120-0401
Cates/Lot 659 Manors @ Lexington

Trenco
818 Soundside Rd
Edenton, NC 27932

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

Design Code: IRC2015/TPI2014
Design Program: MiTek 20/20 8.1
Wind Code: ASCE 7-10
Wind Speed: 130 mph
Roof Load: 40.0 psf
Floor Load: N/A psf

This package includes 24 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E13962714	a1ge	1/15/2020
2	E13962715	a2	1/15/2020
3	E13962716	a3	1/15/2020
4	E13962717	a4	1/15/2020
5	E13962718	a5ge	1/15/2020
6	E13962719	b1	1/15/2020
7	E13962720	b1a	1/15/2020
8	E13962721	b1ge	1/15/2020
9	E13962722	c1ge	1/15/2020
10	E13962723	c2gdr	1/15/2020
11	E13962724	d1	1/15/2020
12	E13962725	d1ge	1/15/2020
13	E13962726	m1	1/15/2020
14	E13962727	m1ge	1/15/2020
15	E13962728	m2	1/15/2020
16	E13962729	m3	1/15/2020
17	E13962730	p1	1/15/2020
18	E13962731	p1ge	1/15/2020
19	E13962732	vc1	1/15/2020
20	E13962733	vc2	1/15/2020
21	E13962734	vc3	1/15/2020
22	E13962735	vc4	1/15/2020
23	E13962736	vc5	1/15/2020
24	E13962737	vc6	1/15/2020

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.
Truss Design Engineer's Name: Gilbert, Eric
My license renewal date for the state of North Carolina is December 31, 2020.
North Carolina COA: C-0844

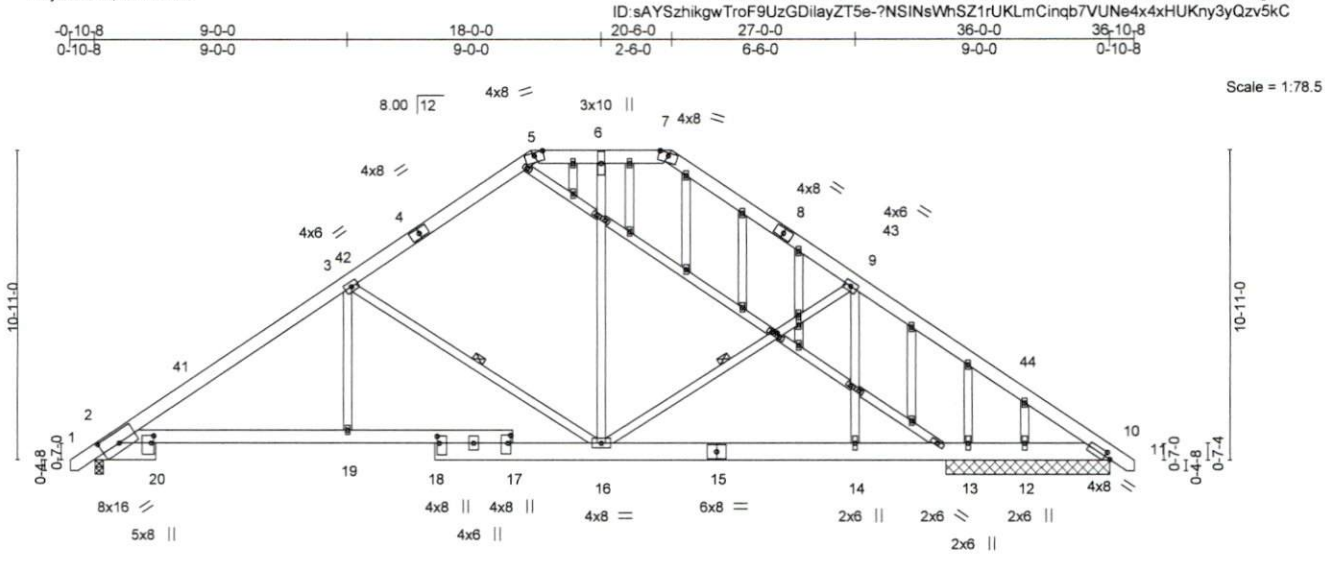
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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.

January 15, 2020
Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962714
J0120-0401	A1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:01 2020 Page 1

ID:sAYSzhikgwTroF9UzGDilayZT5e-?NSINsWhSZ1rUKLmCinqb7VUNe4x4xHUKny3yQzv5kC



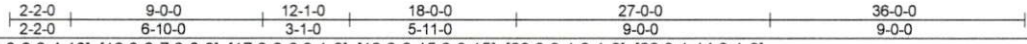


Plate Offsets (X,Y)-- [2:0-8-0,0-4-10], [10:0-2-7,0-2-0], [17:0-3-6,0-1-2], [18:0-2-15,0-0-15], [20:0-3-1,0-1-2], [22:0-1-14,0-1-0]

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	0.49	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.3 *Except* 3-16,9-16: 2x4 SP No.2
OTHERS	2x4 SP No.3

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 8)

Max Uplift All uplift 100 lb or less at joint(s) 13 except 2=-311(LC 10), 10=-201(LC 11), 12=-234(LC 21)

Max Grav All reactions 250 lb or less at joint(s) 12 except 2=1405(LC 1), 10=1053(LC 1), 13=724(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=-1345/501, 7-9=-1342/501, 9-10=-1653/449, 5-6=-1068/484, 6-7=-1068/484
BOT CHORD	2-19=-431/1737, 16-19=-424/1737, 14-16=-188/1241, 13-14=-188/1241, 12-13=-188/1241, 10-12=-188/1241
WEBS	3-16=-958/449, 6-16=-178/817, 3-19=-5/565, 9-16=-397/321

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 2=311, 10=201, 12=234.

January 15,2020

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962715
J0120-0401	A2	FINK	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:02 2020 Page 1

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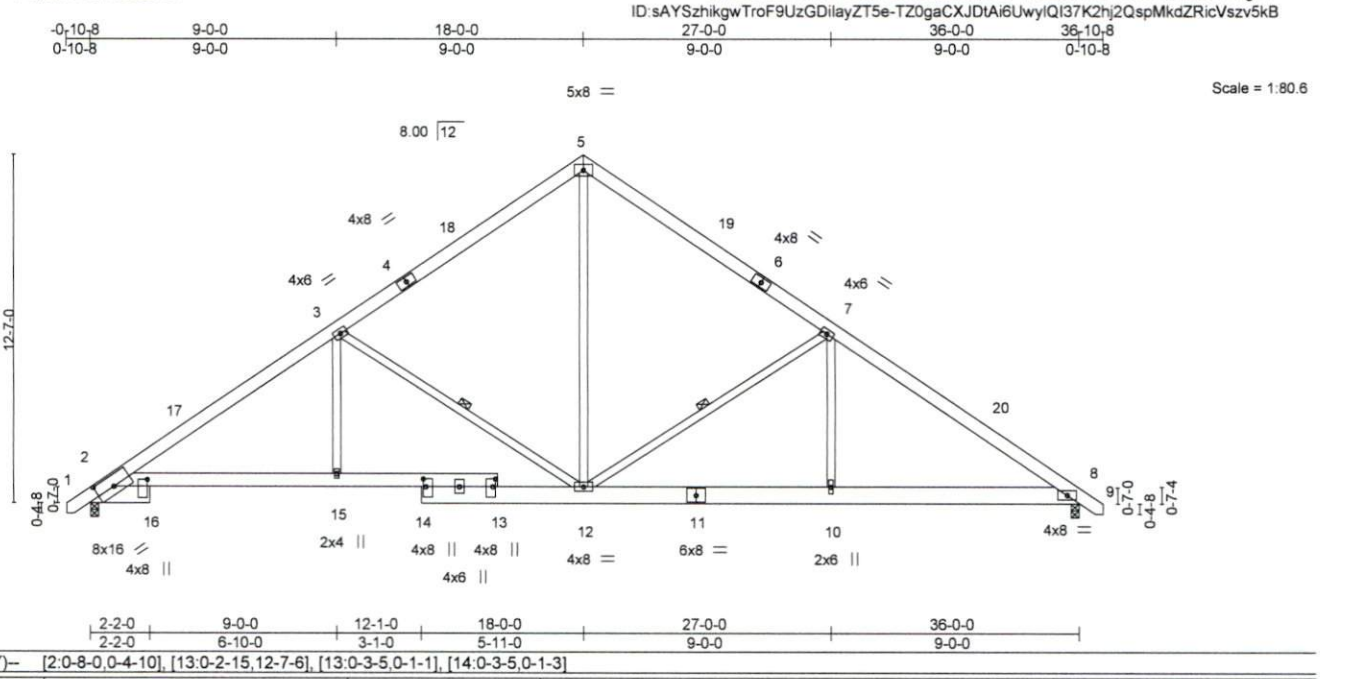


Plate Offsets (X,Y)-- [2:0-8-0,0-4-10], [13:0-2-15,12-7-6], [13:0-3-5,0-1-1], [14:0-3-5,0-1-3]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.38	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	0.61	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 *Except* 7-10,3-15: 2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-6-8 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

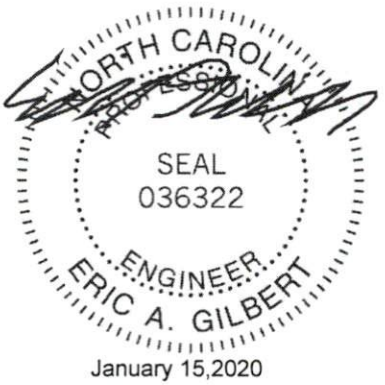
REACTIONS. (lb/size) 2=1482/0-3-8, 8=1482/0-3-8
Max Horz 2=300(LC 9)
Max Uplift 2=-124(LC 10), 8=-124(LC 11)

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

TOP CHORD	2-3=-2376/532, 3-5=-1464/475, 5-7=-1462/475, 7-8=-2167/494
BOT CHORD	2-15=-277/1949, 12-15=-268/1949, 10-12=-234/1684, 8-10=-234/1684
WEBS	3-12=-1091/350, 5-12=-248/1097, 7-10=0/406, 3-15=0/582, 7-12=-858/313

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 18-0-0, Interior(1) 22-4-13 to 32-4-2 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=124, 8=124.



January 15,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962716
J0120-0401	A3	FINK	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:03 2020 Page 1

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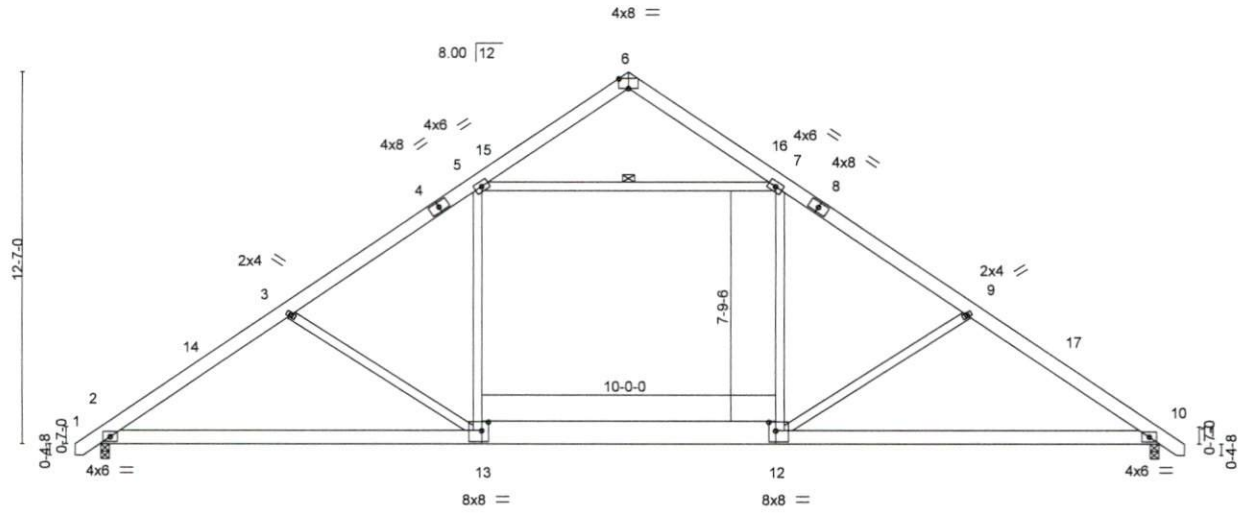
-0-10-8	6-6-0	13-0-0	18-0-0	23-0-0	29-6-0	36-0-0	36-10-8
0-10-8	6-6-0	6-6-0	5-0-0	5-0-0	6-6-0	6-6-0	0-10-8

Scale = 1:75.3



13-0-0	23-0-0	36-0-0
13-0-0	10-0-0	13-0-0

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	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.53	2-13	>813	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	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.3

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

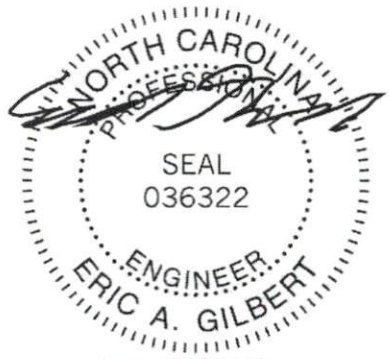
REACTIONS. (lb/size) 2=1482/0-3-8, 10=1482/0-3-8
Max Horz 2=-300(LC 8)
Max Uplift 2=-124(LC 10), 10=-124(LC 11)
Max Grav 2=1603(LC 17), 10=1603(LC 18)

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=-342/148, 6-7=-342/148, 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=-1458/429, 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 (3-second gust) 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 18-0-0, Interior(1) 22-4-13 to 32-4-2 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 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=124, 10=124.



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Edenton, NC 27932

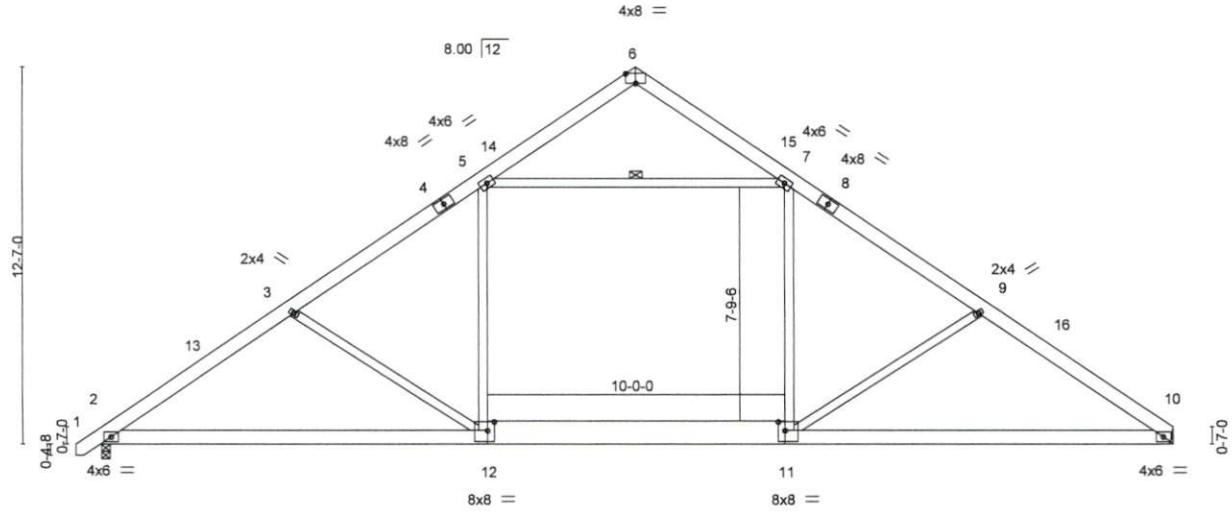
Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962717
J0120-0401	A4	FINK	10	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:04 2020 Page 1

ID:sAYSzhikgwTroF9UzGDilayZT5e-Py8Q?uZZIUQQLo4KtrKXCl72tsBsHDFw0lBjZlzv5k9

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

Scale = 1:74.4



13-0-0	23-0-0	36-0-0
13-0-0	10-0-0	13-0-0

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)	-0.56	10-11	>773	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.80	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.3

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

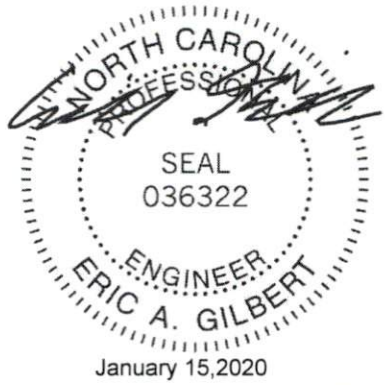
REACTIONS. (lb/size) 2=1486/0-3-8, 10=1431/Mechanical
Max Horz 2=296(LC 7)
Max Uplift 2=-124(LC 10), 10=-112(LC 11)
Max Grav 2=1607(LC 17), 10=1556(LC 18)

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=-344/149, 6-7=-341/148, 7-9=-2089/485, 9-10=-2365/550
BOT CHORD	2-12=-331/2096, 11-12=-124/1735, 10-11=-350/1900
WEBS	5-12=-14/656, 7-11=-21/667, 5-7=-1465/433, 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 (3-second gust) 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 18-0-0, Interior(1) 22-4-13 to 31-6-7 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 with a clearance greater than 6-0-0 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.



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Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962718
J0120-0401	A5GE	HIP SUPPORTED GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:06 2020 Page 1

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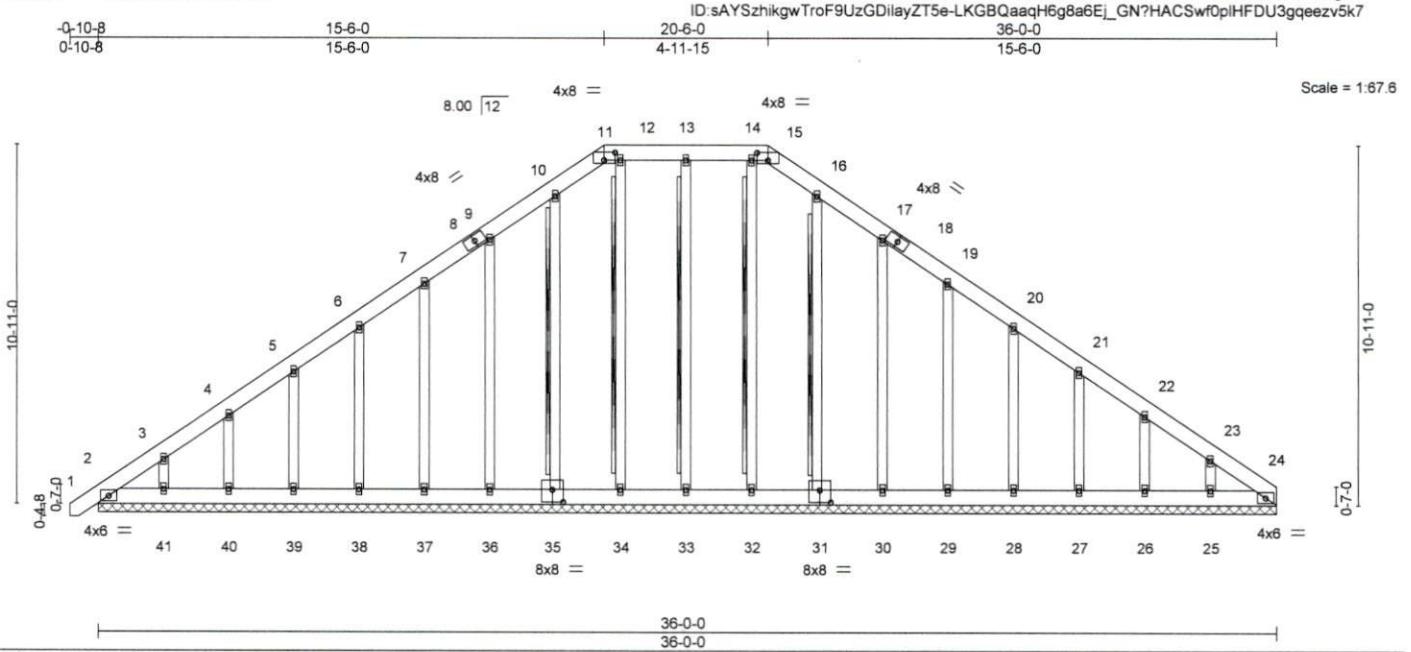


Plate Offsets (X,Y)-- [11:0-4-0,0-2-13], [15:0-4-0,0-2-13], [31:0-4-0,0-4-8], [35:0-4-0,0-4-8]

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	0.19	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.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	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=-102(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=-233/273, 10-11=-260/294, 11-12=-242/281, 12-13=-242/281, 13-14=-242/281, 14-15=-242/281, 15-16=-260/294, 16-17=-233/258

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 32, 33, 34, 35, 37, 38, 39, 40, 31, 29, 28, 27, 26, 24 except (jt=lb) 36=102, 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.

January 15,2020

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

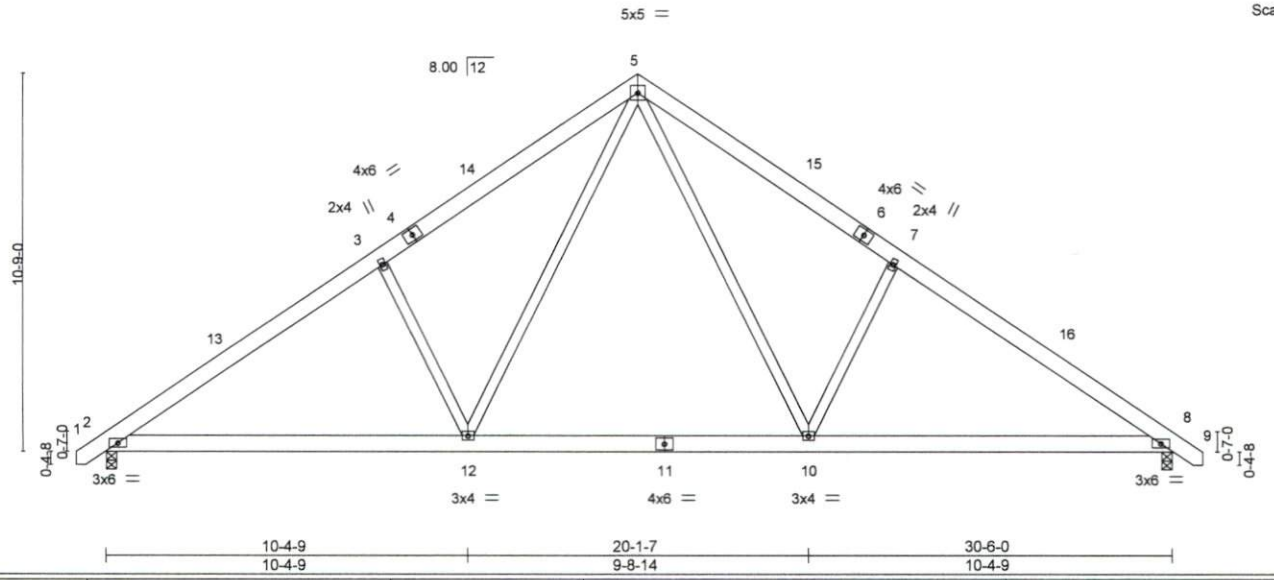
Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962719
J0120-0401	B1	FINK	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:07 2020 Page 1

ID:sAYSzhikgwTroF9UzGDilayZT5e-pXqZdwbS2Po?CFpvYzuEqOlZP3FJUgcMijPNA4zv5k6

-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)	-0.15	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.20	10-12	>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.3 *Except*
5-12,5-10: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1262/0-3-8, 8=1262/0-3-8
Max Horz 2=256(LC 9)
Max Uplift 2=-106(LC 10), 8=-106(LC 11)
Max Grav 2=1320(LC 17), 8=1320(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1867/433, 3-5=-1716/527, 5-7=-1716/527, 7-8=-1867/433
BOT CHORD 2-12=-203/1625, 10-12=0/1054, 8-10=-203/1452
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 (3-second gust) 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 15-3-0, Interior(1) 19-7-13 to 26-10-2 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=106, 8=106.

January 15,2020

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962720
J0120-0401	B1A	FINK	4	1	Job Reference (optional)	

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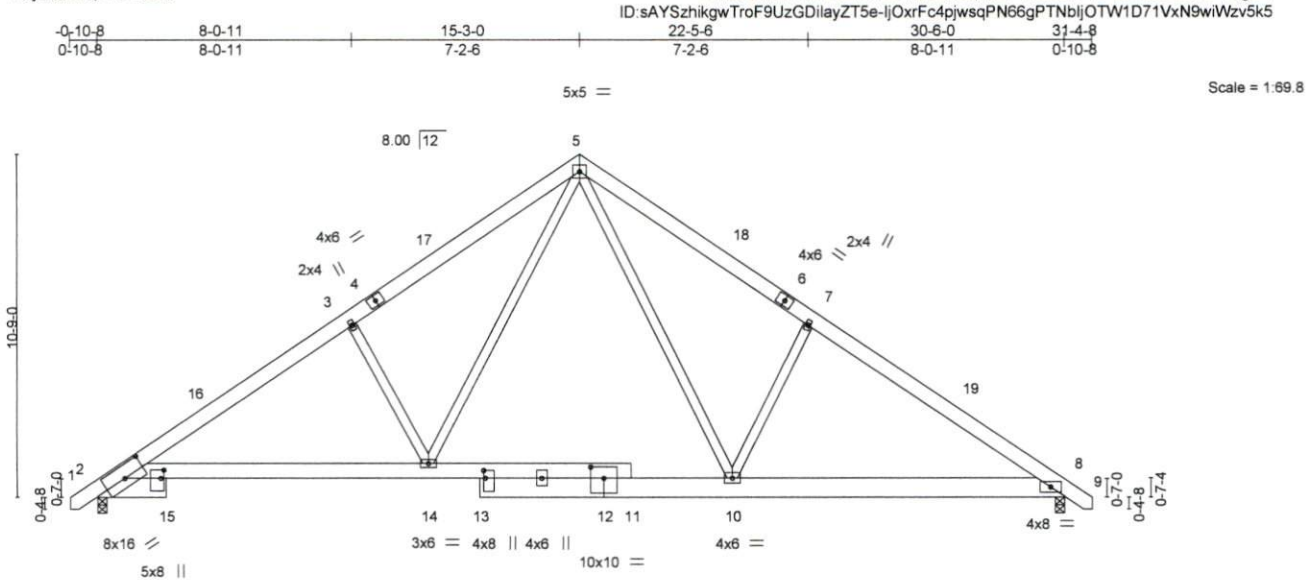


Plate Offsets (X,Y)-- [2:0-8-0,0-4-10], [12:0-5-0,0-4-4], [13:0-2-15,0-0-10], [15:0-3-1,0-1-2]

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	0.37	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.3 *Except*
5-14,5-10: 2x4 SP No.2

BRACING-

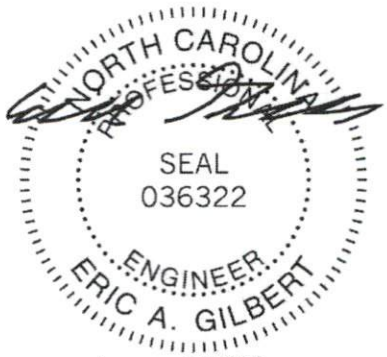
TOP CHORD Structural wood sheathing directly applied or 4-11-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1262/0-3-8, 8=1262/0-3-8
Max Horz 2=256(LC 9)
Max Uplift 2=-107(LC 10), 8=-107(LC 11)
Max Grav 2=1318(LC 17), 8=1318(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2038/462, 3-5=-1894/543, 5-7=-1704/528, 7-8=-1854/433
BOT CHORD 2-14=-232/1806, 10-14=0/1091, 8-10=-198/1444
WEBS 3-14=-536/299, 5-14=-213/1098, 5-10=-193/798, 7-10=-510/302

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 15-3-0, Interior(1) 19-7-13 to 26-10-2 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=107, 8=107.



January 15,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962721
J0120-0401	B1GE	HIP SUPPORTED GABLE	1	1	Job Reference (optional)	

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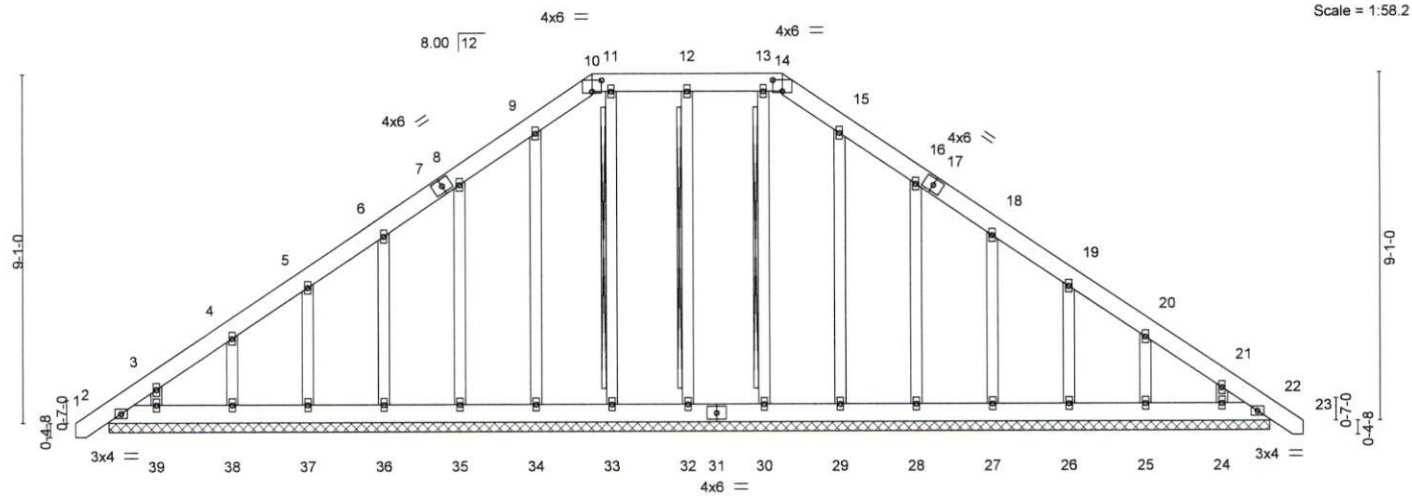
ID:sAYSzhikgwTroF9UzGDilayZT5e-mvxJ2bdia12jRZylgOwivpqzIt1ZyemfA1uUEyzv5k4

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

0-10-8 | 12-9-0 | 4-11-15 | 12-9-0 | 0-10-8

Scale = 1:58.2



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	0.14	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.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 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=-275/217, 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 (3-second gust) 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 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.

January 15,2020

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962722
J0120-0401	C1GE	HIP STRUCTURAL GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:10 2020 Page 1

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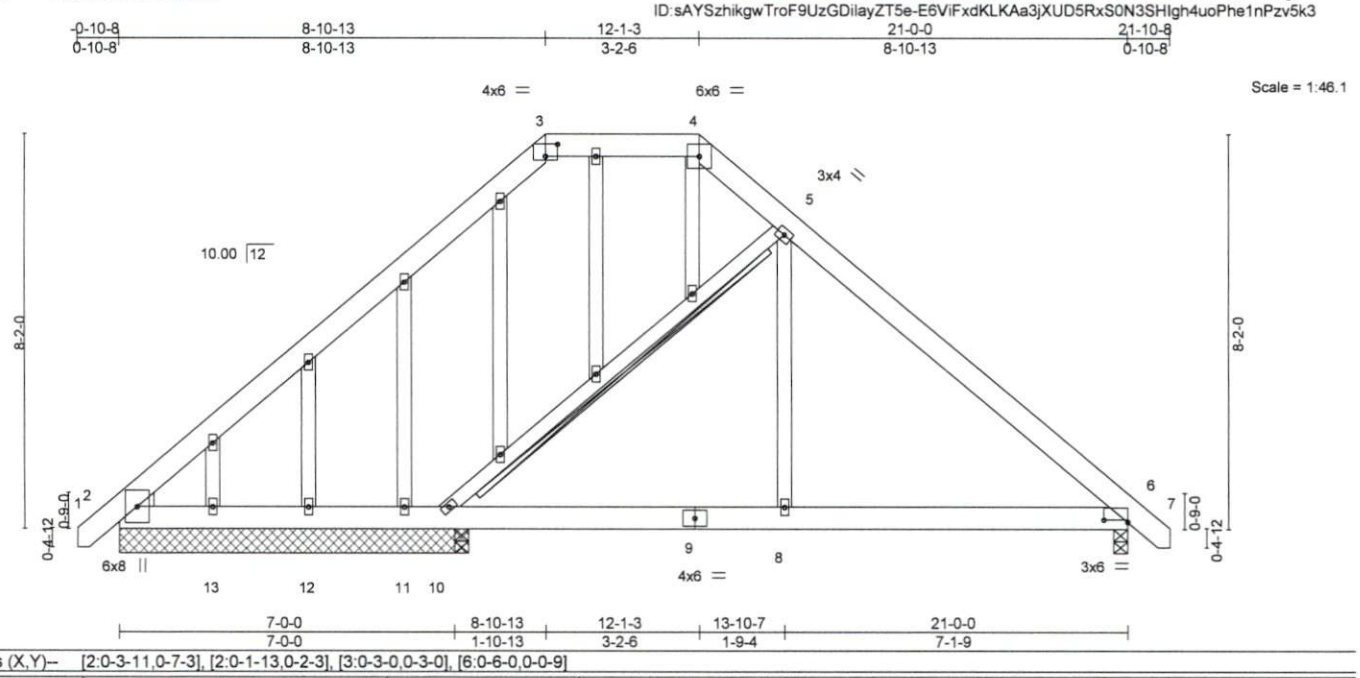

Plate Offsets (X,Y)-- [2:0-3-11,0-7-3], [2:0-1-13,0-2-3], [3:0-3-0,0-3-0], [6:0-6-0,0-0-9]

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	0.21	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.3
OTHERS	2x4 SP No.3
WEDGE	
Left: 2x4 SP No.3	

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	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=-200(LC 3), 13=-398(LC 10), 6=-156(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 12 except 2=374(LC 21), 13=472(LC 17), 10=589(LC 3), 10=359(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=-638/224, 3-4=-351/292, 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=-47/526, 6-8=-48/524
WEBS	5-10=-400/209, 5-8=0/315

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12 except (jt=lb) 11=200, 13=398, 6=156.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

January 15,2020

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962723
J0120-0401	C2GDR	HIP GIRDER	1	3	Job Reference (optional)	

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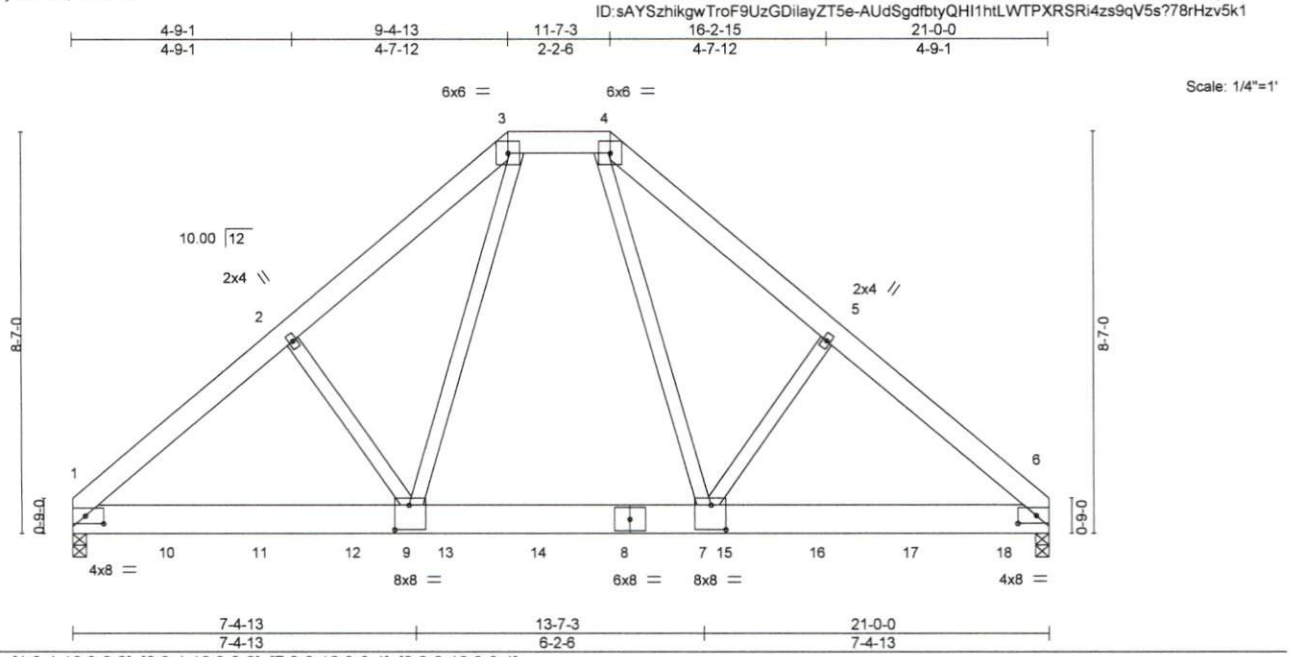

Plate Offsets (X,Y)-- [1:0-4-12,0-2-0], [6:0-4-12,0-2-0], [7:0-3-12,0-6-4], [9:0-3-12,0-6-4]

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	0.78	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.3

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

REACTIONS. (lb/size) 1=7504/0-3-8, 6=8265/0-3-8
Max Horz 1=-192(LC 23)
Max Uplift 1=-629(LC 8), 6=-693(LC 9)
Max Grav 1=7668(LC 2), 6=8453(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8968/762, 2-3=-8808/807, 3-4=-5295/532, 4-5=-8828/808, 5-6=-8994/763
BOT CHORD 1-9=-589/6687, 7-9=-407/5295, 6-7=-520/6708
WEBS 2-9=-263/305, 3-9=-504/5607, 4-7=-508/5651, 5-7=-263/296

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 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 (3-second gust) 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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, 1434 lb down and 132 lb up at 8-0-12, 1427 lb down and 132 lb up at 10-0-12, 1427 lb down and 132 lb up at 12-0-12, 1451 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

January 15,2020

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington
J0120-0401	C2GDR	HIP GIRDER	1	3	E13962723 Job Reference (optional)

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) 14=-1411(B) 15=-1411(B) 16=-1411(B) 17=-1411(B) 18=-1413(B)

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962724
J0120-0401	D1	COMMON	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:13 2020 Page 1

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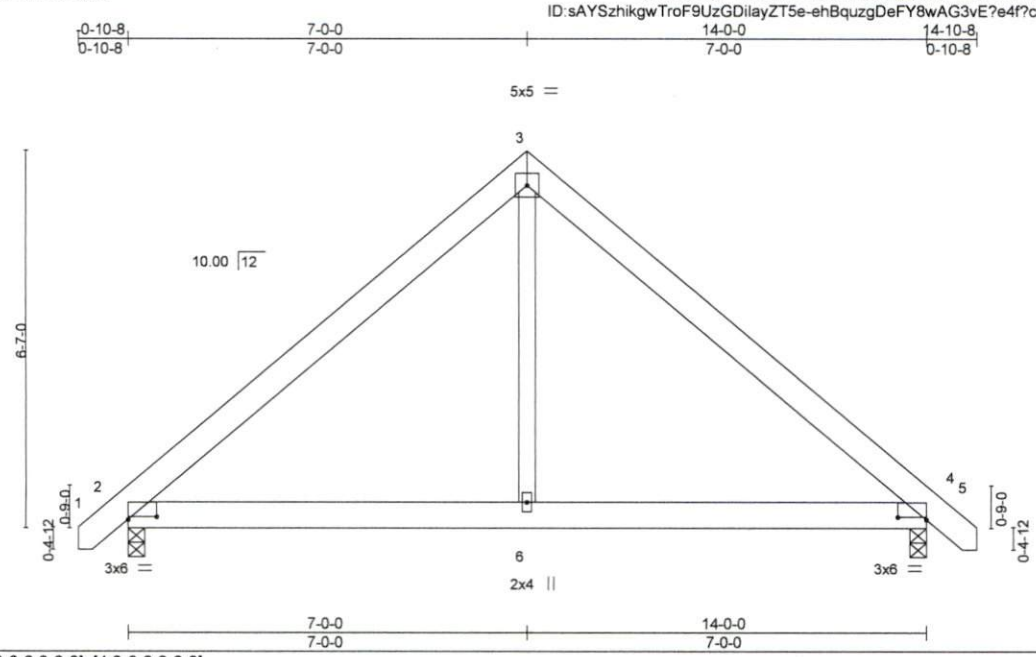


Plate Offsets (X,Y)-- [2:0-6-0,0-0-9], [4:0-6-0,0-0-9]

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	0.17	Vert(CT)	-0.03	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	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%

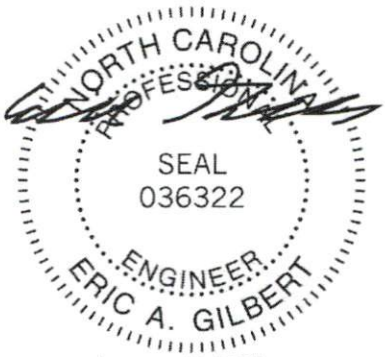
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3

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

REACTIONS. (lb/size) 2=602/0-3-8, 4=602/0-3-8
Max Horz 2=-155(LC 8)
Max Uplift 2=-49(LC 10), 4=-49(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-609/185, 3-4=-609/185
BOT CHORD 2-6=0/378, 4-6=0/378
WEBS 3-6=0/335

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



January 15,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962725
J0120-0401	D1GE	HIP SUPPORTED GABLE	1	1	Job Reference (optional)	

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ID:sAYSzhikgwTroF9UzGDilayZT5e-6tlC5JhrOZg?YKrFSxWtcsYqJukodwROJJcFwAzv5k?

-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 = 1:30.2

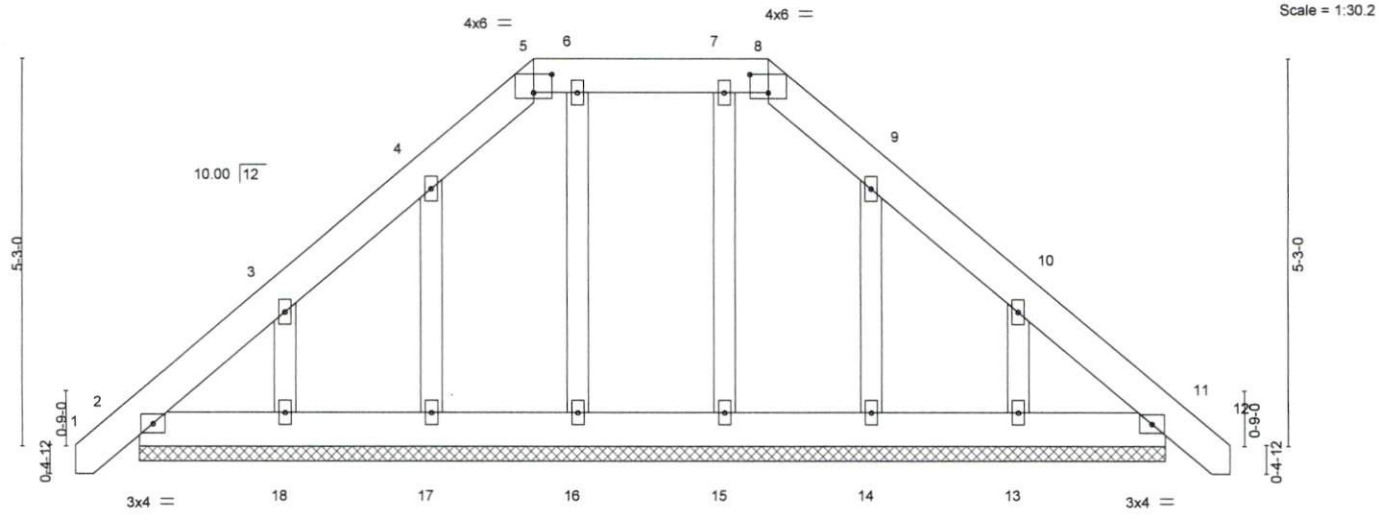

Plate Offsets (X,Y)-- [5:0-3-0,0-3-0], [8:0-3-0,0-3-0]

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	0.05	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.3

BRACING-

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

REACTIONS. All bearings 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 (3-second gust) 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 with a clearance greater than 6-0-0 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.

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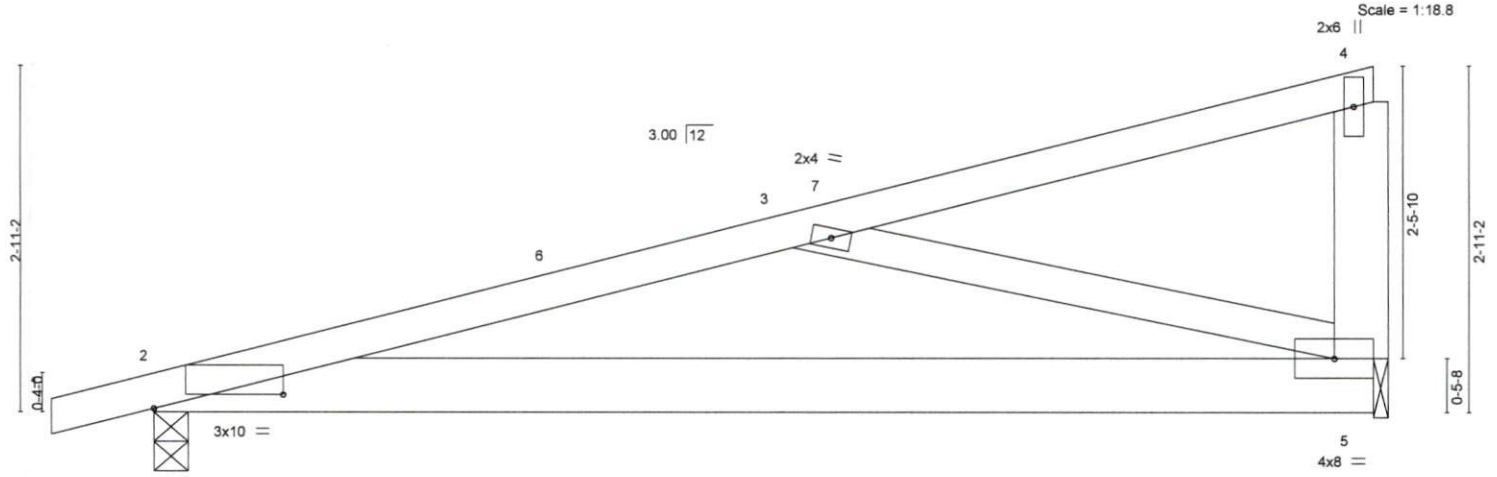
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962726
J0120-0401	M1	MONOPITCH	5	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:14 2020 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-6tlC5JhrOZg?YKrFSxWtcsYnhufZdsSOJJcFwAzv5k?

-0-10-8	5-7-8	10-6-0
0-10-8	5-7-8	4-10-8

Scale = 1:18.8



10-6-0
10-6-0

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	0.30	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%

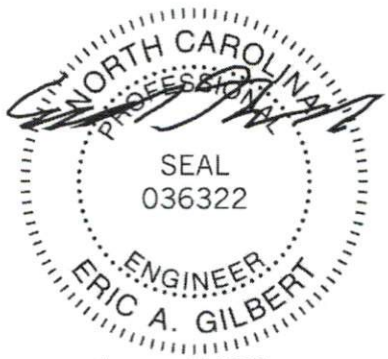
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
3-5: 2x4 SP No.3

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

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

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-780/564
BOT CHORD 2-5=-650/724
WEBS 3-5=-681/540

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) 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 with a clearance greater than 6-0-0 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.



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962727
J0120-0401	M1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:15 2020 Page 1
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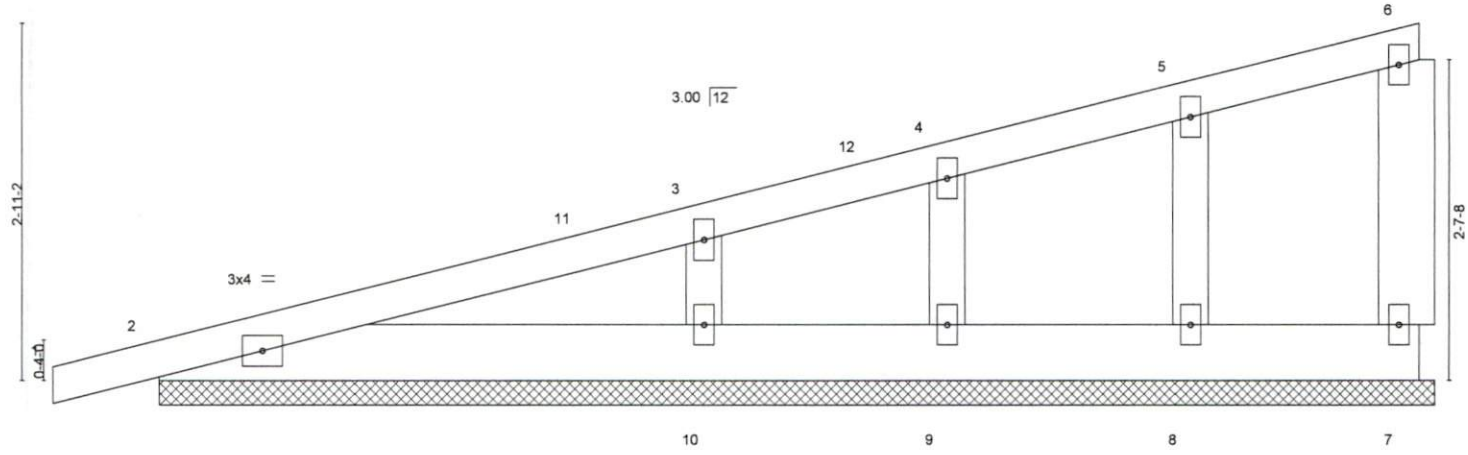
0-10-8 10-6-0

Scale = 1:18.2



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	0.14	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 52 lb	FT = 20%

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

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

REACTIONS. All bearings 10-6-0.
(lb) - Max Horz 2=135(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8, 9 except 10=-121(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 7, 2, 8, 9 except 10=361(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 (3-second gust) 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) -0-10-8 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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 with a clearance greater than 6-0-0 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) 7, 2, 8, 9 except (jt=lb) 10=121.

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Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962728
J0120-0401	M2	MONOPITCH	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:16 2020 Page 1
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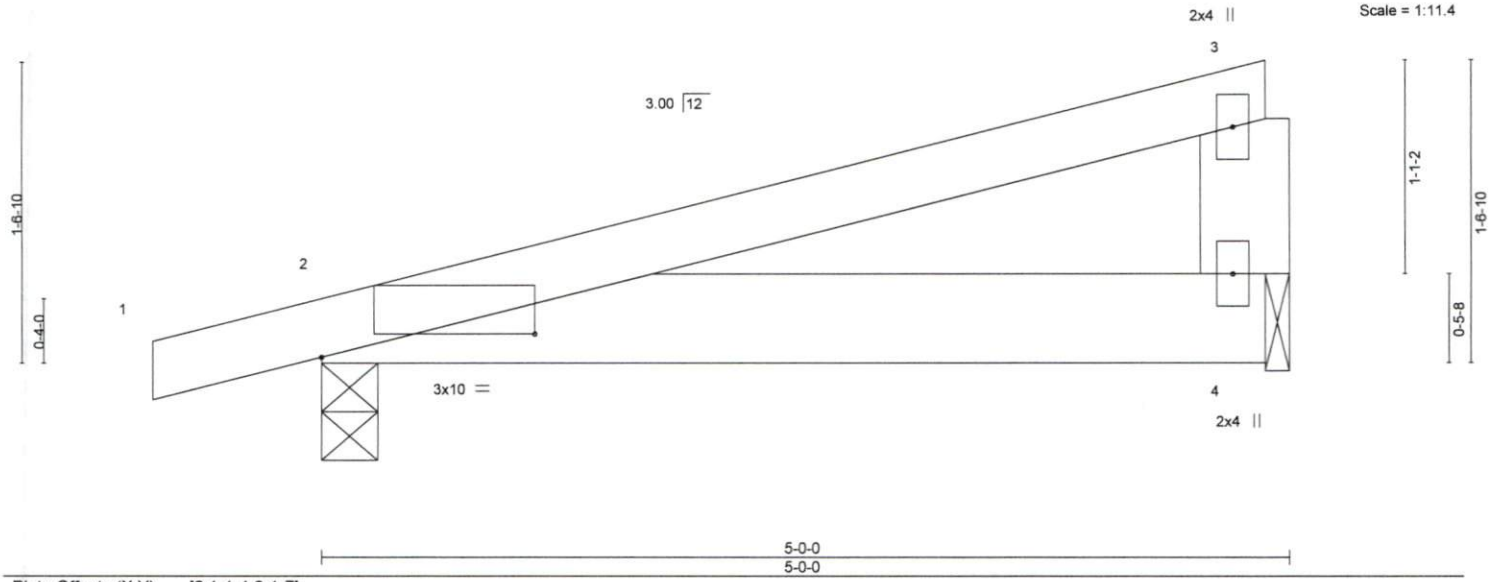
-0-10-8 / 0-10-8 — 5-0-0 / 5-0-0

Scale = 1:11.4



5-0-0 / 5-0-0

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%

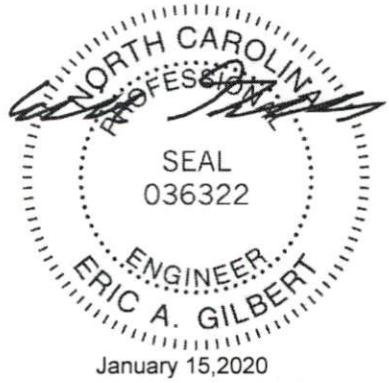
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1

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. (lb/size) 2=253/0-3-8, 4=178/0-1-8
Max Horz 2=50(LC 6)
Max Uplift 2=-113(LC 6), 4=-76(LC 6)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) 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 with a clearance greater than 6-0-0 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.



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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962729
J0120-0401	M3	MONOPITCH	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:16 2020 Page 1
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-0-10-8 4-0-0
0-10-8 4-0-0

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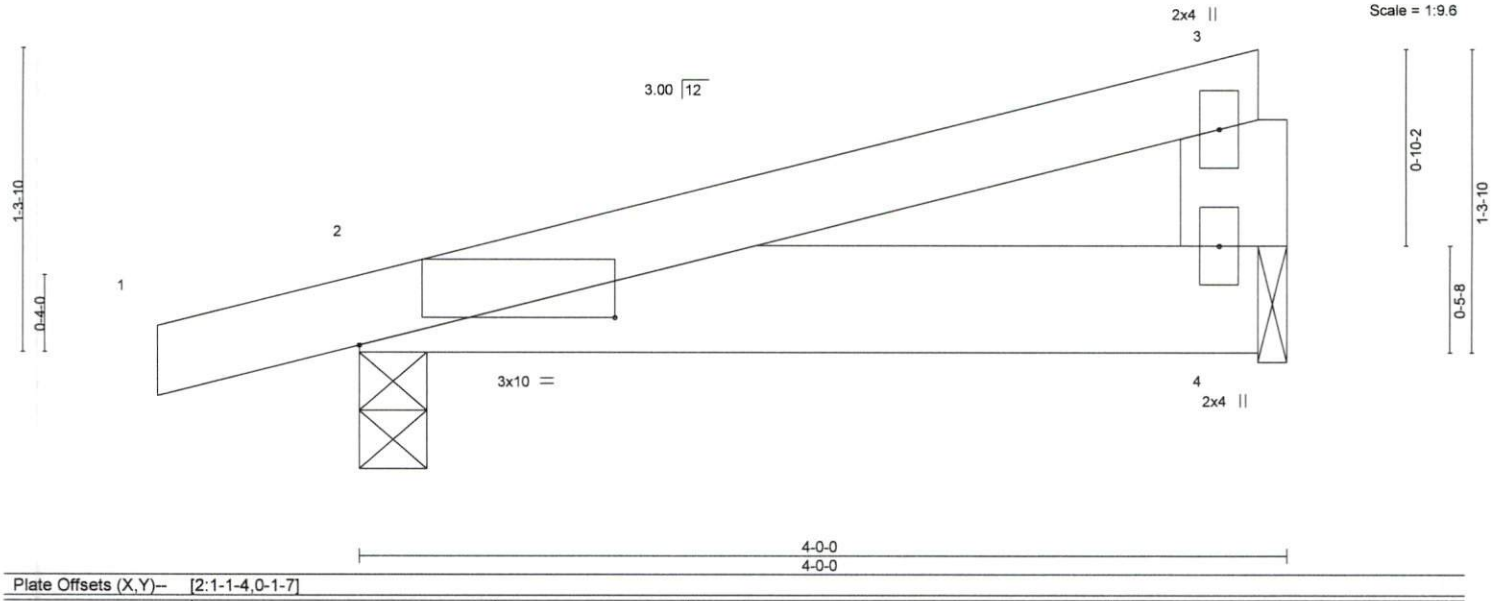

4-0-0
4-0-0

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. (lb/size) 4=136/0-1-8, 2=215/0-3-8
Max Horz 2=42(LC 6)
Max Uplift 4=-58(LC 6), 2=-99(LC 6)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) 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 with a clearance greater than 6-0-0 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.

January 15,2020

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962730
J0120-0401	P1	COMMON	5	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:17 2020 Page 1
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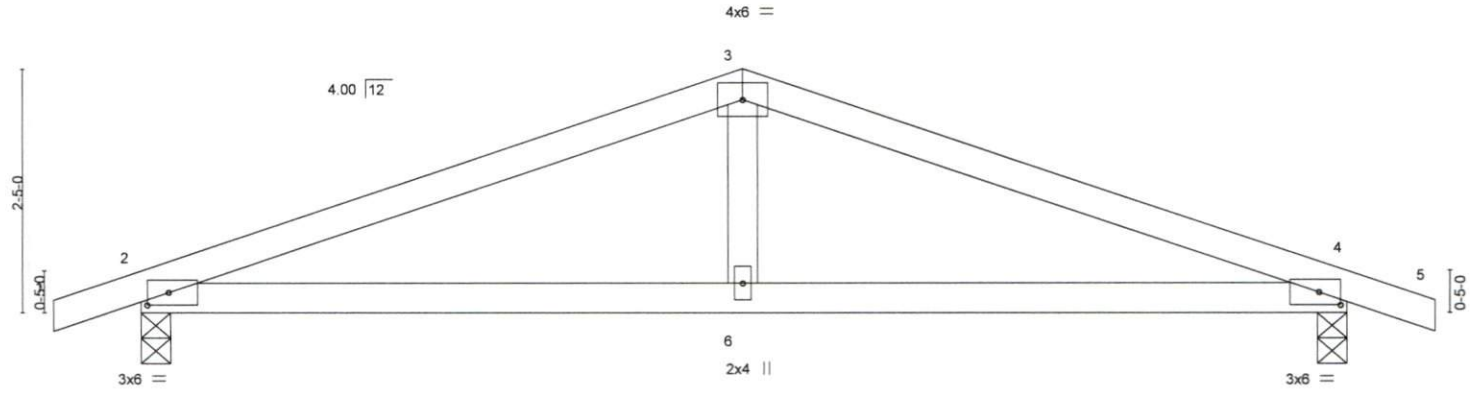
0-10-8 6-0-0 6-0-0 0-10-8

Scale = 1:22.0



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

Plate Offsets (X,Y)-- [2:0-2-9,0-1-8], [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	0.11	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.3

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. (lb/size) 2=530/0-3-8, 4=530/0-3-8
Max Horz 2=-27(LC 15)
Max Uplift 2=-217(LC 6), 4=-217(LC 7)

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 (3-second gust) 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=217, 4=217.

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Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962731
J0120-0401	P1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:18 2020 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-?e_jxgkLSoBR0y81hnapniiQtV2HZjU_ExaS2xzv5jx

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

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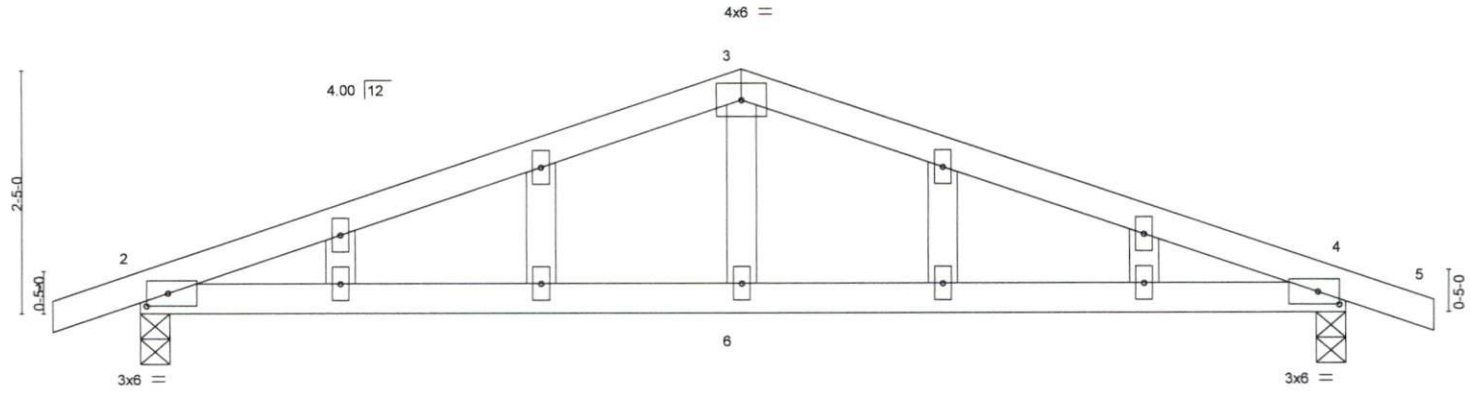

6-0-0 12-0-0
6-0-0 6-0-0

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	0.11	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 48 lb	FT = 20%

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

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

REACTIONS. (lb/size) 2=530/0-3-8, 4=530/0-3-8
Max Horz 2=-46(LC 11)
Max Uplift 2=-304(LC 6), 4=-304(LC 7)

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 (3-second gust) 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; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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 with a clearance greater than 6-0-0 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=304, 4=304.

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Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962732
J0120-0401	VC1	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:19 2020 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-TqY580k_D5JIe5jDFU52JwFduvQyI987TaJ0aNzv5jw

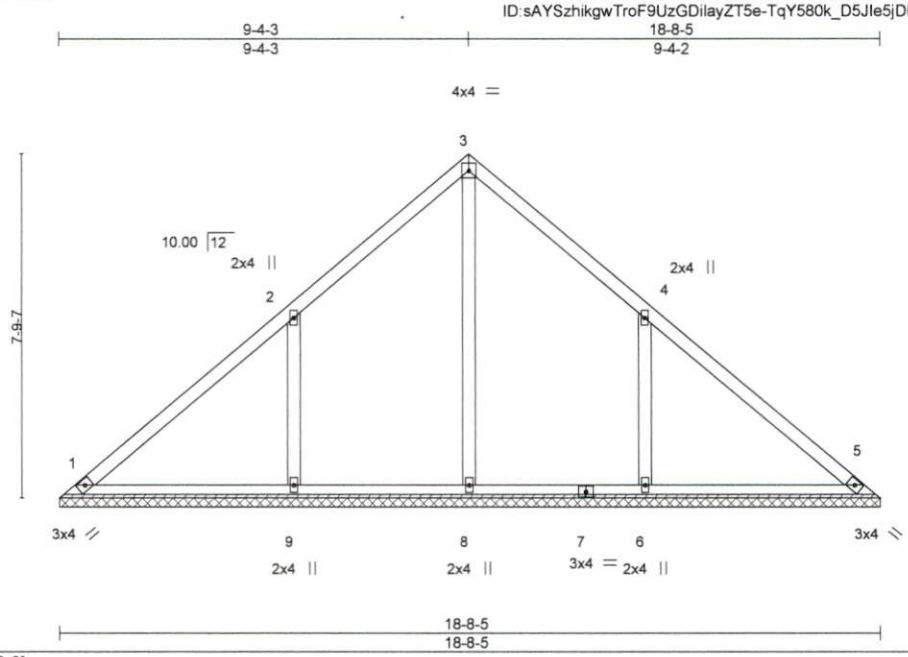

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	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	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 85 lb	FT = 20%

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

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

REACTIONS. All bearings 18-8-5.
(lb) - Max Horz 1=-179(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-185(LC 10), 6=-185(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=337(LC 20), 9=540(LC 17), 6=539(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-434/327, 4-6=-434/327

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 with a clearance greater than 6-0-0 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) 9=185, 6=185.

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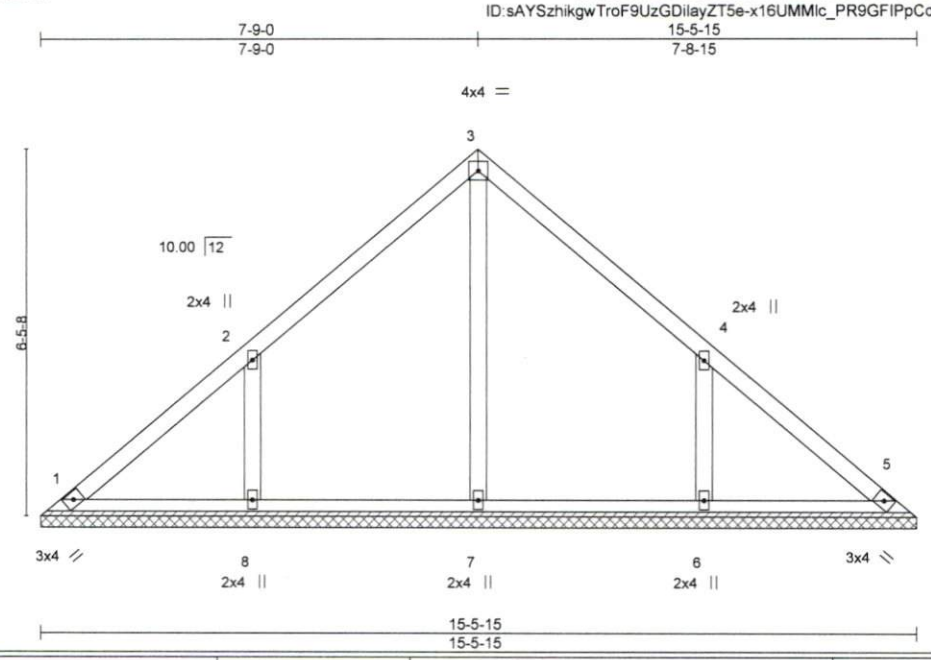
Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962733
J0120-0401	VC2	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:20 2020 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-x16UMMlc_PR9GFIPpCdHs7npyJmB1d_HiE3Z6qzv5jv



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	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.3

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

REACTIONS. All bearings 15-5-15.
(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, 7 except 8=383(LC 17), 6=383(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 (3-second gust) 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=149, 6=149.

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Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962734
J0120-0401	VC3	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:20 2020 Page 1
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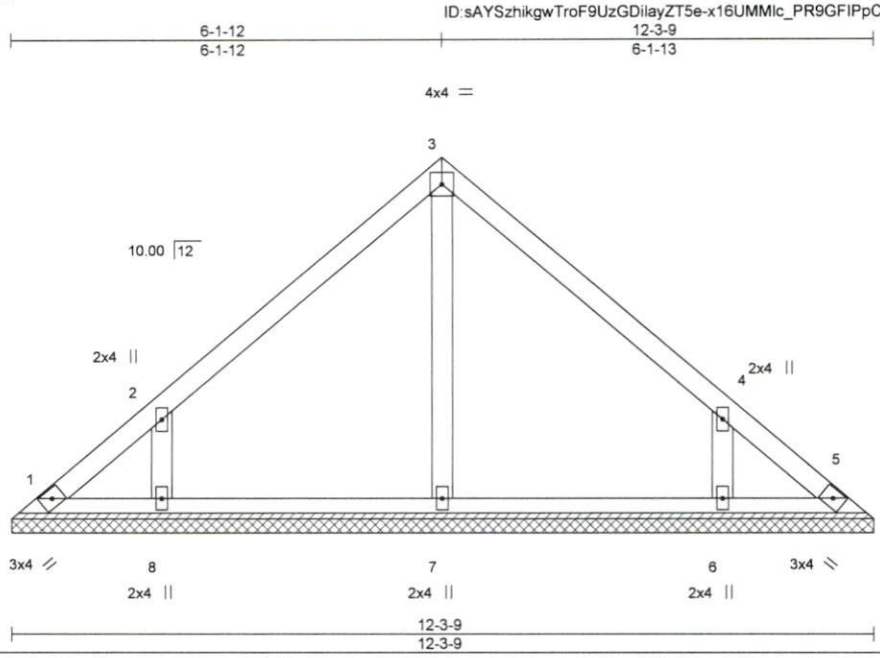

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	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	0.07	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.3

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

REACTIONS. All bearings 12-3-9.
(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=-129(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=-312/247, 4-6=-312/247

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=130, 6=129.
6) Non Standard bearing condition. Review required.

January 15,2020

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962735
J0120-0401	VC4	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:21 2020 Page 1
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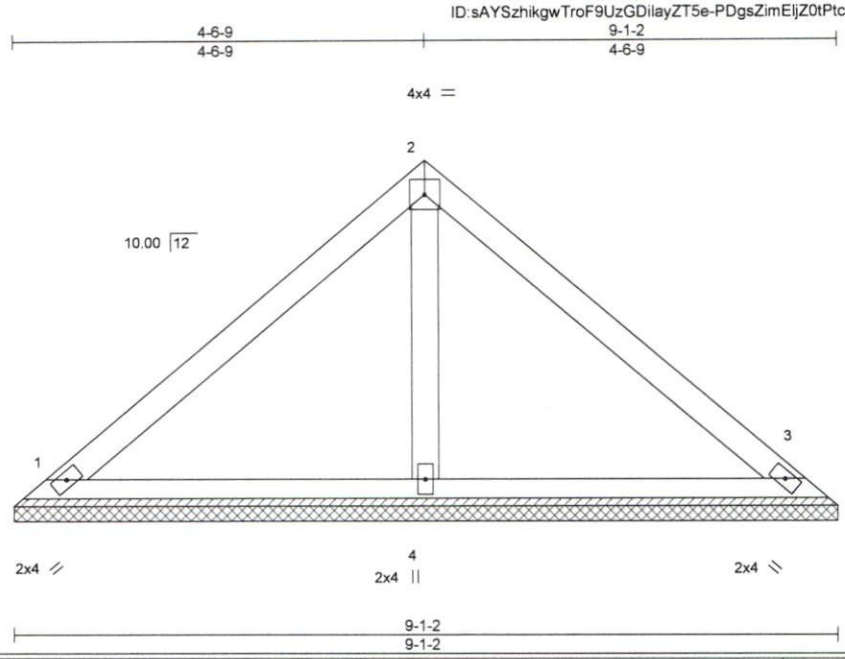

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 34 lb	FT = 20%

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

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

REACTIONS. (lb/size) 1=179/9-1-2, 3=179/9-1-2, 4=305/9-1-2
Max Horz 1=-83(LC 6)
Max Uplift 1=-23(LC 10), 3=-30(LC 11)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

January 15,2020

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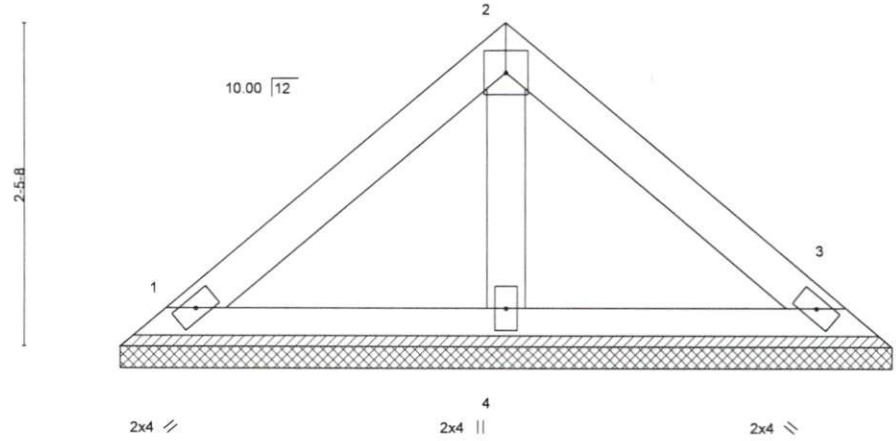
Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962736
J0120-0401	VC5	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:22 2020 Page 1
ID:sAYSzhikgwTroF9UzGDilayZT5e-tPEEn2nsW0htVZSowdfIxYtAE6T8VYpZ9YYgBizv5jt

2-11-6 5-10-12
2-11-6 2-11-6

4x4 =

Scale = 1:16.9



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	0.09	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	0.02	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.3

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

REACTIONS. (lb/size) 1=119/5-10-12, 3=119/5-10-12, 4=169/5-10-12
Max Horz 1=-51(LC 6)
Max Uplift 1=-20(LC 10), 3=-24(LC 11)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.

January 15,2020

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cates/Lot 659 Manors @ Lexington	E13962737
J0120-0401	VC6	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 15 13:16:22 2020 Page 1
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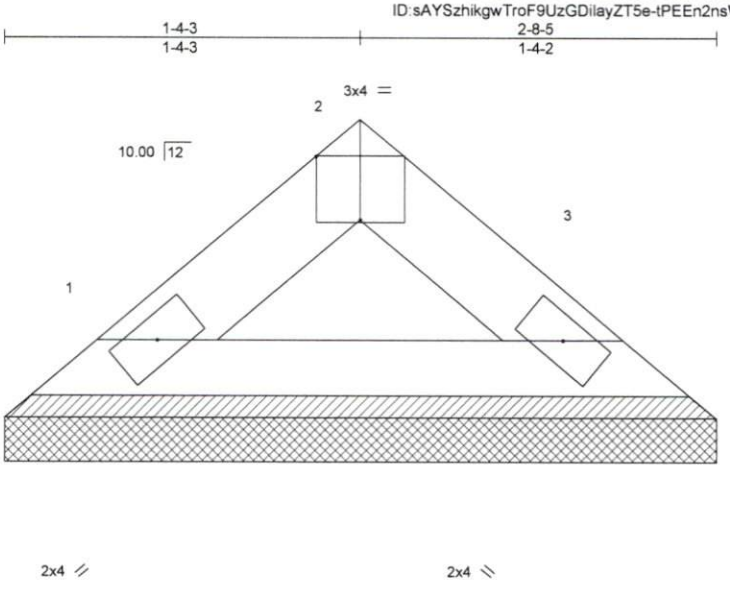

Scale = 1:8.4

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. (lb/size) 1=75/2-8-5, 3=75/2-8-5
Max Horz 1=19(LC 9)
Max Uplift 1=-5(LC 10), 3=-5(LC 11)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

January 15,2020

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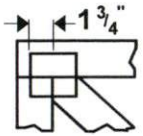
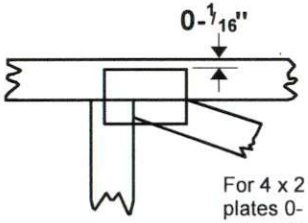
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

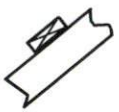
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

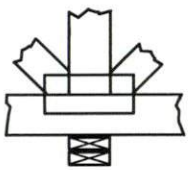
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

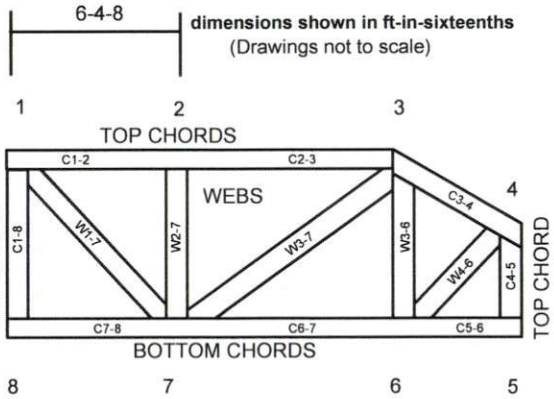


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

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.

Reaction Summary of Order

ComTech ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS
Cary Office: (919) 816-0105

REQ. QUOTE DATE	/ /	ORDER #	J0120-0401
ORDER DATE	01/27/20	QUOTE #	
DELIVERY DATE	/ /	CUSTOMER ACCT #	0000006689
DATE OF INVOICE	/ /	CUSTOMER PO #	
ORDERED BY	Walt Smith	INVOICE #	
COUNTY	Harnett	TERMS	
SUPERINTENDANT	Mike Sans	SALES REP	Scot Duncan
JOBSITE PHONE #	(910) 237-7798	SALES AREA	Curtis Quick

SOLD TO
Cates Building
559 Executive Centre Suite
Fayetteville, NC 28305
(910) 481-0503

SHIP TO
Cates Building, Inc.
Lot 659 Manors @ Lexington
Harnett County, NC

JOB NAME: Lot 659 Manors @ Lexington **LOT #** 659 **SUBDIV:** Manors @ Lexington
MODEL: 32000 **TAG:** CC 2355 / C / LF2 / RP **JOB CATEGORY:** Residential - Roof

DELIVERY INSTRUCTIONS:

SPECIAL INSTRUCTIONS:
Like Lot 127 Cleveland Bluffs (J0120-0247)

PLAN SEAL DATE: 10/11/19

BUILDING DEPARTMENT
Roof Order

OVERHANG INFO		HEEL HEIGHT	00-04-03	REQ. LAYOUTS		REQ. ENGINEERING			BY	DATE
END CUT	RETURN							QUOTE		/ /
PLUMB		GABLE STUDS	24 IN. OC	JOBSITE 1		JOBSITE 1		LAYOUT	WM	01/27/20
								CUTTING	WM	01/27/20

ROOF TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY / PLY	PITCH TOP	PITCH BOT	TYPE ID	BASE O/A	LUMBER TOP	LUMBER BOT	OVERHANG LEFT	OVERHANG RIGHT	REACTIONS
	1	8.00	0.00	GABLE A1GE	36-00-00 36-00-00	2 X 6	2 X 8	00-10-08	00-10-08	Joint 2 1404.7 lbs. -311.2 lbs. Joint 10 1052.5 lbs. -201.1 lbs. Joint 12 56.9 lbs. -234.1 lbs. Joint 13 724.1 lbs. -93.9 lbs.
	2	8.00	0.00	FINK A2	36-00-00 36-00-00	2 X 6	2 X 8	00-10-08	00-10-08	Joint 2 1481.7 lbs. -123.9 lbs. Joint 8 1481.7 lbs. -123.9 lbs.
	2	8.00	0.00	FINK A3	36-00-00 36-00-00	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2 1603.4 lbs. -123.6 lbs. Joint 10 1603.4 lbs. -123.6 lbs.
	10	8.00	0.00	FINK A4	36-00-00 36-00-00	2 X 6	2 X 6	00-10-08		Joint 2 1607.2 lbs. -123.7 lbs. Joint 10 1556.2 lbs. -111.7 lbs.
	1	8.00	0.00	HIP A5GE	36-00-00 36-00-00	2 X 6	2 X 6	00-10-08		Joint 2 193.2 lbs. -94.3 lbs. Joint 24 131.6 lbs. -28.0 lbs. Joint 25 201.5 lbs. -111.5 lbs. Joint 26 172.3 lbs. -88.7 lbs. Joint 27 173.7 lbs. -91.7 lbs.
	1	8.00	0.00	FINK B1	30-06-00 30-06-00	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2 1319.7 lbs. -106.4 lbs. Joint 8 1319.7 lbs. -106.4 lbs.
	4	8.00	0.00	FINK B1A	30-06-00 30-06-00	2 X 6	2 X 8	00-10-08	00-10-08	Joint 2 1318.0 lbs. -106.7 lbs. Joint 8 1318.0 lbs. -106.7 lbs.
	1	8.00	0.00	HIP B1GE	30-06-00 30-06-00	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2 159.1 lbs. -89.9 lbs. Joint 22 119.6 lbs. -29.6 lbs. Joint 24 146.0 lbs. -81.9 lbs. Joint 25 181.8 lbs. -94.4 lbs. Joint 26 176.4 lbs. -90.4 lbs.
	1	10.00	0.00	HIP C1GE	21-00-00 21-00-00	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2 373.5 lbs. -10.6 lbs. Joint 6 764.8 lbs. -155.8 lbs. Joint 10 588.5 lbs. 0.7 lbs. Joint 11 -46.3 lbs. -200.3 lbs. Joint 12 137.9 lbs. -66.1 lbs.
	1 / 3 Ply	10.00	0.00	HIP GIRDER C2GDR	21-00-00 21-00-00	2 X 6	2 X 8			Joint 1 7668.0 lbs. -628.7 lbs. Joint 6 8452.8 lbs. -693.1 lbs.
	1	10.00	0.00	COMMON D1	14-00-00 14-00-00	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2 602.4 lbs. -48.9 lbs. Joint 4 602.4 lbs. -48.9 lbs.

Reaction Summary of Order

ComTech ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS
Cary Office: (919) 816-0105

REQ. QUOTE DATE	/ /	ORDER #	J0120-0401
ORDER DATE	01/27/20	QUOTE #	
DELIVERY DATE	/ /	CUSTOMER ACCT #	0000006689
DATE OF INVOICE	/ /	CUSTOMER PO #	
ORDERED BY	Walt Smith	INVOICE #	
COUNTY	Harnett	TERMS	
SUPERINTENDANT	Mike Sans	SALES REP	Scot Duncan
JOBSITE PHONE #	(910) 237-7798	SALES AREA	Curtis Quick

SOLD TO
Cates Building
559 Executive Centre Suite
Fayetteville, NC 28305
(910) 481-0503

SHIP TO
Cates Building, Inc.
Lot 659 Manors @ Lexington
Harnett County, NC

JOB NAME: Lot 659 Manors @ Lexington **LOT #** 659 **SUBDIV:** Manors @ Lexington
MODEL: 32000 **TAG:** CC 2355 / C / LF2 / RP **JOB CATEGORY:** Residential - Roof

DELIVERY INSTRUCTIONS:

SPECIAL INSTRUCTIONS:
Like Lot 127 Cleveland Bluffs (J0120-0247)

PLAN SEAL DATE: 10/11/19

BUILDING DEPARTMENT
Roof Order

OVERHANG INFO		HEEL HEIGHT	00-04-03	REQ. LAYOUTS				REQ. ENGINEERING					BY	DATE
END CUT	RETURN											QUOTE		/ /
PLUMB		GABLE STUDS	24 IN. OC			JOBSITE	1			JOBSITE	1	LAYOUT	WM	01/27/20
												CUTTING	WM	01/27/20

ROOF TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY PLY	PITCH TOP	PITCH BOT	TYPE ID	BASE O/A	LUMBER TOP	LUMBER BOT	OVERHANG LEFT	OVERHANG RIGHT	REACTIONS
	1	10.00	0.00	HIP D1GE	14-00-00 14-00-00	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2 153.2 lbs. -44.4 lbs. Joint 11 151.8 lbs. -13.3 lbs. Joint 13 200.7 lbs. -144.1 lbs. Joint 14 165.7 lbs. -78.7 lbs. Joint 15 146.2 lbs. -20.8 lbs.
	5	3.00	0.00	MONOPITCH M1	10-06-00 10-06-00	2 X 4	2 X 6	00-10-08		Joint 2 469.3 lbs. -195.2 lbs. Joint 5 401.9 lbs. -174.6 lbs.
	1	3.00	0.00	GABLE M1GE	10-06-00 10-06-00	2 X 4	2 X 6	00-10-08		Joint 2 206.2 lbs. -73.4 lbs. Joint 7 55.0 lbs. -23.1 lbs. Joint 8 184.6 lbs. -57.9 lbs. Joint 9 67.2 lbs. -29.4 lbs. Joint 10 361.1 lbs. -120.8 lbs.
	4	3.00	0.00	MONOPITCH M2	05-00-00 05-00-00	2 X 4	2 X 6	00-10-08		Joint 2 253.0 lbs. -112.7 lbs. Joint 4 178.2 lbs. -76.2 lbs.
	4	3.00	0.00	MONOPITCH M3	04-00-00 04-00-00	2 X 4	2 X 6	00-10-08		Joint 2 214.9 lbs. -98.5 lbs. Joint 4 136.4 lbs. -57.5 lbs.
	5	4.00	0.00	COMMON P1	12-00-00 12-00-00	2 X 4	2 X 4	00-10-08	00-10-08	Joint 2 529.6 lbs. -217.0 lbs. Joint 4 529.6 lbs. -217.0 lbs.
	1	4.00	0.00	GABLE P1GE	12-00-00 12-00-00	2 X 4	2 X 4	00-10-08	00-10-08	Joint 2 529.6 lbs. -304.4 lbs. Joint 4 529.6 lbs. -304.4 lbs.
	1	10.00	0.00	VALLEY VC1	18-08-05 18-08-05	2 X 4	2 X 4			Joint 1 198.6 lbs. -10.1 lbs. Joint 5 186.3 lbs. 19.4 lbs. Joint 6 539.2 lbs. -184.5 lbs. Joint 8 337.3 lbs. 48.4 lbs. Joint 9 539.6 lbs. -184.7 lbs.
	1	10.00	0.00	VALLEY VC2	15-05-15 15-05-15	2 X 4	2 X 4			Joint 1 153.2 lbs. -19.5 lbs. Joint 5 133.3 lbs. 7.0 lbs. Joint 6 383.2 lbs. -148.6 lbs. Joint 7 226.0 lbs. 48.0 lbs. Joint 8 383.4 lbs. -148.7 lbs.
	1	10.00	0.00	VALLEY VC3	12-03-09 12-03-09	2 X 4	2 X 4			Joint 1 86.8 lbs. -38.3 lbs. Joint 5 71.3 lbs. -17.3 lbs. Joint 6 324.8 lbs. -129.4 lbs. Joint 7 239.1 lbs. 43.5 lbs. Joint 8 325.0 lbs. -129.6 lbs.
	1	10.00	0.00	VALLEY VC4	09-01-02 09-01-02	2 X 4	2 X 4			Joint 1 179.1 lbs. -23.0 lbs. Joint 3 179.1 lbs. -30.5 lbs. Joint 4 304.8 lbs. 0.4 lbs.

Reaction Summary of Order

ComTech ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS
Cary Office: (919) 816-0105

REQ. QUOTE DATE	/ /	ORDER #	J0120-0401
ORDER DATE	01/27/20	QUOTE #	
DELIVERY DATE	/ /	CUSTOMER ACCT #	0000006689
DATE OF INVOICE	/ /	CUSTOMER PO #	
ORDERED BY	Walt Smith	INVOICE #	
COUNTY	Harnett	TERMS	
SUPERINTENDANT	Mike Sans	SALES REP	Scot Duncan
JOBSITE PHONE #	(910) 237-7798	SALES AREA	Curtis Quick

SOLD TO
Cates Building
559 Executive Centre Suite
Fayetteville, NC 28305
(910) 481-0503

SHIP TO
Cates Building, Inc.
Lot 659 Manors @ Lexington
Harnett County, NC

JOB NAME: Lot 659 Manors @ Lexington **LOT #** 659 **SUBDIV:** Manors @ Lexington
MODEL: 32000 **TAG:** CC 2355 / C / LF2 / RP **JOB CATEGORY:** Residential - Roof

DELIVERY INSTRUCTIONS:

SPECIAL INSTRUCTIONS:
Like Lot 127 Cleveland Bluffs (J0120-0247)

PLAN SEAL DATE: 10/11/19

BUILDING DEPARTMENT
Roof Order

OVERHANG INFO		HEEL HEIGHT	00-04-03	REQ. LAYOUTS				REQ. ENGINEERING					BY	DATE
END CUT	RETURN											QUOTE		/ /
PLUMB		GABLE STUDS	24 IN. OC			JOBSITE	1			JOBSITE	1	LAYOUT	WM	01/27/20
												CUTTING	WM	01/27/20

ROOF TRUSSES

LOADING INFORMATION

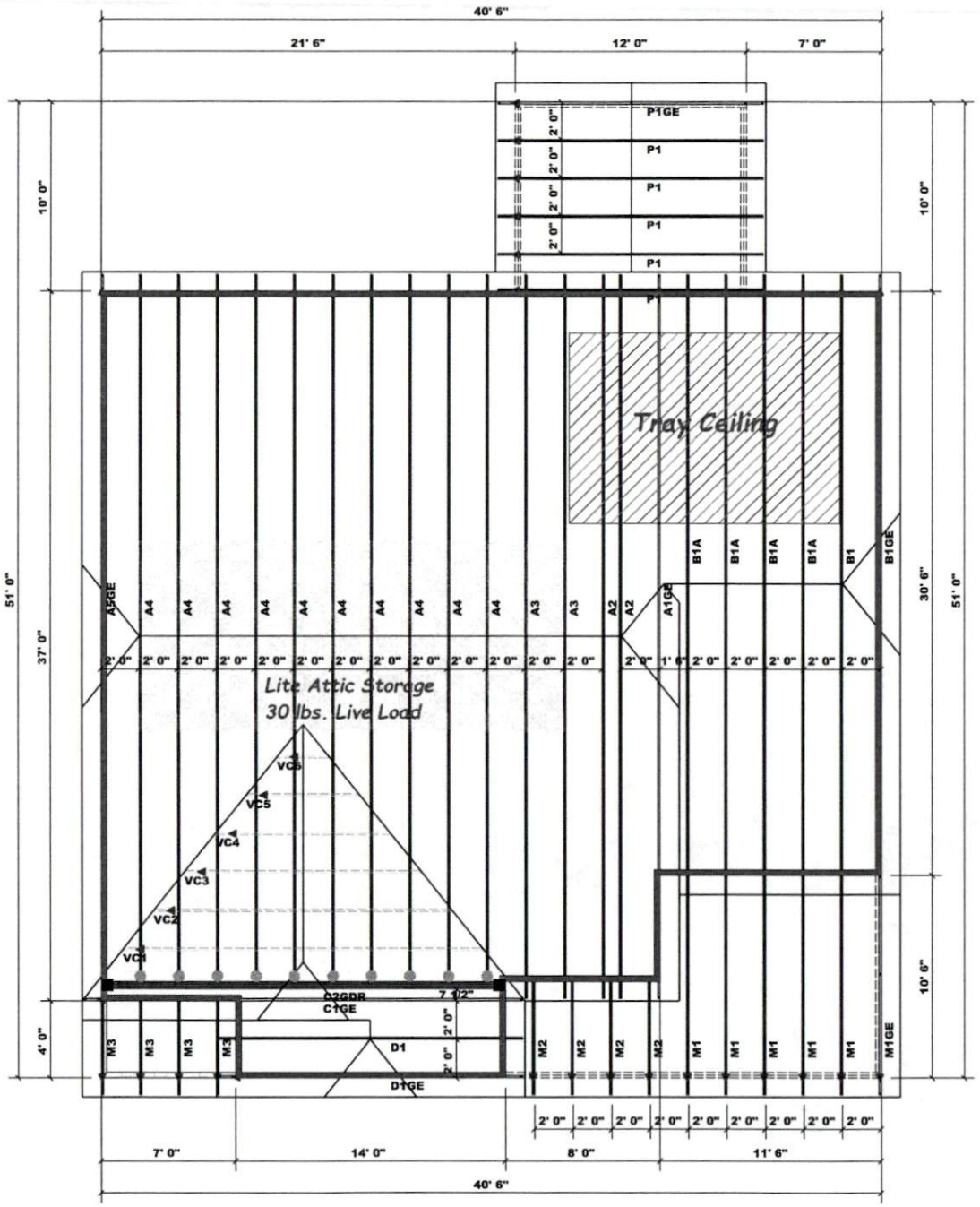
TCLL-TCDL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY PLY	PITCH TOP	PITCH BOT	TYPE ID	BASE O/A	LUMBER TOP	LUMBER BOT	OVERHANG LEFT	OVERHANG RIGHT	REACTIONS
	1	10.00	0.00	VALLEY VC5	05-10-12 05-10-12	2 X 4	2 X 4			Joint 1 118.9 lbs. -19.9 lbs. Joint 3 118.9 lbs. -24.4 lbs. Joint 4 169.4 lbs. 11.7 lbs.
	1	10.00	0.00	VALLEY VC6	02-08-05 02-08-05	2 X 4	2 X 4			Joint 1 75.5 lbs. -5.2 lbs. Joint 3 75.5 lbs. -5.2 lbs.

ITEMS

QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
4	Hangers, USP	HTW20			SIMPSON (HTS20)
11	Hangers, USP	HUS 26			SIMPSON (HUS26)
4	Wholesale	W-LVL, 1-3/4" x 9-1/4"	13-00-00		BM3 \ Rear Porch Beams



▲ = Denotes Left End of Truss
(Reference Engineered Truss Drawing)
Do Not Erect Trusses Backwards

Hatch Legend

2nd Floor Bearing Walls @ 8' 1-1/2"

Truss Placement Plan
SCALE: 1/4" = 1'

HANGER LEGEND

■	= USP HTW20 x 2 / Tie Down
●	= USP HUS26 / Single 2x Hanger

COMTECH
ROOF & FLOOR
TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature: *Curtis Quick*

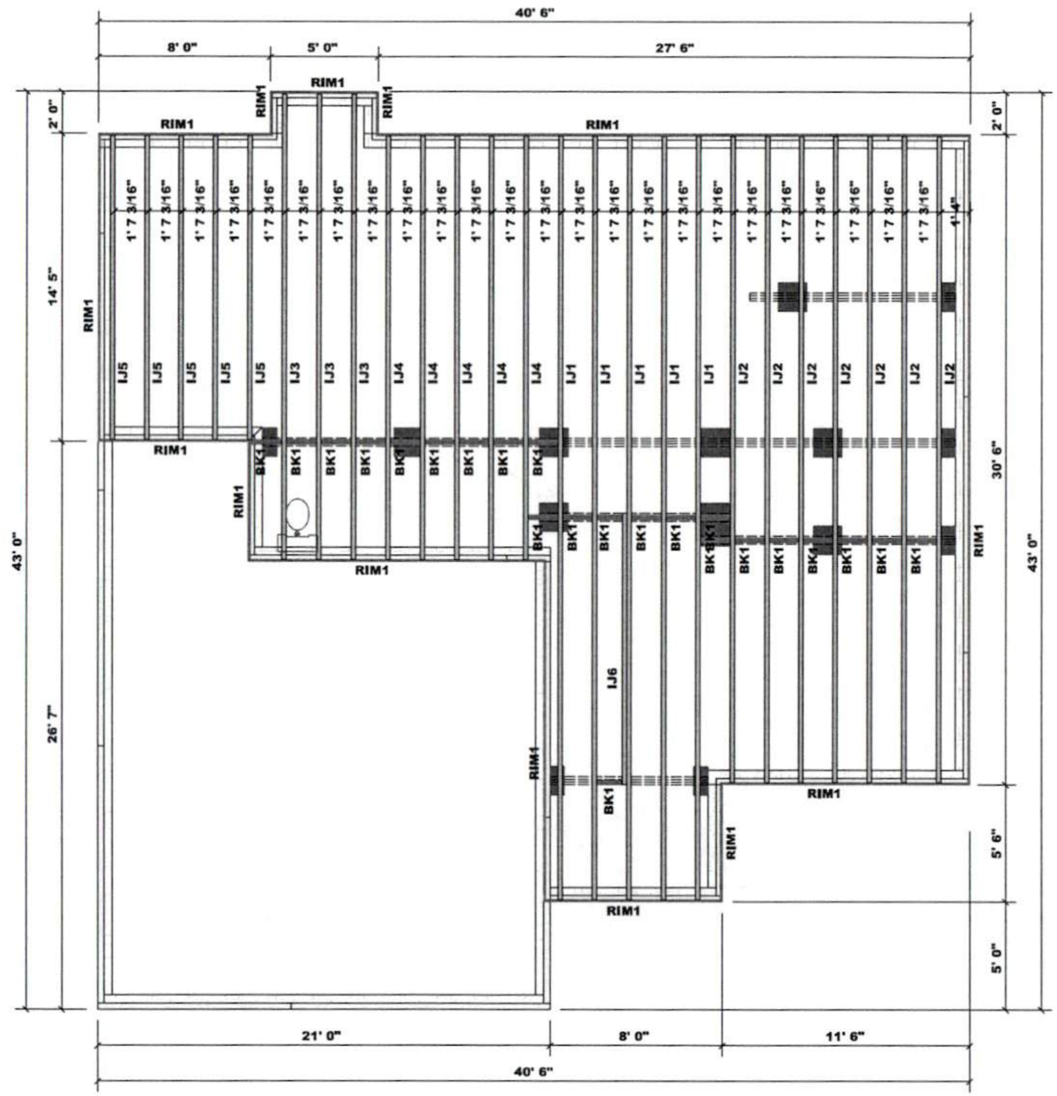
Curtis Quick

LOAD CHART FOR JACK STUDS

BASED ON TABLES R502.5(1) & (2)
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (LB TOT)	REQ'D # STUDS FOR (1) 1-1/2" MEMBER	END REACTION (LB TOT)	REQ'D # STUDS FOR (2) 1-1/2" MEMBERS	END REACTION (LB TOT)	REQ'D # STUDS FOR (3) 1-1/2" MEMBERS
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	Cates Building, Inc.
JOB NAME	Lot 659 Manors @ Lexington
PLAN	CC 2355 / C / LF2 / RP
SEAL DATE	10/11/19
QUOTE #	Quote #
JOB #	J0120-0401
CITY / CO.	Harnett County / Harnett
ADDRESS	Lot 659 Manors @ Lexington
MODEL	32000
DATE REV.	01/27/20
DRAWN BY	Curtis Quick
SALES REP.	Scot Duncan



Beam Legend				
PlotID	Length	Product	Plies	Net Qty
BM1	34' 0"	2x10 SP No.2	3	3
BM2	12' 0"	2x10 SP No.2	3	3
BM3	10' 0"	2x10 SP No.2	3	3
BM4	10' 0"	2x10 SP No.2	3	3
BM5	8' 0"	2x10 SP No.2	3	3

Truss Placement Plan
SCALE: 1/4" = 1'

I-Joist Legend				
PlotID	Length	Product	Plies	Net Qty
IJ1	35' 9 9/16"	11 7/8" NI-40x	1	5
IJ2	30' 3 9/16"	11 7/8" NI-40x	1	7
IJ3	21' 10 1/8"	11 7/8" NI-40x	1	3
IJ4	19' 10 1/8"	11 7/8" NI-40x	1	5
IJ5	14' 2 5/8"	11 7/8" NI-40x	1	5
IJ6	12' 9"	11 7/8" NI-40x	1	1
RIM1	12' 0"	1 1/8" x 11 7/8" Rim Board	1	14
BK1	2' 0"	11 7/8" NI-40x	1	23

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
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Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature *Curtis Quick*
Curtis Quick

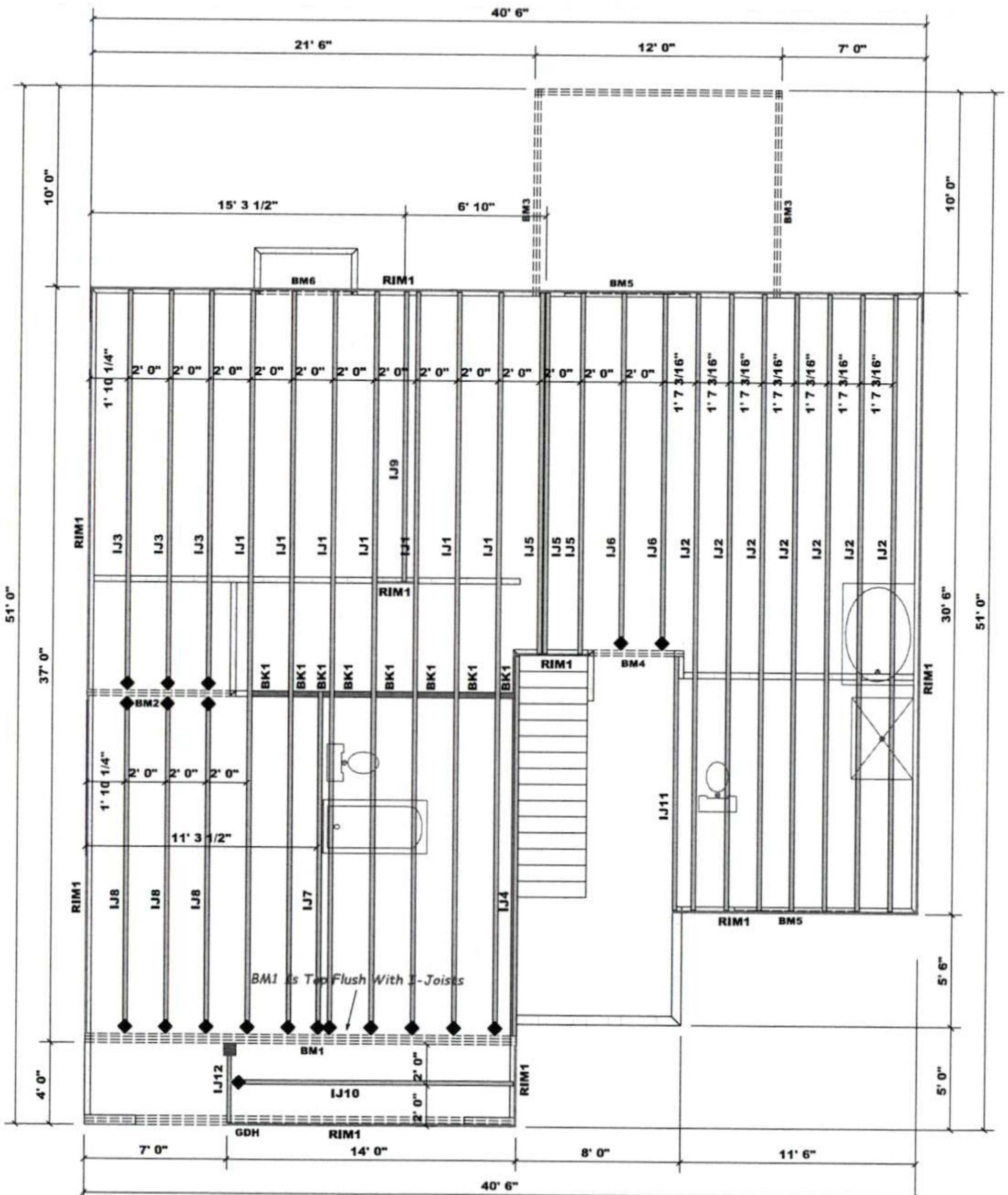
LOAD CHART FOR JACK STUDS
(BASED ON TABLES R502.5(1) & (b))
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

CITY / CO.	Harnett County / Harnett
ADDRESS	Lot 659 Manors @ Lexington
MODEL	31000
DATE REV.	01/27/20
DRAWN BY	Curtis Quick
SALES REP.	Scot Duncan

BUILDER	Cates Building
JOB NAME	Lot 659 Manors @ Lexington
PLAN	CC-2355 / Crawl / LF2
SEAL DATE	10/11/19
QUOTE #	Quote #
JOB #	J0120-0399

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



Beam Legend

PlotID	Length	Product	Plies	Net Qty
BM3	11' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	4
BM5	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	4
BM6	5' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
GDH	21' 0"	1-3/4"x 11-7/8" LVL Kerto-S	3	3
BM2	8' 0"	1-3/4"x 14" LVL Kerto-S	2	2
BM4	5' 0"	1-3/4"x 14" LVL Kerto-S	2	2
BM1	21' 0"	1-3/4"x 18" LVL Kerto-S	3	3

HANGER LEGEND

◆	= USP THF25140 / Single I-Joist Hanger
■	= USP HD416 / Single I-Joist Hanger

Truss Placement Plan
SCALE: 1/4" = 1'

I-Joist Legend

PlotID	Length	Product	Plies	Net Qty
IJ1	36' 5 1/4"	14" WI 40	1	7
IJ2	30' 2 13/16"	14" WI 40	1	7
IJ3	19' 7 1/2"	14" WI 40	1	3
IJ4	18' 7 5/16"	14" WI 40	1	1
IJ5	17' 8 1/4"	14" WI 40	1	3
IJ6	17' 6"	14" WI 40	1	2
IJ7	16' 9 3/4"	14" WI 40	1	1
IJ8	16' 6 3/8"	14" WI 40	1	3
IJ9	14' 2 1/4"	14" WI 40	1	1
IJ10	13' 7 7/8"	14" WI 40	1	1
IJ11	12' 5 7/16"	14" WI 40	1	1
IJ12	3' 10 1/2"	14" WI 40	1	1
RIM1	12' 0"	1 1/8" x 14" Rim Board	1	12
BK1	2' 0"	14" WI 40	1	8
	1' 8"	Backer Blocks (14" WI 40)	1	2
	1' 0"	Backer Blocks (14" WI 40)	1	2
		Web Stiffeners (14" WI 40)	1	40

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature: *Curtis Quick*
Curtis Quick

LOAD CHART FOR JACK STUDS
(BASED ON TABLES R502.5(1) & (b))
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ'D # STUDS FOR (2) PLY HEADER	END REACTION (UP TO)	REQ'D # STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D # STUDS FOR (4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

CITY / CO.	Harnett County / Harnett
ADDRESS	Lot 659 Manors @ Lexington
MODEL	31500
DATE REV.	01/27/20
DRAWN BY	Curtis Quick
SALES REP.	Scot Duncan
BUILDER	Cates Building, Inc.
JOB NAME	Lot 659 Manors @ Lexington
PLAN	CC-2355 / Elev. C / I-Joist / LF2
SEAL DATE	10/11/19
QUOTE #	Quote #
JOB #	J0120-0400

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com