

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: J0221-1079  
Lot 16 Forest Ridge

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

Pages or sheets covered by this seal: E15425640 thru E15425671

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



February 19,2021

Strzyzewski, Marvin

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425640
J0221-1079	A01	COMMON	3	1		

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4x6 ||

Scale = 1:73.1

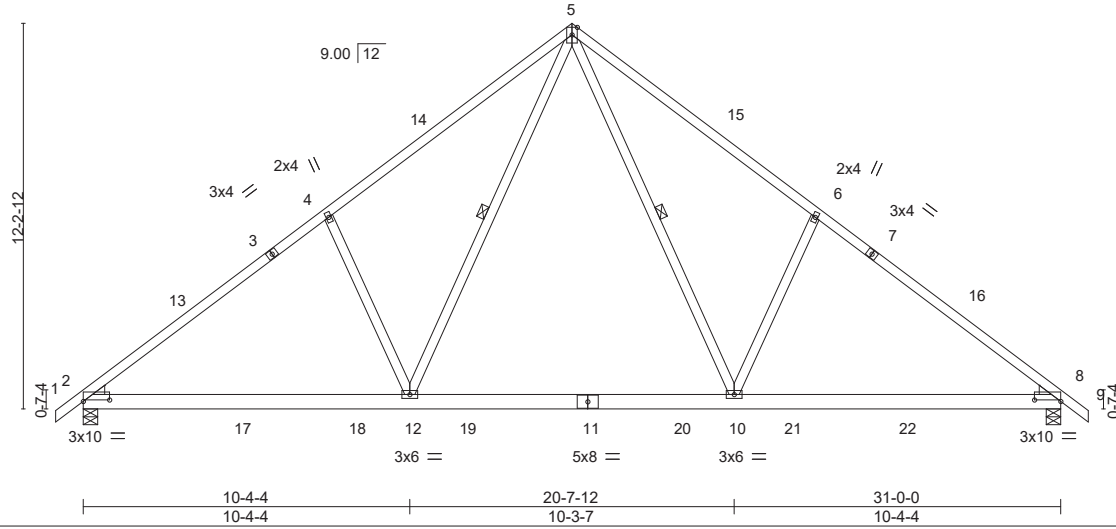


Plate Offsets (X,Y)-- [2:0-10-0,0-0-9], [8:0-10-0,0-0-9]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.79	Vert(LL) -0.21	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.27	10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.36	Horz(CT) 0.04	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	2-12	>999	240		
							Weight: 191 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-10, 5-12

**REACTIONS.**

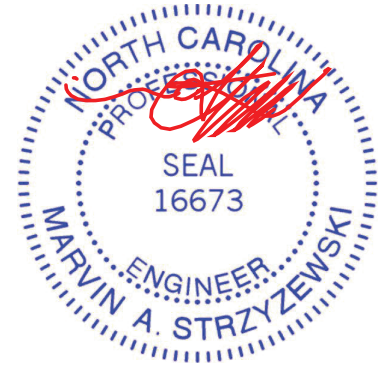
(size) 2=0-5-8, 8=0-5-8  
 Max Horz 2=-294(LC 8)  
 Max Uplift 2=-104(LC 10), 8=-104(LC 11)  
 Max Grav 2=1611(LC 17), 8=1611(LC 18)

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

TOP CHORD 2-4=-2092/410, 4-5=-1955/539, 5-6=-1956/539, 6-8=-2092/410  
 BOT CHORD 2-12=-144/1744, 10-12=0/1147, 8-10=-144/1571  
 WEBS 5-10=-216/1084, 6-10=-494/321, 5-12=-216/1084, 4-12=-494/321

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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 11-1-3, Exterior(2) 11-1-3 to 19-10-13, Interior(1) 19-10-13 to 27-5-11, Exterior(2) 27-5-11 to 31-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 2 and 104 lb uplift at joint 8.



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



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425641
J0221-1079	A01-P	FINK	2	1		

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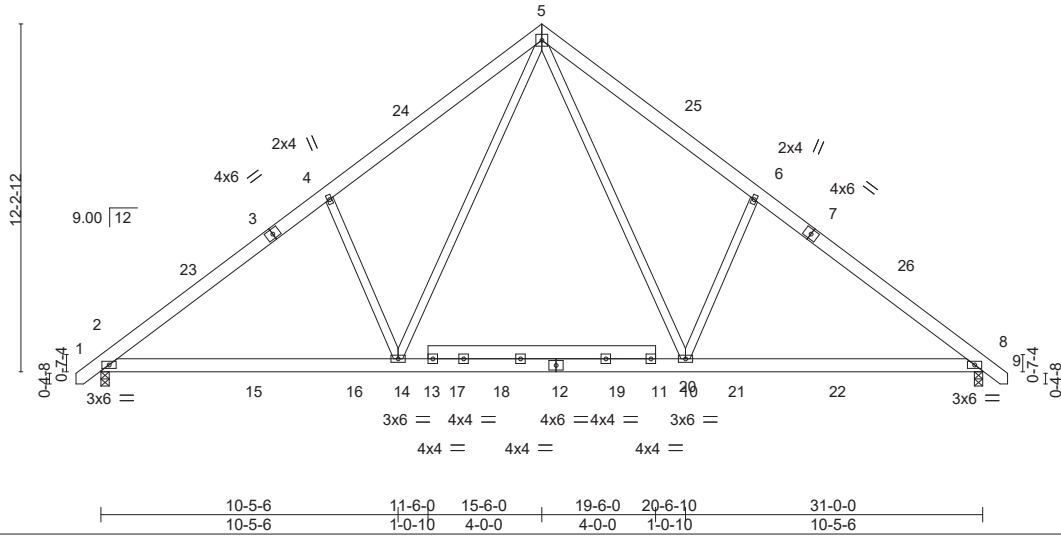
8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:14:45 2021 Page 1

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5x5 =

Scale = 1:81.0



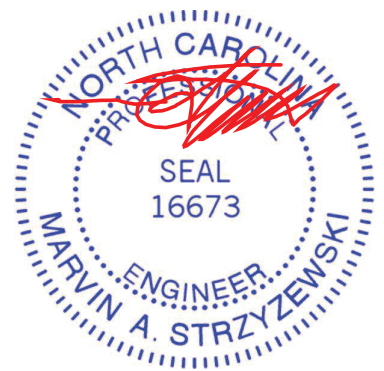
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-1-8	TC 0.31	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.57	Vert(LL) -0.08 2-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.40	Vert(CT) -0.17 2-14 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.04 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.04 2-14 >999 240	Weight: 243 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-2-14 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	
11-13: 2x6 SP No.1	

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=310(LC 9)  
 Max Uplift 8=-9(LC 11), 2=-9(LC 10)  
 Max Grav 8=1570(LC 18), 2=1570(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2046/272, 4-5=-1942/420, 5-6=-1942/420, 6-8=-2046/272  
 BOT CHORD 2-14=-32/1754, 10-14=0/1142, 8-10=-31/1573  
 WEBS 4-14=-566/364, 6-10=-566/364, 5-10=-137/1075, 5-14=-137/1074

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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 11-1-3, Exterior(2) 11-1-3 to 19-10-13, Interior(1) 19-10-13 to 27-4-2, Exterior(2) 27-4-2 to 31-8-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 200.0lb AC unit load placed on the bottom chord, 15-6-0 from left end, supported at two points, 5-0-0 apart.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 8 and 9 lb uplift at joint 2.



February 19,2021

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**ENGINEERING BY**  
**TRENCO**  
 A MITEK Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425642
J0221-1079	A02	COMMON	3	1		

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4x6 ||

Scale = 1:73.1

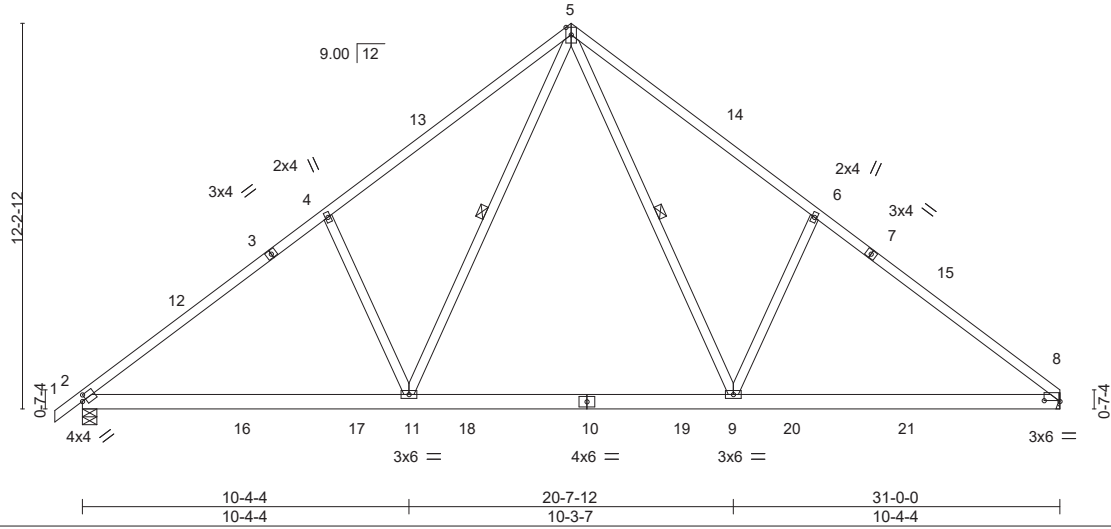


Plate Offsets (X,Y)-- [2:0-1-8,0-2-0], [8:0-6-0,0-0-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.72	Vert(LL) -0.15	9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.53	Vert(CT) -0.21	9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.38	Horz(CT) 0.04	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	2-11	>999	240		
							Weight: 188 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-9, 5-11

**REACTIONS.**

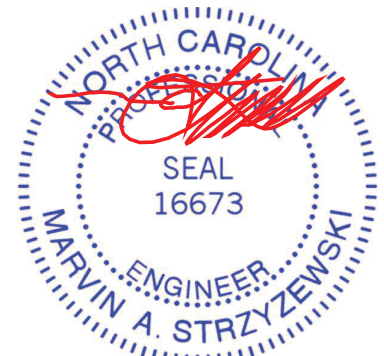
(size) 8=Mechanical, 2=0-5-8  
 Max Horz 2=291(LC 7)  
 Max Uplift 8=-90(LC 11), 2=-104(LC 10)  
 Max Grav 8=1448(LC 18), 2=1514(LC 17)

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

TOP CHORD 2-4=-1951/417, 4-5=-1816/546, 5-6=-1839/557, 6-8=-1970/423  
 BOT CHORD 2-11=-176/1628, 9-11=0/1069, 8-9=-193/1481  
 WEBS 5-9=-235/1023, 6-9=-526/346, 5-11=-217/983, 4-11=-494/322

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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 11-1-3, Exterior(2) 11-1-3 to 19-10-13, Interior(1) 19-10-13 to 26-6-7, Exterior(2) 26-6-7 to 30-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 8 and 104 lb uplift at joint 2.



February 19, 2021

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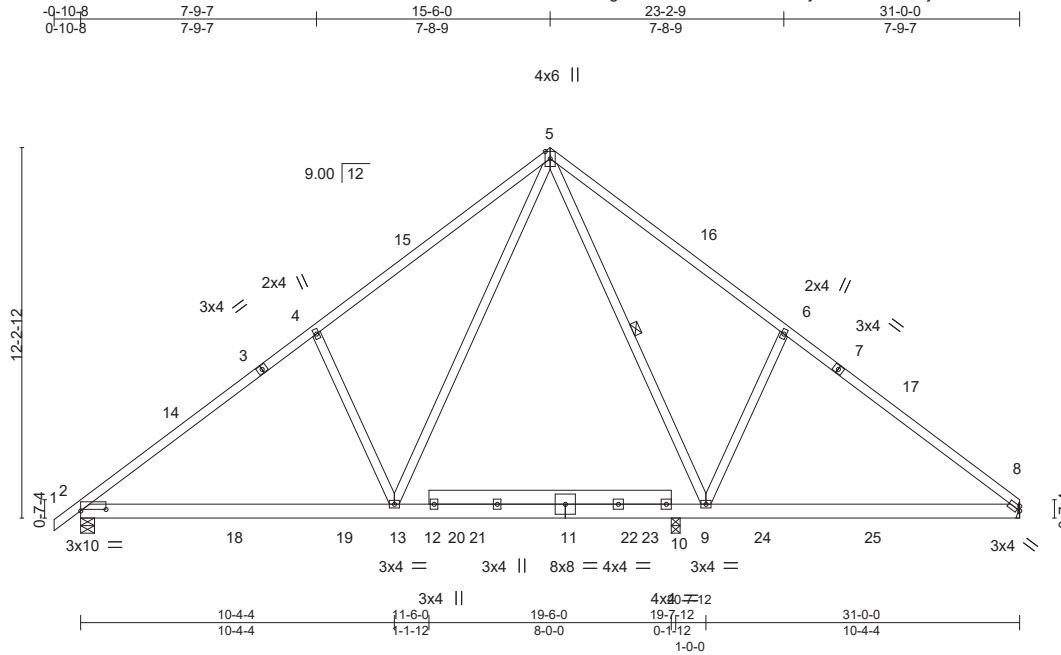
Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425643
J0221-1079	A02-P	COMMON	6	1		

Comtech, Inc.

Fayetteville, NC - 28314,

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Scale = 1:76.1

Plate Offsets (X,Y)-- [2:0-10-0,0-0-9], [11:0-0-0,0-2-12]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.62	Vert(LL) -0.09	8-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.78	Vert(CT) -0.20	8-9	>665	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.01	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	2-13	>999	240	Weight: 207 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 10-12: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-3-11 oc bracing.  
 WEBS 1 Row at midpt 5-9

**REACTIONS.**

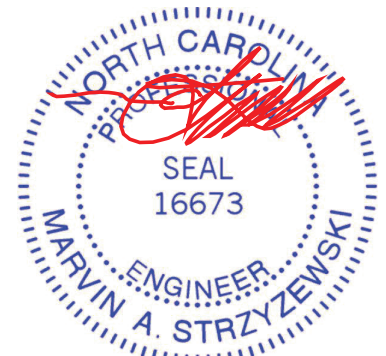
(size) 8=Mechanical, 2=0-5-8, 10=0-3-8  
 Max Horz 2=291(LC 7)  
 Max Uplift 8=-80(LC 11), 2=-57(LC 10)  
 Max Grav 8=675(LC 18), 2=1061(LC 17), 10=1204(LC 18)

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

TOP CHORD 2-4=-1233/246, 4-5=-1104/376, 5-6=-633/382, 6-8=-728/247  
 BOT CHORD 2-13=-93/1067, 10-13=-35/537, 9-10=-25/537, 8-9=-54/492  
 WEBS 5-9=-382/21, 6-9=-552/351, 5-13=-111/885, 4-13=-512/329

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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 11-1-3, Exterior(2) 11-1-3 to 19-10-13, Interior(1) 19-10-13 to 26-6-7, Exterior(2) 26-6-7 to 30-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 200.0lb AC unit load placed on the bottom chord, 15-6-0 from left end, supported at two points, 5-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 8 and 57 lb uplift at joint 2.



February 19, 2021

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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425644
J0221-1079	A03	COMMON	1	1		

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4x6 ||

Scale = 1:73.1

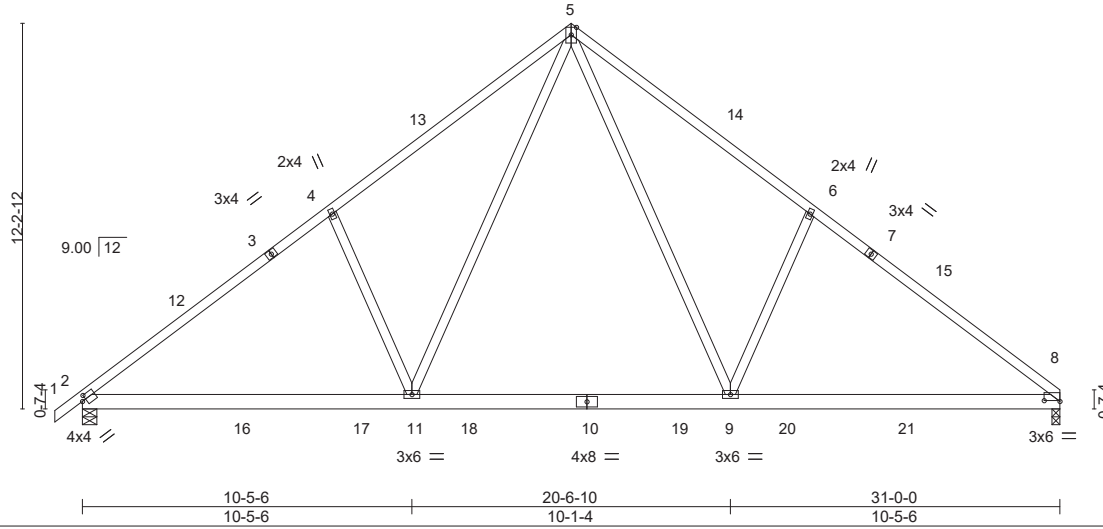


Plate Offsets (X,Y)-- [2:0-1-8,0-1-12], [8:0-6-0,0-0-5]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.19	9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.24	8-9	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.04	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06	2-11	>999	240		
							Weight: 188 lb	FT = 20%

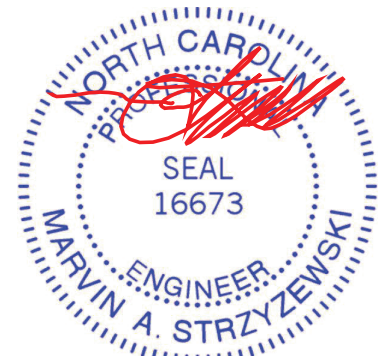
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

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

**REACTIONS.** (size) 8=0-3-0, 2=0-5-8  
 Max Horz 2=291(LC 9)  
 Max Uplift 8=-89(LC 11), 2=-104(LC 10)  
 Max Grav 8=1557(LC 18), 2=1622(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2098/415, 4-5=-1963/547, 5-6=-1980/558, 6-8=-2111/420  
 BOT CHORD 2-11=-171/1740, 9-11=0/1153, 8-9=-186/1589  
 WEBS 5-9=-237/1114, 6-9=-520/345, 5-11=-221/1085, 4-11=-496/323

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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 11-1-3, Exterior(2) 11-1-3 to 19-10-13, Interior(1) 19-10-13 to 26-5-11, Exterior(2) 26-5-11 to 30-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 8 and 104 lb uplift at joint 2.



February 19, 2021

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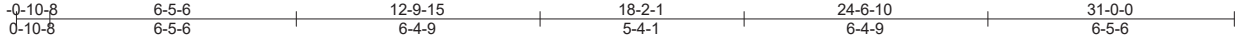
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425645
J0221-1079	A04	HIP	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

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ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-zlvUzTkssJM16rKdFEWtEMszX\_ab1s0iY3nYNljrwZ



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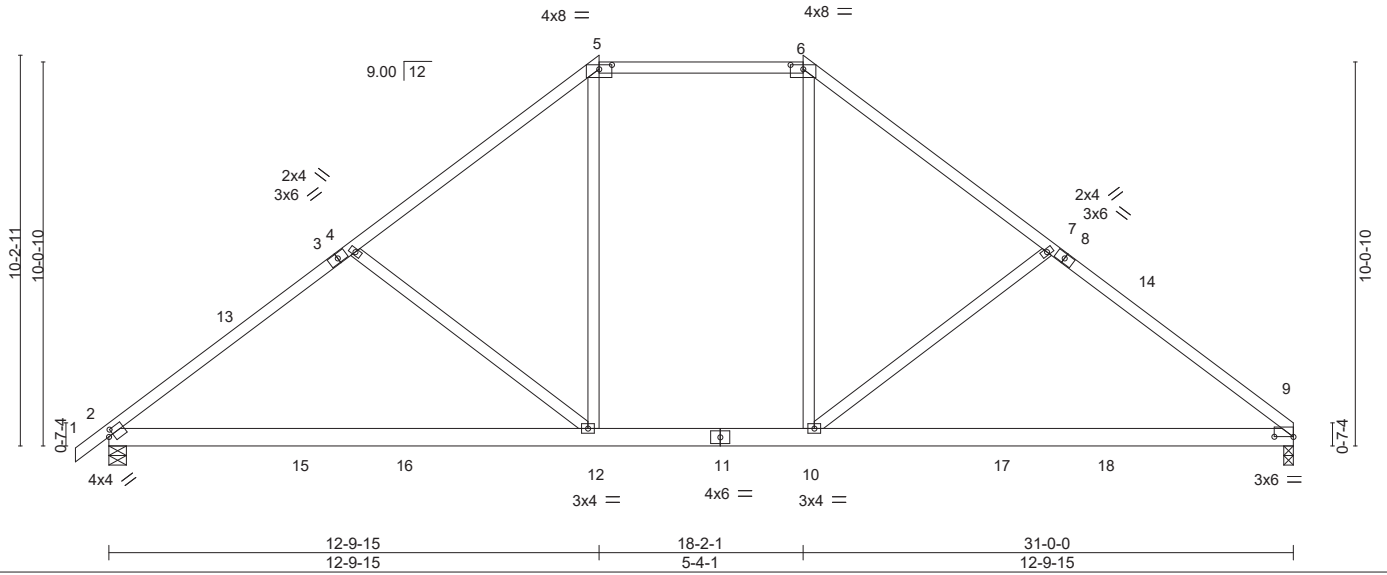


Plate Offsets (X,Y)-- [2:0-1-8,0-1-12], [5:0-4-0,0-1-6], [6:0-4-0,0-1-6], [9:0-6-0,0-0-1]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.38	9-10	>967	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.80	Vert(CT) -0.61	9-10	>606	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.48	Horz(CT) 0.04	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.24	9-10	>999	240		
							Weight: 181 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-11-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 9=0-3-0, 2=0-5-8  
 Max Horz 2=241(LC 9)  
 Max Uplift 9=-81(LC 11), 2=-96(LC 10)  
 Max Grav 9=1429(LC 18), 2=1494(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1837/518, 4-5=-1606/488, 5-6=-1196/469, 6-7=-1608/491, 7-9=-1846/528  
 BOT CHORD 2-12=-275/1526, 10-12=-49/1239, 9-10=-295/1404  
 WEBS 4-12=-413/284, 5-12=-87/648, 6-10=-94/654, 7-10=-432/310

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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 6-3-15, Exterior(2) 6-3-15 to 24-8-1, Interior(1) 24-8-1 to 26-5-11, Exterior(2) 26-5-11 to 30-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 9 and 96 lb uplift at joint 2.



February 19, 2021

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

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



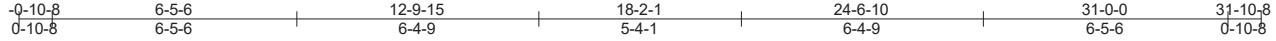
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425646
J0221-1079	A04A	HIP	1	1		

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:14:51 2021 Page 1

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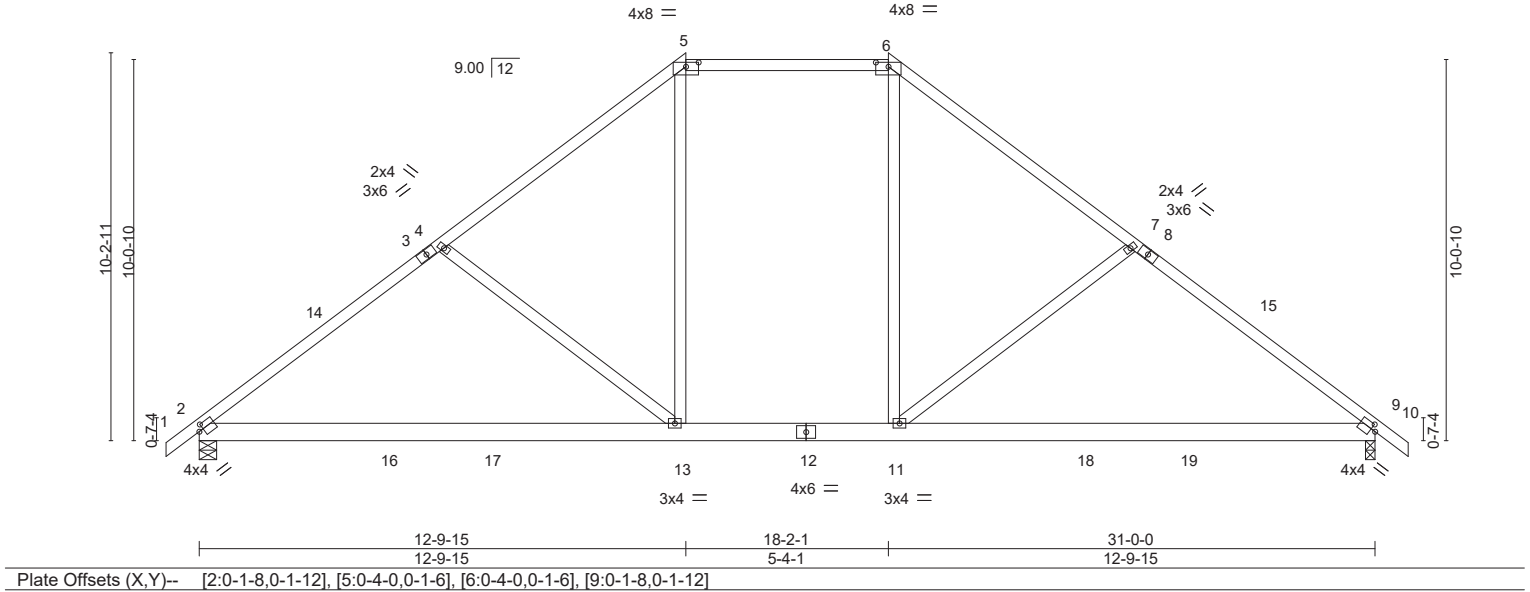


Plate Offsets (X,Y)--	[2:0-1-8,0-1-12], [5:0-4-0,0-1-6], [6:0-4-0,0-1-6], [9:0-1-8,0-1-12]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) -0.37	9-11	>996	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.78	Vert(CT) -0.59	9-11	>627	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.47	Horz(CT) 0.04	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.24	9-11	>999	240		
							Weight: 183 lb	FT = 20%

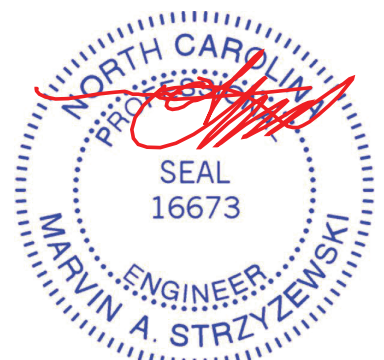
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-1-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 9=0-3-0, 2=0-5-8  
Max Horz 2=245(LC 9)  
Max Uplift 9=-95(LC 11), 2=-96(LC 10)  
Max Grav 9=1486(LC 18), 2=1493(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1835/513, 4-5=-1604/483, 5-6=-1194/466, 6-7=-1606/484, 7-9=-1844/515  
BOT CHORD 2-13=-246/1530, 11-13=-20/1243, 9-11=-252/1403  
WEBS 4-13=-412/285, 5-13=-85/647, 6-11=-87/652, 7-11=-429/291

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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 6-3-15, Exterior(2) 6-3-15 to 24-8-1, Interior(1) 24-8-1 to 27-5-11, Exterior(2) 27-5-11 to 31-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 9 and 96 lb uplift at joint 2.



February 19, 2021

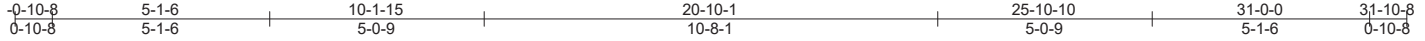


Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425647
J0221-1079	A05	HIP	2	1		

Comtech, Inc. Fayetteville, NC - 28314,

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ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-w81EO9l6OxclM9T0MeZLJnyE\_nFRVr4??NGfSBzjrWx



Scale = 1:54.2

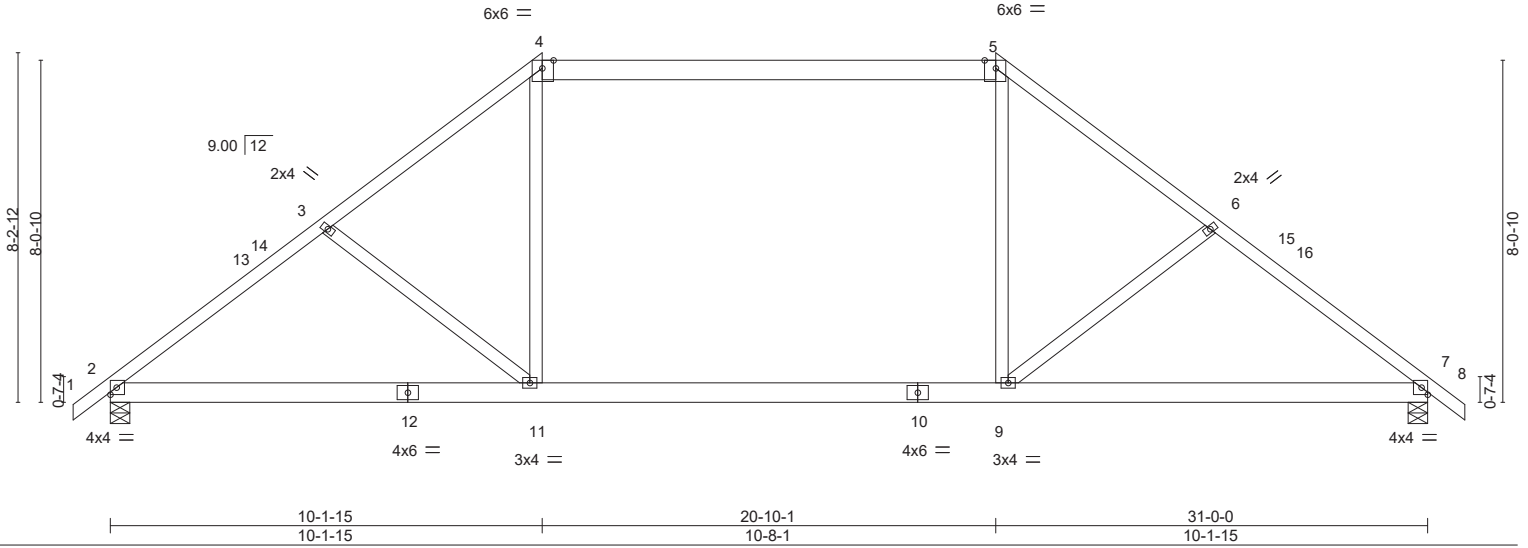


Plate Offsets (X,Y)--	[4:0-3-3,Edge], [5:0-3-3,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.71	Vert(LL) -0.43	9-11	>855	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.81	Vert(CT) -0.50	9-11	>729	240		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.18	Horz(CT) 0.04	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.28	2-11	>999	240		
								Weight: 179 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-3-10 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-5-8, 7=0-5-8  
 Max Horz 2=196(LC 9)  
 Max Uplift 2=-82(LC 10), 7=-82(LC 11)  
 Max Grav 2=1453(LC 2), 7=1453(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2030/531, 3-4=-1861/518, 4-5=-1438/488, 5-6=-1861/518, 6-7=-2030/531  
 BOT CHORD 2-11=-280/1576, 9-11=-119/1438, 7-9=-280/1506  
 WEBS 3-11=-269/204, 4-11=-18/706, 5-9=-18/706, 6-9=-269/204

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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 3-11-5, Exterior(2) 3-11-5 to 27-0-11, Interior(1) 27-0-11 to 27-5-11, Exterior(2) 27-5-11 to 31-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 2 and 82 lb uplift at joint 7.



February 19,2021

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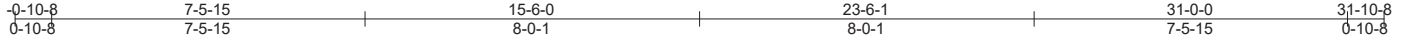
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425648
J0221-1079	A06	HIP GIRDER	2	2		

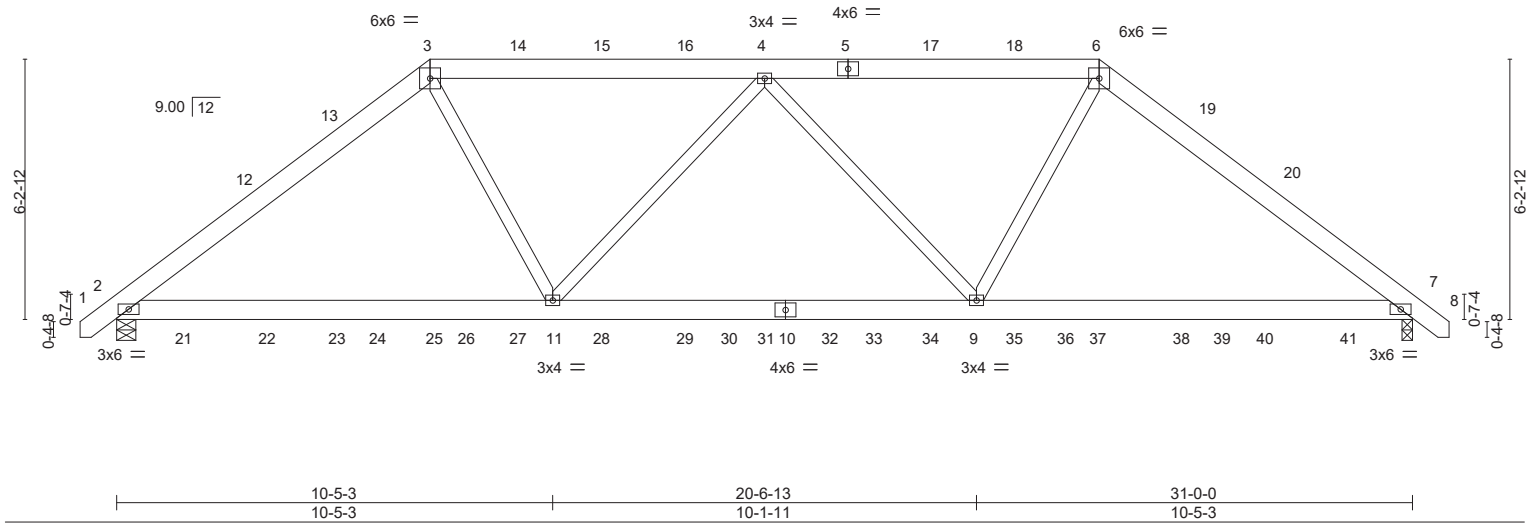
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:14:56 2021 Page 1

ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-ovHIEodS96ArmnbnUdHUd61cOjCReibw?FsbzjrwT



Scale = 1:55.1



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(LL) -0.09 7-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Vert(CT) -0.18 7-9 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.03 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 7-9 >999 240	Weight: 399 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 2=0-5-8, 7=0-3-0  
 Max Horz 2=149(LC 26)  
 Max Uplift 2=-715(LC 8), 7=-711(LC 9)  
 Max Grav 2=2383(LC 33), 7=2370(LC 34)

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

TOP CHORD 2-3=-3031/1080, 3-4=-2893/1001, 4-6=-2911/1006, 6-7=-3045/1084  
 BOT CHORD 2-11=-902/2394, 9-11=-1324/3366, 7-9=-833/2384  
 WEBS 3-11=-266/1269, 4-11=-647/570, 4-9=-622/564, 6-9=-260/1256

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.
- 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 715 lb uplift at joint 2 and 711 lb uplift at joint 7.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 102 lb down and 80 lb up at 3-6-12, 110 lb down and 103 lb up at 5-6-12, 149 lb down and 168 lb up at 7-5-15, 154 lb down and 164 lb up at 9-6-12, 154 lb down and 164 lb up at 11-6-12, 154 lb down and 164 lb up at 13-6-12, 154 lb down and 164 lb up at 15-6-0, 154 lb down and 164 lb up at 17-5-4, 154 lb down and 164 lb up at 19-5-4, 154 lb down and 164 lb up at 21-5-4, 149 lb down and 168 lb up at 23-6-1, and 110 lb down and 103 lb up at 25-5-4, and 102 lb down and 80 lb up at 27-5-4 on top chord, and 182 lb down and 52 lb up at 1-6-12, 63 lb down at 3-6-12, 59 lb down at 5-6-12, 62 lb down at 7-6-12, 62 lb down at 9-6-12, 62 lb down at 11-6-12, 62 lb down at 13-6-12, 62 lb down at 15-6-0, 62 lb down at 17-5-4, 62 lb down at 19-5-4, 62 lb down at 21-5-4, 62 lb down at 23-5-4, 59 lb down at 25-5-4, and 63 lb down at 27-5-4, and 182 lb down and 52 lb up at 29-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

Continued on page 2

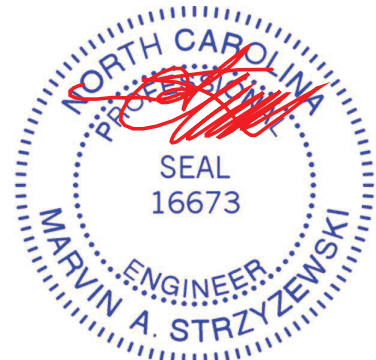
February 19, 2021

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425648
J0221-1079	A06	HIP GIRDER	2	<b>2</b>	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:14:56 2021 Page 2  
 ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-ovHIEXodS96ArmnbUdHUd61cOjCReibw?FsbyzjrwT

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-6=-60, 6-8=-60, 2-7=-20

Concentrated Loads (lb)

Vert: 3=-87(F) 5=-87(F) 6=-87(F) 4=-87(F) 12=-62(F) 13=-70(F) 14=-87(F) 15=-87(F) 16=-87(F) 17=-87(F) 18=-87(F) 19=-70(F) 20=-62(F) 21=-182(F) 22=-55(F) 24=-48(F) 25=-31(F) 27=-31(F) 28=-31(F) 29=-31(F) 31=-31(F) 33=-31(F) 34=-31(F) 35=-31(F) 37=-31(F) 38=-48(F) 40=-55(F) 41=-182(F)

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

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425649
J0221-1079	B01	GABLE	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:14:58 2021 Page 1

ID:PtgA9aKcFvmBbRX6w1bfS5yA1hk-kHOVfCqt\_nNu44xAjvflZ2CPHCUKvZluNjkzgrjwR

0-10-8 7-0-0 7-9-0 12-3-0 13-0-0 20-0-0 20-10-8  
 0-10-8 7-0-0 0-9-0 4-5-15 0-9-0 7-0-0 0-10-8

Scale = 1:51.5

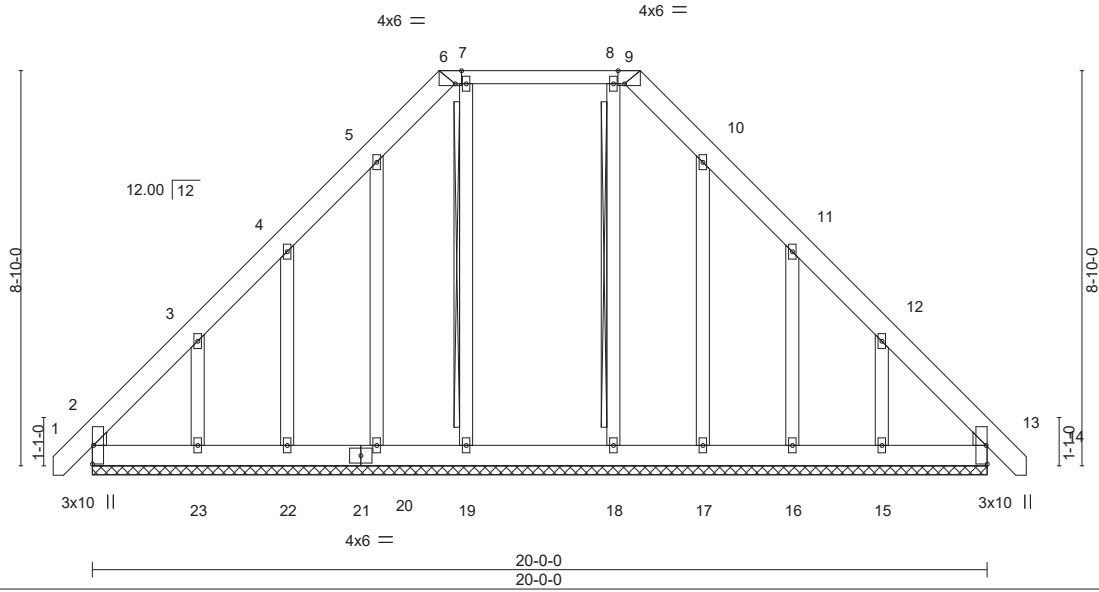


Plate Offsets (X,Y)-- [2:0-0-5,0-2-10], [2:0-0-2,0-0-2], [6:0-1-12,Edge], [9:0-1-12,Edge], [13:0-0-2,0-0-2], [13:0-0-5,0-2-10]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) 0.00	13	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) 0.00	13	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.00	13	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 177 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1 \*Except\*  
 6-9: 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.2, Right: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 7-19, 8-18  
 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 20-0-0.  
 (lb) - Max Horz 2=260(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 13, 19, 18, 17, 2 except 20=102(LC 10), 22=145(LC 10), 23=231(LC 10), 16=147(LC 11), 15=225(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 13, 20, 22, 23, 17, 16, 15, 2 except 19=340(LC 20), 18=323(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=314/218, 12-13=-266/171

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 19, 18, 17, 2 except (jt=lb) 20=102, 22=145, 23=231, 16=147, 15=225.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



February 19, 2021

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

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425650
J0221-1079	B02	HIP	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

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ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-DUyusYrV14ViiEWMHdB\_6FkWDciset71czTWCHzjrWQ

0-10-8 4-3-3 5-1-12 8-6-0 11-6-0 14-10-4 15-8-13 20-0-0 20-10-8  
 0-10-8 4-3-3 0-10-9 3-4-4 2-11-15 3-4-4 0-10-9 4-3-3 0-10-8

Scale = 1:59.6

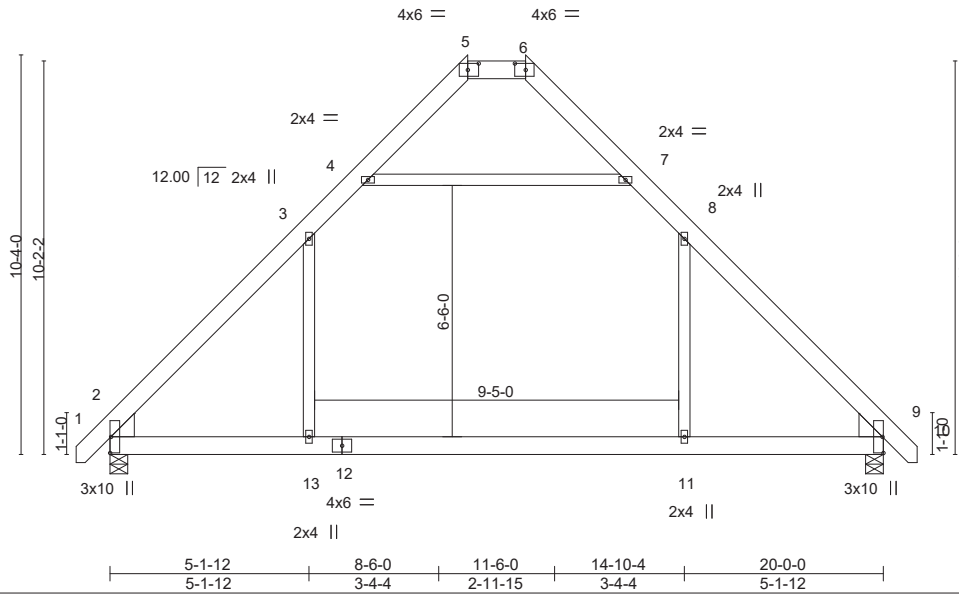


Plate Offsets (X,Y)-- [2:0-0-5,0-5-2], [2:0-0-2,0-0-2], [5:0-3-6,0-2-0], [6:0-3-6,0-2-0], [9:0-0-2,0-0-2], [9:0-0-5,0-5-2]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.57	Vert(LL) -0.23 11-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.68	Vert(CT) -0.30 11-13 >782 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.11 13 >999 240	Weight: 148 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE  
 Left: 2x8 SP No.1 , Right: 2x8 SP No.1

**BRACING-**

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

**REACTIONS.**

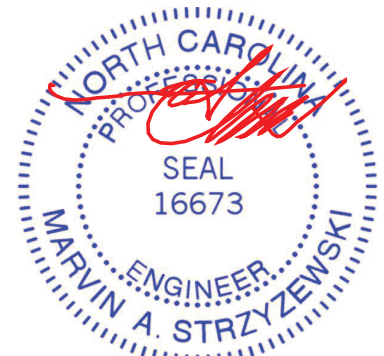
(size) 2=0-5-8, 9=0-5-8  
 Max Horz 2=239(LC 9)  
 Max Uplift 2=-55(LC 10), 9=-55(LC 11)  
 Max Grav 2=1038(LC 17), 9=1038(LC 18)

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

TOP CHORD 2-3=-1360/235, 3-4=-725/305, 7-8=-725/305, 8-9=-1359/235  
 BOT CHORD 2-13=-21/817, 11-13=-21/818, 9-11=-21/817  
 WEBS 3-13=-6/686, 8-11=-5/686, 4-7=-801/372

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.



February 19, 2021

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425651
J0221-1079	B03	COMMON	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:14:59 2021 Page 1

ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-DUyusYrVl4VliEWMHdB\_6FKXlchEeu?1czTWCChzjrWQ

-0-10-8 5-1-12 10-0-0 14-10-4 19-6-0 20-0-0  
 0-10-8 5-1-12 4-10-4 4-10-4 4-7-12 0-6-0

4x6 =

Scale = 1:73.3

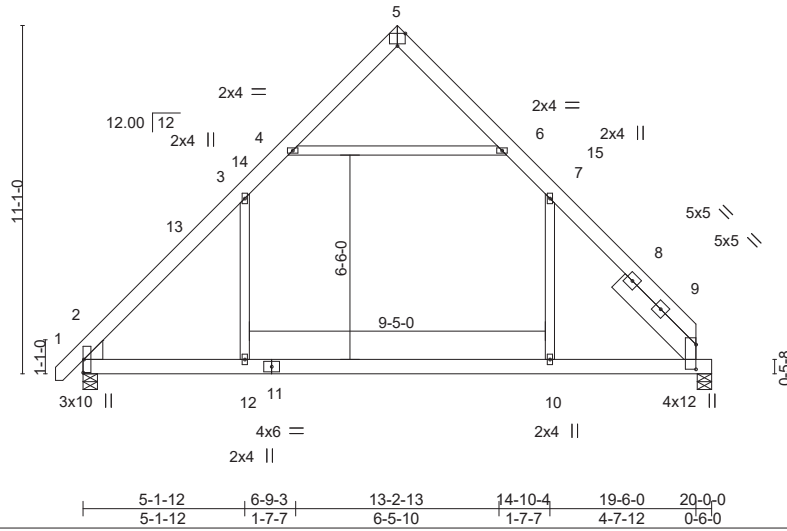


Plate Offsets (X,Y)-- [2:0-0-5,0-5-2], [2:0-0-2,0-0-2], [5:0-3-0,Edge], [9:0-9-7,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.23	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.29	10-12	>794	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.11	12	>999	240		
							Weight: 155 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE  
 Left: 2x8 SP No.1  
 SLIDER Right 2x8 SP No.1 - 3-6-3

**BRACING-**

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

**REACTIONS.**

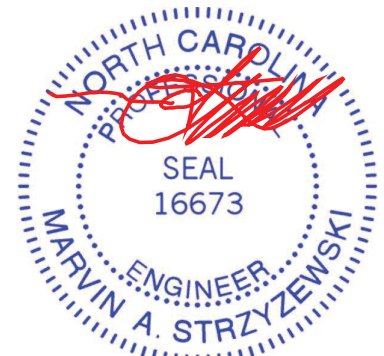
(size) 9=0-5-8, 2=0-5-8  
 Max Horz 2=256(LC 7)  
 Max Uplift 9=-50(LC 10), 2=-54(LC 10)  
 Max Grav 9=997(LC 17), 2=1030(LC 17)

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

TOP CHORD 2-3=-1348/226, 3-4=-733/290, 6-7=-728/285, 7-9=-1364/218  
 BOT CHORD 2-12=-23/803, 10-12=-23/804, 9-10=-23/803  
 WEBS 3-12=-11/661, 7-10=-13/709, 4-6=-734/355

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 5-7-3, Exterior(2) 5-7-3 to 14-4-13, Interior(1) 14-4-13 to 14-10-7, Exterior(2) 14-10-7 to 19-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2.



February 19,2021

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425652
J0221-1079	C01	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-hgWG4ur7W0dcJO5YqKiDeTHkM081NSqBrdD4kjrWp

-0-10-8 7-8-0 10-8-0 18-4-0 19-2-8  
 0-10-8 7-8-0 3-0-0 7-8-0 0-10-8

Scale = 1:53.2

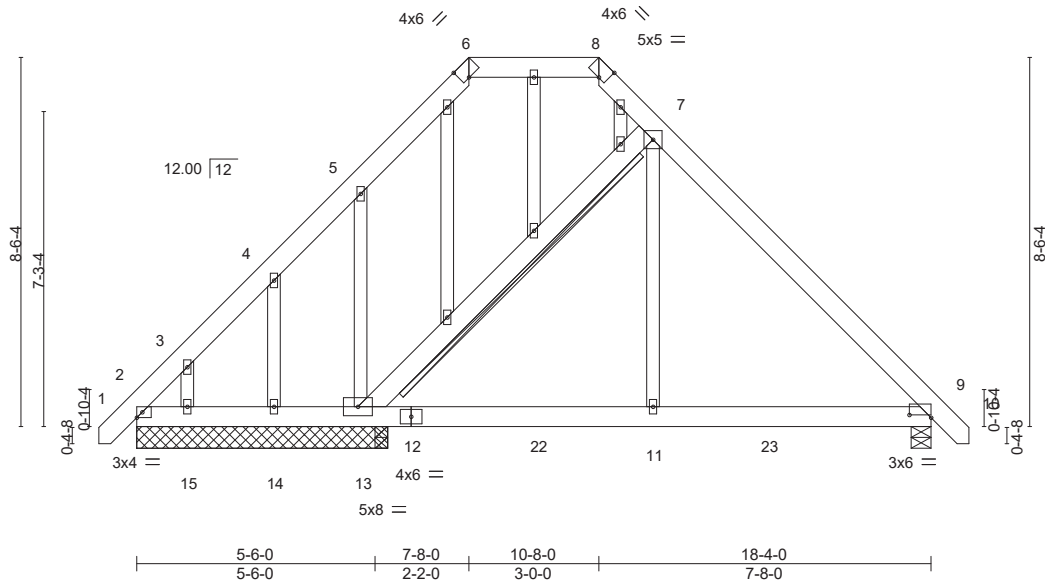


Plate Offsets (X,Y)-- [6:0-2-2,Edge], [8:0-2-2,Edge], [9:0-6-0,0-0-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL) -0.02	9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT) -0.03	9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02	9-11	>999	240	Weight: 167 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	Except:
WEBS 2x4 SP No.2	T-Brace: 2x4 SPF No.2 - 7-13
OTHERS 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 5-9-8 except (jt=length) 9=0-5-8.  
 (lb) - Max Horz 2=-255(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 9 except 13=-246(LC 11), 14=-162(LC 10), 15=-177(LC 10)  
 Max Grav All reactions 250 lb or less at joint(s) 14, 15 except 2=305(LC 10), 13=686(LC 18), 13=528(LC 1), 9=689(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-434/328, 3-4=-284/205, 7-9=-705/78, 7-13=-583/278  
 BOT CHORD 2-15=-208/379, 14-15=-211/380, 13-14=-211/380, 11-13=-12/474, 9-11=-12/474  
 WEBS 7-11=0/519, 5-13=-293/229

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9 except (jt=lb) 13=246, 14=162, 15=177.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



February 19, 2021

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425653
J0221-1079	C02	Hip Girder	1	2	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-9s4eHEsmHilTxYglO1DSBgupPJl6qDK4HydGAzjrW0

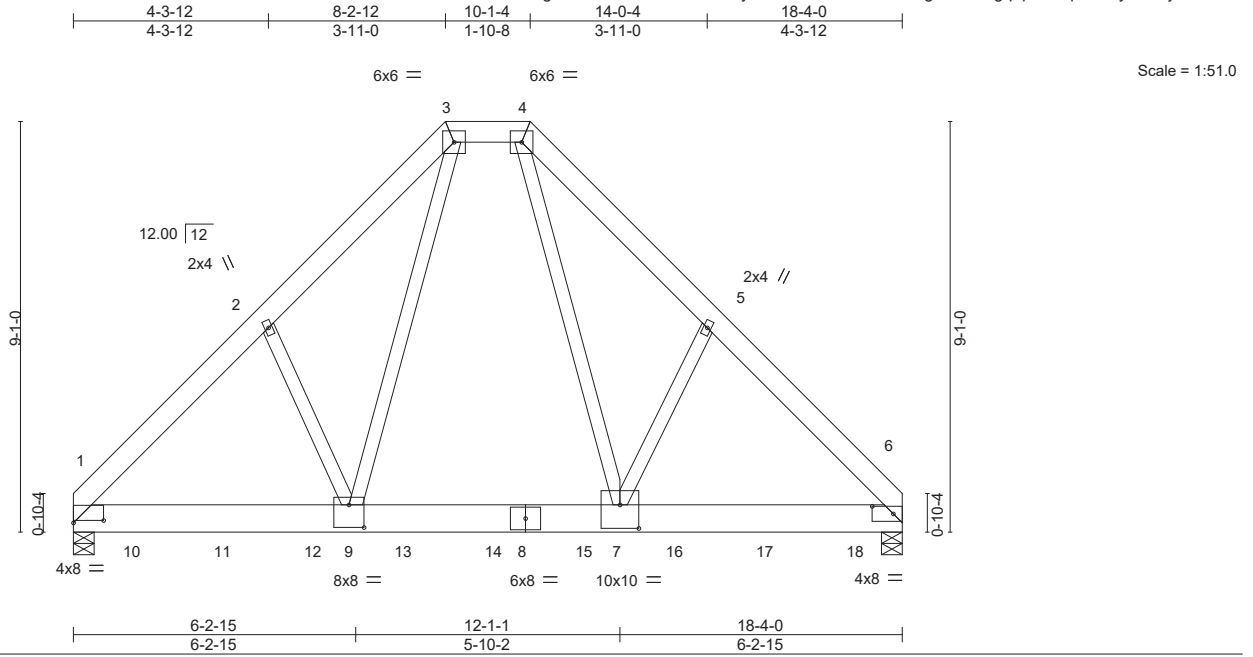


Plate Offsets (X,Y)-- [1:0-8-0,0-0-10], [6:0-5-10,0-2-0], [7:0-5-0,0-6-4], [9:0-4-0,0-6-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) -0.08	1-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.89	Vert(CT) -0.14	1-9	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.51	Horz(CT) 0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	1-9	>999	240		
							Weight: 311 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=0-5-8, 6=0-5-8  
 Max Horz 1=205(LC 24)  
 Max Uplift 1=440(LC 8), 6=405(LC 9)  
 Max Grav 1=6200(LC 2), 6=5246(LC 2)

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

TOP CHORD 1-2=-5710/462, 2-3=-5544/531, 3-4=-2825/324, 4-5=-5044/508, 5-6=-5253/443  
 BOT CHORD 1-9=-346/3824, 7-9=-214/2825, 6-7=-241/3485  
 WEBS 2-9=-217/304, 3-9=-387/4154, 4-7=-344/3138, 5-7=-216/352

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.
- 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=440, 6=405.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1474 lb down and 110 lb up at 1-3-4, 1474 lb down and 110 lb up at 3-3-4, 1474 lb down and 110 lb up at 5-3-4, 912 lb down and 88 lb up at 7-3-4, 880 lb down and 88 lb up at 9-3-4, 918 lb down and 88 lb up at 11-3-4, 940 lb down and 88 lb up at 13-3-4, and 940 lb down and 88 lb up at 15-3-4, and 942 lb down and 87 lb up at 17-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



February 19, 2021

Continued on page 2

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818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425653
J0221-1079	C02	Hip Girder	1	2	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:15:01 2021 Page 2  
 ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-9s4eHEsmHilTxYglO1DSBgqupPJl6qDK4HydGAzjrwO

**LOAD CASE(S)** Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 10=-1207(F) 11=-1207(F) 12=-1207(F) 13=-877(F) 14=-877(F) 15=-877(F) 16=-877(F) 17=-877(F) 18=-879(F)

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425654
J0221-1079	D01	COMMON SUPPORTED GAB	1	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:15:03 2021 Page 1

ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-5FCOiwu0oJ?BArp7WSFWG5vHgDCDaqldXbRKLZzjrwm

0-10-8 6-6-0 13-0-0 13-10-8  
 0-10-8 6-6-0 6-6-0 0-10-8

5x5 =

Scale = 1:44.0

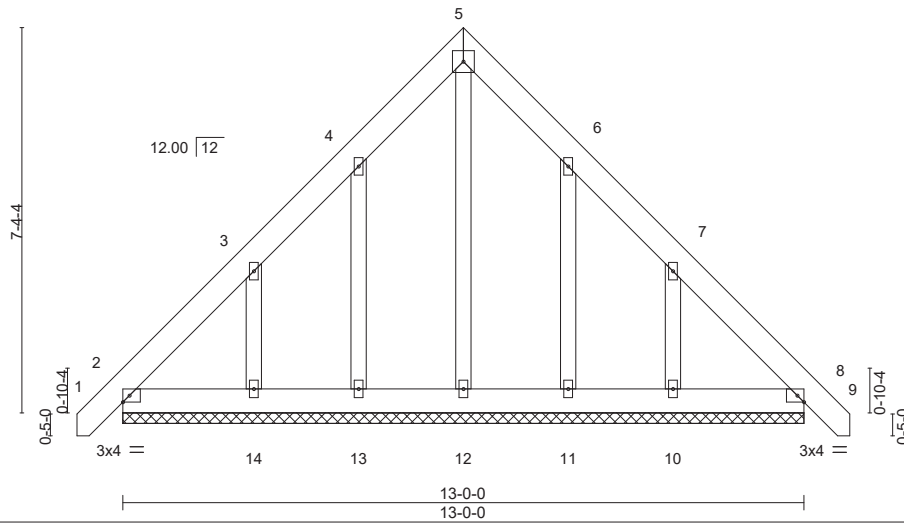


Plate Offsets (X,Y)-- [8:0-1-8,Edge]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) 0.00	8	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00	8	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 110 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

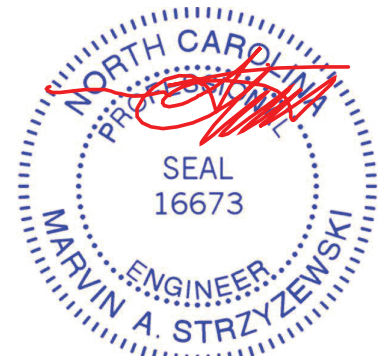
All bearings 13-0-0.  
 (lb) - Max Horz 2=-218(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 13=-119(LC 10), 14=-212(LC 10), 11=-115(LC 11), 10=-212(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

WEBS 3-14=-255/221, 7-10=-255/220

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 13=119, 14=212, 11=115, 10=212.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.



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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

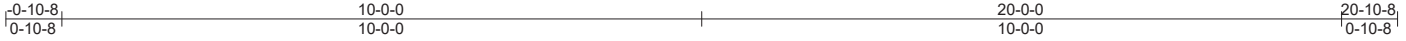
Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425655
J0221-1079	G01	COMMON GIRDER	3	1		

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ID:PtgA9aKCfvmBbRX6w1bfSSyA1hk-ZRmnvGueZd72o?OK3Am9pJROqdUoJHFmmFBHtUzjrwl

Job Reference (optional)



Scale = 1:36.0

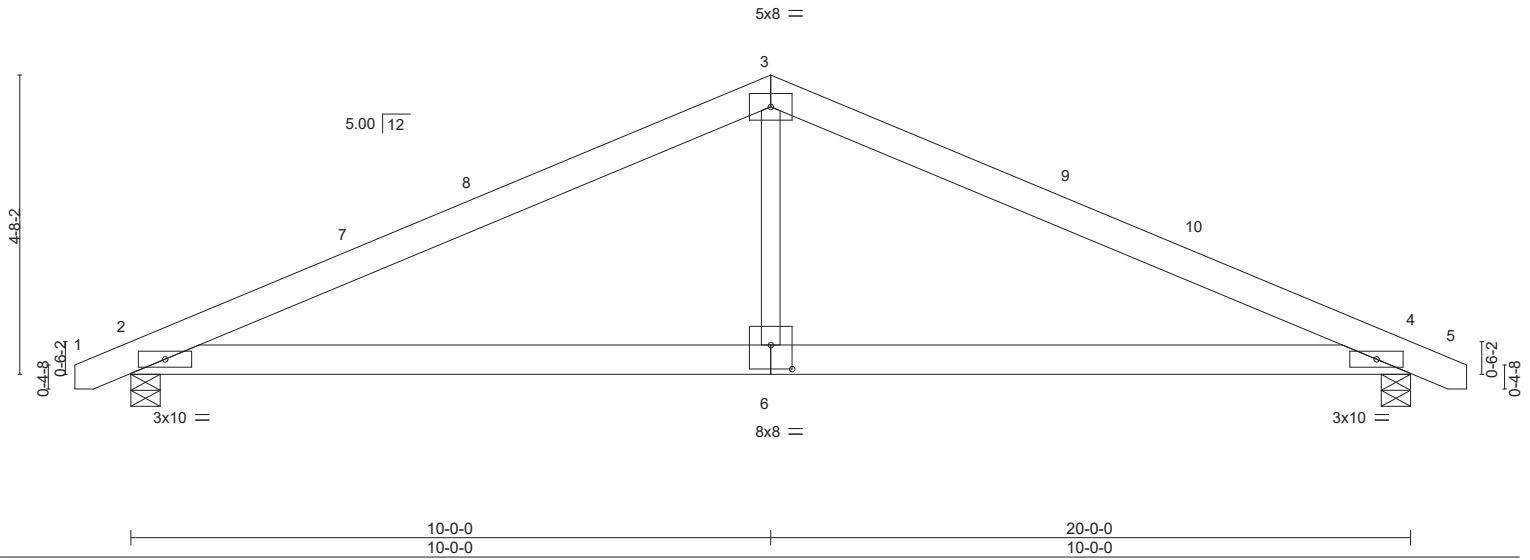


Plate Offsets (X,Y)-- [6:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0.04	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.10	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	Wind(LL) 0.03	2-6	>999	240		
							Weight: 108 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.2

**BRACING-**

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

**REACTIONS.**

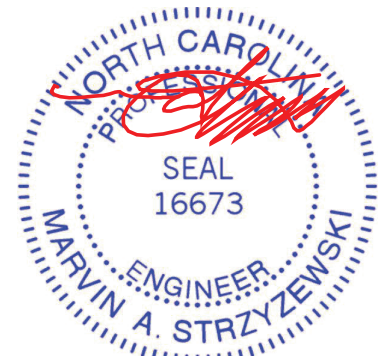
(size) 2=0-5-8, 4=0-5-8  
 Max Horz 2=-54(LC 11)  
 Max Uplift 2=-82(LC 10), 4=-82(LC 11)  
 Max Grav 2=839(LC 1), 4=839(LC 1)

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

TOP CHORD 2-3=-1255/399, 3-4=-1255/399  
 BOT CHORD 2-6=-222/1053, 4-6=-222/1053  
 WEBS 3-6=0/474

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 5-7-3, Exterior(2) 5-7-3 to 14-4-13, Interior(1) 14-4-13 to 16-3-15, Exterior(2) 16-3-15 to 20-8-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



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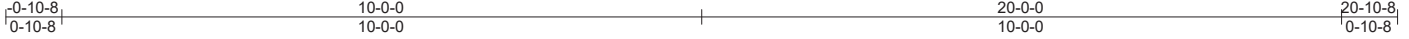
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425656
J0221-1079	G02	COMMON GIRDER	1	1		

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Scale = 1:36.0

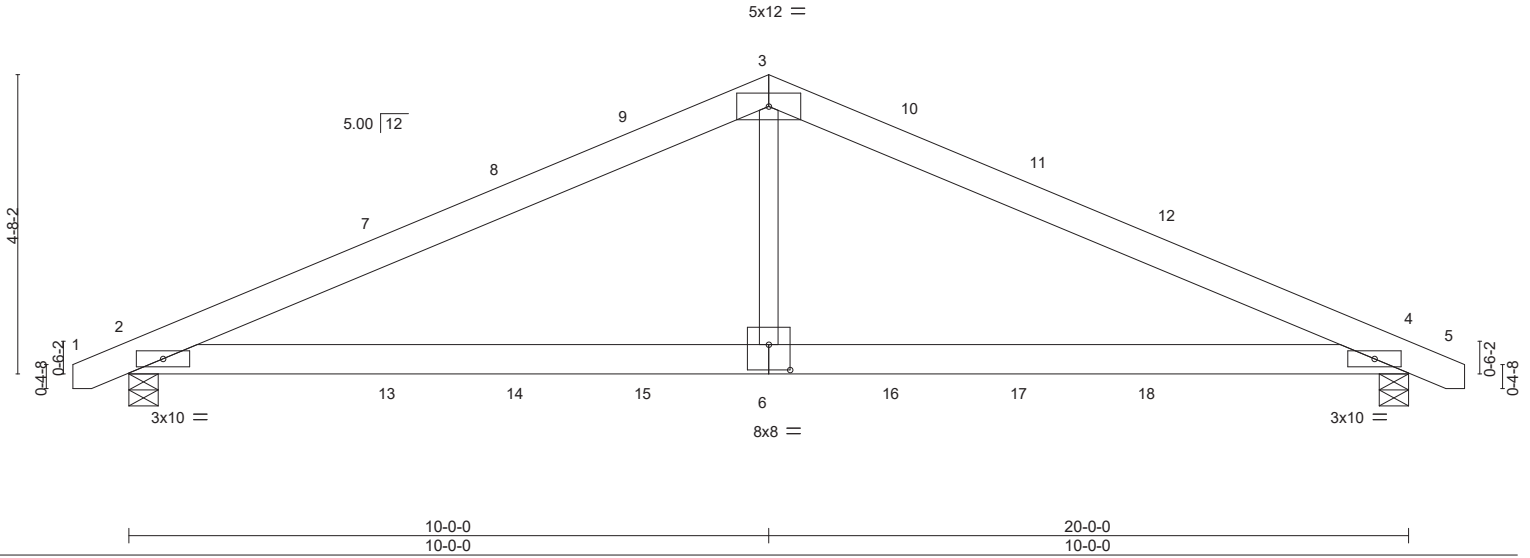


Plate Offsets (X,Y)-- [6:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.06	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(CT) -0.15	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.16	Horz(CT) 0.02	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	2-6	>999	240		
							Weight: 108 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.2

**BRACING-**

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

**REACTIONS.**

(size) 2=0-5-8, 4=0-5-8  
 Max Horz 2=-54(LC 28)  
 Max Uplift 2=-182(LC 8), 4=-182(LC 9)  
 Max Grav 2=1183(LC 1), 4=1183(LC 1)

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

TOP CHORD 2-3=-1906/299, 3-4=-1906/299  
 BOT CHORD 2-6=-214/1623, 4-6=-214/1623  
 WEBS 3-6=0/728

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=182, 4=182.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 128 lb down and 75 lb up at 4-0-12, 91 lb down and 56 lb up at 6-0-12, 89 lb down and 63 lb up at 8-0-12, 78 lb down and 87 lb up at 10-0-0, 89 lb down and 63 lb up at 11-11-4, and 91 lb down and 56 lb up at 13-11-4, and 128 lb down and 75 lb up at 15-11-4 on top chord, and 69 lb down at 4-0-12, 40 lb down at 6-0-12, 41 lb down at 8-0-12, 45 lb down and 22 lb up at 10-0-0, 41 lb down at 11-11-4, and 40 lb down at 13-11-4, and 69 lb down at 15-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

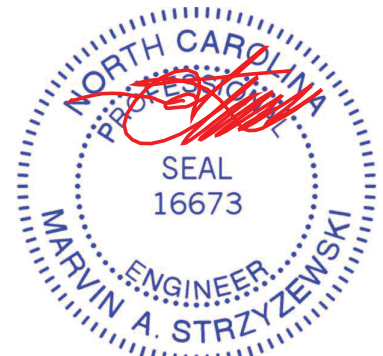
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 2-4=-20

Concentrated Loads (lb)

Vert: 3=-48(B) 6=-33(B) 7=-88(B) 8=-51(B) 9=-49(B) 10=-49(B) 11=-51(B) 12=-88(B) 13=-51(B) 14=-31(B) 15=-32(B)  
 16=-32(B) 17=-31(B) 18=-51(B)



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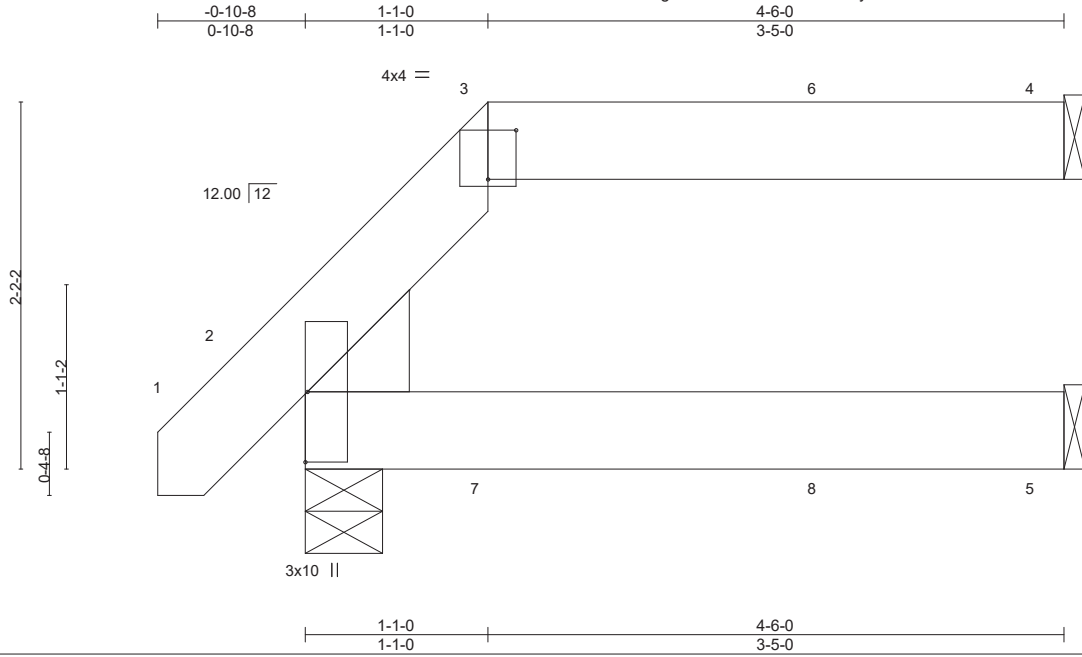
818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425657
J0221-1079	G04	JACK-OPEN GIRDER	2	1		

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ID:PtgA9aKcFvmBbRX6w1bfS5yA1hk-Ob72AjzP9StBwWwTQQzZ2ahTL2aUj0Pf8Aec58zjrwF



Scale = 1:13.7

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00	2-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.01	2-5	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.00	2-5	>999	240	Weight: 27 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEDGE  
 Left: 2x8 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
 Max Horz 2=61(LC 8)  
 Max Uplift 4=-63(LC 5), 2=-43(LC 8)  
 Max Grav 4=148(LC 20), 2=298(LC 1), 5=109(LC 3)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 67 lb up at 1-1-0, and 44 lb down and 64 lb up at 3-1-12 on top chord, and 36 lb down at 1-1-12, and 34 lb down at 3-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-60, 2-5=-20  
 Concentrated Loads (lb)  
 Vert: 3=-41(F) 6=-41(F) 7=-18(F) 8=-17(F)



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Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425658
J0221-1079	G05	JACK-OPEN	2	1		

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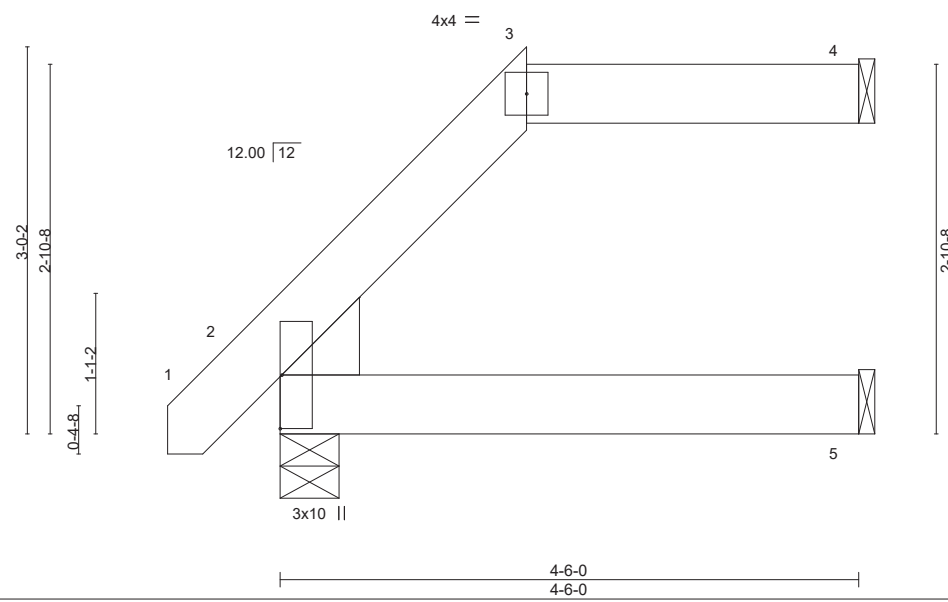


Plate Offsets (X,Y)-- [2:0-0-1,0-0-1], [2:0-0-2,0-5-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	2-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.01	2-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P	Wind(LL)	0.00	2-5	>999	240	Weight: 28 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEDGE  
 Left: 2x8 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
 Max Horz 2=84(LC 10)  
 Max Uplift 4=-43(LC 7), 2=-6(LC 10)  
 Max Grav 4=111(LC 1), 2=233(LC 1), 5=80(LC 3)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



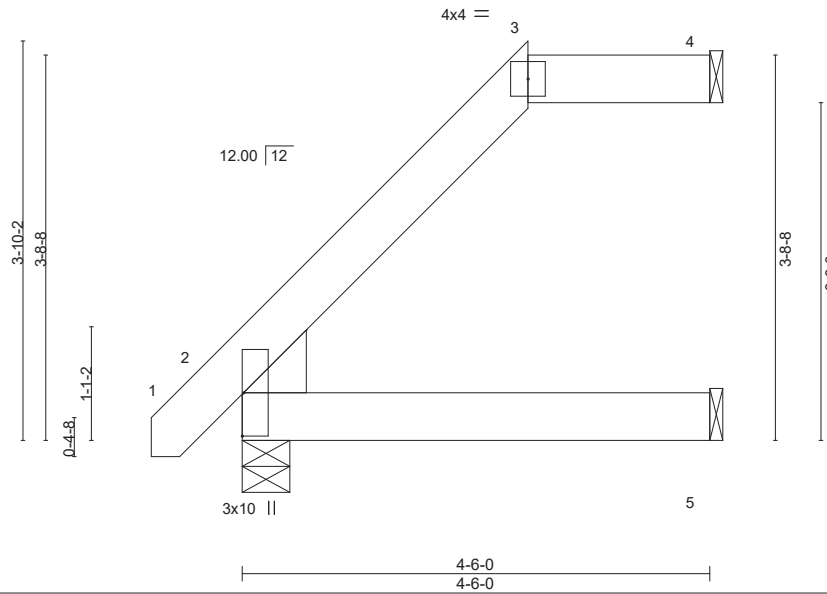
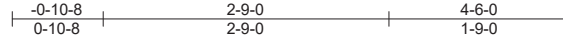
February 19, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425659
J0221-1079	G06	JACK-OPEN	2	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:15:15 2021 Page 1

ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-lZwxD01Y\_?WUchRD\_TkldPKP3lpOGeOISLmMzjrWA



Scale = 1:22.2

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

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 0.05	Vert(LL)	-0.00	2-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.01	2-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.02	4	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P	Wind(LL)	0.00	2-5	>999	240	Weight: 29 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEDGE  
 Left: 2x8 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
 Max Horz 2=111(LC 10)  
 Max Uplift 4=50(LC 7)  
 Max Grav 4=109(LC 1), 2=233(LC 1), 5=81(LC 3)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.



February 19, 2021

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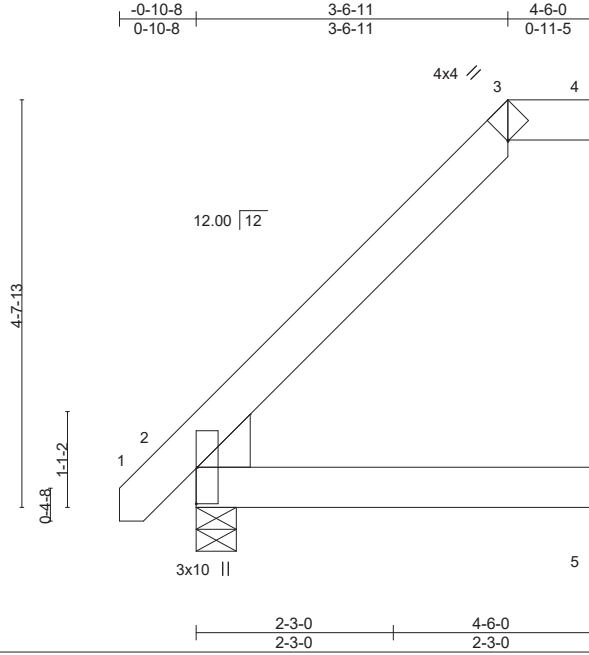
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425660
J0221-1079	G07	JACK-OPEN	1	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:15:17 2021 Page 1

ID:PtgA9akCfvmBbRX6w1bfS5yA1hk-hx2hei2oVcmCs?uqKOV Cq2UfgszBsA8hlmqTrEzjrw8



Scale = 1:26.3

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.07	Vert(LL)	-0.00	2-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.01	2-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P	Wind(LL)	0.01	2-5	>999	240	Weight: 30 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP 2400F 2.0E \*Except\*  
3-4: 2x6 SP No.1  
BOT CHORD 2x6 SP 2400F 2.0E  
WEDGE  
Left: 2x8 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-6-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
Max Horz 2=142(LC 10)  
Max Uplift 4=-78(LC 10), 5=-2(LC 10)  
Max Grav 4=109(LC 17), 2=233(LC 1), 5=81(LC 3)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.



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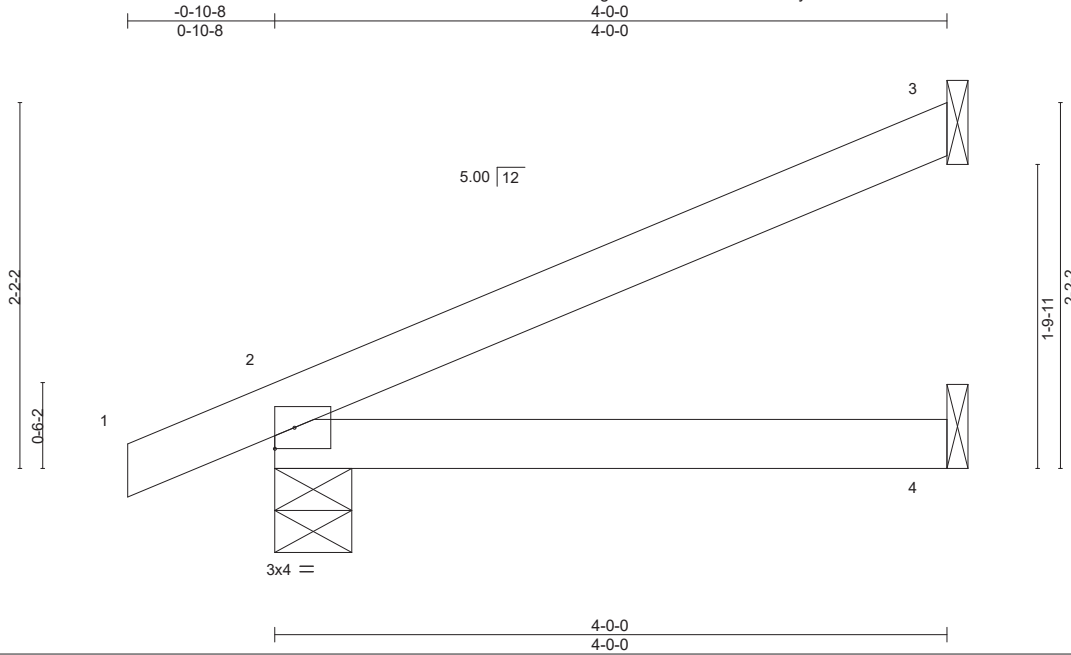


Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425661
J0221-1079	G08	Jack-Open	4	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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ID:PtgA9aKCfvmBbRX6w1bfS5yA1hk-98c3r23QGwu3T9T0u60RNG1p\_GIjbdNq\_Qa1Ngzjrw7



Scale = 1:13.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT)	-0.02	2-4	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL)	0.00	2	****	240		
	Code IRC2015/TPI2014							Weight: 14 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 4-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

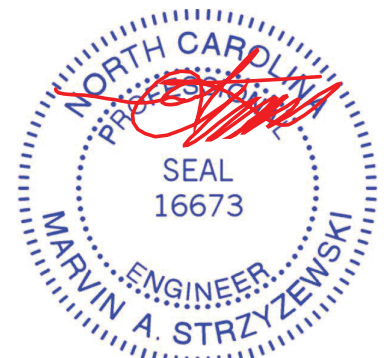
**REACTIONS.**

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=64(LC 10)  
Max Uplift 3=-51(LC 10), 2=-27(LC 6)  
Max Grav 3=101(LC 1), 2=224(LC 1), 4=74(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (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
- 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 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



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Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425662
J0221-1079	J02	Jack-Open	8	1		

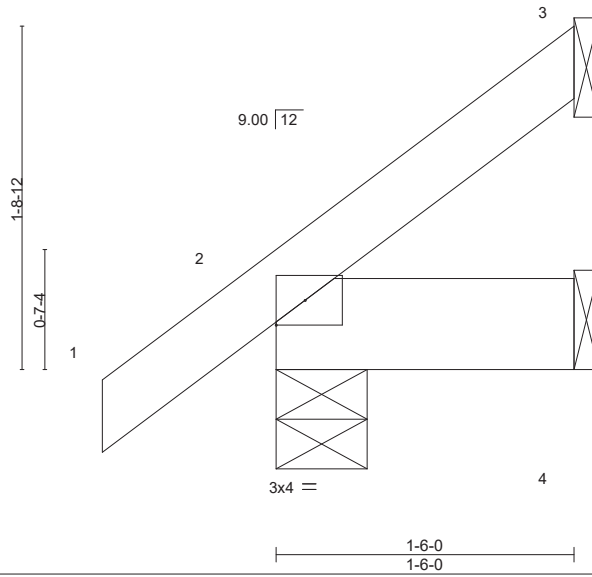
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:15:20 2021 Page 1

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Scale = 1:11.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	2	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	2	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	Weight: 8 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

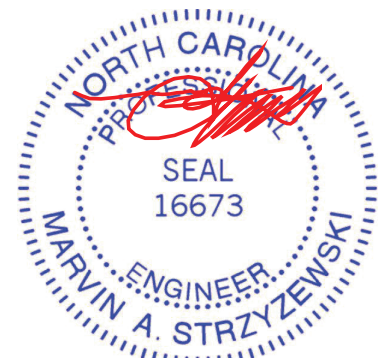
**REACTIONS.**

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=55(LC 10)  
Max Uplift 3=-28(LC 10), 2=-7(LC 10)  
Max Grav 3=34(LC 17), 2=131(LC 1), 4=29(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (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
- 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 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



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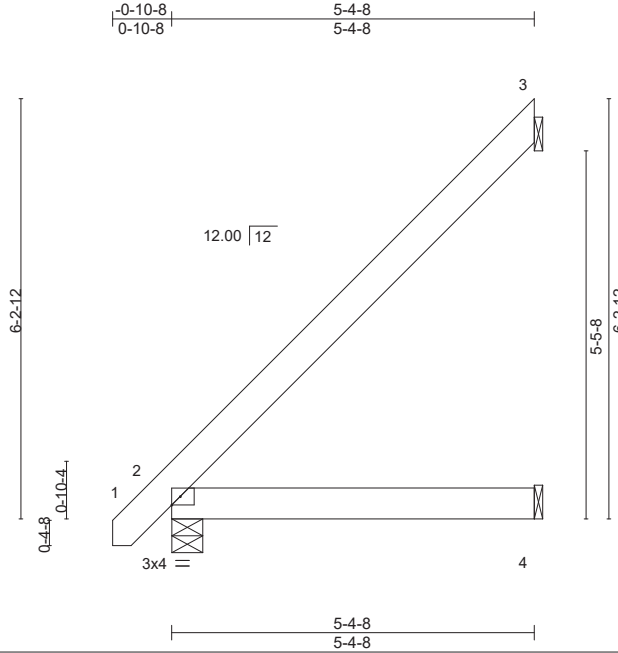
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425663
J0221-1079	J05	JACK-OPEN	18	1		

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Scale = 1:34.2

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.23	Vert(LL) -0.01	2-4	>999	360		MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT) -0.02	2-4	>999	240			
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT) -0.00	3	n/a	n/a			
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL) 0.00	2	****	240			
	Code IRC2015/TPI2014							Weight: 34 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

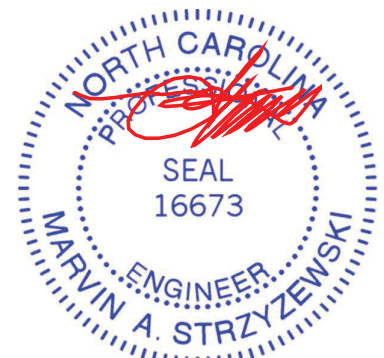
**REACTIONS.**

(size) 3=Mechanical, 2=0-5-8, 4=Mechanical  
Max Horz 2=194(LC 10)  
Max Uplift 3=152(LC 10)  
Max Grav 3=184(LC 17), 2=267(LC 1), 4=102(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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
- 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 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=152.



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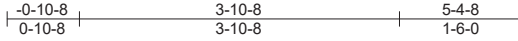
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425664
J0221-1079	J05A	JACK-OPEN	4	1		

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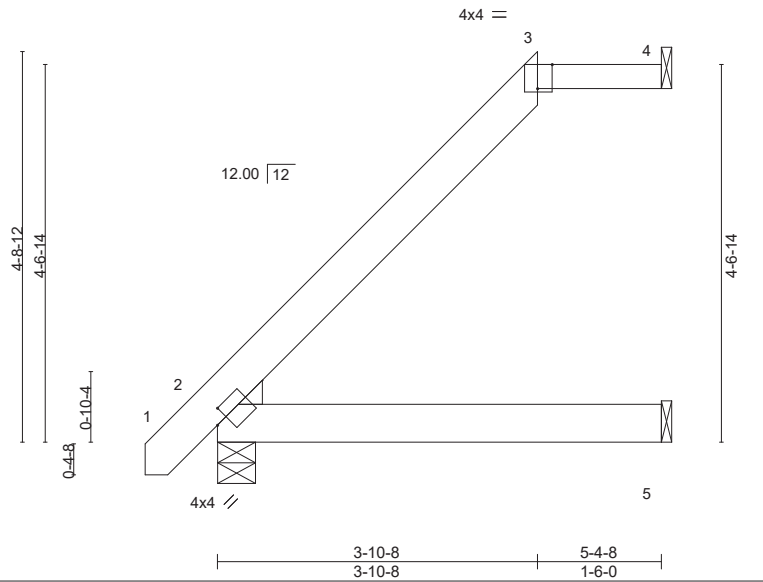


Plate Offsets (X,Y)-- [2:0-1-12,0-1-12], [3:0-2-2,Edge]

LOADING (psf)	SPACING-	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	2-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) -0.02	2-5	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.04	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.01	2-5	>999	240		
							Weight: 32 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

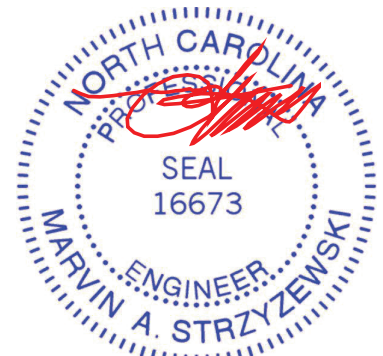
**REACTIONS.**

(size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
Max Horz 2=148(LC 10)  
Max Uplift 4=68(LC 10)  
Max Grav 4=130(LC 1), 2=267(LC 1), 5=99(LC 3)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.



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Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425665
J0221-1079	J05B	JACK-OPEN	4	1		

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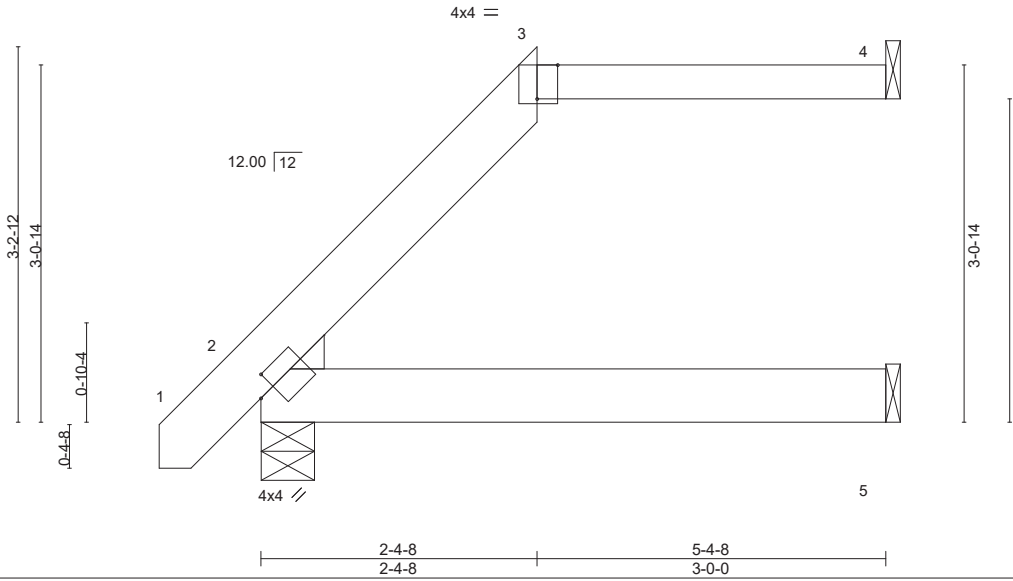


Plate Offsets (X,Y)-- [2:0-1-12,0-1-12], [3:0-2-2,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.01	2-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.02	2-5	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.06	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.01	2-5	>999	240		
							Weight: 29 lb	FT = 20%

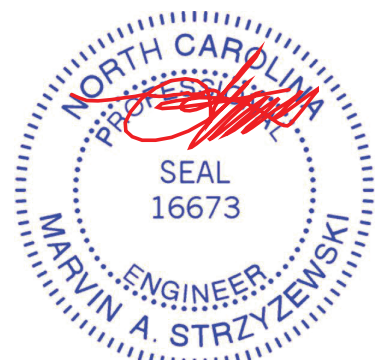
**LUMBER-**  
TOP CHORD 2x6 SP No.1 \*Except\*  
3-4: 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
WEDGE  
Left: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-5-8, 5=Mechanical  
Max Horz 2=99(LC 10)  
Max Uplift 4=45(LC 7), 2=-9(LC 10)  
Max Grav 4=122(LC 1), 2=267(LC 1), 5=103(LC 3)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.

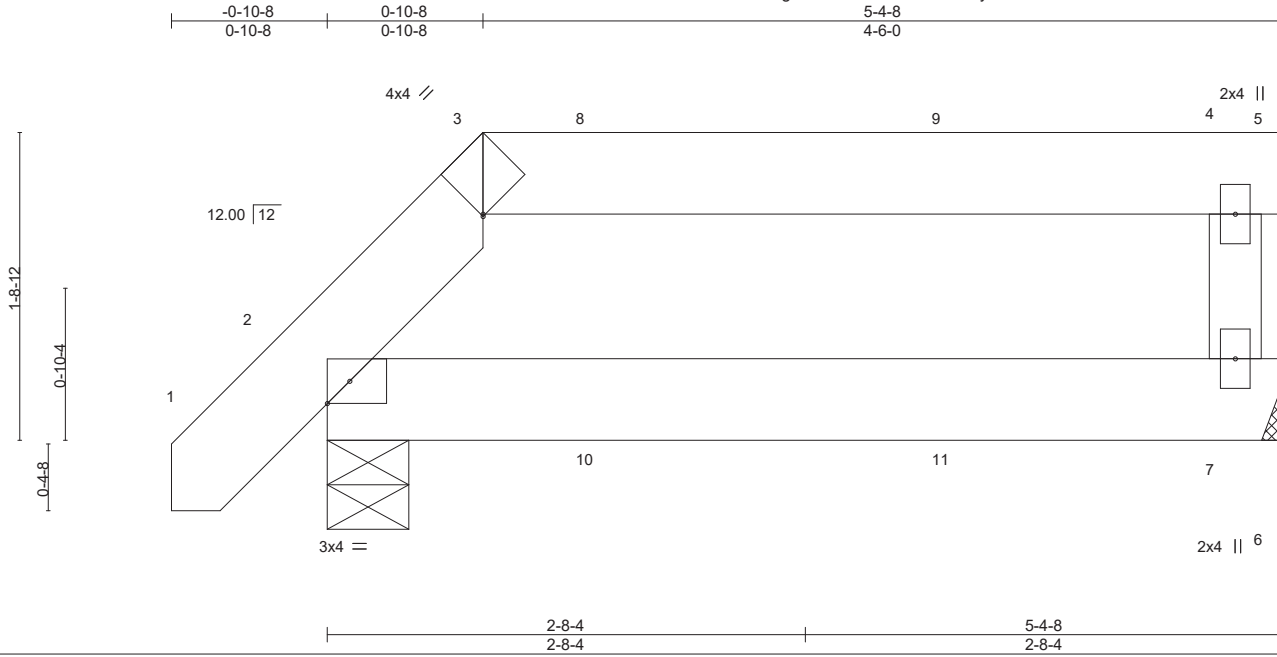


February 19, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425666
J0221-1079	J05C	Jack-Open Girder	4	1		

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8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:15:27 2021 Page 1  
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Scale = 1:12.9

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.13	Vert(LL) -0.01 2-7 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) -0.01 2-7 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.02	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.00 2-7 >999 240	Weight: 31 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-5-8, 7=Mechanical  
 Max Horz 2=53(LC 27)  
 Max Uplift 2=-26(LC 8), 7=-32(LC 5)  
 Max Grav 2=258(LC 1), 7=202(LC 20)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 56 lb down and 26 lb up at 1-6-12, and 57 lb down and 26 lb up at 3-6-12 on top chord, and 4 lb down at 1-6-12, and 4 lb down at 3-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

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



February 19, 2021

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425667
J0221-1079	M01	ROOF SPECIAL	7	1		

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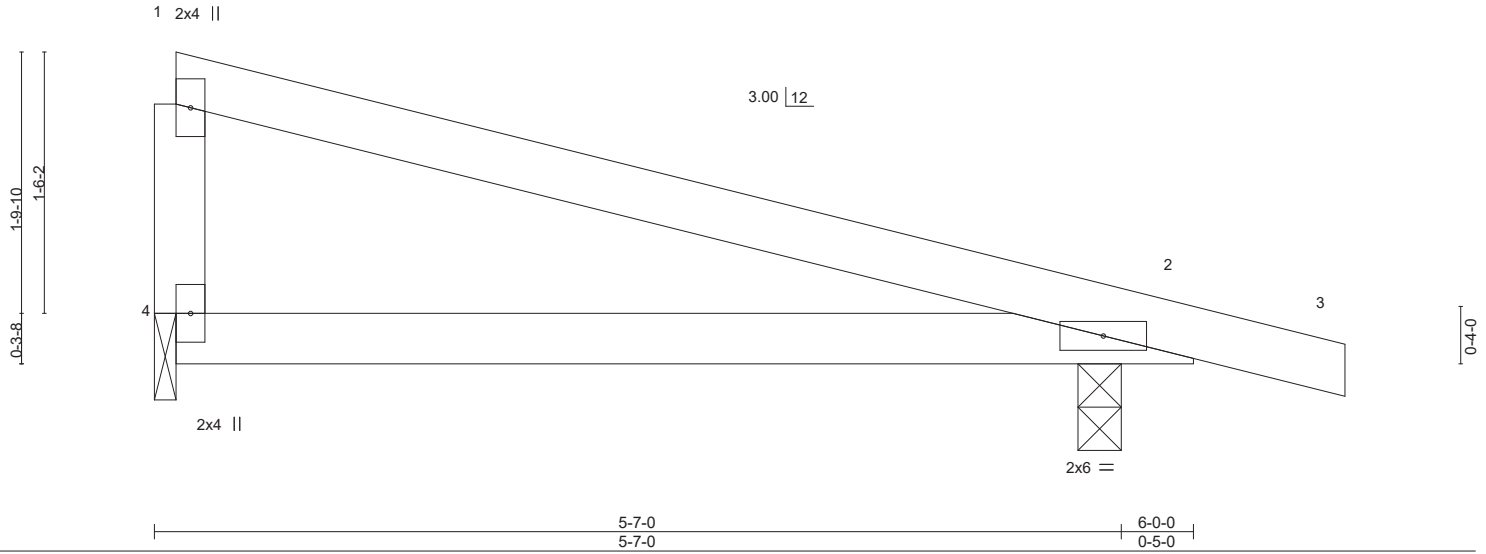
8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:15:30 2021 Page 1

ID:PtgA9aKcFvmBbRX6w1bfS5yA1hk-pRKcN9DyRcPMw?NKbdEFsoWmW6EeP3MbkiUfn\_zjrvx

Job Reference (optional)

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

Scale = 1:13.3



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.57	Vert(LL) -0.06	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.73	Vert(CT) -0.11	2-4	>608	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.13	2-4	>548	240		
							Weight: 21 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

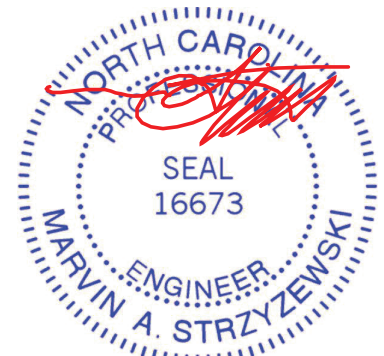
**REACTIONS.**

(size) 4=0-1-8, 2=0-3-0  
Max Horz 4=-58(LC 7)  
Max Uplift 4=-97(LC 7), 2=-127(LC 7)  
Max Grav 4=223(LC 1), 2=294(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) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=127.



February 19, 2021

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

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



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425668
J0221-1079	M02	ROOF SPECIAL	3	1	Job Reference (optional)	

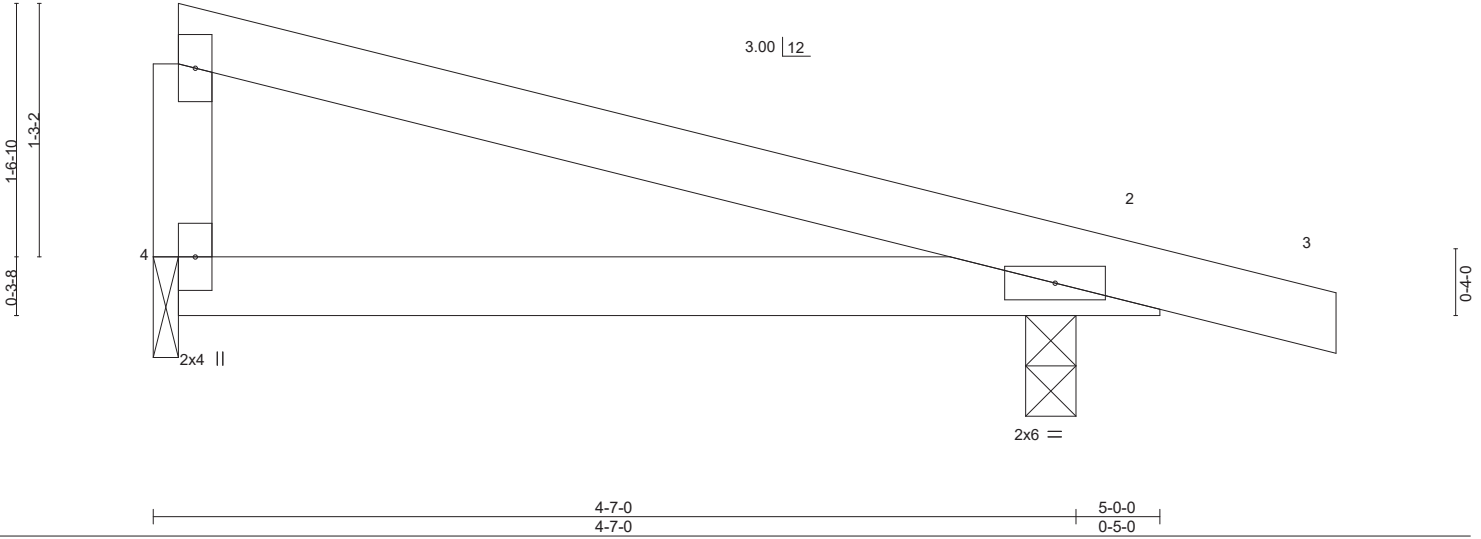
Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:15:33 2021 Page 1  
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1 2x4 II

Scale = 1:11.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.03	2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.05	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.06	2-4	>970	240	Weight: 18 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 4=0-1-8, 2=0-3-0  
Max Horz 4=-49(LC 7)  
Max Uplift 4=-79(LC 7), 2=-113(LC 7)  
Max Grav 4=182(LC 1), 2=256(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) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=113.



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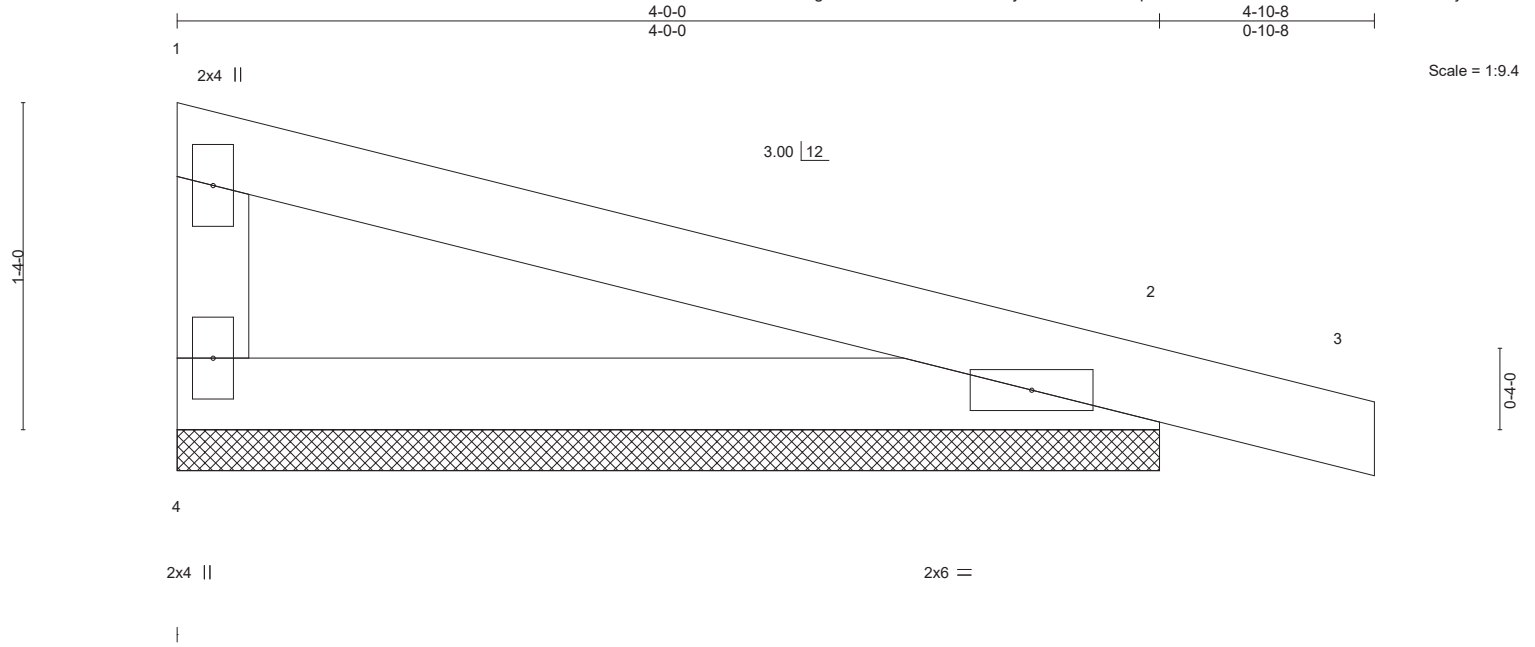
818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 16 Forest Ridge	E15425669
J0221-1079	M03	ROOF SPECIAL	1	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Thu Feb 18 16:15:33 2021 Page 1  
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	-0.01	3	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.00	3	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 15 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 4=4-0-0, 2=4-0-0  
Max Horz 4=-58(LC 7)  
Max Uplift 4=-51(LC 11), 2=-91(LC 7)  
Max Grav 4=148(LC 1), 2=213(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 Corner(3) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



February 19, 2021

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

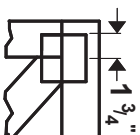
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



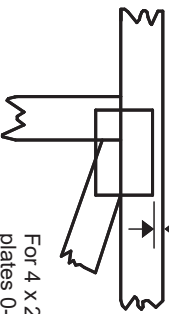
818 Soundside Road  
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# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

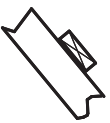
\* Plate location details available in **MITek 20/20 software** or upon request.

## PLATE SIZE

**4 X 4**

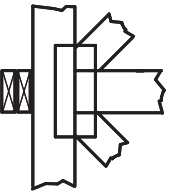
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



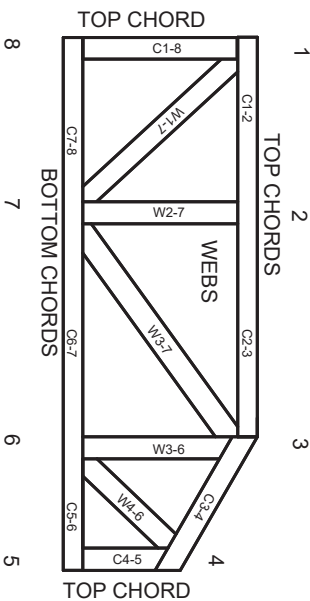
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TFP 1: 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

6-4-8  
dimensions shown in ft-in-sixteenths  
(Drawings not to scale)



**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/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MIL-7473 rev. 5/19/2020



# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 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. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.