

RE: J0121-0587 Lot 32 Forest Ridge Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0121-0587 Lot/Block: Address: City:

Model: Subdivision: State:

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

Design Code: IRC2015/TPI2014 Wind Code: ASCE 7-10 Roof Load: 40.0 psf Design Program: MiTek 20/20 8.3 Wind Speed: 130 mph Floor Load: N/A psf

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

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E15359716	A01	1/28/2021	21	E15359736	M02	1/28/2021
2	E15359717	A02	1/28/2021	22	E15359737	M03	1/28/2021
3	E15359718	A03	1/28/2021	23	E15359738	PS-8	1/28/2021
4	E15359719	A04	1/28/2021	24	E15359739	PS-8G	1/28/2021
5	E15359720	A05	1/28/2021				
6	E15359721	A06	1/28/2021				
7	E15359722	A07	1/28/2021				
8	E15359723	A08	1/28/2021				
9	E15359724	A09	1/28/2021				
10	E15359725	A10	1/28/2021				
11	E15359726	A11	1/28/2021				
12	E15359727	B01	1/28/2021				
13	E15359728	B02	1/28/2021				
14	E15359729	B03	1/28/2021				
15	E15359730	B04	1/28/2021				
16	E15359731	J01	1/28/2021				
17	E15359732	J02	1/28/2021				
18	E15359733	J03	1/28/2021				
19	E15359734	J04	1/28/2021				
20	E15359735	M01	1/28/2021				

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision

based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



Gilbert, Eric



	10-3-3 10-3-3	15-3-0 4-11-13	<u>20-2-13</u> 4-11-13	<u> </u>	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	) l/defl L/d	PLATES GRIP
TCDL 10.0	Lumber DOL 1.15	BC 0.71	Vert(CT) -0.15 12 Vert(CT) -0.31 12	2 >999 360 2 >999 240	MT20 244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.14 12	2 >999 240	Weight: 218 lb FT = 20%
LUMBER-			BRACING-		

TOP CHORD

BOT CHORD

WFBS

# LUMBER-

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

REACTIONS. (size) 2=0-5-8, 8=0-5-8 Max Horz 2=-226(LC 10) Max Uplift 2=-113(LC 12), 8=-113(LC 13)

Max Grav 2=1545(LC 1), 8=1545(LC 1)

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

TOP CHORD 2-3=-2425/524, 3-5=-2208/577, 5-7=-2208/577, 7-8=-2425/524

- BOT CHORD 2-13=-319/1996. 12-13=-128/1475. 10-12=-128/1475. 8-10=-328/1970
- WEBS 5-15=-214/1031, 10-15=-170/849, 7-10=-441/266, 13-14=-170/849, 5-14=-214/1031, 3-13=-441/266, 12-16=-299/78

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 15-3-0, Exterior(2) 15-3-0 to 19-7-13, Interior(1) 19-7-13

to 31-4-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=113, 8=113.

#### LOAD CASE(S) Standard

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

Vert: 1-5=-60, 5-9=-60, 2-8=-20, 14-15=-60



Structural wood sheathing directly applied or 4-9-13 oc purlins.

14-15

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt



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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



	10-3-3	4-11-13	4-11-13		10-3-3		
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0 *           BCDL         10.0	SPACING-2-1-8Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2015/TPI2014	CSI. TC 0.29 BC 0.72 WB 0.42 Matrix-S	DEFL.         in           Vert(LL)         -0.15           Vert(CT)         -0.32           Horz(CT)         0.05           Wind(LL)         0.15	(loc) 12 12 8 12	l/defl L/d >999 360 >999 240 n/a n/a >999 240	<b>PLATES</b> MT20 Weight: 218 lb	<b>GRIP</b> 244/190 FT = 20%

BRACING-

WFBS

TOP CHORD

BOT CHORD

1 Row at midpt

# LUMBER-

TOP CHORD2x6 SP No.1BOT CHORD2x6 SP No.1WEBS2x4 SP No.2

WEBS 2x4 SP No.2 **REACTIONS.** (size) 2=0-5-8, 8=0-5-8 May Horz 2=-240(1 C 10)

Max Horz 2=-240(LC 10) Max Uplift 2=-118(LC 12), 8=-118(LC 13)

Max Grav 2=1624(LC 1), 8=1624(LC 1)

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

TOP CHORD 2-3=-2542/548, 3-5=-2312/605, 5-7=-2312/605, 7-8=-2542/548

BOT CHORD 2-13=-332/2091, 12-13=-130/1542, 10-12=-130/1542, 8-10=-341/2064

WEBS 5-15=-222/1076, 10-15=-178/892, 7-10=-470/283, 13-14=-178/892, 5-14=-222/1076, 3-13=-470/283, 12-16=-299/78

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 15-3-0, Exterior(2) 15-3-0 to 19-7-13, Interior(1) 19-7-13

to 31-4-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=118, 8=118.

#### LOAD CASE(S) Standard

 Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (blf)

Vert: 1-5=-64, 5-9=-64, 2-8=-21, 14-15=-60



Structural wood sheathing directly applied or 4-8-2 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

14-15

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<u> </u>	10-3-3	15-3-0	20-2-13	+	30-6-0	
	10-3-3	4-11-13	4-11-13	·	10-3-3	
Plate Offsets (X,Y)	[5:0-3-0,0-3-12], [6:0-4-0,0-4-12], [7:0-3-0	0,0-3-12]				
LOADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc)	l/defl L/d	PLATES GRIP	
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0.12 12-14	>999 360	MT20 244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.18 12-14	>999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.24	Horz(CT) 0.04 10	n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04 2-14	>999 240	Weight: 202 lb FT = 20%	

LUMBER-BRACING-TOP CHORD 2x6 SP No 1 TOP CHORD Structural wood sheathing directly applied or 5-5-11 oc purlins, BOT CHORD 2x6 SP No.1 except 2x4 SP No.2 WFBS 2-0-0 oc purlins (6-0-0 max.): 5-7. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. REACTIONS. (size) 2=0-5-8, 10=0-5-8

Max Horz 2=-215(LC 10) Max Uplift 2=-80(LC 12), 10=-80(LC 13) Max Grav 2=1268(LC 1), 10=1268(LC 1)

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

- TOP CHORD 2-3=-1845/406, 3-5=-1661/456, 7-9=-1661/456, 9-10=-1845/406, 5-6=-1436/454,
- 6-7=-1436/454
- BOT CHORD 2-14=-236/1630. 12-14=-29/1045. 10-12=-237/1492
- WEBS 6-12=-141/773, 9-12=-449/280, 6-14=-141/772, 3-14=-449/280

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 14-5-4, Exterior(2) 14-5-4 to 22-3-7, Interior(1) 22-3-7 to 31-4-8 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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	L	7-9-4	15-3-0	22-8-12	30-6-0
	1	7-9-4	7-5-12	7-5-12	7-9-4
	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCDL	20.0	Lumber DOL 1.15	BC 0.28	Vert(LL) -0.05 9-11 >999 360 Vert(CT) -0.10 9-11 >999 240	) M120 244/190
BCLL BCDL	0.0 * 10.0	Rep Stress Incr YES Code IRC2015/TPI2014	WB 0.13 Matrix-S	Horz(CT) 0.04 7 n/a n/a Wind(LL) 0.03 9-11 >999 240	a 0 Weight: 213 lb FT = 20%

BRACING-TOP CHORD

BOT CHORD

# LUMBER-

TOP CHORD2x6 SP No.1BOT CHORD2x6 SP No.1WEBS2x4 SP No.2

REACTIONS. (size) 7=0-5-8, 2=0-5-8 Max Horz 2=177(LC 11) May Unjit 7\_6 7(LC 12) 2= 67(

Max Uplift 7=-67(LC 13), 2=-67(LC 12) Max Grav 7=1268(LC 1), 2=1268(LC 1)

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

TOP CHORD 2-3=-1919/459, 3-4=-1755/512, 4-5=-1277/416, 5-6=-1755/512, 6-7=-1919/459

BOT CHORD 2-12=-299/1621, 11-12=-148/1236, 9-11=-149/1225, 7-9=-301/1551

WEBS 3-12=-323/214, 4-12=-112/526, 5-9=-112/526, 6-9=-323/214

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 11-10-5, Exterior(2) 11-10-5 to 18-0-15, Interior(1) 18-0-15 to 18-7-11, Exterior(2) 18-7-11 to 24-10-6, Interior(1) 24-10-6 to 31-4-8 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.

7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 5-6-6 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 4-5.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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	9-0-0 9-0-0	21- 12-	6-0 6-0		<u>30-6-0</u> 9-0-0	<u> </u>
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014	CSI. TC 0.42 BC 0.48 WB 0.14 Matrix-S	DEFL.         in         (loc)           Vert(LL)         -0.13         8-10           Vert(CT)         -0.28         8-10           Horz(CT)         0.04         6           Wind(LL)         0.04         2-10	l/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES GRIP MT20 244/19 Weight: 193 lb FT =	)0 = 20%

BRACING-

TOP CHORD

BOT CHORD

WFBS

# LUMBER-

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

REACTIONS. (size) 2=0-5-8, 6=0-5-8 Max Horz 2=137(LC 11)

Max Uplift 2=-49(LC 12), 6=-49(LC 13)

Max Grav 2=1268(LC 1), 6=1268(LC 1)

- FORCES. (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.
- 2-3=-1864/410, 3-4=-1474/439, 4-5=-1474/439, 5-6=-1864/410 TOP CHORD
- BOT CHORD 2-10=-204/1487 8-10=-313/1697 6-8=-203/1487

WEBS 3-10=0/579, 4-10=-418/198, 4-8=-418/198, 5-8=0/579

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 9-0-0, Exterior(2) 9-0-0 to 15-3-0, Interior(1) 15-3-0 to

21-6-0, Exterior(2) 21-6-0 to 27-8-11, Interior(1) 27-8-11 to 31-4-8 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.

7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Structural wood sheathing directly applied or 5-1-6 oc purlins, except

4-10. 4-8

2-0-0 oc purlins (6-0-0 max.): 3-5.

1 Row at midpt

Rigid ceiling directly applied or 10-0-0 oc bracing.

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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Scale = 1:52.6



⊢	10-2-14		20-3-2			30-6-0		
Plate Offsets (X	Y) [4:0-4-0,0-4-8]		10-0-4			10-2-14		
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	* SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2015/TPI2014	CSI. TC 0.27 BC 0.32 WB 0.13 Matrix-S	DEFL.         in           Vert(LL)         -0.05           Vert(CT)         -0.12           Horz(CT)         0.03           Wind(LL)         0.06	(loc) 6-8 6-8 6 8-10	I/defl L/d >999 360 >999 240 n/a n/a >999 240	PLATES GF MT20 24 Weight: 373 lb F	RIP 4/190 FT = 20%	
LUMBER- TOP CHORD BOT CHORD WEBS	x6 SP No.1 x6 SP No.1 x4 SP No.2		BRACING- TOP CHORD BOT CHORD	Structura 2-0-0 oc Rigid cei	al wood sheathing di purlins (6-0-0 max.) iling directly applied	rectly applied or 6-0-0 oc pu : 3-5. or 10-0-0 oc bracing.	urlins, except	
REACTIONS.	(size) 2=0-5-8, 6=0-5-8 Max Horz 2=99(LC 7) Max Uplift 2=-426(LC 5), 6=-428(LC 4) Max Grav 2=1680(LC 1), 6=1681(LC 1)							
FORCES. (Ib) TOP CHORD BOT CHORD WEBS	Max. Comp./Max. Ten All forces 250 (lb) ( 2-3=-2520/821, 3-4=-2841/849, 4-5=-2841// 2-10=-729/2062, 8-10=-1228/3380, 6-8=-66 3-10=-196/1078, 4-10=-700/526, 4-8=-699/	or less except when shown. 351, 5-6=-2522/825 8/2063 524, 5-8=-195/1077						
<ul> <li>WEBS 3-10=-186/1078, 4-10=-700/526, 4-8=-699/524, 5-8=-195/1077</li> <li>NOTES- <ol> <li>1) 2-pty 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.</li> <li>Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> <li>Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> <li>Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.</li> <li>Webs connection have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.</li> <li>3) Urbalanced roof live loads have been considered for this design.</li> <li>Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15f; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60</li> <li>Provide adequate drainage to prevent water ponding.</li> <li>This truss has been designed for a 10.0 psf bottom chord in el areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.</li> <li>Provide mechanical connection device(s) shall be provided sufficient to support concentrated load(s) 78 lb down and 78 lb up at 42-7, 716 lb down and 108 lb up at 14-3-9, 111 lb down and 108 lb up at 8-3-9, 111 lb down and 108 lb up at 3-2-7, 75 lb down and 73 lb up at 12-2-3, 111 lb down and 108 lb up at 12-3-9, 111 lb down and 108 lb up at 12-3-9, 111 lb down and 108 lb up at 22-3-9, 34 lb down at 12-3-9, 34 lb down</li></ol></li></ul>								
LOOP CASE(S) Design valid for a truss system. building design. is always requir fabrication, stor Safety Information	A stand of the second stand st	ND INCLUDED MITEK REFERENCE nly upon parameters shown, and i illity of design parameters and prop s web and/or chord members only nal injury and property damage. F stems, see <b>ASUTPI</b> Q way, Suite 203 Waldorf, MD 2060	E PAGE MII-7473 rev. 5/19/202 s for an individual building com perly incorporate this design inth . Additional temporary and per for general guidance regarding tuality Criteria, DSB-89 and B 1	20 BEFORE ponent, not o the overall manent brace the CSI Building	USE. sing g Component	ENGINEERING F EREAN A Mil 818 Soundside Road Edenton, NC 27932	Tek Affiliate	

Job	Truss	Truss Type	Qty	Ply	Lot 32 Forest Ridge	
					E1:	5359721
J0121-0587	A06	Hip Girder	1	2		
				<b>_</b>	Job Reference (optional)	
Comtech, Inc, Fayette	/ille, NC - 28314,			8.330 s Oc	t 7 2020 MiTek Industries, Inc. Thu Jan 28 13:24:26 2021 Pa	age 2

ID:WeU20\_wZYqtTA5MeuIVrNIzoaVc-K30KOD6HOXzw9FqVZbZoR2TkHy8fYcm0vaaTFHzqpOJ

#### 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, 5-7=-60, 2-6=-20

Concentrated Loads (lb)

Vert: 3=-41(F) 5=-41(F) 9=-17(F) 10=-17(F) 8=-17(F) 11=-38(F) 12=-35(F) 13=-41(F) 14=-41(F) 15=-41(F) 16=-41(F) 17=-41(F) 18=-41(F) 19=-41(F) 20=-41(F) 21=-35(F) 22=-38(F) 23=-25(F) 24=-23(F) 25=-17(F) 26=-17(F) 27=-17(F) 28=-17(F) 29=-17(F) 30=-17(F) 31=-17(F) 32=-23(F) 33=-25(F)

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 ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





LOADING (ps TCLL 20. TCDL 10. BCLL 0.	sf) .0 .0 .0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.25 0.35 0.30	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.12 -0.17 0.01	(loc) 8-9 8-9 8	l/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20	<b>GRIP</b> 244/190
BCDL IU.	.0	CODE IRC2015/11	-12014	IVIAUIX	-0	VVIIIQ(LL)	0.03	2-9	>999	240	Weight. 146 lb	FI = 20%
LUMBER- TOP CHORD BOT CHORD	2x6 SP 2x6 SP	No.1 No.1				BRACING- TOP CHOR	RD	Structu except	ral wood end verti	sheathing di cals.	rectly applied or 6-0-0 c	oc purlins,
WEBS	2x4 SP	No.2				BOT CHOR	RD .	Rigid c	eiling dire	ectly applied	or 10-0-0 oc bracing.	
REACTIONS.	(size	e) 2=0-5-8, 8=Mechanie	cal			WEBS		1 Row	at midpt	5	5-8	
	Max He	orz 2=253(LC 12)										

Max Uplift 2=-44(LC 12), 8=-83(LC 12) Max Grav 2=842(LC 19), 8=867(LC 19)

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

TOP CHORD 2-3=-1089/158. 3-5=-937/232

BOT CHORD 2-9=-280/949. 8-9=-84/311

WFBS 3-9=-503/285, 5-9=-146/868, 5-8=-706/201

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 15-3-0, Exterior(2) 15-3-0 to 19-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



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		0100		1000			
	I	9-10-8	1	9-10-8		1	
Plate Offsets (X,Y) [5:0	)-3-0,0-3-12], [7:0-3-0,0-3-12], [11:0-	4-0,0-4-8]					
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014	CSI. TC 0.22 BC 0.34 WB 0.27 Matrix-S	DEFL.         in           Vert(LL)         -0.11           Vert(CT)         -0.17           Horz(CT)         0.01           Wind(LL)         0.03	l (loc) l/defl 10-11 >999 10-11 >999 10 n/a 2-11 >999	L/d 360 240 n/a 240	PLATES MT20 Weight: 147 lb	<b>GRIP</b> 244/190 FT = 20%
LUMBER- TOP CHORD 2x6 SP No BOT CHORD 2x6 SP No WEBS 2x4 SP No	.1 .1 .2	E T	BRACING- TOP CHORD BOT CHORD WEBS	Structural wood except end vertie Rigid ceiling dire 1 Row at midpt	sheathing directly cals, and 2-0-0 oc ctly applied or 10 6-10	/ applied or 6-0-0 o c purlins (6-0-0 max )-0-0 oc bracing.	oc purlins, x.): 5-7.
REACTIONS. (size) Max Horz Max Uplift Max Grav	2=0-5-8, 10=Mechanical 2=248(LC 12) 2=-44(LC 12), 10=-73(LC 12) 2=838(LC 1), 10=837(LC 19)			·			
	mp /Max Ten - All forces 250 (lb) or	less except when shown					

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

- TOP CHORD 2-3=-1070/171, 3-5=-915/241, 5-6=-753/268
- BOT CHORD 2-11=-302/920, 10-11=-99/297
- WEBS 3-11=-467/288, 6-11=-152/839, 6-10=-645/227

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 14-5-4, Exterior(2) 14-5-4 to 19-5-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) 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) 2, 10.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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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 0.61	Vert(LL)	-0.12	2-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT)	-0.24	2-9	>959	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.39	Horz(CT)	0.01	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.02	2-9	>999	240	Weight: 143 lb	FT = 20%
I IIMBER.	1		BRACING-						

TOP CHORD BOT CHORD WEBS	2x6 SP No.1 2x6 SP No.1 2x4 SP No.2	TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6. Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS.	(size) 8=Mechanical, 2=0-5-8		

Max Horz 2=236(LC 12) Max Uplift 8=-77(LC 9), 2=-39(LC 12) Max Grav 8=779(LC 1), 2=838(LC 1)

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

TOP CHORD 2-3=-1048/210, 3-4=-725/131, 4-5=-550/166, 5-8=-726/268

BOT CHORD 2-9=-379/892

WEBS 3-9=-436/246. 5-9=-219/736

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 11-10-5, Exterior(2) 11-10-5 to 18-0-15, Interior(1) 18-0-15 to 19-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) 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) 8, 2.8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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1	9-0-0		19-9-0						
T	9-0-0	9-0-0			10-9-0				
Plate Offsets (X,Y)	[3:0-2-4,0-5-0]								
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.59 BC 0.35 WB 0.54 Matrix-S	DEFL. in Vert(LL) -0.08 Vert(CT) -0.15 Horz(CT) 0.01 Wind(LL) 0.04	(loc) l/def 7-9 >999 7-9 >999 7 n/a 2-9 >999	l L/d 360 240 a n/a 240 240	PLATES MT20 Weight: 130 lb	<b>GRIP</b> 244/190 FT = 20%		
LUMBER- TOP CHORD 2x6 SF BOT CHORD 2x6 SF WEBS 2x4 SF REACTIONS. (siz Max H Max L Max C	<ul> <li>No.1</li> <li>No.2</li> <li>re) 7=Mechanical, 2=0-5-8</li> <li>lorz 2=182(LC 12)</li> <li>lplift 7=-80(LC 9), 2=-40(LC 12)</li> <li>rav 7=779(LC 1), 2=846(LC 19)</li> </ul>		BRACING- TOP CHORD BOT CHORD WEBS	Structural wo except end v Rigid ceiling o 1 Row at mid	od sheathing dir erticals, and 2-0 directly applied o pt 3	rectly applied or 6-0-0 ( -0 oc purlins (6-0-0 ma or 10-0-0 oc bracing. 3-7	oc purlins, x.): 3-5.		
FORCES.(lb) - Max.TOP CHORD2-3=BOT CHORD2-9=WEBS3-9=	Comp./Max. Ten All forces 250 (lb) or -1063/177, 4-7=-310/157 -241/818, 7-9=-237/829 0/463, 3-7=-891/253	less except when shown.							

- NOTES-
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 9-0-0, Exterior(2) 9-0-0 to 15-2-11, Interior(1) 15-2-11 to 19-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) 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) 7, 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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L	10-0-1	10-0-1			19-	<del>)</del> -9-0			
	10-0-1		1	9-8-15					
Plate Offsets (X,Y)	[9:0-4-0,0-4-8]					L.			
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCodeIRC2015/TPI2014	<b>CSI.</b> TC 0.14 BC 0.25 WB 0.32 Matrix-S	DEFL.         in           Vert(LL)         -0.03           Vert(CT)         -0.06           Horz(CT)         0.07           Wind(LL)         0.02	n (loc) 3 2-9 3 2-9 1 8 2 2-9	I/defl         L/d           >999         360           >999         240           n/a         n/a           >999         240	<b>PLATES</b> MT20 Weight: 255 lb	<b>GRIP</b> 244/190 FT = 20%		
LUMBER- TOP CHORD 2x6 SP BOT CHORD 2x6 SP WEBS 2x4 SP REACTIONS. (size Max H Max U Max G	P No.1 No.1 No.2 e) 8=Mechanical, 2=0-5-8 orz 2=132(LC 8) plift 8=-368(LC 5), 2=-246(LC 8) rav 8=1052(LC 1), 2=1095(LC 1)		BRACING- TOP CHORD BOT CHORD	Structu except Rigid c	ral wood sheathir end verticals, and eiling directly app	ng directly applied or 6-0-0 o d 2-0-0 oc purlins (6-0-0 max lied or 10-0-0 oc bracing.	c purlins, ĸ.): 3-6.		
FORCES.       (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown.         TOP CHORD       2-3=-1430/449, 3-4=-1363/383         BOT CHORD       2-9=-413/1135, 8-9=-504/1284         WEBS       3-9=0/461, 4-9=0/396, 4-8=-1435/574									
<ul> <li>NOTES-</li> <li>1) 2-ply truss to be connected together with 10d (0.131*x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 1 rows to 49-0 oc.</li> <li>2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.</li> <li>3) Wind: ASCE 7-10; Vult=130mph (5-second guard) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15f; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60</li> <li>4) Provide adequate drainage to prevent water ponding.</li> <li>5) This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.</li> <li>7) Refer to grider(s) for truss to truss connections.</li> <li>8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8-368, 2=246.</li> <li>9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.</li> <li>10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 75 lb down and 78 lb up at 12-27, 101 lb down and 108 lb up at 14-27, and 111 lb down and 108 lb up at 14-27, and 34 lb down at 16-27, and 34 lb down at 16-27,</li></ul>									
LOAD CASE(S) Stand	dard					January	28,2021		

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TREENCO A MiTek Affiliate 818 Soundside Road Edenton, NC 27932

4x6 =

Job	Truss	Truss Type	Qty	Ply	Lot 32 Forest Ridge	
					E1	5359726
J0121-0587	A11	Half Hip Girder	1	2		
				<b>_</b>	Job Reference (optional)	
Comtech, Inc, Fayetter	ville, NC - 28314,			8.330 s Oc	t 7 2020 MiTek Industries, Inc. Thu Jan 28 13:24:30 2021 Pa	age 2

ID:WeU20\_wZYqtTA5MeuIVrNIzoaVc-DqGrEa9nRITLdt8GoQdkbudSKaXaUOpcpCYgO2zqpOF

#### 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, 5-6=-20, 2-7=-20

Concentrated Loads (lb)

Vert: 3=-41(B) 9=-17(B) 10=-38(B) 11=-35(B) 12=-41(B) 13=-41(B) 14=-41(B) 15=-41(B) 16=-41(B) 17=-41(B) 18=-25(B) 19=-23(B) 20=-17(B) 21=-17(B) 22=-17(B) 23=-17(B) 24=-17(B) 25=-17(B) 25

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 ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





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818 Soundside Road Edenton, NC 27932

![](_page_15_Figure_0.jpeg)

![](_page_15_Picture_1.jpeg)

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 sand truss systems, see MaNS/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

A MiTek Affi 818 Soundside Road

Edenton, NC 27932

![](_page_16_Figure_0.jpeg)

![](_page_16_Figure_1.jpeg)

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/TP11 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

![](_page_17_Figure_0.jpeg)

		6-9-	3	C-0-0			6-9	-13		
Plate Offsets (X,Y	[1:0-0-13,0-1-0], [1:0-1-11	,0-4-13], [5:0-	1-11,0-4-13], [5:0-0-1	3,0-1-0], [6:0-4-0,0-4-1	2], [8:0	-4-0,0-	4-12]			
LOADING (psf)	SPACING-	2-0-0	<b>CSI.</b>	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCDL 10.0 BCLL 0.0	Lumber DOL Rep Stress Incr	1.15 1.15 NO	BC 0.94 WB 0.43	Vert(CT) Horz(CT)	-0.08 -0.16 0.03	0-0 1-8 5	>999 >999 n/a	240 n/a	MT20	244/190
BCDL 10.0	Code IRC2015/TP	12014	Matrix-S	Wind(LL)	0.08	5-6	>999	240	Weight: 302 lb	FT = 20%
LUMBER- TOP CHORD 23	5 SP No.1			BRACING- TOP CHOR	D	Structu	Iral wood	sheathing di	rectly applied or 6-0-0 o	oc purlins.

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

TOP CHORD2x6 SP No.1BOT CHORD2x6 SP No.1WEBS2x4 SP No.2

WEDGE Left: 2x4 SP No.3 , Right: 2x4 SP No.3

REACTIONS.	(size)	1=0-5-8, 5=0-5-8
	Max Horz	1=-235(LC 4)
	Max Uplift	1=-607(LC 8), 5=-659(LC 9)
	Max Grav	1=4730(IC2) 5=3930(IC1)

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

TOP CHORD 1-2=-5258/712, 2-3=-5071/805, 3-4=-4878/890, 4-5=-5090/797

- BOT CHORD 1-8=-536/3803, 6-8=-337/2648, 5-6=-522/3650
- WEBS 3-6=-668/2983, 4-6=-263/394, 3-8=-481/3489, 2-8=-265/385

# 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.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) Unbalanced roof live loads have been considered for this design.

- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 607 lb uplift at joint 1 and 659 lb uplift at joint 5.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 779 lb down and 103 lb up at 1-4-4, 779 lb down and 103 lb up at 3-4-4, 779 lb down and 103 lb up at 5-4-4, 779 lb down and 103 lb up at 7-0-12, 754 lb down and 103 lb up at 9-0-12, 754 lb down and 93 lb up at 10-1-4, 759 lb down and 97 lb up at 12-1-4, and 759 lb down and 100 lb up at 14-1-4, and 1032 lb down and 388 lb up at 16-0-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

# LOAD CASE(S) Standard

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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

![](_page_17_Picture_20.jpeg)

![](_page_17_Picture_21.jpeg)

Job	Truss	Truss Type	Qty	Ply	Lot 32 Forest Ridge	
						E15359730
J0121-0587	B04	Common Girder	1	2		
				<b></b>	Job Reference (optional)	
Comtech, Inc, Fayettey	/ille, NC - 28314,			8.330 s Oc	t 7 2020 MiTek Industries, Inc. Thu Jan 28 13:24:34 2021	Page 2

ID:WeU20\_wZYqtTA5MeuIVrNIzoaVc-5bVM4yCIV\_zn6UR11Gigmko0jBjmQA5CkqWuXpzqpOB

#### 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, 1-5=-20

Concentrated Loads (lb)

Vert: 7=-759(B) 8=-754(B) 9=-754(B) 10=-754(B) 11=-754(B) 13=-754(B) 14=-754(B) 15=-759(B) 16=-1032(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

![](_page_18_Picture_8.jpeg)

![](_page_19_Figure_0.jpeg)

	1	4-0-0	
	Г	4-0-0	
Plate Offsets (X,Y)	[2:0-0-13,0-1-0], [2:0-1-11,0-4-13], [2:0-5-8,Edge]		

LOADING	G (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL) -0.00 2-4 >999 360 MT20 244/190	
TCDL	10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.01 2-4 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 3 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL)         0.00         2         ****         240         Weight: 26 lb         FT = 20	)%

LUMBER-

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

REACTIONS. (size) 3=Mechanical, 2=0-5-8, 4=Mechanical Max Horz 2=128(LC 12) Max Uplift 3=-95(LC 12) Max Grav 3=124(LC 19), 2=224(LC 1), 4=74(LC 3)

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

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 3-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 3.

![](_page_19_Picture_13.jpeg)

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 MSIVTP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

![](_page_19_Picture_15.jpeg)

BRACING-TOP CHORD BOT CHORD

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

![](_page_20_Figure_0.jpeg)

Plate Offsets (X,Y)	[2:0-0-13,0-1-0], [2:0-1-11,0-4-13], [2:0-	-5-8,Edge]							
LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.06	DEFL. Vert(LL)	in -0.00	(loc) 2-5	l/defl >999	L/d 360	PLATES MT20	<b>GRIP</b> 244/190
TCDL         10.0           BCLL         0.0 *	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.05 WB 0.00	Vert(CT) Horz(CT)	-0.00 0.01	2-5 4	>999 n/a	240 n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) BRACING-	-0.00	2-5	>999	240	Weight: 25 lb	FT = 20%
TOP CHORD 2x6 S	SP No.1		TOP CHOR	D :	Structu	ral wood	sheathing d	irectly applied or 4-0-0	oc purlins, except

BOT CHORD

2-0-0 oc purlins: 3-4.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (size) 4=Mechanical, 2=0-5-8, 5=Mechanical Max Horz 2=90(LC 12) Max Uplift 4=-38(LC 9), 2=-4(LC 12) Max Grav 4=95(LC 1), 2=224(LC 1), 5=70(LC 3)

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

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 4 and 4 lb uplift at joint 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

![](_page_20_Picture_14.jpeg)

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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

![](_page_20_Picture_16.jpeg)

![](_page_21_Figure_0.jpeg)

			1-2-6	1	4-0-0		1	
			1-2-6		2-9-10		1	
Plate Offs	Plate Offsets (X,Y) [2:0-5-8.Edge], [2:0-1-11,0-4-13], [2:0-0-13,0-1-0], [3:0-2-0,0-3-13]							
LOADING	í (psf)	SPACING- 2-0	-0 <b>CSI.</b>	DEFL.	in (loc)	l/defl L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.1	15 TC 0.07	Vert(LL)	-0.00 2-5	>999 360	MT20	244/190
TCDL	10.0	Lumber DOL 1.1	I5 BC 0.05	Vert(CT)	-0.00 2-5	>999 240		
BCLL	0.0 *	Rep Stress Incr N	O WB 0.00	Horz(CT)	0.01 4	n/a n/a		
BCDL	10.0	Code IRC2015/TPI2014	4 Matrix-P	Wind(LL)	0.00 2-5	>999 240	Weight: 24 lb	FT = 20%

LUMBER-		BRACING-		
TOP CHORD 2x6 SF	9 No.1	TOP CHORD	Structural wood sheathing dir	ectly applied or 4-0-0 oc purlins, except
BOT CHORD 2x6 SF	9 No.1		2-0-0 oc purlins: 3-4.	
WEDGE		BOT CHORD	Rigid ceiling directly applied of	or 10-0-0 oc bracing.

Left: 2x4 SP No.2

REACTIONS. (size) 4=Mechanical, 2=0-5-8, 5=Mechanical Max Horz 2=56(LC 27)

Max Uplift 4=-44(LC 5), 2=-24(LC 8)

Max Grav 4=98(LC 20), 2=225(LC 1), 5=72(LC 3)

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

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 4 and 24 lb uplift at joint 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 54 lb down and 34 lb up at 1-2-6, and 55 lb down and 32 lb up at 3-3-2 on top chord, and 7 lb down at 1-3-2, and 8 lb down at 3-3-2 on bottom chord. The
- design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

![](_page_21_Picture_23.jpeg)

![](_page_21_Picture_24.jpeg)

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Edenton, NC 27932

![](_page_22_Figure_0.jpeg)

				2-1-11
	G (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	IC 0.03	Vert(LL) -0.00 2 >999 360 M120 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.01	Vert(CT) -0.00 2 >999 240
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.00 2 **** 240 Weight: 14 lb FT = 20%

2-1-11

BRACING-

TOP CHORD

BOT CHORD

# LUMBER-

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

**REACTIONS.** (size) 3=Mechanical, 2=0-5-8, 4=Mechanical

Max Horz 2=54(LC 12)

Max Uplift 3=-31(LC 12), 2=-12(LC 12)

Max Grav 3=44(LC 19), 2=160(LC 1), 4=37(LC 3)

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

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 3 and 12 lb uplift at joint 2.

![](_page_22_Picture_15.jpeg)

818 Soundside Road Edenton, NC 27932

Structural wood sheathing directly applied or 2-1-11 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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 MSIVTP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

![](_page_23_Figure_0.jpeg)

# A. GILBERT

![](_page_23_Picture_2.jpeg)

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Edenton, NC 27932

![](_page_24_Figure_0.jpeg)

		0-4-0				6-2-0						
LOADING (p	psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	0.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.08	2-4	>946	360	MT20	244/190
TCDL 1	0.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.16	2-4	>473	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 1	0.0	Code IRC2015/TF	PI2014	Matri	к-Р	Wind(LL)	0.19	2-4	>385	240	Weight: 22 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

# LUMBER-

TOP CHORD2x4 SP No.1BOT CHORD2x4 SP No.1WEBS2x4 SP No.2

REACTIONS. (size) 4=0-1-8, 2=0-3-0

Max Horz 2=62(LC 6) Max Uplift 4=-128(LC 6), 2=-136(LC 6)

Max Grav 4=247(LC 1), 2=280(LC 1)

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

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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 128 lb uplift at joint 4 and 136 lb uplift at joint 2.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

![](_page_24_Picture_16.jpeg)

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

![](_page_25_Figure_0.jpeg)

		0-4-0				2-4-0						
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2	2014	Matrix	κ-P	Wind(LL)	0.00	2	****	240	Weight: 8 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

# LUMBER-

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

REACTIONS. All bearings 2-5-0.

(lb) - Max Horz 2=36(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 3, 2 Max Grav All reactions 250 lb or less at joint(s) 3, 3, 2, 4

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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=25ft; 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
- 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 studs spaced at 2-0-0 oc.

- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

![](_page_25_Picture_17.jpeg)

Structural wood sheathing directly applied or 2-4-8 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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818 Soundside Road Edenton, NC 27932

![](_page_26_Figure_0.jpeg)

	6-0-0		1	12-0-0		
	6-0-0		1	6-0-0		
Plate Offsets (X,Y)	[2:0-3-0,Edge], [4:0-3-0,Edge]					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. ir	n (loc) l/defl L/d	PLATES	GRIP
CLL 20.0	Plate Grip DOL 1.15	TC 0.39	Vert(LL) 0.10	2-6 >999 240	MT20	244/190
CDL 10.0	Lumber DOL 1.15	BC 0.31	Vert(CT) -0.07	2-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.01	4 n/a n/a		
3CDL 10.0	Code IRC2015/TPI2014	Matrix-S			Weight: 41 lb	FT = 20%
UMBER-	•	· · ·	BRACING-			
OP CHORD 2x4 S	P No.1	TOP CHORD	Structural wood sheathing dir	ectly applied or 5-10-	12 oc purlins.	
OT CHORD 2x4 S	P No.1	BOT CHORD Rigid ceiling directly applied or 5-10-11 oc bracing.				
VEBS 2x4 S	P No.2				-	
CEACTIONS. (SIZ	ze) 2=0-3-0, 4=0-3-0					

Max Horz 2=28(LC 10) Max Uplift 2=-236(LC 6), 4=-236(LC 7) Max Grav 2=500(LC 1), 4=500(LC 1)

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

TOP CHORD 2-3=-873/1166, 3-4=-873/1166

BOT CHORD 2-6=-1022/771, 4-6=-1022/771 WEBS 3-6=-430/283

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) \* This truss has been designed for a live load of 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=236, 4=236.

 See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

![](_page_26_Figure_13.jpeg)

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 sand truss systems, see MaNS/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

![](_page_26_Picture_15.jpeg)

![](_page_27_Figure_0.jpeg)

Scale = 1:20.4

![](_page_27_Figure_2.jpeg)

L			12-0-0		
			12-0-0		
Plate Offsets (X,Y)	[2:0-3-0,Edge], [6:0-3-0,Edge]				
LOADING         (psf)           TCLL         20.0           TCDL         10.0           BCLL         0.0           BCDL         10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCodeIRC2015/TPI2014	<b>CSI.</b> TC 0.42 BC 0.41 WB 0.07 Matrix-S	DEFL.         ir           Vert(LL)         0.11           Vert(CT)         -0.09           Horz(CT)         -0.02	i (loc) l/defl L/d 2-10 >999 240 2-10 >999 240 6 n/a n/a	PLATES         GRIP           MT20         244/190           Weight: 44 lb         FT = 20%
LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S OTHERS 2x4 S	P No.1 P No.1 P No.2	/	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dir Rigid ceiling directly applied c	ectly applied or 6-0-0 oc purlins. or 5-0-8 oc bracing.
REACTIONS. (siz Max H Max U Max 0	te) 2=0-3-8, 6=0-3-8 Horz 2=48(LC 14) Jplift 2=-325(LC 6), 6=-325(LC 7) Grav 2=500(LC 1), 6=500(LC 1)				

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-880/1434. 3-4=-829/1483. 4-5=-829/1483. 5-6=-880/1434

BOT CHORD 2-10=-1259/786, 9-10=-1259/786, 8-9=-1259/786, 6-8=-1259/786 WFBS 4-9=-559/291

#### NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) Gable studs spaced at 2-0-0 oc.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) \* This truss has been designed for a live load of 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) except (jt=lb) 2=325, 6=325.

8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

![](_page_27_Figure_15.jpeg)

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 MSIVTP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

![](_page_27_Picture_17.jpeg)

![](_page_28_Figure_0.jpeg)