

RE: J0520-2110

Weaver / 4-R Adcock Farm / Harnett

Site Information:

Customer: Project Name: J0520-2110 Lot/Block: Address: City:

Model: Subdivision: State:

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

Design Code: IRC2009/TPI2007 Wind Code: ASCE 7-05 Roof Load: 40.0 psf Design Program: MiTek 20/20 8.3 Wind Speed: 110 mph Floor Load: N/A psf

This package includes 28 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E14284961	A1	7/10/2020	21	E14284981	VB2	7/10/2020
2	E14284962	A1GE	7/10/2020	22	E14284982	VC1	7/10/2020
3	E14284963	A2	7/10/2020	23	E14284983	VC2	7/10/2020
4	E14284964	A3	7/10/2020	24	E14284984	VC3	7/10/2020
5	E14284965	A4	7/10/2020	25	E14284985	VC4	7/10/2020
6	E14284966	A5	7/10/2020	26	E14284986	VC5	7/10/2020
7	E14284967	A6	7/10/2020	27	E14284987	VC6	7/10/2020
8	E14284968	A7	7/10/2020	28	E14284988	VC7	7/10/2020
9	E14284969	A7GE	7/10/2020				
10	E14284970	B1	7/10/2020				
11	E14284971	B1GE	7/10/2020				
12	E14284972	B2	7/10/2020				
13	E14284973	B3	7/10/2020				
14	E14284974	B4	7/10/2020				
15	E14284975	C1	7/10/2020				
16	E14284976	C1GE	7/10/2020				
17	E14284977	C2	7/10/2020				
18	E14284978	D1	7/10/2020				
19	E14284979	D1GE	7/10/2020				
20	E14284980	VB1	7/10/2020				

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

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

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



Trenco 818 Soundside Rd Edenton, NC 27932



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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing 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

A MITek Affilia 818 Soundside Road

Edenton, NC 27932



- FORCES. (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 1-2=-381/317, 2-3=-285/271, 3-4=-225/251, 9-10=-145/258, 10-11=-200/299, 11-12=-231/333, 12-13=-231/333, 13-14=-200/299, 22-23=-276/285, 23-25=-295/346, 25-32=-264/244, 21-24=-253/227, 27-28=-255/121
- BOT CHORD 1-54-156/295, 53-54-156/295, 52-53-156/295, 51-52=-156/295, 50-51=-156/295, 49-50=-156/295, 48-49=-156/295, 46-48=-156/295, 45-46=-156/295, 44-45=-156/295, 43-44=-156/295, 42-43=-156/295, 41-42=-156/295, 39-41=-156/295, 38-39=-156/295, 37-38=-156/295, 36-37=-156/295, 34-36=-156/295, 33-34=-156/295, 32-33=-295/156 WEBS 27-30=-277/275

# NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 4-11-13, Exterior(2) 4-11-13 to 15-7-3, Corner(3) 15-7-3 to 25-6-13, Exterior(2) 25-6-13 to 45-8-11, Corner(3) 45-8-11 to 50-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide Convill fide tryes and the bottom chord and any other members.





Job	Truss	Truss Type	Qty	Ply	Weaver / 4-R Adcock Farm / Harnett	
					E14	1284962
J0520-2110	A1GE	GABLE	1	1		
					Job Reference (optional)	
Comtech, Inc, Fayette	/ille, NC - 28314,			8.330 s Ma	ar 23 2020 MiTek Industries, Inc. Fri Apr 10 09:08:07 2020 Pa	ige 2
		ID:nGEYJn1	QAngpJfE	CepmG8	Mz?may-NObq3USxrSXJohB2Wx28rmulInOxAAynOUY5uCzS	As

# NOTES-

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 45, 46, 48, 49, 50, 51, 52, 53, 43, 42, 41, 39, 38, 37, 34, 33 except (jt=lb) 1=105, 28=127, 54=133, 36=123, 30=168.

10) Graphical purity representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.





April 10,2020





- TOP CHORD 1-2=-447/22, 2-4=-67/321, 4-5=-510/233, 5-6=-543/246, 6-7=-264/113, 7-9=-704/146
- BOT CHORD 1-13=-141/357, 12-13=-141/357, 11-12=-302/123, 10-11=-102/485
- WEBS 6-10=-525/145, 4-12=-982/294, 4-11=-61/629, 7-10=-21/478, 2-12=-653/218, 2-13=0/315

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 29-1-15, Exterior(2) 29-1-15 to 33-6-12 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 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.

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) 1, 9 except (jt=lb) 12=194.







🙏 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 design parameters and READ NOTES ON TIRS AND INCLODED MITER REFERENCE PAGE mit-143 a few of 3/3/2/00 BeFORE DSE. Design valid for use only with MITeR's 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** fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Qu** Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

# April 10,2020





2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 29-1-15, Exterior(2) 29-1-15 to 33-6-12 zone; cantilever left 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 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.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 13=151.







DOL=1.60 plate grip DOL=1.60

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

4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 1=106.







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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 27-3-2, Exterior(2) 27-3-2 to 31-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=144, 10=118.

# LOAD CASE(S) Standard

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

Vert: 2-14=-20, 12-14=-60, 9-12=-20, 1-6=-60, 6-8=-60



👠 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid of ruse only design parameters and READ NOTES ON TIRS ON INTEX REPERTIENCE PAGE MITHAT SHOW STREAM CONCEPTION OF SECTION 2005. Design valid for use only with MITEK design connectors. This design is based only upon parameters shown, and is for an individual building door gromponent, 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 colleges with possible personal injury and property damage. For general quidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component 
 Satisfies
 Ansi/TPH Qu

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

818 Soundside Road Edenton, NC 27932



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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI 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









April 10,2020

ENGINEERING BY AMITEK Affiliate AMITEK Affiliate AMITEK Affiliate AMITEK Affiliate



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 oucling of individual truss web and/or chord members only. Additional temporary and permanent bracing 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



April 10,2020



4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 1.









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 designe. 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/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 Affilia A MiTek Affilia 818 Soundside Road Edenton, NC 27932



Max Horz 2=-243(LC 8) Max Uplift 2=-82(LC 10), 10=-142(LC 11)

Max Grav 2=829(LC 17), 10=1701(LC 1)

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

2-3=-957/118, 3-5=-838/203, 5-7=-273/535, 7-8=-449/606 TOP CHORD

BOT CHORD 2-13=-114/885, 11-13=-48/322, 10-11=-746/565, 8-10=-375/456

WFBS 3-13=-491/304, 5-13=-201/931, 5-11=-1017/499, 7-11=-64/1199, 7-10=-1666/420

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 10-1-3, Exterior(2) 10-1-3 to 18-10-13, Interior(1) 18-10-13 to 25-3-15, Exterior(2) 25-3-15 to 29-8-12 zone; cantilever 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.

\* 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 4) will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=142.

# SEAL 036322 GI minin April 10,2020





 
 TOP CHORD
 2x6 SP No.1
 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlin

 BOT CHORD
 2x6 SP No.1
 BOT CHORD
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-14.

 WEBS
 2x4 SP No.2
 WEBS
 1 Row at midpt
 5-14

**REACTIONS.** All bearings 8-7-8 except (jt=length) 2=0-3-8, 13=0-3-8, 13=0-3-8.

(lb) - Max Horz 2=-304(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 8, 12, 10 except 2=-208(LC 10), 13=-306(LC 11) Max Grav All reactions 250 lb or less at joint(s) 12, 11, 10 except 2=919(LC 17), 13=1058(LC 1), 13=1058(LC 1), 8=352(LC 1)

TOP CHORD 2-3=-1093/262, 3-5=-976/356, 5-7=-423/210, 7-8=-406/72

```
BOT CHORD 2-16=-266/1026, 14-16=-51/486
```

```
WEBS 3-16=-482/380, 5-16=-276/802, 5-14=-500/152, 7-14=-0/473, 7-13=-873/246
```

NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 10-1-3, Exterior(2) 10-1-3 to 18-10-13, Interior(1) 18-10-13 to 25-3-15, Exterior(2) 25-3-15 to 29-8-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) All plates are 2x4 MT20 unless otherwise indicated.

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

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

7) \* This truss has been designed for a live load of 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 12, 10 except



818 Soundside Road Edenton, NC 27932

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



# Continued on page 2

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

A MiTek Aff 818 Soundside Road Edenton, NC 27932

Job		Truss	Truss Type	Qty	Ply	Weaver / 4-R Adcock Farm / Harnett	
							E14284977
J0520-2110		C2	COMMON GIRDER	1	2		
					<b>_</b>	Job Reference (optional)	
Comtech, Inc,	Fayettev	ille, NC - 28314,			8.330 s N	ar 23 2020 MiTek Industries, Inc. Fri Apr 10 09:08:25 20	20 Page 2
			ID:n	GEYJn1QAngpJ	fECepmG	3Mz?may-srgerdgEc_olySZVajNMaYeON1QIOB7RXHv2	W9zSA_a

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 10=-432(B) 11=-309(B) 12=-309(B) 13=-309(B) 14=-309(B) 15=-309(B) 16=-364(B) 17=-432(B) 19=-432(B) 20=-330(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 ocllapse 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



Edenton, NC 27932

April 10,2020



#### LUMBER-

TOP CHORD2x6 SP No.1BOT CHORD2x6 SP No.1OTHERS2x4 SP No.2

BRACING-TOP CHORD BOT CHORD

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

# **REACTIONS.** All bearings 20-8-0.

(lb) - Max Horz 2=-221(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 17, 15, 12 except 22=-129(LC 10), 16=-102(LC 11), 14=-126(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 17, 16, 15, 14, 12

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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-12 to 3-8-1, Exterior(2) 3-8-1 to 5-11-3, Corner(3) 5-11-3 to 14-8-13, Exterior(2) 14-8-13 to 16-11-15, Corner(3) 16-11-15 to 21-4-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 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.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 17, 15, 12 except (jt=lb) 22=129, 16=102, 14=126.



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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TPTI 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



NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.







2x4 💋

2x4 📎

Structural wood sheathing directly applied or 3-11-4 oc purlins.

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

	L		3-11-4	I
			3-11-4	I
Plate Offsets (X,Y)	[2:0-2-0,Edge]			
OADING (psf)	<b>SPACING-</b> 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
CLL 20.0	Plate Grip DOL 1.15	TC 0.02	Vert(LL) n/a - n/a 999	MT20 244/190
CDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) n/a - n/a 999	
CLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a	
3CDL 10.0	Code IRC2015/TPI2014	Matrix-P		Weight: 11 lb FT = 20%
UMBER-		I	BRACING-	

TOP CHORD

BOT CHORD

#### LUMBER-

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

REACTIONS. 1=3-11-4, 3=3-11-4 (size) Max Horz 1=20(LC 9) Max Uplift 1=-9(LC 10), 3=-9(LC 11) Max Grav 1=114(LC 1), 3=114(LC 1)

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

# NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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



3) All plates are 2x4 MT20 unless otherwise indicated.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 11=103, 12=122, 9=103, 8=122.

7) Non Standard bearing condition. Review required.



818 Soundside Road Edenton, NC 27932



- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-12 to 4-10-9, Interior(1) 4-10-9 to 6-10-9, Exterior(2) 6-10-9 to 15-8-3, Interior(1) 15-8-3 to 17-8-3, Exterior(2) 17-8-3 to 22-1-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) All plates are 2x4 MT20 unless otherwise indicated.

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

5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 8 except (jt=lb) 11=112, 9=112.

7) Non Standard bearing condition. Review required.







- grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=142, 6=142.
- 6) Non Standard bearing condition. Review required.







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

4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=113, 6=113.

6) Non Standard bearing condition. Review required.





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

4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.

6) Non Standard bearing condition. Review required.







REACTIONS. (size) 1=8-6-12, 3=8-6-12, 4=8-6-12 Max Horz 1=-61(LC 6) Max Uplift 1=-29(LC 10), 3=-35(LC 11) Max Grav 1=165(LC 1), 3=165(LC 1), 4=278(LC 1)

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

### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

6) Non Standard bearing condition. Review required.







REACTIONS. (size) 1=5-0-12, 3=5-0-12, 4=5-0-12 Max Horz 1=-33(LC 6) Max Uplift 1=-16(LC 10), 3=-19(LC 11) Max Grav 1=89(LC 1), 3=89(LC 1), 4=150(LC 1)

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

### NOTES-

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

6) Non Standard bearing condition. Review required.





