

RE: J1220-5726

Weaver / 70 Thomas Farm / Harnett

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J1220-5726

Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2015/TPl2014 Design Program: MiTek 20/20 8.3

Wind Code: ASCE 7-10 Wind Speed: 130 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 7 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E14688948	A1	12/24/2020
2	E14688949	A1GE	12/24/2020
3	E14688950	A2	12/24/2020
4	E14688951	B1	12/24/2020
5	E14688952	B1GE	12/24/2020
6	E14688953	P1	12/24/2020
7	E14688954	P1GE	12/24/2020

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.



December 24, 2020

Job Truss Truss Type Qty Ply Weaver / 70 Thomas Farm / Harnett E14688948 J1220-5726 FINK 9 A1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 14:41:55 2020 Page 1 Comtech, Inc. ID:IwPOH6hK8Jeptt6SXqQOJcyzm6C-5k_Pckn6a?f4xzZbJ9jTKn0WsnADfyFgtpA5waysWPw -0-10-8 0-10-8 15-9-0 23-2-6 31-6-0 8-3-10

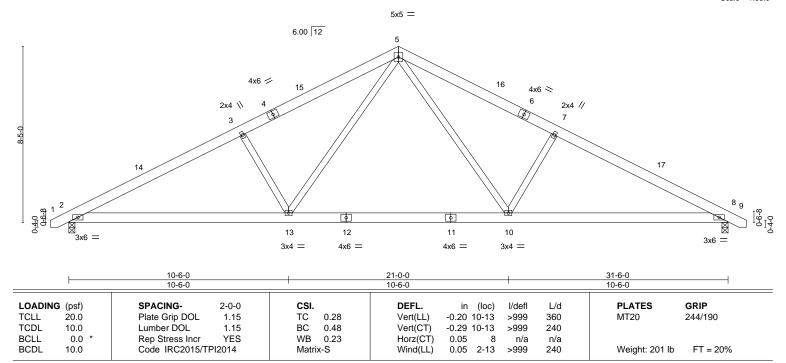
7-5-6

Scale = 1:55.0

8-3-10

Structural wood sheathing directly applied or 4-11-8 oc purlins.

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



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 2=107(LC 11)

Max Uplift 2=-87(LC 12), 8=-87(LC 13) Max Grav 2=1299(LC 1), 8=1299(LC 1)

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

2-3=-2188/486, 3-5=-1990/517, 5-7=-1990/517, 7-8=-2188/486 TOP CHORD **BOT CHORD** 2-13=-311/1914 10-13=-102/1258 8-10=-320/1873

WEBS 3-13=-466/285, 5-13=-144/843, 5-10=-144/843, 7-10=-466/285

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) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 15-9-0, Exterior(2) 15-9-0 to 20-1-13, Interior(1) 20-1-13 to 32-2-6 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) 2, 8.





Job Truss Truss Type Qty Ply Weaver / 70 Thomas Farm / Harnett E14688949 J1220-5726 A1GE **GABLE** 2 Job Reference (optional) 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 14:41:58 2020 Page 1 Comtech, Inc.

Fayetteville, NC - 28314,

ID:lwPOH6hK8Jeptt6SXqQOJcyzm6C-VJgXEmp?tw1foQHA_IGAyQe5j?I7sKH6ZnPIXvysWPt -0-10-8 0-10-8 15-9-0 31-6-0 32-4-8 0-10-8 15-9-0 15-9-0

Scale = 1:58.0

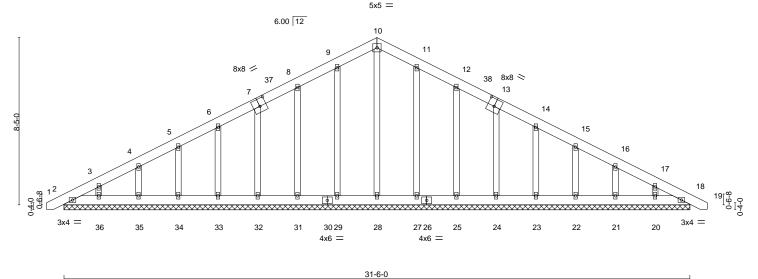


Plate Off	sets (X,Y)	[7:0-4-0,0-4-8], [13:0-4-0,0-4-8]									
LOADIN	G (psf)	SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC	0.05	Vert(LL)	0.00	18	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.02	Vert(CT)	0.00	18	n/r	120		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.14	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix	x-S						Weight: 246 lb	FT = 20%

31-6-0

LUMBER-

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

BOT CHORD 2x4 SP No.2 OTHERS

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 31-6-0.

Max Horz 2=166(LC 16) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22, 21, 20 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 28, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22,

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

TOP CHORD 8-9=-94/277, 9-10=-110/321, 10-11=-110/323, 11-12=-94/280

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) gable end zone and C-C Corner(3) -0-8-6 to 3-9-0, Exterior(2) 3-9-0 to 15-9-0, Corner(3) 15-9-0 to 20-1-13, Exterior(2) 20-1-13 to 32-2-6 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, 18, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22, 21, 20.



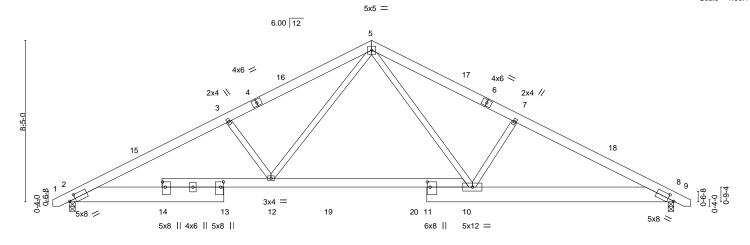
July 31,2020



Job Truss Truss Type Qty Ply Weaver / 70 Thomas Farm / Harnett E14688950 J1220-5726 A2 **ROOF SPECIAL** 4 Job Reference (optional)

Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 14:41:59 2020 Page 1 Comtech, Inc. ID:lwPOH6hK8Jeptt6SXqQOJcyzm6C-_VEvR6qdeE9WPasMY?oPVdBDSPVybmsFnR8l3LysWPs 15-9-0 23-2-6 7-5-6 31-6-0 8-3-10 7-5-6 8-3-10

Scale = 1:60.1



1	6-0-8	8-0-8	10-6-0	18-7-8	21-0-0	31-6-0
	6-0-8	2-0-0	2-5-8	8-1-8	2-4-8	10-6-0
Plate Offsets (X,Y)	[2:0-3-15,0-2-10], [8:0-3	-15,0-2-1	0], [11:0-3-4,0)-1-12], [13:0-3-4,0-1-12], [14:0-3-4,0-	1-12]	

		1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1		1/1 /- 1	
LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.17 10-12 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.28 10-12 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.25	Horz(CT) 0.06 8 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06 10-12 >999 240	Weight: 244 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1

BOT CHORD 2x10 SP No.1 *Except* 10-14: 2x6 SP No.1

WFBS 2x4 SP No.2

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

Max Horz 2=107(LC 11)

Max Uplift 2=-88(LC 12), 8=-88(LC 13) Max Grav 2=1299(LC 1), 8=1299(LC 1)

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

TOP CHORD 2-3=-2535/552, 3-5=-2263/555, 5-7=-2167/507, 7-8=-2403/507

BOT CHORD 2-12=-363/2197, 10-12=-123/1378, 8-10=-344/2077

WEBS 5-12=-183/1008, 5-10=-120/928, 7-10=-468/286, 3-12=-460/283

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 15-9-0, Exterior(2) 15-9-0 to 20-1-13, Interior(1) 20-1-13 to 32-2-6 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) 2, 8.



July 31,2020

Structural wood sheathing directly applied or 4-8-15 oc purlins.

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

COMMON 3 J1220-5726 В1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 14:42:00 2020 Page 1 Comtech, Inc. ID:lwPOH6hK8Jeptt6SXqQOJcyzm6C-ShnHfSrFPXHN1kRZ6iJe1rkPmoz5K8aP05usboysWPr 0-10-8 4-4-12 8-6-0 12-7-4 17-0-0 17-10-8 0-10-8 4-4-12 4-4-12 Scale = 1:40.4 5x5 = 8.00 12 2x4 \\ 2x4 // 5 12 11 9 10 3x4 4x6 =3x4 =3x4 =5-1-12 11-10-4 17-0-0 5-1-12 6-8-8 5-1-12 LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.14 Vert(LL) -0.01 8-10 >999 360 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.11 Vert(CT) -0.02 8-10 >999 240

Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

0.00

-0.01

6

8-10

n/a

>999

n/a

Rigid ceiling directly applied or 6-0-0 oc bracing.

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

Weight: 120 lb

FT = 20%

240

Qty

Ply

Weaver / 70 Thomas Farm / Harnett

E14688951

LUMBER-

BCLL

BCDL

Job

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

0.0

10.0

REACTIONS. (size) 10=0-3-8, 6=0-3-8

Max Horz 10=-147(LC 10)

Truss

Truss Type

Max Uplift 10=-66(LC 12), 6=-43(LC 13) Max Grav 10=1033(LC 1), 6=451(LC 24)

Rep Stress Incr

Code IRC2015/TPI2014

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-371/395, 3-4=-269/441, 4-5=-465/125, 5-6=-488/47

BOT CHORD 2-10=-264/368 6-8=0/341

WEBS 3-10=-327/231, 4-10=-707/371, 4-8=-109/465, 5-8=-288/202

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) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 8-6-0, Exterior(2) 8-6-0 to 12-8-1, Interior(1) 12-8-1 to 17-8-12 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.54

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

YES

- 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) 10, 6.



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



Job Truss Truss Type Qty Ply Weaver / 70 Thomas Farm / Harnett E14688952 J1220-5726 B1GE **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 14:42:01 2020 Page 1 Comtech, Inc. ID:lwPOH6hK8Jeptt6SXqQOJcyzm6C-wuLgsort9rPEfu0lgQqta2GcJCKn3jKYFldP8EysWPq -0-10-8 0-10-8 8-6-0 17-0-0 17-10-8 0-10-8 8-6-0 8-6-0 Scale = 1:41.2 5x5 = 6 8.00 12 8 9

> 17-0-0 17-0-0

16

15 14

4x6 =

13

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	0.00	10	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	10	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 126 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

10

3x4

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

12

REACTIONS. All bearings 17-0-0.

Max Horz 2=-184(LC 10) (lb) -

0<u>-4-4</u> 0-8-1

3x4

Max Uplift All uplift 100 lb or less at joint(s) 2, 17, 18, 15, 13 except 19=-119(LC 12), 12=-116(LC 13)

18

17

Max Grav All reactions 250 lb or less at joint(s) 2, 10, 16, 17, 18, 19, 15, 13, 12

19

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.
- MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-12 to 3-8-1, Exterior(2) 3-8-1 to 8-6-0, Corner(3) 8-6-0 to 12-10-13, Exterior(2) 12-10-13 to 17-8-12 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 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, 17, 18, 15, 13 except (jt=lb) 19=119, 12=116.



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

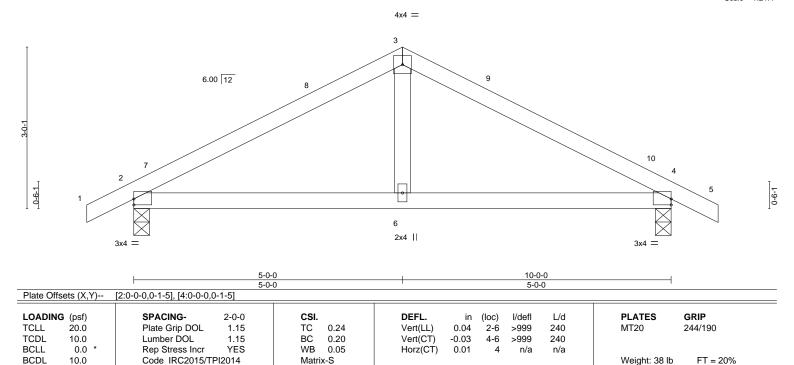
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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



Job Truss Type Qty Ply Weaver / 70 Thomas Farm / Harnett E14688953 J1220-5726 P1 COMMON 5 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 14:42:03 2020 Page 1 Comtech, Inc. ID:lwPOH6hK8Jeptt6SXqQOJcyzm6C-sGTQHTt7hSfxuBA8nrsLfTLvP0yRXcxri36WC7ysWPo -0-10-8 5-0-0 10-0-0 10-10-8 0-10-8 5-0-0 5-0-0 0-10-8

Scale = 1:21.4



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 2=38(LC 11)

Truss

Max Uplift 2=-89(LC 9), 4=-89(LC 8) Max Grav 2=450(LC 1), 4=450(LC 1)

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

TOP CHORD 2-3=-518/572 3-4=-518/572

BOT CHORD 2-6=-392/392, 4-6=-392/392

WFBS 3-6=-311/234

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 5-0-0, Exterior(2) 5-0-0 to 9-4-13, Interior(1) 9-4-13 to 10-10-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 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) 2, 4.



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

Rigid ceiling directly applied or 9-8-3 oc bracing.

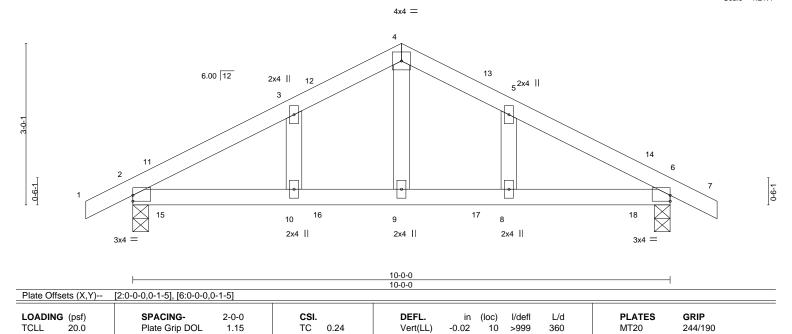


Job Truss Truss Type Qty Ply Weaver / 70 Thomas Farm / Harnett E14688954 J1220-5726 P1GE COMMON SUPPORTED GAB Job Reference (optional) Fayetteville, NC - 28314, 8.330 s May 6 2020 MiTek Industries, Inc. Fri Jul 31 14:42:04 2020 Page 1 Comtech, Inc. ID:lwPOH6hK8Jeptt6SXqQOJcyzm6C-KS1oVpumSmnoWLlKLYNaChu38QHZG33_xjs3kZysWPn -0-10-8 5-0-0 10-0-0 10-10-8 0-10-8 5-0-0

5-0-0

Scale = 1:21.4

0-10-8



Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

-0.03

-0.01

0.05

2-10

2-10

6

>999

>999

n/a

240

n/a

240

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

Rigid ceiling directly applied or 8-1-12 oc bracing.

Weight: 43 lb

FT = 20%

LUMBER-

TCDL

BCLL

BCDL

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

10.0

0.0

10.0

REACTIONS.

(size) 2=0-3-8, 6=0-3-8 Max Horz 2=59(LC 12)

Max Uplift 2=-117(LC 9), 6=-117(LC 8) Max Grav 2=450(LC 1), 6=450(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

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

TOP CHORD 2-3=-514/746, 3-4=-448/794, 4-5=-448/794, 5-6=-514/746 **BOT CHORD** 2-10=-515/397, 9-10=-515/397, 8-9=-515/397, 6-8=-515/397

WFBS 4-9=-435/200

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) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 5-0-0, Corner(3) 5-0-0 to 9-4-13, Exterior(2) 9-4-13 to 10-10-8 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.

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YES

BC

WB

Matrix-S

0.27

0.06

- 6) * 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=117, 6=117.



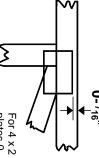


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE



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

LATERAL BRACING LOCATION



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

BEARING



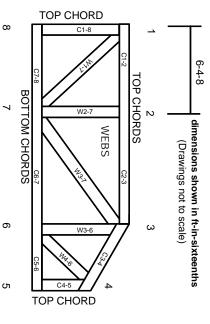
Min size shown is for crushing only number where bearings occur. reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

Industry Standards:

National Design Specification for Metal Building Component Safety Information. Installing & Bracing of Metal Plate Connected Wood Trusses. Guide to Good Practice for Handling Design Standard for Bracing. Plate Connected Wood Truss Construction.

DSB-89: ANSI/TPI1:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered. may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building

4.

- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication

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- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection. responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 13. Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- 18. Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.