

RE: J0521-2957

Weaver/Lot 2B Williams Farm/Harnett

Trenco 818 Soundside Rd Edenton, NC 27932

**Site Information:** 

Customer: Project Name: J0521-2957

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 29 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E15436114	A1	6/7/2021	21	E15436134	P3	6/7/2021
2	E15436115	A2	6/7/2021	22	E15436135	VB-1	6/7/2021
3	E15436116	A3	6/7/2021	23	E15436136	VB-2	6/7/2021
4	E15436117	A4	6/7/2021	24	E15436137	VB-3	6/7/2021
5	E15436118	A5	6/7/2021	25	E15436138	VB-4	6/7/2021
6	E15436119	B1	6/7/2021	26	E15436139	VB-5	6/7/2021
7	E15436120	B2	6/7/2021	27	E15436140	VC-1	6/7/2021
8	E15436121	C1	6/7/2021	28	E15436141	VC-2	6/7/2021
9	E15436122	C2	6/7/2021	29	E15436142	VC-3	6/7/2021
10	E15436123	C3	6/7/2021				
11	E15436124	D1	6/7/2021				
12	E15436125	D2	6/7/2021				
13	E15436126	M1	6/7/2021				
14	E15436127	M2	6/7/2021				
15	E15436128	M3	6/7/2021				
16	E15436129	M4	6/7/2021				
17	E15436130	M5	6/7/2021				
18	E15436131	M6	6/7/2021				
19	E15436132	P1	6/7/2021				
20	E15436133	P2	6/7/2021				

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

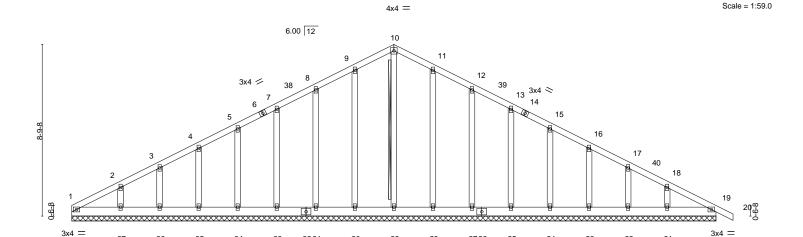
North Carolina COA: C-0844

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.



June 07, 2021

Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436114 J0521-2957 COMMON SUPPORTED GAB A1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:17 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-Usahb1hTIIKWBurfYb12n\_XupROyQspjVi9QtJziJiC 16-6-0 33-0-0



33-0-0 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 0.06 Vert(LL) -0.00 19 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.03 Vert(CT) 0.00 19 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.12 Horz(CT) 0.01 19 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 231 lb FT = 20%

33-0-0

29

30

LUMBER-

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

BRACING-

28

2726

4x6 =

25

24

TOP CHORD **BOT CHORD** WFBS

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

23

22

2x4 SPF No.2 - 10-29 T-Brace: Fasten (2X) T and I braces to narrow edge of web with 10d

16-6-0

(0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 33-0-0.

(lb) -Max Horz 1=-181(LC 17)

37

36

35

34

Max Uplift All uplift 100 lb or less at joint(s) 1, 30, 31, 33, 34, 35, 36, 28, 27, 25, 24, 23, 22, 21 except

33

3231

4x6 =

37=-106(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 21 19

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

16-6-0

TOP CHORD 8-9=-89/266, 9-10=-109/319, 10-11=-109/319, 11-12=-89/267

### 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) 0-0-0 to 4-6-0, Exterior(2) 4-6-0 to 16-6-0, Corner(3) 16-6-0 to 20-10-13, Exterior(2) 20-10-13 to 33-10-8 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 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) 1, 30, 31, 33, 34, 35, 36, 28, 27, 25, 24, 23, 22, 21 except (jt=lb) 37=106. 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



21

February 23,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

Design Valid to its 9 this with Min New Commercials. This design is based only upon parameters shown, and is 10 at an individual obtaining 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/Lot 2B Williams Farm/Harnett E15436115 J0521-2957 COMMON 5 A2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:21 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-MdpCQPkzLXqygV8RnQ6\_yqiUb2elMewJQK7e05ziJi8 16-6-0 33-0-0 33-10-8 0-10-8 8-8-2 7-9-14 8-8-2 Scale = 1:58.0 5x5 = 6.00 12 4x6 / 14 15 4x6 > 2x4 \\ 3 5 2x4 // 16 9-9-0 12 17 18 11 10 9 2x4 || 2x4 ||

Plate Off	sets (X,Y)	[1:0-0-6,Edge]										
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	0.33	Vert(LL)	-0.21	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.28	9-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-S	Wind(LL)	0.05	1-12	>999	240	Weight: 223 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

21-8-9

10-5-3

2x4 ||

4x8 = 6x8 =

6x8 = 2x4

LUMBER-

3x4

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

REACTIONS. 1=Mechanical, 7=0-3-8 (size)

Max Horz 1=-113(LC 8)

Max Uplift 1=-79(LC 12), 7=-91(LC 13) Max Grav 1=1311(LC 1), 7=1364(LC 1)

11-3-7

11-3-7

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

TOP CHORD 1-2=-2297/531, 2-4=-2064/545, 4-6=-2055/529, 6-7=-2283/512

**BOT CHORD** 1-12=-347/2015. 9-12=-110/1324. 7-9=-344/1965

WFBS 4-9=-142/850, 6-9=-495/297, 4-12=-145/865, 2-12=-509/305

### 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) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 33-8-10 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.
- 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, 7.



3x6 =

33-0-0

11-3-7

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

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

February 23,2021

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436116 J0521-2957 COMMON 2 A3 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:23 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-J0xyr4mEt84gvpIpvr8S1Fnq7sKEqYPcteck4zziJi6 16-6-0 24-3-14 . 32-8-8 8-8-2 7-9-14 8-4-10 Scale = 1:57.3 5x5 = 6.00 12 4x6 / 13 4x6 > 2x4 \\ 5 2x4 // 3 9-9-0 11 10 16 17 9 8 2x4 || 2x4 || 3x4 =3x4 =2x4 || 6x8 = 2x4 | I |4x8 = 4x8 = 6x8 =

Plate Off	sets (X,Y)	[1:0-0-6,Edge], [7:0-1-0,0	0-0-1]									
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.20	8-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.28	8-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-S	Wind(LL)	0.05	1-11	>999	240	Weight: 220 lb	FT = 20%

21-8-9

10-5-3

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WFBS 2x4 SP No.2

REACTIONS. (size) 1=Mechanical, 7=Mechanical

Max Horz 1=-108(LC 8)

Max Uplift 1=-79(LC 12), 7=-78(LC 13) Max Grav 1=1303(LC 1), 7=1303(LC 1)

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

TOP CHORD 1-2=-2280/528, 2-4=-2048/543, 4-6=-2021/538, 6-7=-2242/521

11-3-7

11-3-7

**BOT CHORD** 1-11=-354/1997. 8-11=-116/1306. 7-8=-347/1920

WFBS 4-8=-139/822, 6-8=-473/295, 4-11=-145/866, 2-11=-509/305

### 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) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 32-7-12 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, with BCDL = 10.0psf.
- 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, 7.



32-8-8

10-11-15

Structural wood sheathing directly applied or 4-8-9 oc purlins.

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

February 23,2021

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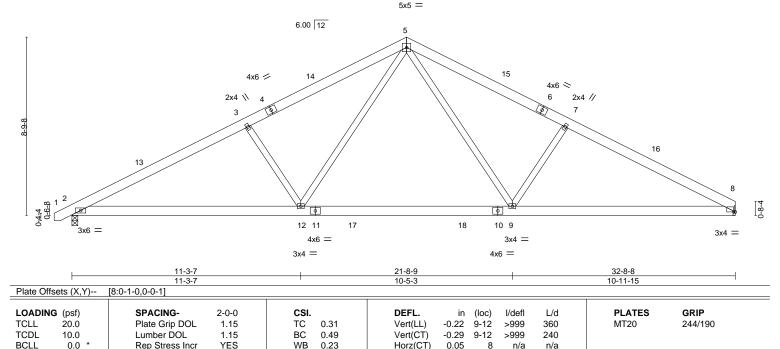




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-0-10-8 0-10-8 16-6-0 24-3-14 32-8-8 8-4-10 8-8-2 7-9-14

Scale = 1:56.8



Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

0.05

0.05

8

2-12

n/a

>999

n/a

240

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

Structural wood sheathing directly applied or 4-9-10 oc purlins.

Weight: 207 lb

FT = 20%

0.23

Matrix-S

LUMBER-

**BCLL** 

BCDL

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

0.0

10.0

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

Max Horz 2=113(LC 9)

Max Uplift 2=-91(LC 12), 8=-78(LC 13) Max Grav 2=1352(LC 1), 8=1299(LC 1)

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=-2261/507 3-5=-2051/524 5-7=-2034/536 7-8=-2238/519

**BOT CHORD** 2-12=-347/1992, 9-12=-113/1312, 8-9=-341/1925

WFBS 5-9=-137/833, 7-9=-473/294, 5-12=-141/861, 3-12=-495/297

### 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 32-7-12 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.

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, with BCDL = 10.0psf.
- 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.



February 23,2021

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Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:28 2021 Page 1 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-fzIrvoqMihiy0aAniOkdkJUgNt2FVpjL1wJVIBziJi1 32-8-8

Scale = 1:60.3

10-6-6 16-6-0 10-6-6 5-11-10 16-2-8

5x5 =

6.00 12 6 3x6 / 9 34 5 4x6 / 33 4x6 > 10 11 3 12 13 35 14 15 16 0-8-4 26 36 27 28 3x6 =3x4 =4x6 = 24322 25 21 20 19 18 17

	10-6-6	19-8-0	32-8-8
	10-6-6	9-1-10	13-0-8
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.         DEFL.           TC 0.42         Vert(LL)           BC 0.43         Vert(CT)           WB 0.17         Horz(CT)           Matrix-S         Wind(LL)	in (loc) I/defl L/d PLATES GRIP -0.08 2-28 >999 360 MT20 244/190 -0.17 2-28 >999 240 0.02 16 n/a n/a 0.07 2-28 >999 240 Weight: 246 lb FT = 20%

4x6 =

LUMBER-**BRACING-**

TOP CHORD 2x6 SP No.1 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD 2x6 SP No.1 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 2x4 SP No.2 WFBS **JOINTS** 1 Brace at Jt(s): 29, 30, 31

REACTIONS. All bearings 13-4-0 except (jt=length) 2=0-3-8, 16=0-3-8, 16=0-3-8, 24=0-3-8.

Max Horz 2=180(LC 16) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 21, 20, 19, 18 except 2=-192(LC 12), 23=-491(LC 19),

17=-114(LC 13), 24=-297(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 23, 21, 20, 19, 18, 17, 16, 16 except 2=848(LC 1), 24=1302(LC

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

TOP CHORD 2-4=-1128/201, 4-5=-292/128, 14-15=-251/0, 15-16=-294/21

BOT CHORD 2-28=-203/943, 26-28=-202/948, 25-26=-17/266, 24-25=-17/266, 23-24=-17/266,

21-23=-17/266, 20-21=-17/266, 19-20=-17/266, 18-19=-17/266, 17-18=-17/266,

16-17=-17/266

**WEBS** 4-31=-927/384, 30-31=-905/365, 29-30=-923/382, 26-29=-932/381, 4-28=0/455,

9-23=-263/134

### 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 Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 32-6-12 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) 21, 20, 19, 18 except (jt=lb) 2=192, 23=491, 17=114, 24=297.



February 23,2021



Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436119 COMMON SUPPORTED GAB J0521-2957 В1 Job Reference (optional)

5-7-0

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:30 2021 Page 1 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-bMsbJUrdElzgFuK9ppm5pka63gq7zlzeUEpcq3ziJi?

Scale = 1:40.1 5x5 =

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

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

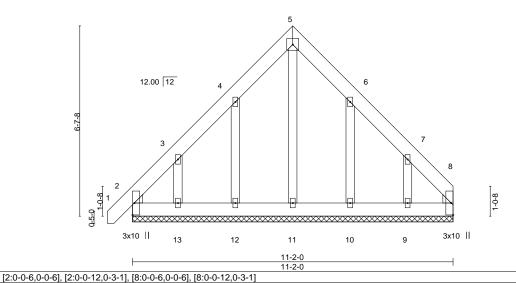


Plate Offsets (X,Y)--LOADING (psf) SPACING-2-0-0 DEFL. (loc) I/defl L/d **PLATES GRIP TCLL** 20.0 Plate Grip DOL 1.15 TC 0.03 Vert(LL) -0.00 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.02 Vert(CT) -0.00 120 n/r WB **BCLL** 0.0 Rep Stress Incr YES 0.06 Horz(CT) 0.00 8 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 93 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

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

REACTIONS. All bearings 11-2-0.

Max Horz 2=187(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 12=-130(LC 12), 13=-189(LC 12), 10=-126(LC 13),

9=-194(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 11, 12, 13, 10, 9, 8

0-10-8

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-2 to 3-6-13, Exterior(2) 3-6-13 to 5-7-0, Corner(3) 5-7-0 to 9-11-13, Exterior(2) 9-11-13 to 11-2-0 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, 8 except (jt=lb) 12=130, 13=189, 10=126, 9=194,
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



February 23,2021



Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436120 J0521-2957 B2 COMMON GIRDER 2 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:32 2021 Page 1 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-Yk\_Mk9ttmvDOUBUYxEoZu9fMjUMWRXHxxYIjuyziJhz

> Scale = 1:41.0 5x5 ||

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

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

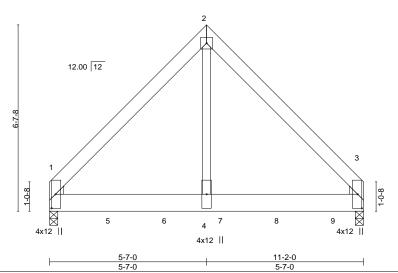


Plate Offsets (X,Y)-- [1:0-1-4,0-1-4], [1:0-2-8,0-4-13], [1:0-6-0,0-1-12], [3:0-1-4,0-1-4], [3:0-2-8,0-4-13], [3:0-6-0,0-1-12]

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 0.40	Vert(LL)	-0.03	3-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.60	Vert(CT)	-0.06	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB 0.52	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.02	3-4	>999	240	Weight: 165 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

WEDGE

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

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

Max Horz 1=-144(LC 23) Max Uplift 1=-301(LC 9), 3=-265(LC 8)

Max Grav 1=4586(LC 1), 3=3979(LC 1)

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

TOP CHORD 1-2=-3212/267, 2-3=-3207/266 **BOT CHORD** 1-4=-137/2118, 3-4=-137/2118

WEBS 2-4=-239/4237

### NOTES-

- 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: 2x8 - 2 rows staggered at 0-6-0 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=6.0psf; h=15ft; 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 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) 1=301, 3=265.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1293 lb down and 88 lb up at 0-1-12, 1283 lb down and 98 lb up at 2-2-0, 1279 lb down and 98 lb up at 4-2-0, 1279 lb down and 98 lb up at 6-2-0, and 1279 lb down and 98 lb up at 8-2-0, and 1281 lb down and 96 lb up at 10-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

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

February 23,2021



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

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\*\*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/Lot 2B Williams Farm/Harnett
10504 0057	DO.	OOMMON OIDDED			E15436120
J0521-2957	B2	COMMON GIRDER	1	2	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:32 2021 Page 2 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-Yk\_Mk9ttmvDOUBUYxEoZu9fMjUMWRXHxxYIjuyziJhz

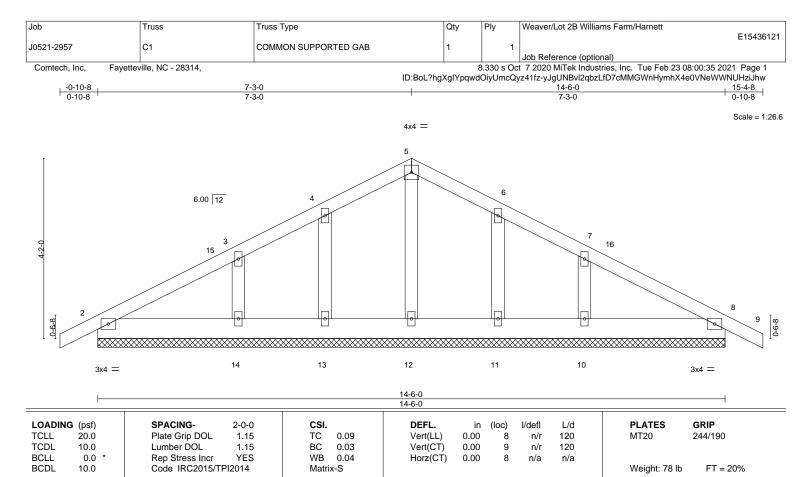
LOAD CASE(S) Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 1=-1293(B) 5=-1283(B) 6=-1279(B) 7=-1279(B) 8=-1279(B) 9=-1281(B)



LUMBER-

TOP CHORD 2x4 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.

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

REACTIONS. All bearings 14-6-0.

Max Horz 2=-82(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 11 except 14=-112(LC 12), 10=-112(LC 13) Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 11 except 14=250(LC 1), 10=250(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.
- MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-3-0, Exterior(2) 3-3-0 to 7-3-0, Corner(3) 7-3-0 to 11-7-13, Exterior(2) 11-7-13 to 15-4-8 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 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, 8, 13, 11 except (jt=lb) 14=112, 10=112.



February 23,2021





Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:37 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-uinFntx0aSrgbzMVjnOkbCMCqVAJ6vLg5p?UZ9ziJhu -0-10-8 14-6-0 0-10-8 0-10-8 Scale = 1:26.6 4x6 = 6.00 12 10 6 2x4 || 3x6 / 3x6 ≿ 14-6-0 7-3-0 7-3-0 Plate Offsets (X,Y)--[2:0-0-12,0-1-8], [4:0-0-12,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.44 Vert(LL) -0.02 2-6 >999 360 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.24 -0.05 2-6 >999 240 WB 0.08 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.01 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.02 2-6 >999 240 Weight: 66 lb FT = 20% BRACING-

TOP CHORD

**BOT CHORD** 

Qty

3

Ply

Weaver/Lot 2B Williams Farm/Harnett

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

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

E15436122

### LUMBER-

Job

J0521-2957

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

REACTIONS.

(size) 2=0-3-8, 4=0-3-8 Max Horz 2=-53(LC 10)

Truss

C2

Truss Type

COMMON

Max Uplift 2=-48(LC 12), 4=-48(LC 13) Max Grav 2=630(LC 1), 4=630(LC 1)

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

TOP CHORD 2-3=-803/237, 3-4=-803/237 **BOT CHORD** 2-6=-75/617, 4-6=-75/617

WFBS 3-6=0/366

### 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 7-3-0, Exterior(2) 7-3-0 to 11-7-13, Interior(1) 11-7-13 to 15-4-8 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 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.

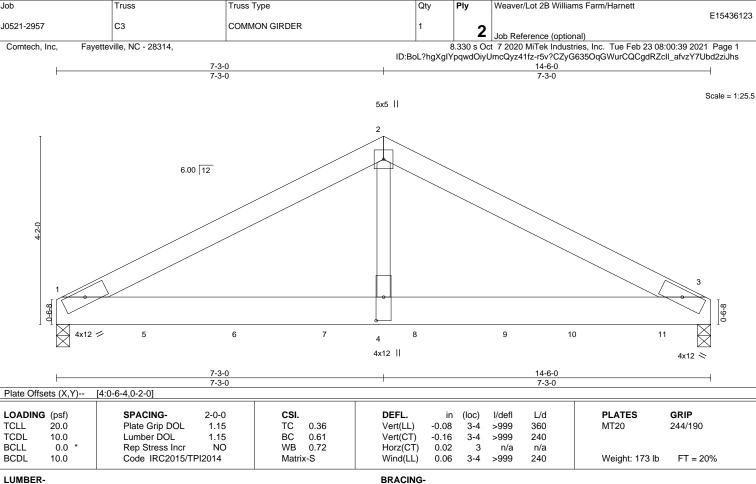


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ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

**BOT CHORD** 

Plv

Weaver/Lot 2B Williams Farm/Harnett

Structural wood sheathing directly applied or 5-10-10 oc purlins.

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

LUMBER-

Job

Truss

Truss Type

TOP CHORD 2x6 SP No 1 BOT CHORD 2x8 SP 2400F 2.0E 2x4 SP No.2 WFBS

REACTIONS. (size) 1=0-3-8, 3=0-3-8 Max Horz 1=-47(LC 25)

Max Uplift 1=-324(LC 8), 3=-382(LC 9)

Max Grav 1=4670(LC 1), 3=5490(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-7127/503 2-3=-7121/502

**BOT CHORD** 1-4=-396/6308, 3-4=-396/6308

WFBS 2-4=-316/5855

### NOTES-

- 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: 2x8 - 2 rows staggered at 0-7-0 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=6.0psf; h=15ft; 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 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) 1=324, 3=382,
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1291 lb down and 99 lb up at 2-0-12, 1291 lb down and 99 lb up at 4-0-12, 1291 lb down and 99 lb up at 6-0-12, 1291 lb down and 99 lb up at 8-0-12, 1291 lb down and 99 lb up at 10-0-12, and 1283 lb down and 99 lb up at 11-6-0, and 1285 lb down and 98 lb up at 13-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

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

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

February 23,2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2B Williams Farm/Harnett
10504 0057	00	OOMMON OIDDED			E15436123
J0521-2957	C3	COMMON GIRDER	1	2	Job Reference (optional)

Comtech, Inc,

Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:39 2021 Page 2 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-r5v?CZyG635OqGWurCQCgdRZcll\_afvzY7Ubd2ziJhs

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 5=-1291(F) 6=-1291(F) 7=-1291(F) 8=-1291(F) 9=-1291(F) 10=-1283(F) 11=-1285(F)

Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436124 J0521-2957 D1 **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:41 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-nT1mdE\_WegL63agHydTgm2XuK6UW2kdF0RzhiwziJhq 10-6-3 14-9-5 18-6-10 22-8-0 5-2-3 4-3-2 3-9-5 4-1-6 Scale = 1:45.3 8x8 / 3 2x6 || 6.00 12 23 2x6 || 8.00 12 22 2x6 || 0<u>-4-4</u> 0-6-8 4x8 / 5x8 = 14 13 25 11 10 9 8 4x6 = 5 5-4-0 10-6-3 18-6-10 5-4-0 8-0-7 Plate Offsets (X,Y)--[2:0-2-4,0-2-7], [3:0-4-6,0-4-0] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.41 Vert(LL) -0.04 5 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.42 Vert(CT) -0.06 5 120 n/r WB **BCLL** 0.0 Rep Stress Incr YES 0.00 Horz(CT) 0.01 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 160 lb FT = 20% BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

2x6 SP No.1 \*Except\* TOP CHORD 3-5: 2x10 SP No.1

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

REACTIONS.

All bearings 17-9-15. (lb) -Max Horz 2=-218(LC 17)

Max Uplift All uplift 100 lb or less at joint(s) 13, 2 except 4=-430(LC 13), 14=-259(LC 12), 6=-139(LC 1) Max Grav All reactions 250 lb or less at joint(s) 10, 11, 12, 13, 8, 7, 6 except 4=979(LC 1), 14=423(LC 23),

2=319(LC 1)

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

TOP CHORD 2-3=-587/244. 3-4=-627/277

**BOT CHORD** 2-14=-80/413, 13-14=-80/413, 12-13=-80/413, 11-12=-80/413, 10-11=-80/413,

8-10=-80/413, 7-8=-80/413, 6-7=-80/413, 4-6=-80/413

### 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 Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 10-6-3, Exterior(2) 10-6-3 to 14-11-0, Interior(1) 14-11-0 to 22-6-4 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, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 2 except (jt=lb) 4=430, 14=259, 6=139.



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

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

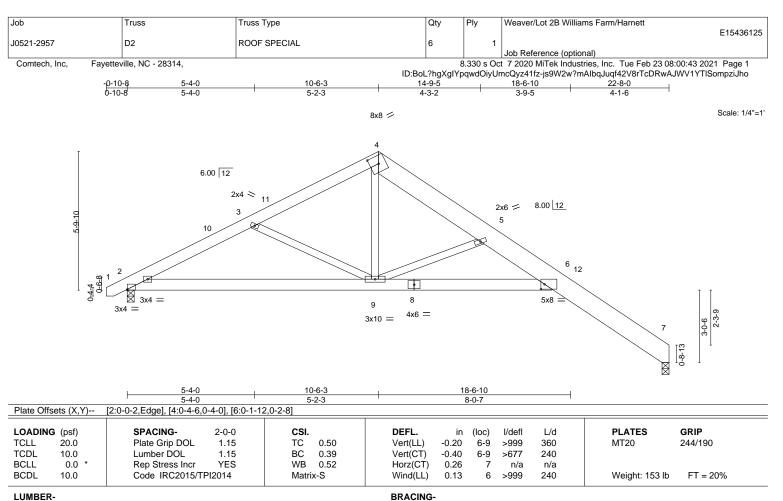
February 23,2021

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TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No.1 \*Except\*

4-7: 2x10 SP 2400F 2.0E

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

REACTIONS.

(size) 7=0-3-8, 2=0-3-8 Max Horz 2=176(LC 11)

Max Uplift 7=-57(LC 13), 2=-58(LC 12) Max Grav 7=909(LC 1), 2=949(LC 1)

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

TOP CHORD  $2\text{-}3\text{=-}1528/386,\ 3\text{-}4\text{=-}1206/274,\ 4\text{-}5\text{=-}1286/301,\ 5\text{-}6\text{=-}2001/430,\ 6\text{-}7\text{=-}452/169}$ 

**BOT CHORD** 2-9=-189/1315. 6-9=-273/2152

**WEBS** 3-9=-349/230, 4-9=-109/874, 5-9=-1256/333

### 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 10-6-3, Exterior(2) 10-6-3 to 15-1-11, Interior(1) 15-1-11 to 22-6-4 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.
- 5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.



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

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

February 23,2021



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

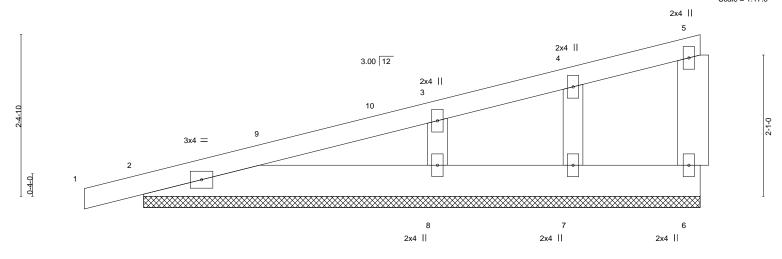
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



1-	T	To:	15.	
I russ	Iruss Type	Qty	Ply	Weaver/Lot 2B Williams Farm/Harnett
				E15436126
N44	CABLE	1	1	
IVII	GABLE	'	'	
				Job Reference (optional)
avetteville NC - 28314			8 330 s Oc	t 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:44 2021 Page 1
	Truss M1  Fayetteville, NC - 28314,	M1 GABLE	M1 GABLE 1	M1 GABLE 1 1

ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-B2iuFG0Pxbjhw1Psel0NNh9TPJc\_F4miiPCMJFziJhn -0-10-8 4-6-8 8-4-0 0-10-8 4-6-8

Scale = 1:17.0



LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (lo	oc) I/	/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.05	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P						Weight: 40 lb	FT = 20%

LUMBER-

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

2x6 SP No.1 WFBS 2x4 SP No.2 OTHERS

**BRACING-**

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

except end verticals.

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 8-2-8.

(lb) -Max Horz 2=109(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=-107(LC 12) Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7 except 8=344(LC 1)

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

**WEBS** 3-8=-255/218

### NOTES-

- 1) 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 Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 8-1-4 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 requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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) 6, 2, 7 except (jt=lb) 8=107.



February 23,2021

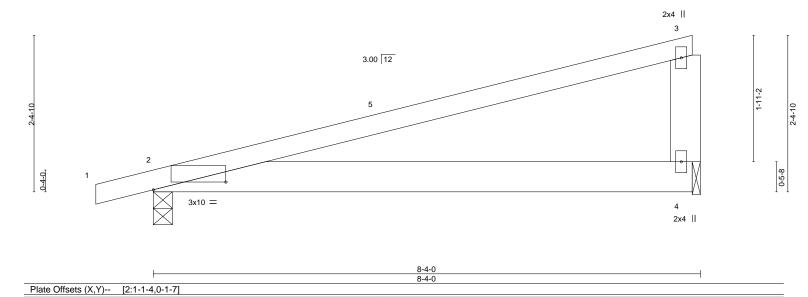


Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436127 J0521-2957 M2 MONOPITCH 5 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:46 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-7Rqfgy2fTC\_PALZEIA2rS6Edd7D6j\_s\_9jhSN8ziJhl -0-10-8 4-6-8 8-4-0

3-9-8

4-6-8

Scale = 1:17.5



DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

BOT CHORD

(loc)

2-4

2

-0.05

-0.11

0.00

0.00

I/defI

>999

>880

except end verticals.

n/a

L/d

360

240

n/a

240

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

**PLATES** 

Weight: 37 lb

MT20

Structural wood sheathing directly applied or 2-2-0 oc purlins,

**GRIP** 

244/190

FT = 20%

LUMBER-

LOADING (psf)

**TCLL** 

TCDL

**BCLL** 

BCDL

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

WFBS 2x6 SP No.1

20.0

10.0

0.0

10.0

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

0-10-8

Max Horz 2=77(LC 8)

Max Uplift 2=-66(LC 8), 4=-41(LC 12)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

Max Grav 2=384(LC 1), 4=314(LC 1)

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

### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 8-1-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

CSI.

0.95

0.26

0.00

TC

BC

WB

Matrix-P

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

2-0-0

1.15

1.15

YES

- 3) \* 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.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



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

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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

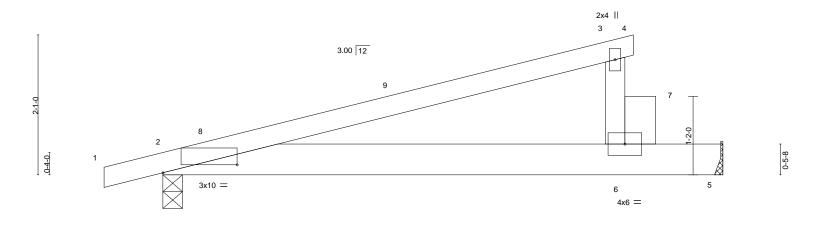


Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2B Williams Farm/Harnett
					E15436128
J0521-2957	M3	ROOF SPECIAL	6	1	
					Job Reference (optional)
Comtech Inc Favetter	ille NC - 28314			330 000	7 2020 MiTek Industries Inc. Tue Feb 23 08:00:50 2021 Page 1

-0-10-8 7-0-0 0-10-8 7-0-0

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Scale = 1:17.1



8-4-0

Plate Oil	Plate Offsets (A, f) [2.1-1-4,0-1-7]											
LOADIN	G (psf)	SPACING- 2-0-	0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.1	5	TC	0.71	Vert(LL)	-0.11	2-6	>884	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.1	5	BC	0.86	Vert(CT)	-0.26	2-6	>373	240		
BCLL	0.0 *	Rep Stress Incr N	0	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix	x-P	Wind(LL)	0.17	2-6	>569	240	Weight: 35 lb	FT = 20%

LUMBER-

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

2x4 SP No.2 \*Except\* **WEBS** 

6-7: 2x6 SP No.1

**BRACING-**

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

except end verticals.

**BOT CHORD** Rigid ceiling directly applied or 7-8-6 oc bracing.

REACTIONS.

(size) 2=0-3-8, 5=Mechanical

Max Horz 2=68(LC 8)

Max Uplift 2=-75(LC 8), 5=-58(LC 12) Max Grav 2=468(LC 1), 5=656(LC 1)

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

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=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 7-0-0 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 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
  6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 500 lb down and 265 lb up at 7-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

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

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

Concentrated Loads (lb) Vert: 6=-500



February 23,2021



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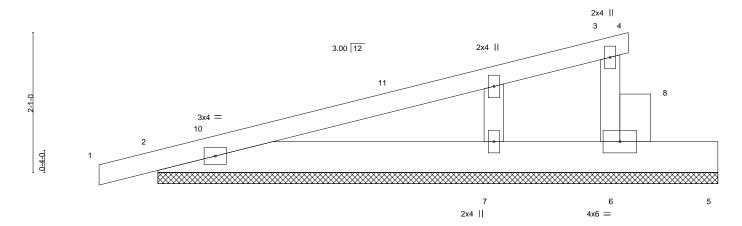
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436129 J0521-2957 M4 **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:51 2021 Page 1 Comtech, Inc.

ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-UOdYjf6oHlchG6RCYke099xYs8zLOF5kJ?OD3LziJhg -0-10-8 7-0-0 0-10-8 7-0-0

Scale = 1:17.1



8-4-0

**BRACING-**

TOP CHORD

**BOT CHORD** 

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (lo	c) I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.66	Vert(LL)	-0.01	4 n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.06	Vert(CT)	0.01	4 n/r	120		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	6 n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 37 lb	FT = 20%

LUMBER-

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

2x4 SP No.2 \*Except\* WFBS 6-8: 2x6 SP No.1

**OTHERS** 2x4 SP No.2

REACTIONS. (size) 6=8-4-0, 2=8-4-0, 7=8-4-0

Max Horz 2=96(LC 8)

Max Uplift 6=-109(LC 12), 2=-133(LC 8)

Max Grav 6=235(LC 1), 2=303(LC 1), 7=181(LC 3)

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

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-0-0 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 requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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) 6=109, 2=133.



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

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

except end verticals.

February 23,2021



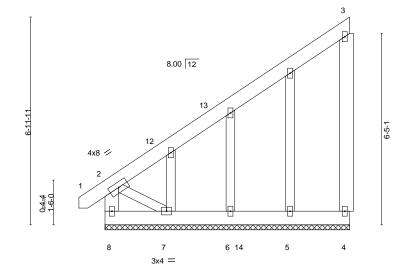
Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2B Williams Farm/Harnett	
10504 0057	M5	CARLE			E1543613	0
J0521-2957	M5	GABLE	1	1	Joh Reference (ontional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:52 2021 Page 1 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-ybBwx?6Q22kYuG0O6R9FiNUmkYKE7iRtYf8nboziJhf

0-10-8

Scale = 1:38.6



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 0.40	Vert(LL)	-0.02	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT)	0.01	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P						Weight: 79 lb	FT = 20%

LUMBER-**BRACING-**

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

2x6 SP No.1 except end verticals. 2x6 SP No.1 \*Except\* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WFBS

2-7: 2x4 SP No.2 **OTHERS** 2x4 SP No.2

REACTIONS. All bearings 8-2-8. (lb) -Max Horz 8=271(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) except 4=-206(LC 12), 7=-142(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 5, 6, 7 except 4=311(LC 19), 8=311(LC 1)

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

TOP CHORD 3-4=-301/226, 2-8=-298/0

**BOT CHORD** 7-8=-280/225 **WEBS** 2-7=-265/330

### NOTES-

- 1) 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 Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 8-1-0 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
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 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 206 lb uplift at joint 4 and 142 lb uplift at joint 7.



February 23,2021





Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2B Williams Farm/Harnett
					E15436131
J0521-2957	M6	MONOPITCH	6	1	
					Joh Reference (ontional)

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:53 2021 Page 1 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-Qnll8L72pMsPVQbaf8gUFa00Hye?s7A0mJtK7EziJhe

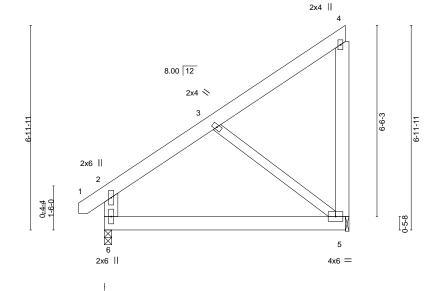
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

0-10-8 3-10-0 8-4-0 3-10-0 4-6-0

Scale = 1:39.3



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 0.09	Vert(LL)	-0.03	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.18	Vert(CT)	-0.06	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.07	5-6	>999	240	Weight: 69 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x6 SP No.1 \*Except\* **WEBS** 3-5: 2x4 SP No.2

REACTIONS. (size) 6=0-3-0, 5=0-1-8

Max Horz 6=178(LC 12)

Max Uplift 6=-27(LC 9), 5=-143(LC 9) Max Grav 6=376(LC 1), 5=310(LC 1)

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

2-3=-268/39, 2-6=-290/86 TOP CHORD

**BOT CHORD** 5-6=-250/259 WFBS 3-5=-313/285

### NOTES-

- 1) 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 3-7-11, Interior(1) 3-7-11 to 8-1-0 zone; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 6 and 143 lb uplift at joint 5.



February 23,2021



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2B Williams Farm/Harnett	
						E15436132
J0521-2957	P1	GABLE	1	1		
					Job Reference (optional)	
Comtech, Inc, Fayette	ville, NC - 28314,	•		3.330 s Oc	t 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:53 202	21 Page 1
•			ID:BoL?hgXg	IYpqwdOiy	UmcQyz41fz-Qnll8L72pMsPVQbaf8gUFa0xjybRs8X0mJ	ltK7EziJhe
-0-10-8	6-9	5-0	12-10-0		12-10-0	13-8-8
0-10-8					6-5-0	0-10-8

Scale = 1:23.4

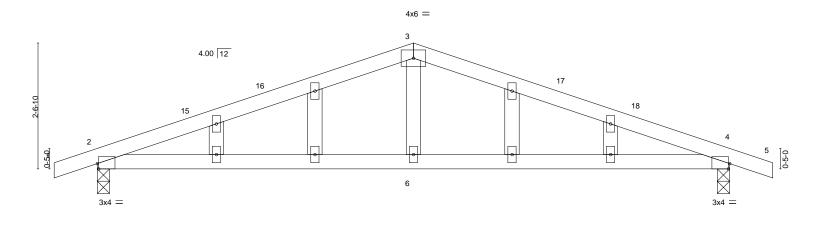


Plate Offsets (X,Y	[2:0-0-5,Edge], [4:0-0-5,Edge]	0-0-0		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) 0.11 4-6 >999 240	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.09 2-6 >999 240	
BCLL 0.0	Rep Stress Incr YES	WB 0.07	Horz(CT) 0.01 4 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 51 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

BOT CHORD 2x4 SP No.2 WFBS **OTHERS** 2x4 SP No.2

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

Max Horz 2=-49(LC 17) Max Uplift 2=-309(LC 8), 4=-309(LC 9) Max Grav 2=563(LC 1), 4=563(LC 1)

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

TOP CHORD 2-3=-910/965, 3-4=-910/965 **BOT CHORD** 2-6=-828/799, 4-6=-828/799

WEBS 3-6=-383/303

### 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 Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-5-0, Exterior(2) 6-5-0 to 10-9-13, Interior(1) 10-9-13 to 13-8-8 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) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 309 lb uplift at joint 2 and 309 lb uplift at ioint 4.



Structural wood sheathing directly applied or 5-9-9 oc purlins.

Rigid ceiling directly applied or 6-6-10 oc bracing.

February 23,2021



- 1	JOD	Iruss	Truss Type	Qty	Ply	vveaver/Lot 2B vviiliams Farm/Harnett			
							E15436133		
	J0521-2957	P2	COMMON	2	1				
						Job Reference (optional)			
	Comtech, Inc, Fayette	ville, NC - 28314,		3	3.330 s Oc	t 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:54 202	21 Page 1	-	
	•			ID:BoL?hgXg	IYpqwdOiy	UmcQyz41fz-uzJgMh8gag_G7aAnDsCjnoZ6TLxgbbnA?	zdtfgziJhd		
	-0-10-8	6-5	5-0			12-10-0	13-8-8		
	0-10-8	6-4	5-0	650 0.10.8					

Scale = 1:23.4

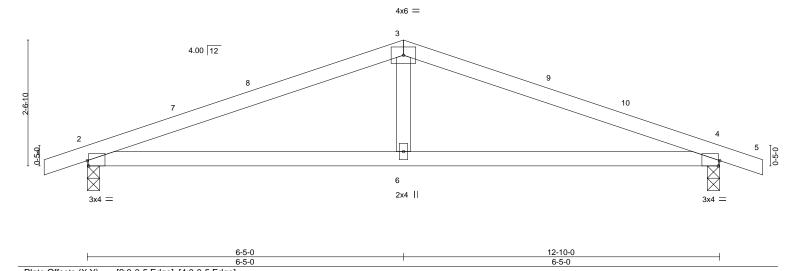


Plate Off	sets (X,Y)	[2:0-0-5,Eage], [4:0-0-5,Eage]			_
LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) 0.11 4-6 >999 240 MT20 244/190	
TCDL	10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.09 2-6 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT) 0.01 4 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Weight: 45 lb FT = 20%	

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 2=0-3-0, 4=0-3-0 Max Horz 2=-29(LC 13)

Max Uplift 2=-217(LC 8), 4=-217(LC 9) Max Grav 2=563(LC 1), 4=563(LC 1)

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

TOP CHORD 2-3=-910/965, 3-4=-910/965 **BOT CHORD** 2-6=-828/799, 4-6=-828/799

WFBS 3-6=-383/303

### 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 6-5-0, Exterior(2) 6-5-0 to 10-9-13, Interior(1) 10-9-13 to 13-8-8 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) 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 217 lb uplift at joint 2 and 217 lb uplift at joint 4.



Structural wood sheathing directly applied or 5-9-9 oc purlins.

Rigid ceiling directly applied or 6-6-10 oc bracing.

February 23,2021

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 2B Williams Farm/Harnett
					E15436134
J0521-2957	P3	COMMON	3	1	
					Job Reference (optional)
Comtech, Inc, Fayette	ville, NC - 28314,			3.330 s Oc	t 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:55 2021 Page 1
•			ID:BoL?hg2	KgIYpqwd(	DiyUmcQyz41fz-NAt2Z19ILz67lklznZjyK?6GflHsK21JEdMRC6ziJhc
-0-10-8		6-5-0			12-10-0
0-10-8		6-5-0			6-5-0

Scale = 1:22.5

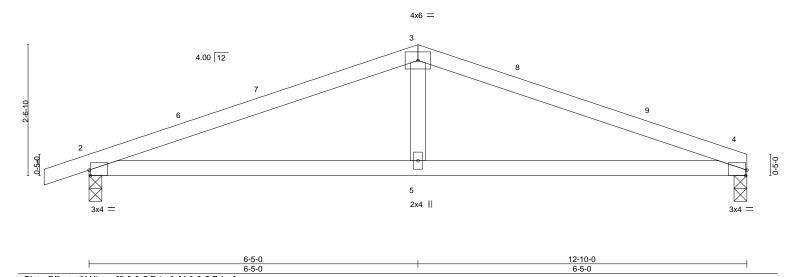


Plate Off	sets (X,Y)	[2:0-0-5,Edge], [4:0-0-5,Edge]					
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL)	0.11 4-5	>999 240	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -	-0.09 4-5	>999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT)	0.01 4	n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S				Weight: 44 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

**WEBS** 2x4 SP No.2

> (size) 4=0-3-0, 2=0-3-0 Max Horz 2=32(LC 12)

Max Uplift 4=-179(LC 9), 2=-217(LC 8) Max Grav 4=501(LC 1), 2=566(LC 1)

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

TOP CHORD 2-3=-918/984, 3-4=-916/993 **BOT CHORD** 2-5=-866/807, 4-5=-866/807

WFBS 3-5=-386/305

### 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 6-5-0, Exterior(2) 6-5-0 to 10-9-13, Interior(1) 10-9-13 to 12-8-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 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 179 lb uplift at joint 4 and 217 lb uplift at joint 2.



Structural wood sheathing directly applied or 5-7-10 oc purlins.

Rigid ceiling directly applied or 6-4-14 oc bracing.

February 23,2021





Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436135 J0521-2957 VB-1 VALLEY Job Reference (optional)

4x4 =

5-0-4 5-0-4

Fayetteville, NC - 28314, Comtech, Inc.

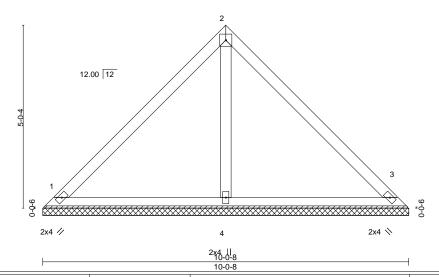
8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:55 2021 Page 1 ID:BoL?hgXglYpqwdOiyUmcQyz41fz-NAt2Z19ILz67lklznZjyK?6KPlKlK20JEdMRC6ziJhc 10-0-8

5-0-4

Scale = 1:31.6

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

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



LOADING	G (psf)	SPACING- 2-0-	-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.1	5	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL 1.1	5	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr YE	S	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	1	Matri	x-S						Weight: 41 lb	FT = 20%

**BRACING-**TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 **OTHERS** 

REACTIONS. (size) 1=10-0-8, 3=10-0-8, 4=10-0-8

Max Horz 1=-112(LC 8)

Max Uplift 1=-28(LC 13), 3=-28(LC 13)

Max Grav 1=212(LC 1), 3=212(LC 1), 4=324(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=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) 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 28 lb uplift at joint 1 and 28 lb uplift at ioint 3.





Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436136 J0521-2957 VB-2 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:56 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-rMRRnNAw6HE\_NtJ9LHEBsDeVL9hy3WqTTH6\_kZziJhb 4-0-4 4-0-4 4-0-4 Scale = 1:26.2 4x4 = 2 12.00 12 3 9-0-0 9-0-0 2x4 || 4 2x4 📏 2x4 / 8-0-8 8-0-8 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 0.23 Vert(LL) n/a n/a 999 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.10 Vert(CT) n/a n/a 999 WB 0.03 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-P Weight: 32 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 1=-88(LC 8)

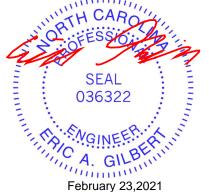
Max Uplift 1=-32(LC 13), 3=-32(LC 13)

Max Grav 1=179(LC 1), 3=179(LC 1), 4=230(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=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) 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 32 lb uplift at joint 1 and 32 lb uplift at joint 3.



Structural wood sheathing directly applied or 6-0-0 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

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/Lot 2B Williams Farm/Harnett E15436137 J0521-2957 VB-3 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:57 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-JY?p\_iAYtbMr\_1uLu\_IQPQBirZ1wozLchxrYG?ziJha 3-0-4 3-0-4 Scale = 1:21.0 4x4 = 2 12.00 12 9-0-0 9-0-0 2x4 // 2x4 🚿 2x4 || 6-0-8 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) I/defl L/d **PLATES TCLL** 20.0 Plate Grip DOL 1.15 TC 0.12 Vert(LL) n/a n/a 999 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.05 Vert(CT) n/a n/a 999 WB 0.02 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-P Weight: 24 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=6-0-8, 3=6-0-8, 4=6-0-8

Max Horz 1=64(LC 9)

Max Uplift 1=-23(LC 13), 3=-23(LC 13)

Max Grav 1=130(LC 1), 3=130(LC 1), 4=167(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=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) 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 23 lb uplift at joint 1 and 23 lb uplift at joint 3.



Structural wood sheathing directly applied or 6-0-0 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

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/Lot 2B Williams Farm/Harnett E15436138 J0521-2957 VB-4 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:57 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-JY?p\_iAYtbMr\_1uLu\_IQPQBj?Z1QozTchxrYG?ziJha 2-0-4 2 4x4 Scale = 1:12.9 12.00 12 3 9-0-0 9-0-0 2x4 // 2x4 || 2x4 📏 4-0-8 4-0-8

LOADING	G (psf)	SPACING- 2-	-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL 1	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr Y	/ES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI201	14	Matri	x-P						Weight: 15 lb	FT = 20%

**BRACING-**TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2

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

Max Horz 1=-40(LC 8)

Max Uplift 1=-14(LC 13), 3=-14(LC 13) Max Grav 1=81(LC 1), 3=81(LC 1), 4=104(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=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) 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 14 lb uplift at joint 1 and 14 lb uplift at ioint 3.



Structural wood sheathing directly applied or 4-0-8 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

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/Lot 2B Williams Farm/Harnett E15436139 J0521-2957 VB-5 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:58 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-nlZBB2BBeuUicBTYSiGfyekuHzNmXQqmwbb5oRziJhZ 1-0-4 2-0-8 1-0-4 Scale = 1:7.9 3x4 12.00 12 3 9-0-0 9-0-C 2x4 // 2x4 📏

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

LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15           Rep Stress Incr         YES	CSI. TC 0.01 BC 0.01 WB 0.00	DEFL.         in (loc)         I/           Vert(LL)         n/a         -           Vert(CT)         n/a         -           Horz(CT)         0.00         3	/defl L/d n/a 999 n/a 999 n/a n/a	PLATES GRIP MT20 244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	11012(01) 0.00 0	iva iva	Weight: 6 lb FT = 20%

LUMBER-TOP CHORD

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

**BRACING-BOT CHORD** 

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

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

Max Horz 1=-16(LC 8)

Max Uplift 1=-2(LC 12), 3=-2(LC 12) Max Grav 1=54(LC 1), 3=54(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=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) 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 2 lb uplift at joint 1 and 2 lb uplift at joint 3.







Job Truss Truss Type Qty Ply Weaver/Lot 2B Williams Farm/Harnett E15436140 J0521-2957 VC-1 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:58 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-nlZBB2BBeuUicBTYSiGfyekrizLPXQDmwbb5oRziJhZ 5-5-0 5-5-0 10-10-1 Scale = 1:19.2 4x4 = 2 6.00 12 8 3 2x4 / 2x4 > 2x4 || 10-10-1 10-10-1 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 0.24 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.17 Vert(CT) n/a n/a 999 **BCLL** YES WB 0.04 0.0 Rep Stress Incr Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-S Weight: 35 lb FT = 20% LUMBER-**BRACING-**

TOP CHORD

BOT CHORD

REACTIONS.

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

(size) 1=10-10-1, 3=10-10-1, 4=10-10-1

Max Horz 1=31(LC 9) Max Uplift 1=-23(LC 12), 3=-29(LC 13)

Max Grav 1=176(LC 23), 3=176(LC 24), 4=413(LC 1)

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

**WEBS** 2-4=-273/182

### 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) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 5-5-0, Exterior(2) 5-5-0 to 9-9-13, Interior(1) 9-9-13 to 10-2-4 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 23 lb uplift at joint 1 and 29 lb uplift at joint 3.



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

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



J0521-2957 VC-2 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Tue Feb 23 08:00:59 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-Fx6ZPOCpPCcZEL2k0PnuUrG2aMjLGtmv9FKeLuziJhY 3-5-0 3-5-0 6-10-1 Scale = 1:13.2 4x4 = 2 6.00 12 3 9-0-0 9-0-2x4 🖊 2x4 || 2x4 > 6-10-1 6-10-1 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES TCLL** 20.0 Plate Grip DOL 1.15 TC 0.10 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.06 Vert(CT) n/a n/a 999 WB 0.02 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-P Weight: 21 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

Qty

Ply

Weaver/Lot 2B Williams Farm/Harnett

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

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

E15436141

LUMBER-

REACTIONS.

Job

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

(size) 1=6-10-1, 3=6-10-1, 4=6-10-1

Max Horz 1=-18(LC 10)

Truss

Truss Type

Max Uplift 1=-18(LC 12), 3=-21(LC 13)

Max Grav 1=113(LC 1), 3=113(LC 1), 4=217(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=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) 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 18 lb uplift at joint 1 and 21 lb uplift at ioint 3.

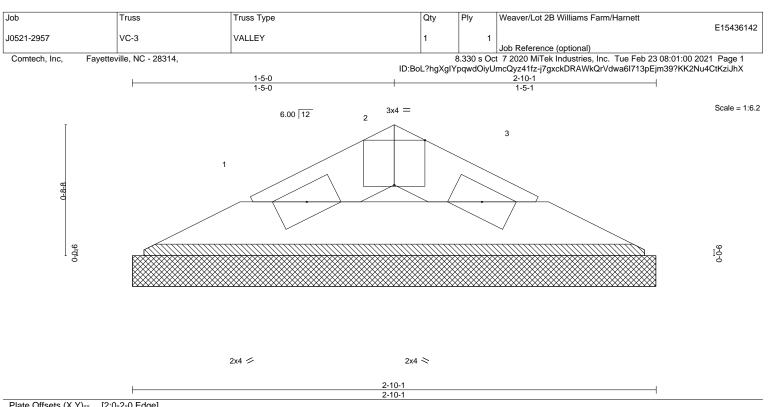


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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





T late of	Trate Orisets (A, 1) [2.0-2-0,Luge]					
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP		
TCLL	20.0	Plate Grip DOL 1.15	TC 0.01	Vert(LL) n/a - n/a 999 MT20 244/190		
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) n/a - n/a 999		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P	Weight: 7 lb FT = 20%		

LUMBER-

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.1 **BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 2-10-1 oc purlins.

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

REACTIONS. (size) 1=2-10-1, 3=2-10-1

Max Horz 1=5(LC 11)

Max Uplift 1=-4(LC 12), 3=-4(LC 13) Max Grav 1=61(LC 1), 3=61(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=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) 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 4 lb uplift at joint 1 and 4 lb uplift at joint
- 7) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



February 23,2021

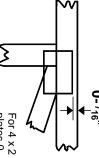


### Symbols

## PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0-  $\frac{1}{16}$  from outside edge of truss.

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

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

### PLATE SIZE

4 × 4

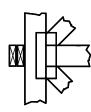
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

### **BEARING**



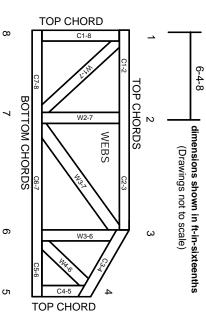
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

### Industry Standards:

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

ANSI/TPI1: DSB-89:

## Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

# **General Safety Notes**

# Failure to Follow Could Cause Property Damage or Personal Injury

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

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

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- 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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- 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 responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 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 specified.
- 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.
- 15. 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.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 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.