

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0823-4608
Fairway Point Bldg. #5

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

Pages or sheets covered by this seal: I62510927 thru I62510931

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



December 14, 2023

Gilbert, Eric

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

Job J0823-4608	Truss 1F3X	Truss Type FLOOR	Qty 0	Ply 1	Fairway Point Bldg. #5 Job Reference (optional)	162510927
-------------------	---------------	---------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Dec 12 10:44:18 2023 Page 1
ID:Uovnvq9wQPw0mmF22C5tSxykGwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



REPAIR: PLATE DAMAGE AT JOINT 24.

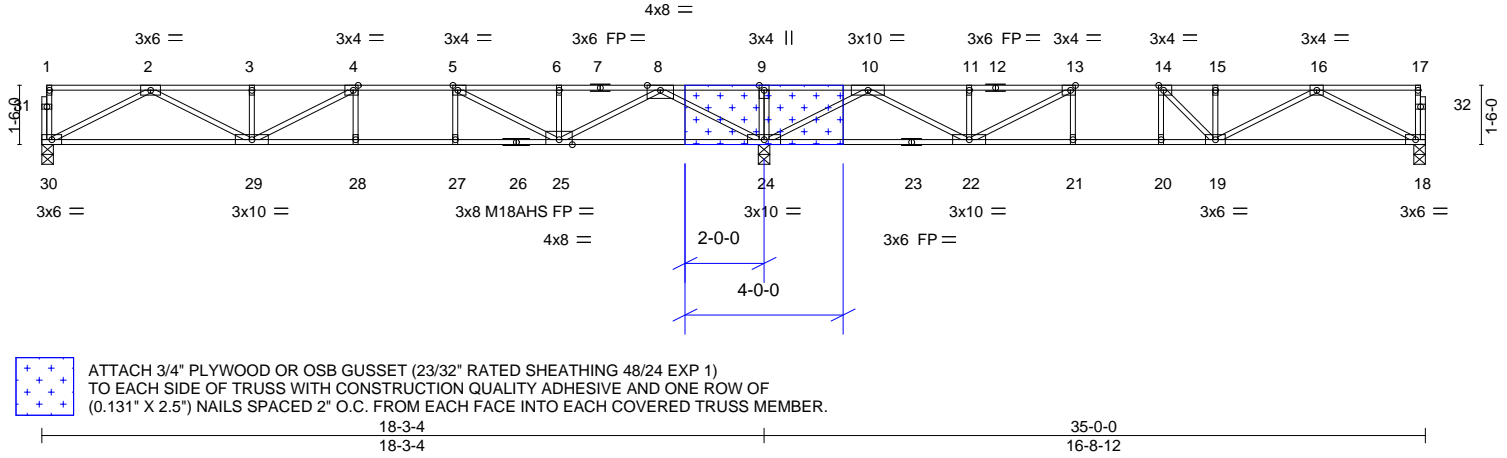


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]

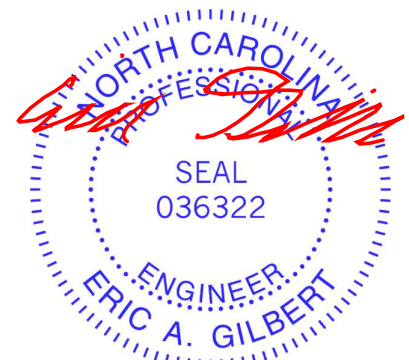
LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.79	Vert(LL)	-0.28	28-29	>779	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.79	Vert(CT)	-0.36	28-29	>599	M18AHS	186/179
BCLL 0.0	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.05	18	n/a		
BCDL 5.0	Code IBC2015/TPI2014		Matrix-S						
								Weight: 178 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat) *Except* 26-30: 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 24-25,22-24.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (size) 30=0-3-8, 24=0-3-8, 18=0-3-8
Max Grav 30=898(LC 3), 24=2218(LC 1), 18=806(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2399/0, 3-4=-2399/0, 4-5=-2644/0, 5-6=-1830/140, 6-8=-1830/140, 8-9=0/2004, 9-10=0/2004, 10-11=-1570/198, 11-13=-1570/198, 13-14=-2149/0, 14-15=-2025/0, 15-16=-2025/0
BOT CHORD 29-30=0/1481, 28-29=0/2644, 27-28=0/2644, 25-27=0/2644, 24-25=-609/603, 22-24=-646/475, 21-22=0/2149, 20-21=0/2149, 19-20=0/2149, 18-19=0/1309
WEBS 9-24=-277/0, 2-30=-1667/0, 2-29=0/1041, 3-29=-330/0, 4-29=-321/185, 8-24=-2103/0, 8-25=0/1507, 6-25=-254/38, 5-25=-1176/0, 10-24=-1972/0, 10-22=0/1391, 11-22=-270/11, 16-18=-1473/0, 16-19=0/813, 15-19=-288/0, 13-22=-944/0, 14-19=-242/279

- NOTES-**
- 1) Repair Condition: Missing or damaged plate(s) on one side(s) of truss at joint(s) 24.
 - 2) N/A
 - 3) Unbalanced floor live loads have been considered for this design.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 6) Plates checked for a plus or minus 1 degree rotation about its center.
 - 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 8) CAUTION, Do not erect truss backwards.



December 14, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job J0823-4608	Truss 1F3XX	Truss Type FLOOR	Qty 0	Ply 1	Fairway Point Bldg. #5 Job Reference (optional)	162510928
-------------------	----------------	---------------------	----------	----------	--	-----------

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Dec 12 10:44:20 2023 Page 1
ID:Uovnvq9wQPw0mmF22C5tSxykGwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

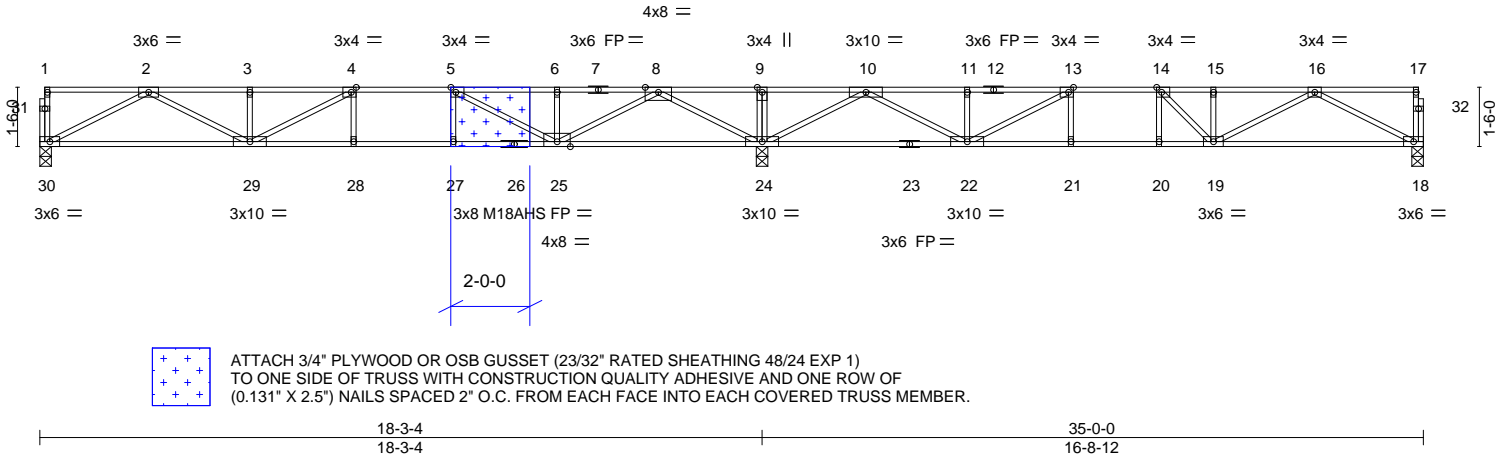


Plate Offsets (X,Y)--	[4:0-1-8,Edge], [5:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSL.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.79	Vert(LL) -0.28 28-29 >779 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.79	Vert(CT) -0.36 28-29 >599 360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.72	Horz(CT) 0.05 18 n/a n/a		
BCDL 5.0	Code IBC2015/TPI2014	Matrix-S		Weight: 178 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat) *Except* 26-30: 2x4 SP 2400F 2.0E (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 24-25,22-24.
WEBS 2x4 SP No.3 (flat)	

REACTIONS. (size) 30=0-3-8, 24=0-3-8, 18=0-3-8
Max Grav 30=898(LC 3), 24=2218(LC 1), 18=806(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2399/0, 3-4=-2399/0, 4-5=-2644/0, 5-6=-1830/140, 6-8=-1830/140, 8-9=0/2004, 9-10=0/2004, 10-11=-1570/198, 11-13=-1570/198, 13-14=-2149/0, 14-15=-2025/0, 15-16=-2025/0
BOT CHORD 29-30=0/1481, 28-29=0/2644, 27-28=0/2644, 25-27=0/2644, 24-25=-609/603, 22-24=-646/475, 21-22=0/2149, 20-21=0/2149, 19-20=0/2149, 18-19=0/1309
WEBS 9-24=-277/0, 2-30=-1667/0, 2-29=0/1041, 3-29=-330/0, 4-29=-321/185, 8-24=-2103/0, 8-25=0/1507, 6-25=-254/38, 5-25=-1176/0, 10-24=-1972/0, 10-22=0/1391, 11-22=-270/11, 16-18=-1473/0, 16-19=0/813, 15-19=-288/0, 13-22=-944/0, 14-19=-242/279

- NOTES-**
- 1) Repair Condition: Missing or damaged plate(s) on one side(s) of truss at joint(s) 27.
 - 2) N/A
 - 3) Unbalanced floor live loads have been considered for this design.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 6) Plates checked for a plus or minus 1 degree rotation about its center.
 - 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 8) CAUTION, Do not erect truss backwards.



December 14, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Fairway Point Bldg. #5	162510929
J0823-4608	2F19X	FLOOR	0	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Dec 12 10:44:21 2023 Page 1

ID:Uovnvq9wQPw0mmF22C5tSxykGwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwCDoi7J4zJC?f



Scale = 1:21.5

REPAIR: BREAK ON BC AT 3'-8" FROM RIGHT END.

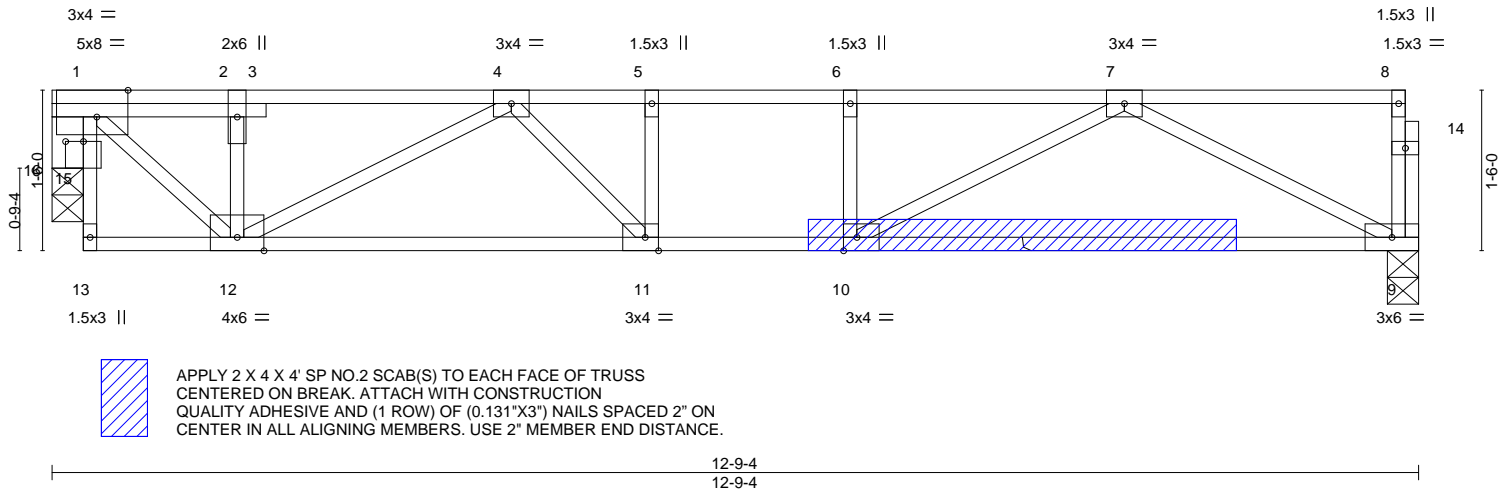


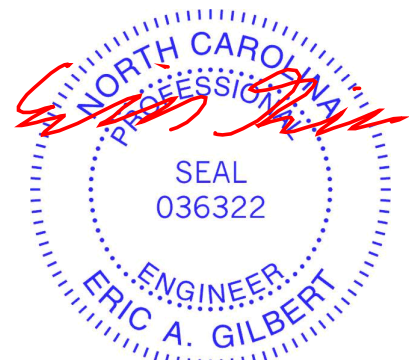
Plate Offsets (X,Y)--	[1:0-3-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [15:0-2-0,0-0]
LOADING (psf)	SPACING- 2-0-0
TCLL 40.0	Plate Grip DOL 1.00
TCDL 10.0	Lumber DOL 1.00
BCLL 0.0	Rep Stress Incr YES
BCDL 5.0	Code IBC2015/TPI2014
	CSL
	TC 0.37
	BC 0.41
	WB 0.45
	Matrix-S
	DEFL. in (loc) l/defl L/d
	Vert(LL) -0.10 9-10 >999 480
	Vert(CT) -0.17 9-10 >861 360
	Horz(CT) 0.02 9 n/a n/a
	PLATES GRIP
	MT20 244/190
	Weight: 70 lb FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 4x4 SP No.2(flat)	

REACTIONS. (size) 9=0-3-8, 16=0-3-8
Max Grav 9=677(LC 1), 16=669(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-721/0, 2-4=-731/0, 4-5=-1534/0, 5-6=-1534/0, 6-7=-1534/0
BOT CHORD 11-12=0/1369, 10-11=0/1534, 9-10=0/1061
WEBS 2-12=-269/0, 1-12=0/943, 7-9=-1192/0, 7-10=0/602, 4-12=-735/0, 4-11=0/420, 1-16=-678/0

- NOTES-**
- 1) Repair Condition: bottom chord has 0-1-0 long break centered at 3-7-15 to the left of joint 9.
 - 2) N/A
 - 3) Unbalanced floor live loads have been considered for this design.
 - 4) Plates checked for a plus or minus 1 degree rotation about its center.
 - 5) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 7) CAUTION, Do not erect truss backwards.



December 14, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

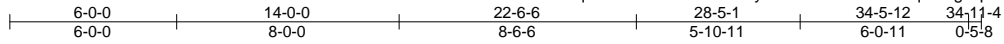
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Fairway Point Bldg. #5	162510930
J0823-4608	A8X	PIGGYBACK BASE	0	1		

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Dec 12 10:44:23 2023 Page 1

ID:Uovnvq9wQPw0mmF22C5tSxykGwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



SEE NOTE 2 FOR REPAIR.

Scale = 1:82.9

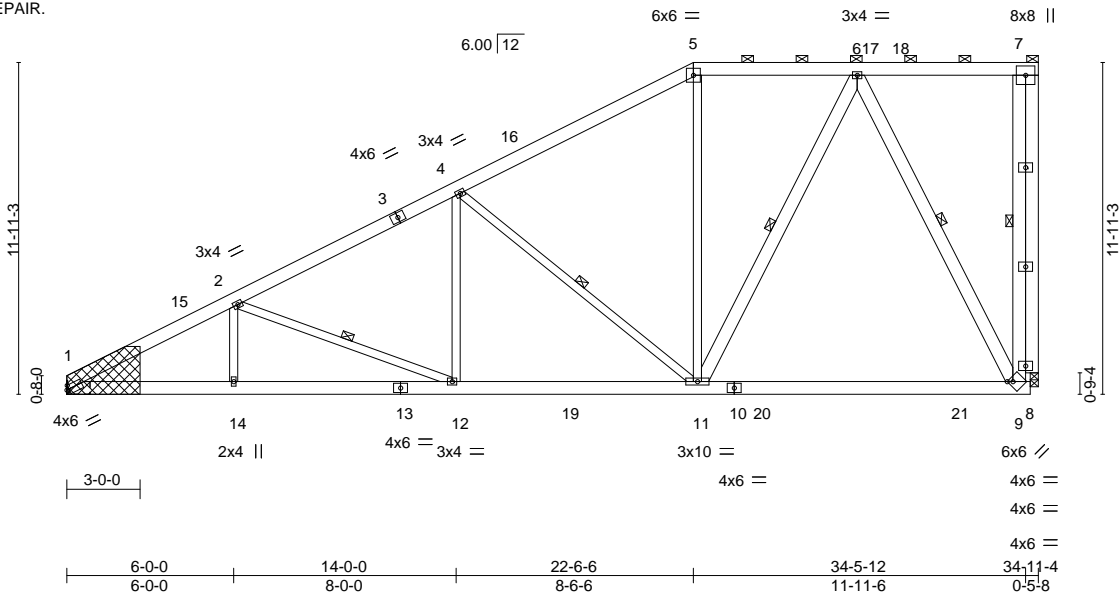


Plate Offsets (X,Y)-- [1:0-1-0,0-1-12], [9:0-1-12,Edge]

LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.23	9-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.33	9-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.52	Horz(CT)	0.04	9	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-S	Wind(LL)	0.15	9-11	>999		
								Weight: 337 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 5-7-11 oc bracing.
WEBS 2x4 SP No.2 *Except* 6-11,6-9,7-9: 2x6 SP No.1	WEBS 1 Row at midpt 7-9, 6-11, 6-9, 2-12, 4-11
OTHERS 2x6 SP No.1	

REACTIONS. (size) 1=Mechanical, 9=0-3-8
 Max Horz 1=374(LC 12)
 Max Uplift 1=-345(LC 9), 9=-501(LC 9)
 Max Grav 1=1367(LC 1), 9=1554(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-2531/1709, 2-4=-2015/1308, 4-5=-1271/844, 5-6=-1043/836
 BOT CHORD 1-14=-1915/2185, 12-14=-1915/2185, 11-12=-1463/1731, 9-11=-515/658
 WEBS 6-11=-771/893, 6-9=-1245/974, 2-14=-237/295, 2-12=-583/549, 4-12=-456/484,
 4-11=-913/785

- NOTES-**
- 1) Repair Condition: bottom chord has damaged section 0-10-0 long starting 0-0-0 to the right of joint 1.
 - 2) Replace damaged section cut clean with same size and grade of material. Attach 21"H X 36"W X 3/4" Plywood or OSB (23/32" APA Rated Sheathing 48/24 Exposure 1) gusset to both sides of truss at joint 1 with 10d (0.131"x3") nails from each face, driven through both sheets of plywood. Connected together as follows: 2x6 - 3 rows 0-4-0 o.c. Minimum 0-3-0 end distance.
 - 3) N/A
 - 4) Wind: ASCE 7-10; Vult=130mph 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 22-6-6, Exterior(2) 22-6-6 to 28-9-1, Interior(1) 28-9-1 to 34-3-0 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
 - 5) Provide adequate drainage to prevent water ponding.
 - 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) Refer to girder(s) for truss to truss connections.
 - 9) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 345 lb uplift at joint 1 and 501 lb uplift at joint 9.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 14, 2023

Job	Truss	Truss Type	Qty	Ply	Fairway Point Bldg. #5	162510931
J0823-4608	B4X	COMMON	0	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

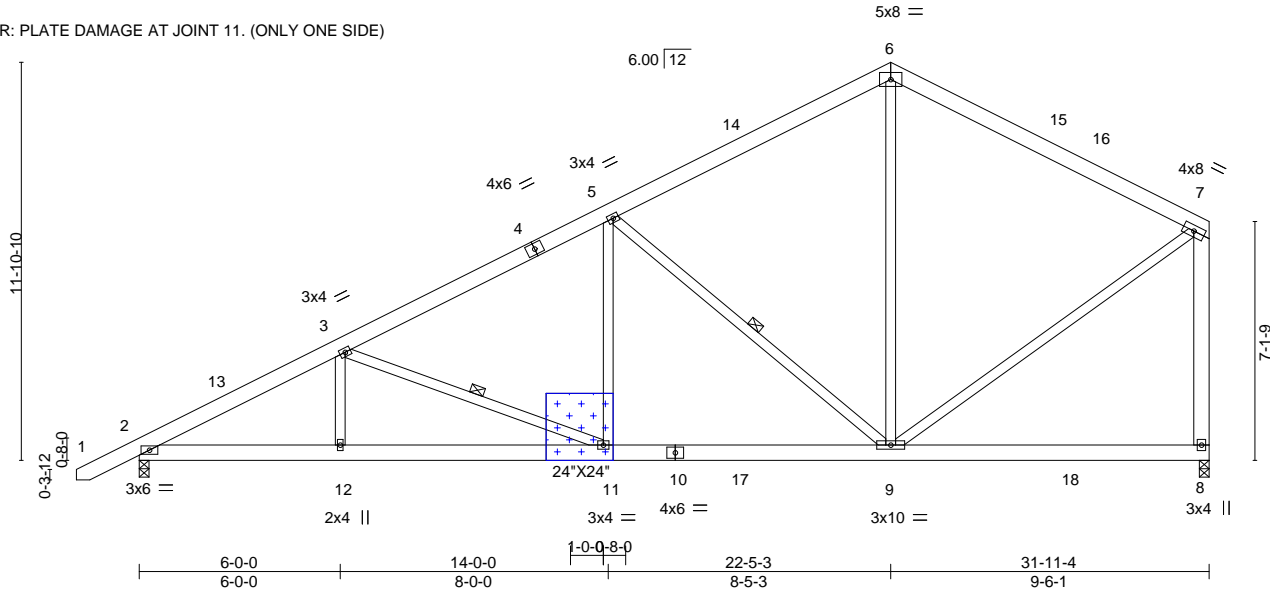
8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Dec 12 10:44:24 2023 Page 1

ID:Uovnvq9wQPw0mmF22C5tSxykGwZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



REPAIR: PLATE DAMAGE AT JOINT 11. (ONLY ONE SIDE)

Scale = 1:68.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	-0.07 9-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.13 11-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.04 8	n/a	n/a		
BCDL 10.0	Code IBC2015/TPI2014		Matrix-S	Wind(LL)	0.05 11-12	>999	240	Weight: 253 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-1-9 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 7-8: 2x6 SP No.1	WEBS 1 Row at midpt 3-11, 5-9

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=293(LC 12)
 Max Uplift 2=106(LC 12), 8=79(LC 2)
 Max Grav 2=1375(LC 1), 8=1357(LC 2)



ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1) TO ONE FACE OF TRUSS WITH (0.113" X 2") NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 X 3'S - 2 ROWS, 2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS: SPACED @ 2" O.C. INTO EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2284/363, 3-5=-1698/347, 5-6=-967/303, 6-7=-969/306, 7-8=-1174/377
 BOT CHORD 2-12=-498/1941, 11-12=-498/1941, 9-11=-355/1487
 WEBS 3-12=0/289, 3-11=-555/155, 5-11=0/484, 5-9=-929/277, 6-9=0/404, 7-9=-156/918

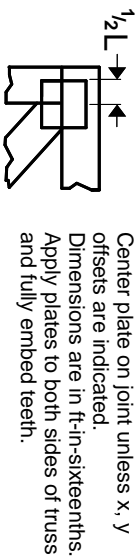
- NOTES-**
- 1) Repair Condition: Missing or damaged plate(s) on one side(s) of truss at joint(s) 11.
 - 2) N/A
 - 3) N/A
 - 4) Unbalanced roof live loads have been considered for this design.
 - 5) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-8-2 to 2-8-11, Interior(1) 2-8-11 to 22-5-3, Exterior(2) 22-5-3 to 26-10-0, Interior(1) 26-10-0 to 31-8-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 106 lb uplift at joint 2 and 79 lb uplift at joint 8.



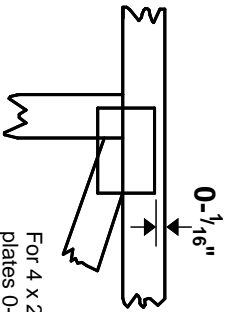
December 14, 2023

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

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

LATERAL BRACING LOCATION



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

BEARING



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

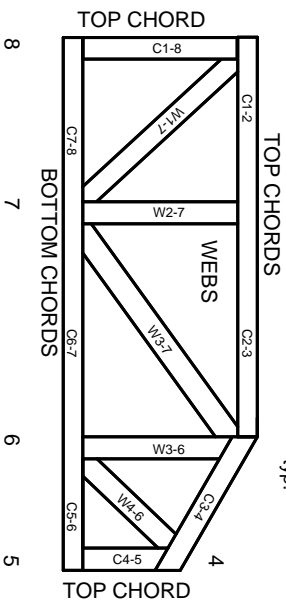
Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



1 2 3 Joint ID typ.



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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on Lumber values established by others.

© 2023 MITek® All Rights Reserved

MITek

ENGINEERING BY
TRENGO
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.