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

RE: Bullard - Bullard

MiTek USA, Inc.
6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:
Customer Info: BB Homes Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: Columbia County State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.
Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 12 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T26170762	A1GE	12/6/21
2	T26170763	A2	12/6/21
3	T26170764	A3GE	12/6/21
4	T26170765	B1GE	12/6/21
5	T26170766	B2	12/6/21
6	T26170767	B3	12/6/21
7	T26170768	B4	12/6/21
8	T26170769	CJ01	12/6/21
9	T26170770	J1	12/6/21
10	T26170771	J2	12/6/21
11	T26170772	PB01GE	12/6/21
12	T26170773	PB02	12/6/21

COLUMBIA COUNTY BUILDING DEPARTMENT
Received for FILE COPY
Code Compliance
PLANS EXAMINER

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Mayo Truss Company, Inc..

Truss Design Engineer's Name: Lee, Julius
My license renewal date for the state of Florida is February 28, 2023.

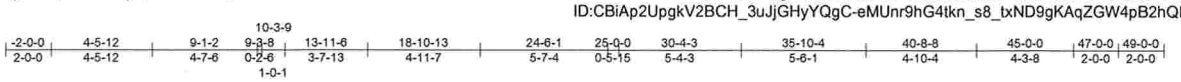
JULIUS LEE LICENSE No 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

Julius Lee PE No.34869
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: December 6,2021

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.

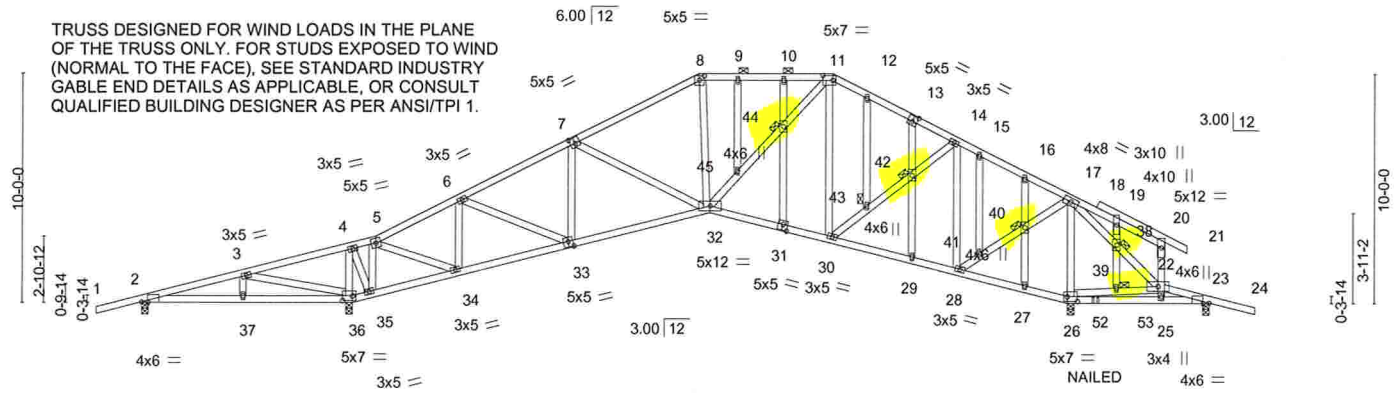
Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	A1GE	Piggyback Base Girder	1	1	T26170762
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 6 08:33:37 2021 Page 1
ID:CBiAp2UpgkV2BCH_3uJjGHyYQgC-eMUnr9hG4tkn_s8_txND9gKAqZGW4pB2hQEjO?yBkky



Scale: 1/8"=1'

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.



TOP CHORD UNDER PIGGYBACKS TO BE LATERALLY BRACED BY PURLINS AT 2-0-0 OC. MAX. TYPICAL.

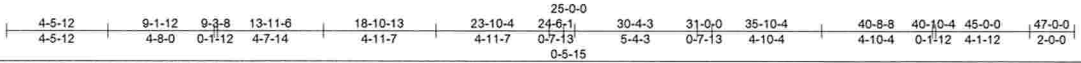


Plate Offsets (X,Y)-- [2:0-3-4,Edge], [7:0-2-8,0-3-0], [8:0-2-8,0-2-4], [11:0-5-4,0-2-8], [13:0-2-8,0-3-0], [23:0-3-4,Edge], [26:0-5-4,0-2-8], [31:0-2-8,0-3-0], [33:0-2-8,0-3-0], [36:0-5-4,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.68	Vert(LL)	-0.10	32-33	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.23	32-33	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.09	26	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 338 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-2 max.): 8-11, 20-25, 22-50. Except:
6-0-0 oc bracing: 20-22
BOT CHORD Rigid ceiling directly applied or 5-2-11 oc bracing.
JOINTS 1 Brace at Jt(s): 38, 39, 40, 42, 43, 44

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-145(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 26 except 2=-115(LC 4), 36=-125(LC 25), 23=-123(LC 25)
Max Grav All reactions 250 lb or less at joint(s) 2, 23 except 36=1931(LC 1), 26=1973(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-859/0, 6-7=-1495/48, 7-8=-1455/86, 8-9=-1280/96, 9-10=-1280/96, 10-11=-1280/96, 11-12=-1005/125, 12-13=-1050/108, 13-14=-1066/84, 14-15=-615/132, 15-16=-650/123, 16-17=-671/101, 22-25=-20/285, 22-23=0/497, 2-3=0/558, 3-4=-103/1183, 4-5=-83/739
BOT CHORD 2-37=-432/0, 36-37=-432/0, 35-36=-1250/65, 34-35=-691/69, 33-34=0/867, 32-33=0/1381, 31-32=0/958, 30-31=0/938, 29-30=-51/622, 28-29=-47/585, 27-28=-546/46, 26-27=-576/47, 25-26=-365/101, 23-25=-482/0
WEBS 6-34=-803/91, 6-33=0/559, 7-33=-254/52, 32-45=0/578, 44-45=0/585, 11-44=0/584, 11-30=-268/8, 30-43=0/521, 42-43=0/514, 14-42=0/522, 14-28=-724/3, 28-41=0/1230, 40-41=0/1242, 17-40=0/1239, 17-26=-1594/54, 17-38=-66/637, 22-38=-63/622, 26-39=-329/143, 22-39=-323/142, 4-36=-1346/49, 5-35=-1119/29, 3-36=-783/161, 4-35=0/1074, 5-34=-46/1520, 8-32=0/331

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=47ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Continued on page 2

Julius Lee PE No.34869
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: December 6,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	A1GE	Piggyback Base Girder	1	1	T26170762
					Job Reference (optional)

NOTES-

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26 except (jt=lb) 2=115, 36=125, 23=123.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 172 lb down and 15 lb up at 43-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 5-8=-60, 8-11=-60, 11-20=-60, 20-21=-60, 22-50=-20, 24-50=-60, 36-46=-20, 32-36=-20, 26-32=-20, 26-49=-20, 1-5=-60
   Concentrated Loads (lb)
   Vert: 52=-57(B) 53=-144(B)

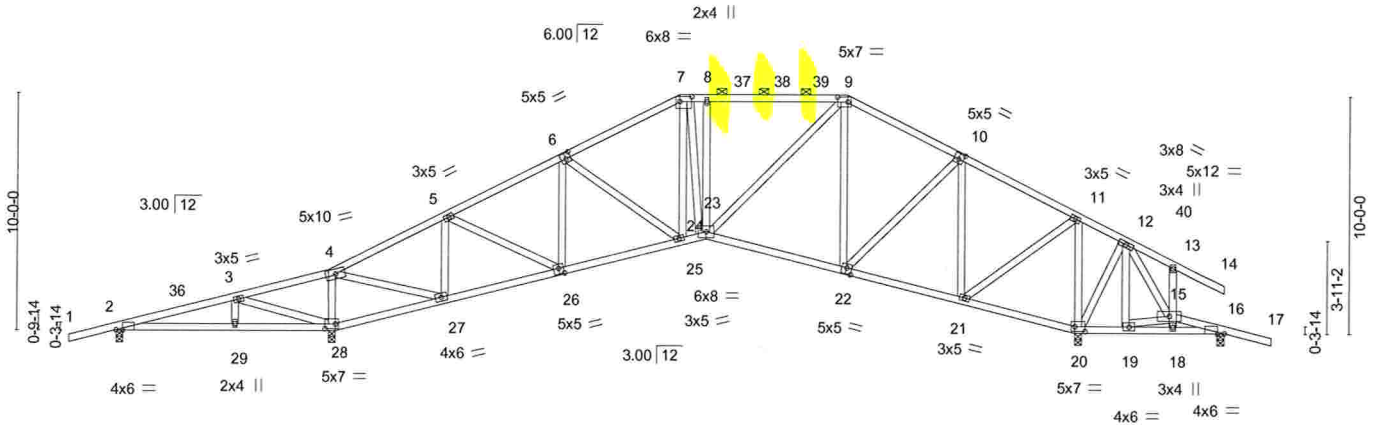
MiTek®
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	A2	Piggyback Base	11	1	T26170763
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 6 08:33:39 2021 Page 1
ID:CBiAp2UpgkV2BCH_3uJjGHyYQgC-akcYGriXcV_VDAIM?MPhE5QZONzuYi8L9kjqTtyBkkw

-2-0-0	5-0-7	8-11-15	13-11-6	18-10-13	23-10-4	25-0-0	31-0-0	35-10-4	40-8-8	42-10-4	45-0-0	47-0-0	49-0-0
2-0-0	5-0-7	3-11-7	4-11-7	4-11-7	4-11-7	1-1-12	6-0-0	4-10-4	4-10-4	2-1-12	2-1-12	2-0-0	2-0-0

Scale = 1:93.5



5-0-7	9-1-12	9-3-8	13-11-6	18-10-13	23-10-4	25-0-0	31-0-0	35-10-4	40-8-8	40-10-4	42-10-4	45-0-0	47-0-0
5-0-7	4-1-5	0-1-12	4-7-14	4-11-7	4-11-7	1-1-12	6-0-0	4-10-4	4-10-4	0-1-12	2-0-0	2-1-12	2-0-0

Plate Offsets (X,Y)-- [2:0-3-4,Edge], [6:0-2-8,0-3-0], [7:0-6-0,0-2-8], [9:0-5-4,0-2-8], [10:0-2-8,0-3-0], [16:0-3-4,Edge], [20:0-5-4,0-2-8], [22:0-2-8,0-3-0], [26:0-2-8,0-3-0], [28:0-5-4,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	-0.09	22-23	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.21	22-23	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.09	20	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 306 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-5 max.): 7-9, 13-18, 15-34. Except:
6-0-0 oc bracing: 13-15
BOT CHORD Rigid ceiling directly applied or 5-6-10 oc bracing.

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-144(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 16
Max Grav All reactions 250 lb or less at joint(s) 16 except 2=270(LC 21), 28=1853(LC 1), 20=1913(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-104/316, 3-4=-102/969, 4-5=-958/138, 5-6=-1478/216, 6-7=-1445/238, 7-8=-1325/253, 8-9=-1325/253, 9-10=-985/215, 10-11=-589/122, 11-12=-80/592, 13-15=-213/375, 15-16=-55/646
BOT CHORD 27-28=-1128/131, 26-27=-91/866, 25-26=-87/1312, 24-25=-39/1314, 23-24=-29/1266, 22-23=-26/878, 21-22=-24/486, 20-21=-546/278, 19-20=-342/210, 18-19=-569/83, 16-18=-632/77
WEBS 3-28=-736/54, 4-28=-1297/184, 4-27=-174/1937, 5-27=-790/150, 5-26=0/491, 7-24=-85/626, 8-23=-320/113, 9-23=-32/703, 9-22=-380/61, 10-22=-8/537, 10-21=-823/135, 11-21=-81/1193, 11-20=-1475/214, 12-20=-267/90, 12-15=-214/556, 15-19=-43/385

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=47ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-8-6, Interior(1) 2-8-6 to 23-10-4, Exterior(2R) 23-10-4 to 28-6-10, Interior(1) 28-6-10 to 31-0-0, Exterior(2R) 31-0-0 to 35-9-5, Interior(1) 35-9-5 to 49-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 16.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Julius Lee PE No.34869
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

December 6,2021

6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	A3GE	Piggyback Base Girder	1	1	T26170764
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 6 08:33:41 2021 Page 1
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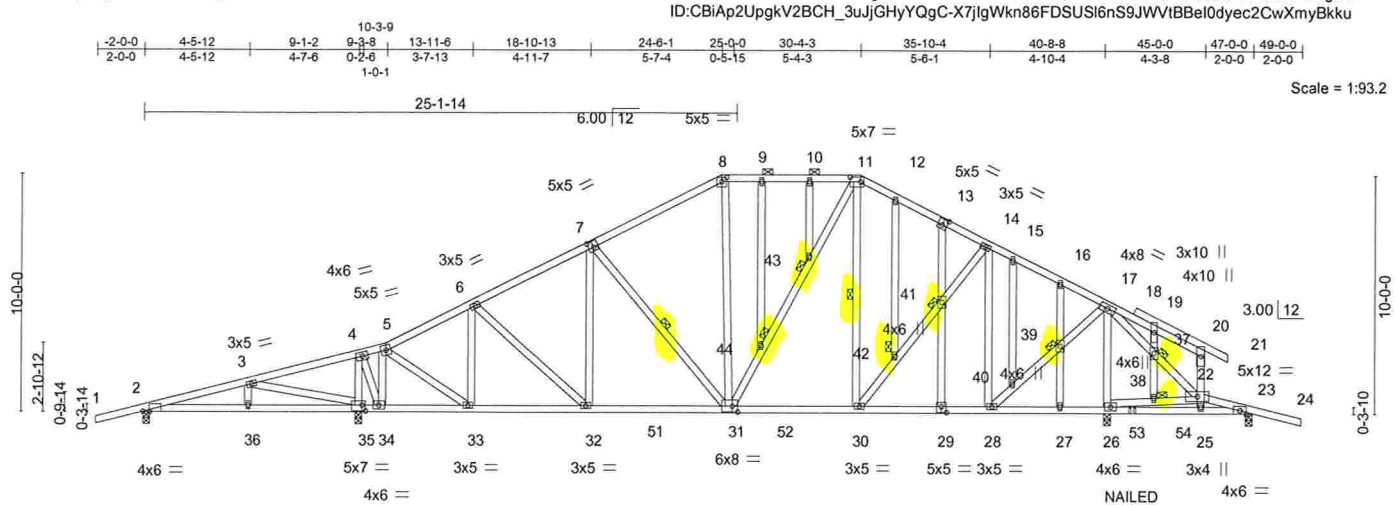


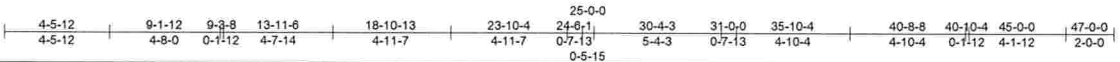


Plate Offsets (X,Y)-- [2:0-3-4,Edge], [7:0-2-8,0-3-0], [8:0-2-8,0-2-4], [11:0-5-4,0-2-8], [13:0-2-8,0-3-0], [29:0-2-8,0-3-0], [31:0-2-12,0-3-0], [35:0-1-12,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	-0.10	31-32	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.19	31-32	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.03	23	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 377 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-12 max.): 8-11, 20-25, 22-49. Except:
6-0-0 oc bracing: 20-22
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-31, 11-30
JOINTS 1 Brace at Jt(s): 37, 38, 39, 41, 42, 43, 44

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-145(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 26 except 2=-106(LC 8), 35=-123(LC 25), 23=-116(LC 25)
Max Grav All reactions 250 lb or less at joint(s) except 2=325(LC 17), 35=2029(LC 13), 26=2050(LC 30), 23=260(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-1053/0, 6-7=-1400/50, 7-8=-1179/110, 8-9=-1038/119, 9-10=-1038/119, 10-11=-1038/119, 11-12=-1015/125, 12-13=-1069/113, 13-14=-1088/90, 14-15=-799/114, 15-16=-845/108, 16-17=-867/87, 3-4=-104/849, 4-5=-81/281
BOT CHORD 34-35=-870/59, 32-33=0/1026, 31-32=0/1269, 30-31=0/967, 29-30=-31/760, 28-29=-31/760, 27-28=-308/44, 26-27=-308/44
WEBS 6-33=-669/79, 6-32=0/346, 7-31=-300/19, 31-44=-19/265, 43-44=-18/279, 11-43=-19/279, 30-42=0/403, 41-42=0/380, 14-41=0/426, 14-28=-650/21, 28-40=0/1305, 39-40=0/1301, 17-39=0/1292, 17-26=-1670/66, 17-37=-72/440, 22-37=-69/431, 26-38=-473/71, 22-38=-464/69, 4-35=-1819/65, 5-34=-1336/44, 3-35=-863/165, 4-34=-5/1552, 5-33=-54/1394

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=47ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26 except (jt=lb) 2=106, 35=123, 23=116.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Julius Lee PE No.34869
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: December 6,2021

Continued on page 2

6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	A3GE	Piggyback Base Girder	1	1	T26170764
					Job Reference (optional)

NOTES-

10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 172 lb down and 15 lb up at 43-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 5-8=-60, 8-11=-60, 11-20=-60, 20-21=-60, 22-49=-20, 24-49=-60, 45-48=-20, 1-5=-60
   Concentrated Loads (lb)
   Vert: 53=-57(F) 54=-144(F)

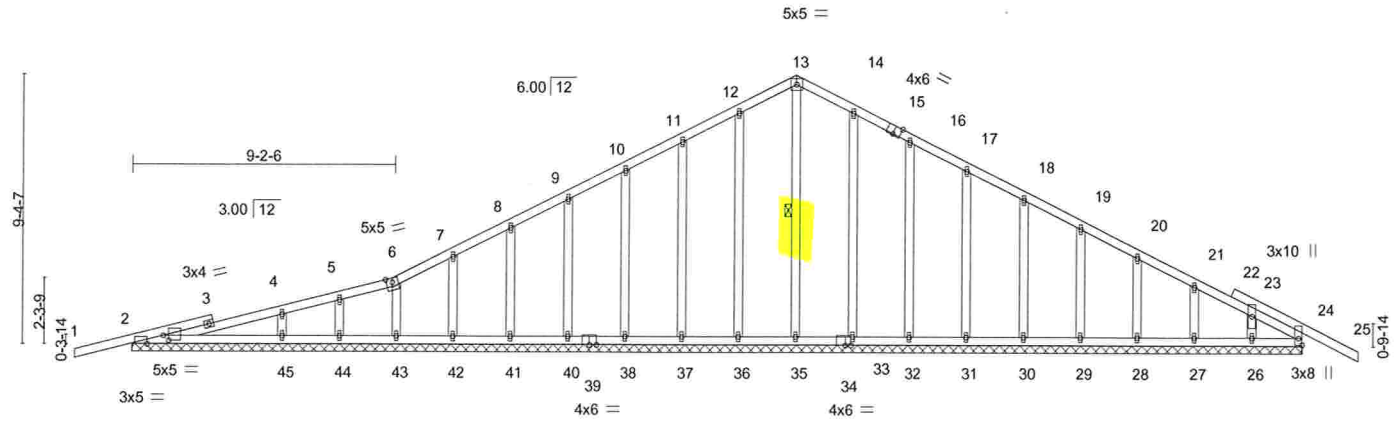
Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	B1GE	Roof Special Supported Gable	2	1	T26170765

Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 6 08:33:44 2021 Page 1
ID:CBiAp2UpgkV2BCH_3uJjGHyYQgC-xiPQJYmfR1doJxAKov?sx97UlOlKD4C4l0Qb85yBkkr

-2-0-0 2-0-0 | 9-1-2 9-1-2 | 23-3-0 14-1-14 | 41-0-0 17-9-0 | 43-0-0 2-0-0

Scale = 1:77.0



41-0-0
41-0-0

Plate Offsets (X,Y)-- [2:0-2-4,0-2-0], [2:0-6-12,Edge], [15:0-3-0,Edge], [24:Edge,0-1-8], [34:0-2-4,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.25	Vert(LL)	-0.02	25	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.19	Vert(CT)	-0.03	25	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 259 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 13-35

REACTIONS. All bearings 41-0-0.
(lb) - Max Horz 2=169(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 37, 38, 40, 41, 42, 44, 33, 32, 31, 30, 29, 28, 27, 26, 24
Max Grav All reactions 250 lb or less at joint(s) 35, 36, 37, 38, 40, 41, 42, 43, 44, 33, 32, 31, 30, 29, 28, 27, 26 except 2=324(LC 1), 45=372(LC 1), 24=251(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-45=-265/72

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=41ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3E) -2-0-0 to 2-1-3, Exterior(2N) 2-1-3 to 23-3-0, Corner(3R) 23-3-0 to 27-3-0, Exterior(2N) 27-3-0 to 43-0-0 zone; cantilever left and right exposed ; end vertical 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 36, 37, 38, 40, 41, 42, 44, 33, 32, 31, 30, 29, 28, 27, 26, 24.

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Date:

December 6,2021

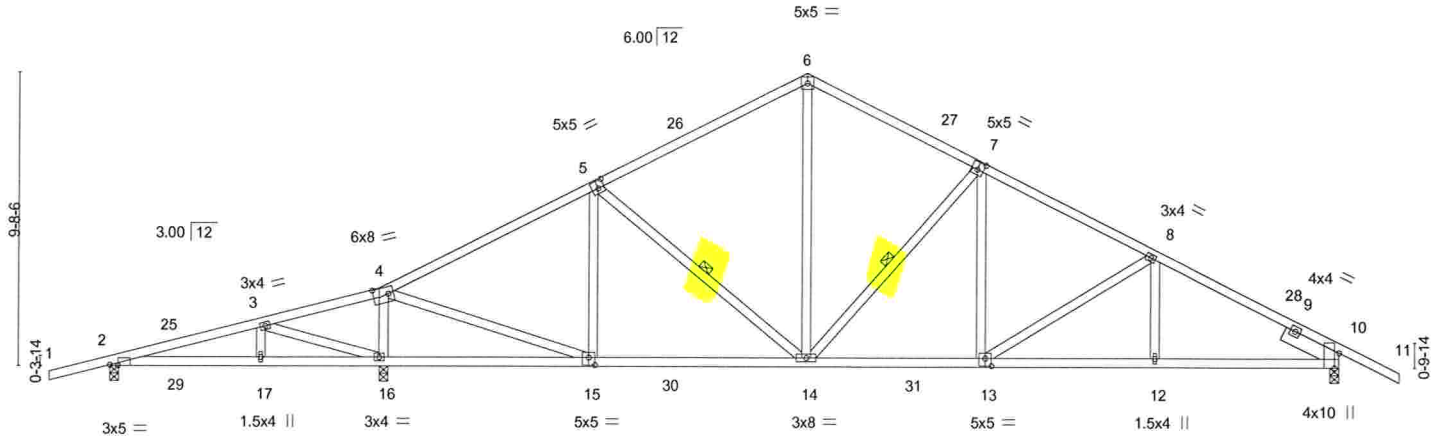
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	B2	Roof Special	15	1	T26170766
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 6 08:33:46 2021 Page 1
ID:CBiAp2UpgkV2BCH_3uJjGHyYQgC-t5XBkEowzetWZFKivK1K0aCgLCGNhwWNmJvhDzyBkkp

-2-0-0	5-0-7	8-11-15	16-1-7	23-3-0	29-0-13	34-10-11	41-0-0	43-0-0
2-0-0	5-0-7	3-11-7	7-1-8	7-1-8	5-9-13	5-9-13	6-1-5	2-0-0

Scale = 1:73.3



5-0-7	8-11-15	9-1-12	16-1-7	23-3-0	29-0-13	34-10-11	41-0-0
5-0-7	3-11-7	0-1-13	6-11-11	7-1-8	5-9-13	5-9-13	6-1-5

Plate Offsets (X,Y)-- [2:0-3-4,Edge], [4:0-6-0,0-2-12], [5:0-2-8,0-3-0], [7:0-2-8,0-3-0], [10:0-5-15,Edge], [13:0-2-8,0-3-0], [15:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.82	Vert(LL)	-0.16	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.31	14-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 232 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Right 2x6 SP No.2 2-0-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-14, 7-14

REACTIONS. (size) 2=0-3-8, 16=0-3-8, 10=0-3-8
Max Horz 2=172(LC 11)
Max Uplift 2=-124(LC 12), 16=-84(LC 12), 10=-47(LC 12)
Max Grav 2=360(LC 21), 16=2014(LC 2), 10=1512(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-155/312, 3-4=-200/646, 4-5=-1342/103, 5-6=-1348/201, 6-7=-1309/203, 7-8=-1827/189, 8-10=-2223/171
BOT CHORD 2-17=-252/132, 16-17=-252/132, 15-16=-678/280, 14-15=0/1198, 13-14=0/1526, 12-13=-65/1901, 10-12=-65/1901
WEBS 3-16=-606/539, 4-16=-1644/273, 4-15=-205/1856, 5-15=-404/135, 6-14=-0/772, 7-14=-666/115, 7-13=0/425, 8-13=-436/88

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-1-3, Interior(1) 2-1-3 to 23-3-0, Exterior(2R) 23-3-0 to 27-4-3, Interior(1) 27-4-3 to 43-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10 except (jt=lb) 2=124.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Date:

December 6,2021

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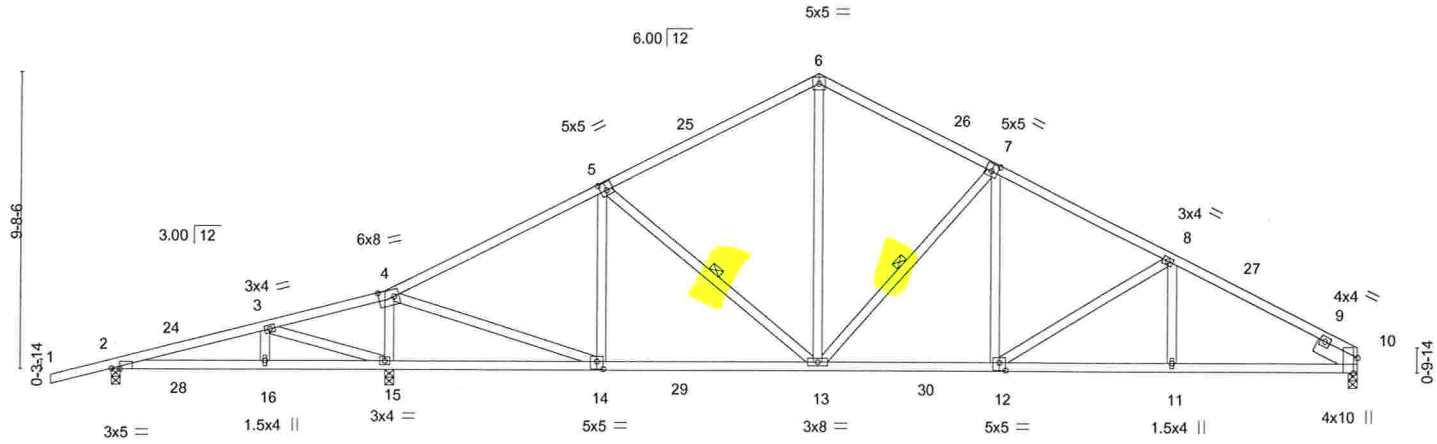
Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	B3	Roof Special	1	1	T26170767
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 6 08:33:48 2021 Page 1
ID:CBiAp2UpgkV2BCH_3uJjGHyYQgC-qTfx8wpAVG7DoYU51l4o5?l04?yf9qzgDdOoHsyBkkn

-2-0-0	5-0-7	8-11-15	16-1-7	23-3-0	29-0-13	34-10-11	41-0-0
2-0-0	5-0-7	3-11-7	7-1-8	7-1-8	5-9-13	5-9-13	6-1-5

Scale = 1:72.4



5-0-7	8-11-15	9-1-12	16-1-7	23-3-0	29-0-13	34-10-11	41-0-0
5-0-7	3-11-7	0-1-13	6-11-11	7-1-8	5-9-13	5-9-13	6-1-5

Plate Offsets (X,Y)-- [2:0-3-4,Edge], [4:0-6-0,0-2-12], [5:0-2-8,0-3-0], [7:0-2-8,0-3-0], [10:0-5-15,Edge], [12:0-2-8,0-3-0], [14:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.81	Vert(LL)	-0.16	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.94	Vert(CT)	-0.31	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 227 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Right 2x6 SP No.2 1-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-13, 7-13

REACTIONS. (size) 2=0-3-8, 15=0-3-8, 10=0-3-8
Max Horz 2=167(LC 11)
Max Uplift 2=-119(LC 12), 15=-91(LC 12)
Max Grav 2=359(LC 21), 15=2020(LC 2), 10=1399(LC 18)

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

TOP CHORD	2-3=-148/289, 3-4=-225/651, 4-5=-1342/99, 5-6=-1352/200, 6-7=-1313/204, 7-8=-1839/198, 8-10=-2255/187
BOT CHORD	2-16=-278/126, 15-16=-278/126, 14-15=-687/255, 13-14=0/1190, 12-13=-19/1531, 11-12=-103/1933, 10-11=-103/1933
WEBS	3-15=-606/539, 4-15=-1648/282, 4-14=-227/1863, 5-14=-407/142, 6-13=0/775, 7-13=-674/117, 7-12=-1/437, 8-12=-457/99

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-1-3, Interior(1) 2-1-3 to 23-3-0, Exterior(2R) 23-3-0 to 27-4-3, Interior(1) 27-4-3 to 41-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 2=119.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Date:

December 6,2021

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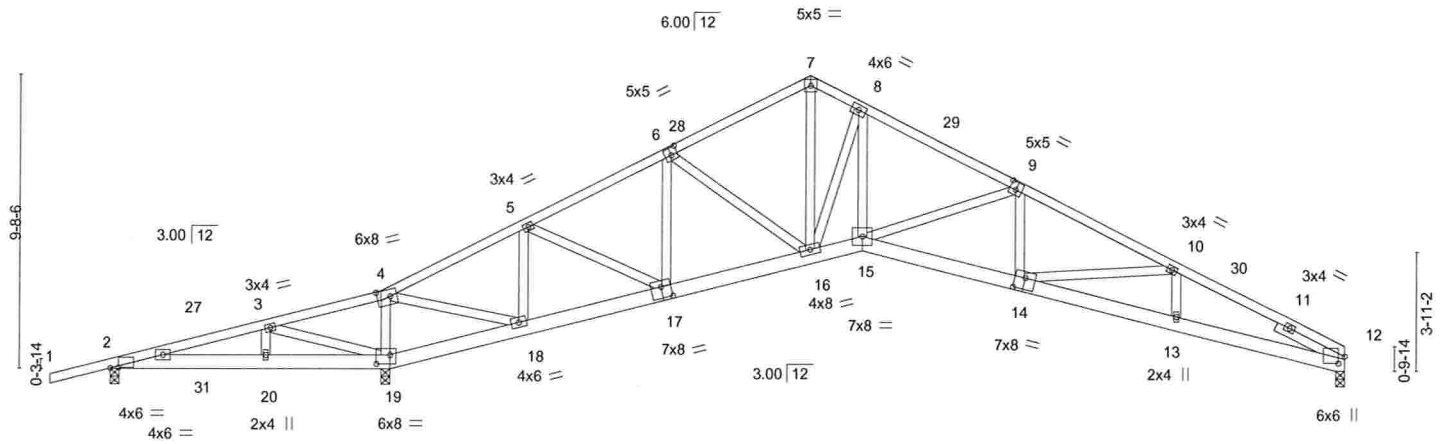
Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	B4	Roof Special	2	1	T26170768
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 6 08:33:49 2021 Page 1
ID:CBiAp2UpgkV2BCH_3uJjGHyYQgC-IgCJMFqoGZF4Qi3HaSb1eCqEiPKbuEOpSH8LplyBkkm

-2-0-0	5-2-4	8-11-15	13-8-15	18-5-15	23-3-0	25-0-0	30-2-13	35-5-11	41-0-0
2-0-0	5-2-4	3-9-11	4-9-0	4-9-0	4-9-0	1-9-0	5-2-13	5-2-13	5-6-5

Scale = 1:73.2



5-2-4	9-1-12	9-3-8	13-8-15	18-5-15	23-3-0	25-0-0	30-2-13	35-5-11	41-0-0
5-2-4	3-11-8	0-1-12	4-5-7	4-9-0	4-9-0	1-9-0	5-2-13	5-2-13	5-6-5

Plate Offsets (X,Y)-- [2:0-3-4,0-0-4], [4:0-5-4,0-2-12], [6:0-2-8,0-3-0], [9:0-2-8,0-3-0], [12:0-2-12,0-2-8], [14:0-4-0,0-4-8], [17:0-4-0,0-4-8], [19:0-5-8,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	-0.18	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.36	14-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.20	12	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-AS							Weight: 259 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
SLIDER Right 2x4 SP No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 19=0-3-8, 12=0-3-8
Max Horz 2=167(LC 11)
Max Uplift 2=-147(LC 8), 19=-84(LC 12)
Max Grav 2=179(LC 21), 19=2191(LC 1), 12=1140(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=0/1107, 3-4=-320/1770, 4-5=-550/2, 5-6=-1368/98, 6-7=-1546/147, 7-8=-1530/174, 8-9=-2046/148, 9-10=-2744/202, 10-12=-2956/244
BOT CHORD 2-20=-1074/0, 19-20=-1074/0, 18-19=-1957/378, 17-18=0/561, 16-17=0/1227, 15-16=0/1826, 14-15=-44/2466, 13-14=-171/2686, 12-13=-167/2636
WEBS 3-19=-676/534, 4-19=-1416/175, 4-18=-235/2377, 5-18=-1042/188, 5-17=-52/799, 6-17=-460/79, 6-16=0/289, 7-16=-81/1137, 8-16=-1321/118, 8-15=0/1235, 9-15=-648/127, 9-14=0/291, 10-14=-251/120

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 2-1-3, Interior(1) 2-1-3 to 23-3-0, Exterior(2R) 23-3-0 to 27-4-3, Interior(1) 27-4-3 to 41-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19 except (jt=lb) 2=147.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Date:

December 6,2021

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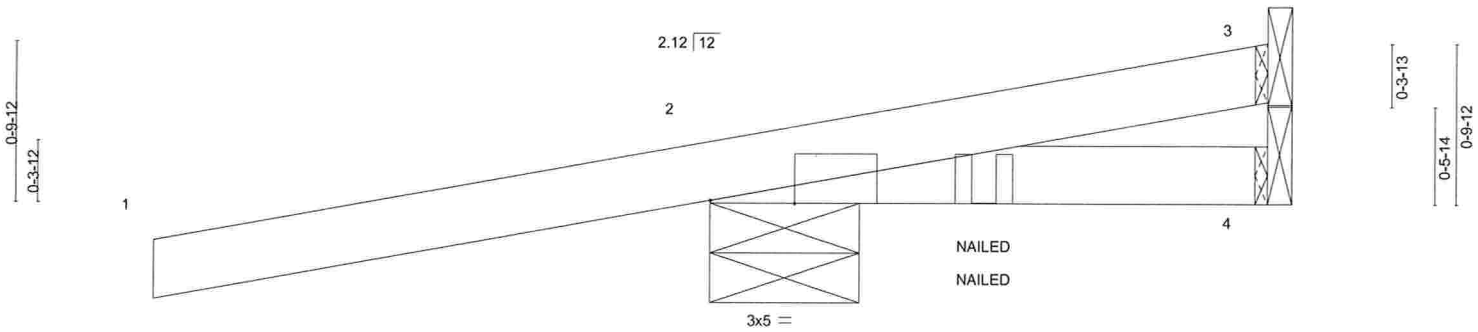
Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	CJ01	Jack-Partial	2	1	T26170769
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 6 08:33:50 2021 Page 1
ID:CBiAp2UpgkV2BCH_3uJjGHyYQgC-msmiZbrQ1tNx1seT8A6GAQNQxpspdq_yhxtvMkyBkkI

-2-9-15 / 2-9-15 | 2-0-10 / 2-0-10 | 2-9-15 / 0-9-5

Scale = 1:11.2



2-9-15 / 2-9-15

Plate Offsets (X,Y)-- [2:0-5-3,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.53	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 13 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-9-2, 4=Mechanical
Max Horz 2=37(LC 25)
Max Uplift 3=-16(LC 9), 2=-143(LC 8), 4=-4(LC 9)
Max Grav 3=38(LC 33), 2=382(LC 1), 4=30(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Corner(3) -2-9-15 to 1-6-13, Exterior(2R) 1-6-13 to 2-9-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) 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) 3, 4 except (jt=lb) 2=143.
7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-20
Concentrated Loads (lb)
Vert: 7=-34(F=-17, B=-17)

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Date:

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Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	J1	Jack-Open	4	1	T26170770
					Job Reference (optional)

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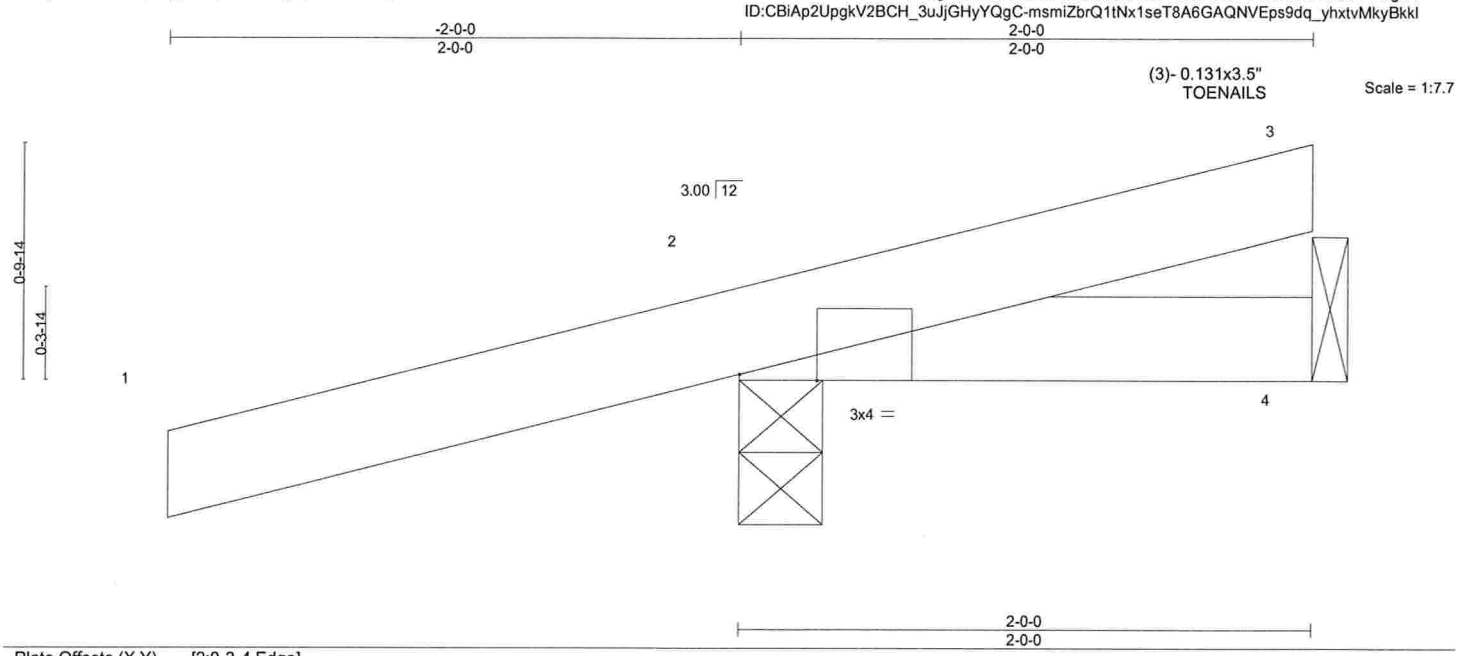

Plate Offsets (X,Y)-- [2:0-3-4,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.25	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 9 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=Mechanical
Max Horz 2=36(LC 12)
Max Uplift 2=-84(LC 12), 4=-6(LC 9)
Max Grav 2=260(LC 1), 4=40(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-1-0, Interior(1) 1-1-0 to 2-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) 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, 4.

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Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	J2	Jack-Open	4	1	T26170771
					Job Reference (optional)

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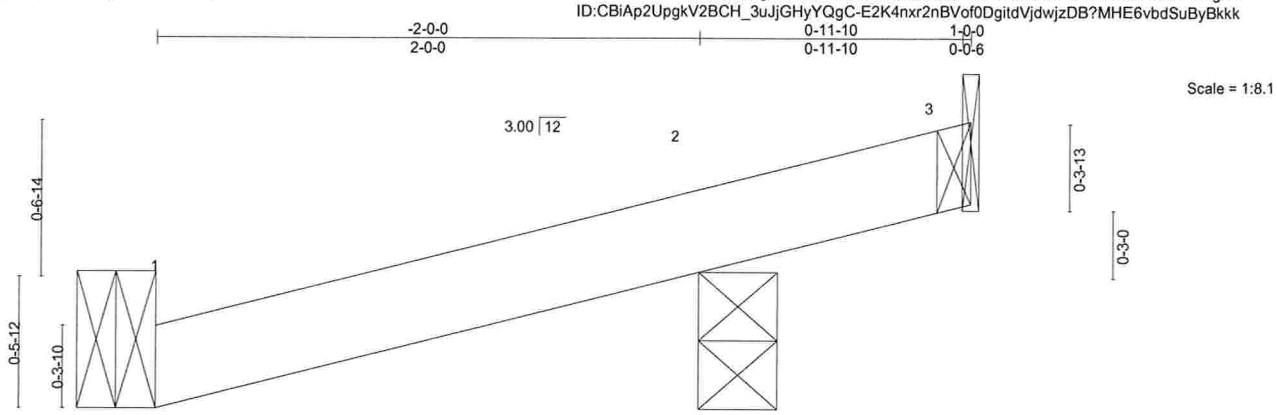

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.06	Vert(LL)	-0.00	1-2	>999	240		
TCDL	10.0	Lumber DOL	1.25	BC	0.00	Vert(CT)	-0.00	1-2	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	1	n/a	n/a		
BCDL	0.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 5 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=Mechanical, 3=Mechanical, 2=0-3-8
Max Horz 2=24(LC 12)
Max Uplift 1=-23(LC 12), 3=-10(LC 12), 2=-27(LC 12)
Max Grav 1=60(LC 1), 3=25(LC 1), 2=85(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Part. Encl., GCpi=0.55; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 2.
6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	PB01GE	GABLE	2	1	T26170772
					Job Reference (optional)

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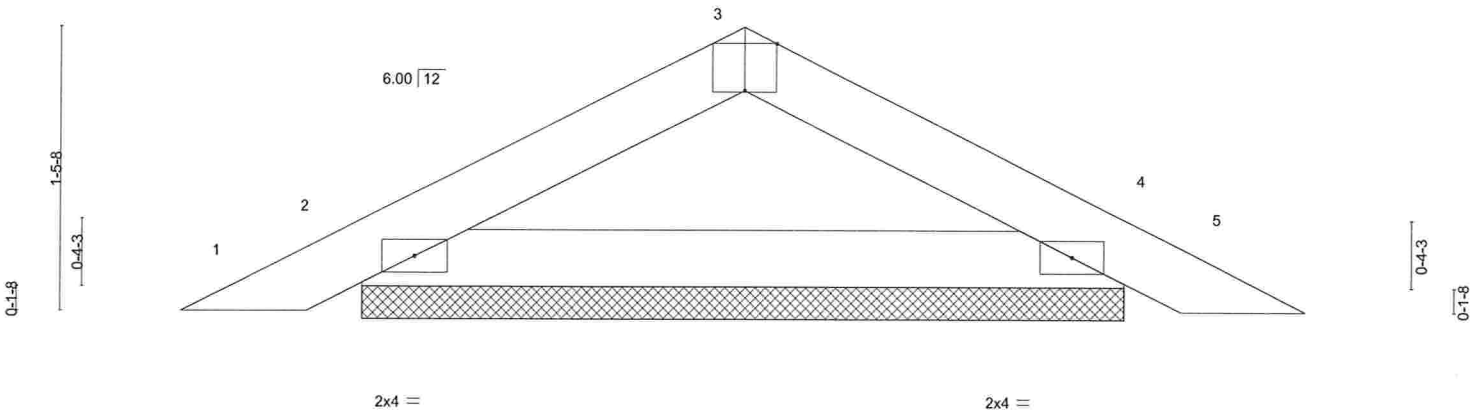
3-6-14 | 7-1-12
3-6-14 | 3-6-14

3x4 =

Scale = 1:11.4



2x4 = 2x4 =

7-1-12
7-1-12

Plate Offsets (X,Y)-- [3:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.06	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.19	Vert(CT)	0.00	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-P							Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

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

REACTIONS. (size) 2=3-11-7, 4=3-11-7
Max Horz 2=-21(LC 10)
Max Uplift 2=-15(LC 12), 4=-15(LC 12)
Max Grav 2=195(LC 1), 4=195(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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	Bullard
BULLARD	PB02	Piggyback	11	1	T26170773
					Job Reference (optional)

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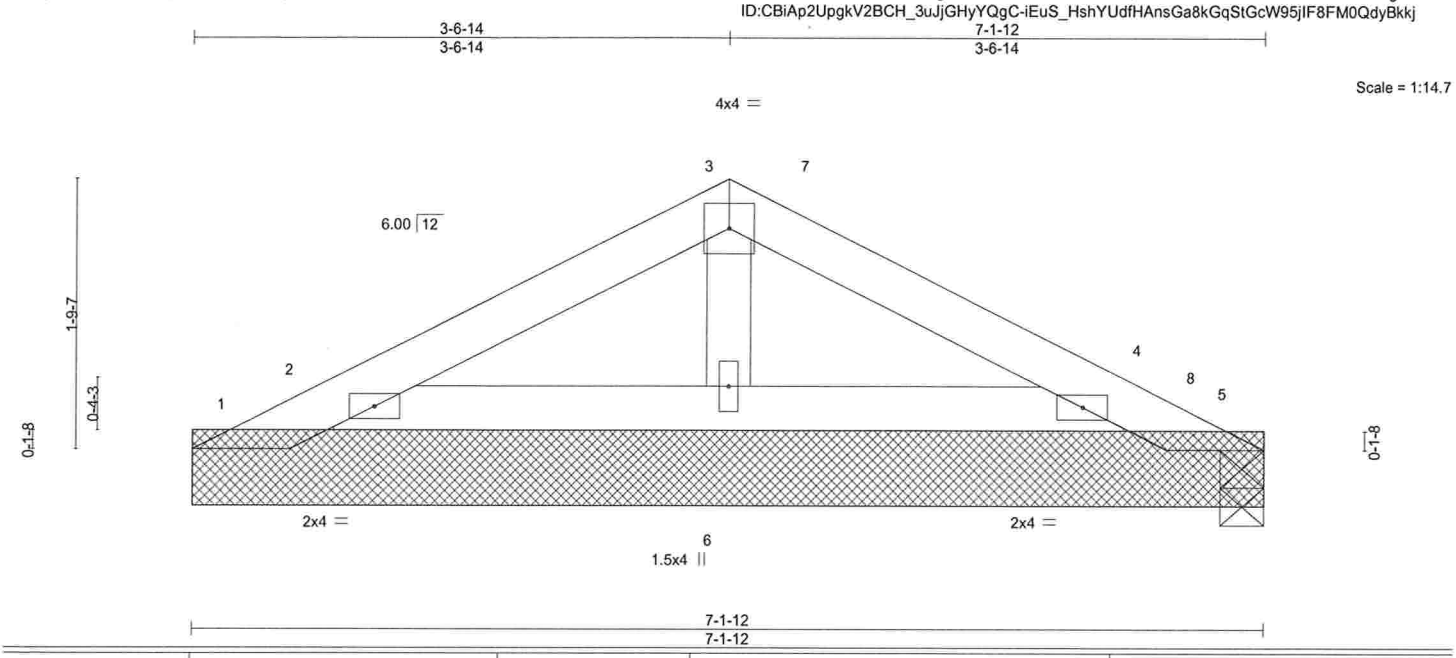

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.09	Vert(LL)	-0.00	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.00	4-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-P							Weight: 21 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 7-1-12.
(lb) - Max Horz 1=-28(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 5, 2, 4
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-6-14, Exterior(2R) 3-6-14 to 6-6-14, Interior(1) 6-6-14 to 7-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2, 4.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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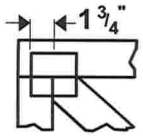
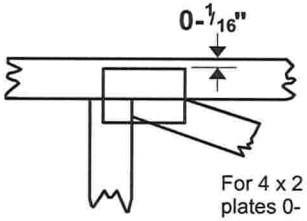
Symbols

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 20/20 software or upon request.**

PLATE SIZE

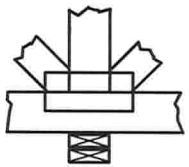
4 x 4

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

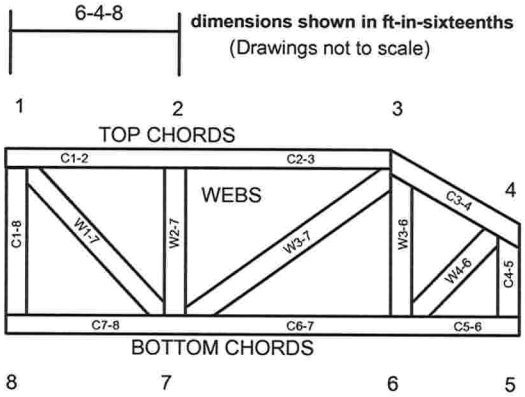


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

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.

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

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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.

21.The design does not take into account any dynamic or other loads other than those expressly stated.