



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

73

RE: W0493 - PAYNE RES. / CASON BUILDERS

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Site Information:

Customer Info: 84 LUMBER Project Name: PAYNE RES Model: 000
Lot/Block: 000 Subdivision: 000
Address: 000, 000
City: 000 State: 000

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: FRC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 140 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 5 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	T30348363	CAP1	4/18/23
2	T30348364	CAP2	4/18/23
3	T30348365	CAP3	4/18/23
4	T30348366	T1	4/18/23
5	T30348367	T2	4/18/23



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

Truss Design Engineer's Name: Lee, Julius

My license renewal date for the state of Florida is February 28, 2025.

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.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 18, 2023

Lee, Julius

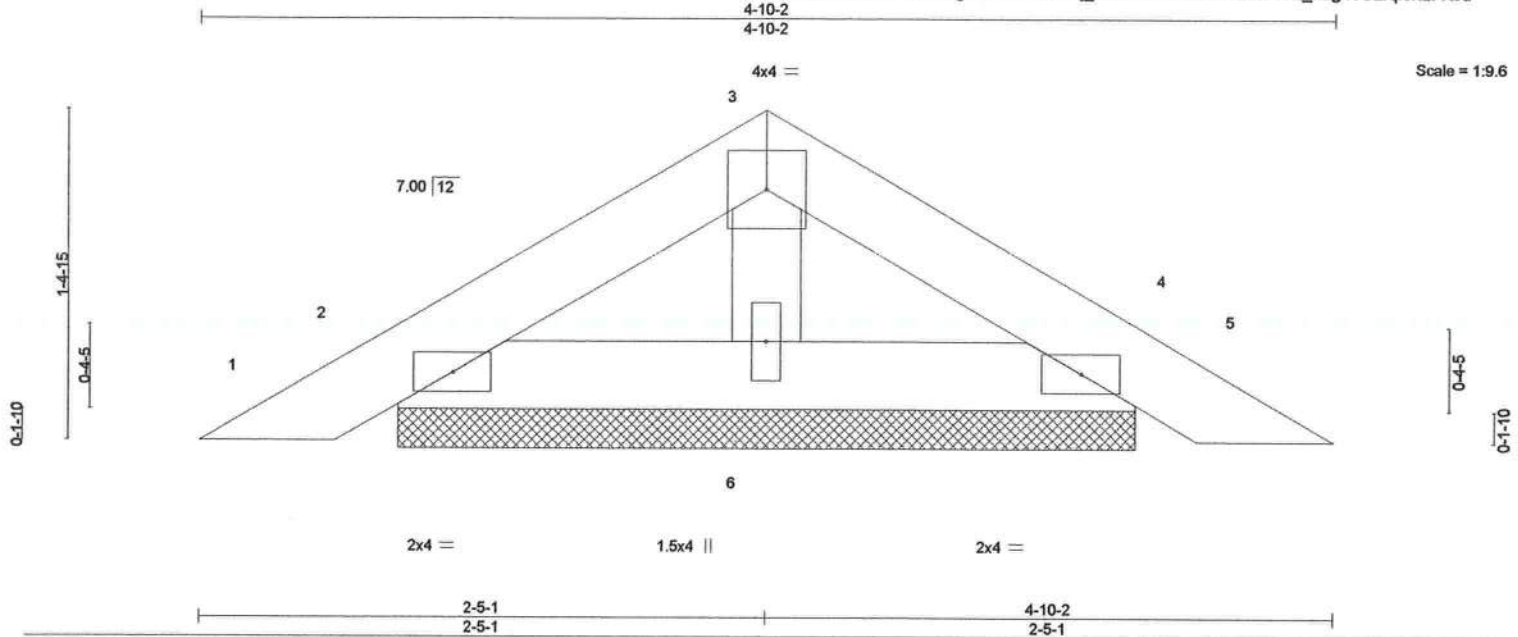
1 of 1

Job	Truss	Truss Type	Qty	Ply	PAYNE RES. / CASON BUILDERS	T30348363
WD493	CAP1	Piggyback	1	1	Job Reference (optional)	

Duley Truss, Dunnellon, FL - 34430,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 08:29:58 2023 Page 1

ID:LWOUBsDNwCbVNagGIDIH2HzSBIP-j_Cevsc5LBY98aZITIQasP?Ks_kEg4VSErqrJNzPXod



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 0.05	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.02	Vert(CT)	0.00	4	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code FRC2020/TP12014		Matrix-P						

Weight: 14 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2D
BOT CHORD 2x4 SP No.2D
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=3-1-13, 4=3-1-13, 6=3-1-13
Max Horz 2=-41(LC 10)
Max Uplift 2=-78(LC 12), 4=-78(LC 12)
Max Grav 2=96(LC 1), 4=96(LC 1), 6=102(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 2 and 78 lb uplift at joint 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Date:

April 18, 2023

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job W0493	Truss CAP2	Truss Type Piggyback	Qty 11	Ply 1	PAYNE RES. / CASON BUILDERS	T30348364
Job Reference (optional)						

Duley Truss, Dunnellon, FL - 34430,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 08:29:59 2023 Page 1

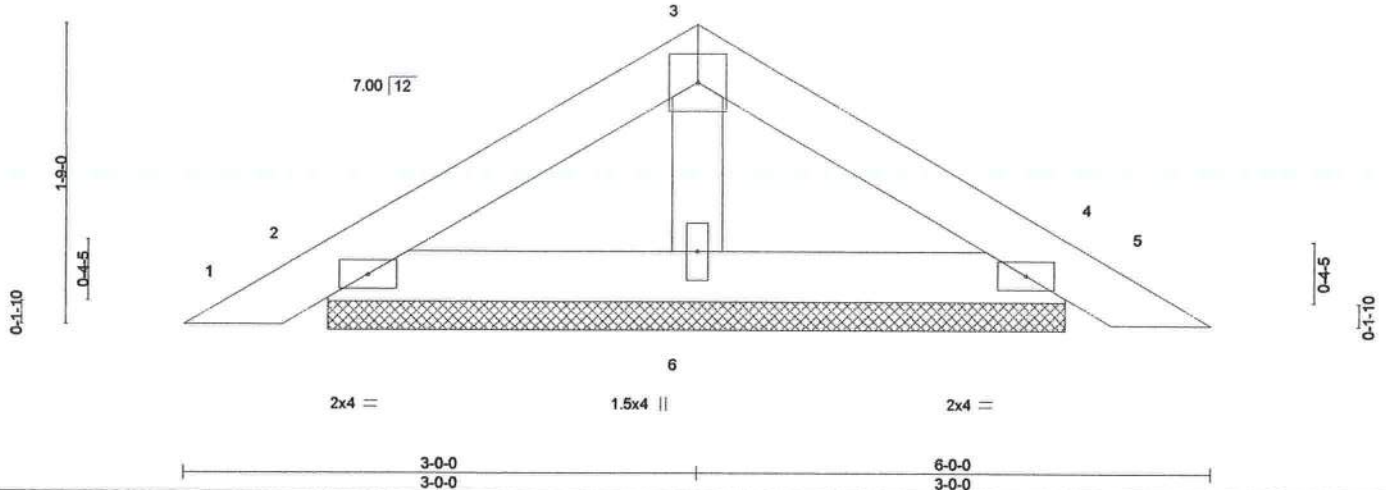
ID:LWOUBsDNwCbVNagGIDIH2HzSBIP-BBm06CdJ6Ug0mk8U0SxpOdYUmO49PXZbTVZOrpzPXoc

6-0-0

6-0-0

4x4 =

Scale = 1:13.1



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 0.11	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.04	Vert(CT)	0.00	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FRC2020/TPI2014		Matrix-P							
									Weight: 18 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2D

BOT CHORD 2x4 SP No.2D

WEBS 2x4 SP No.3

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=4-3-11, 4=4-3-11, 6=4-3-11

Max Horz 2=-52(LC 10)

Max Uplift 2=-89(LC 12), 4=-89(LC 12), 6=-10(LC 12)

Max Grav 2=117(LC 1), 4=117(LC 1), 6=145(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 2, 89 lb uplift at joint 4 and 10 lb uplift at joint 6.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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16023 Swingley Ridge Rd. Chesterfield, MO 63017

Date:

April 18, 2023



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

ANSI/TPI 1 Quality Criteria, DSB-89 and BCSI Building Component



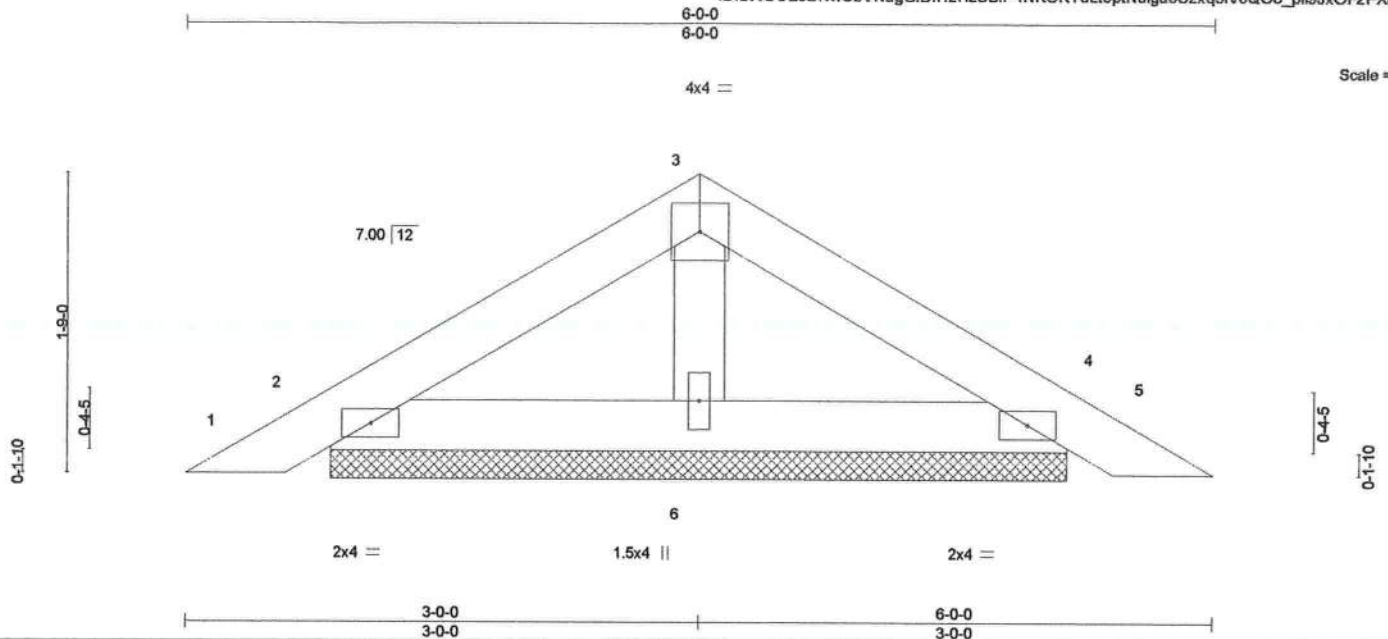
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	PAYNE RES. / CASON BUILDERS	T30348365
W0493	CAP3	Piggyback	1	1	Job Reference (optional)	

Duley Truss, Dunnellon, FL - 34430,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 08:30:00 2023 Page 1

ID:LWOUBsDNwCbVNagGiDIH2HzSBIP-fNKOKYdLtoptNulga9S2xq5VoQO8_pli9JxOFzPXob



Scale = 1:13.1

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 0.11	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.04	Vert(CT)	0.00	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FRC2020/TPI2014		Matrix-P							
									Weight: 18 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2D
BOT CHORD 2x4 SP No.2D
WEBS 2x4 SP No.3

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=4-3-11, 4=4-3-11, 6=4-3-11
Max Horz 2=-52(LC 10)
Max Uplift 2=-89(LC 12), 4=-89(LC 12), 6=-10(LC 12)
Max Grav 2=117(LC 1), 4=117(LC 1), 6=145(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 2, 89 lb uplift at joint 4 and 10 lb uplift at joint 6.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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Date:

April 18, 2023

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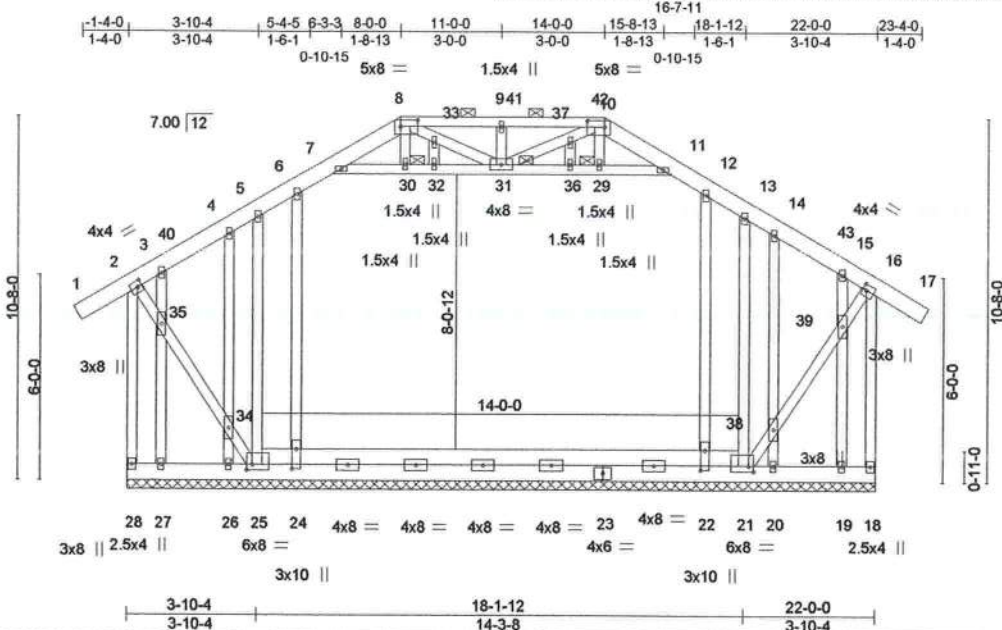
Job W0493	Truss T1	Truss Type GABLE	Qty 2	Ply 1	PAYNE RES. / CASON BUILDERS	T30348366
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Duley Truss, Dunnellon, FL - 34430,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 08:30:02 2023 Page 1

ID:LWOUBsDNwCbVNagGiDIH2HzSBIP-bmR9IEfcPP3bdBs3iaUW0FAwvb4vclc29To2S8zPXoZ

Job Reference (optional)



Scale = 1:65.9

Plate Offsets (X,Y)--	[2:0-1-8,0-2-0], [8:0-6-0,0-2-4], [10:0-6-0,0-2-4], [16:0-1-4,0-2-0], [21:0-1-12,0-2-0], [22:0-7-0,0-1-8], [24:0-7-0,0-1-8], [25:0-2-0,0-2-0]
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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 0.43	Vert(LL)	-0.00 16-17	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.17	Vert(CT)	-0.01 16-17	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	-0.00 18	n/a	n/a		
BCDL 10.0	Code FRC2020/TPI2014		Matrix-S						
								Weight: 290 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1 *Except*	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	JOINTS	1 Brace at Jt(s): 29, 30, 31
OTHERS	2x4 SP No.3		

REACTIONS. All bearings 22-0-0.
(lb) - Max Horz 28=-482(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 27, 19 except 28=-289(LC 8), 25=-916(LC 19), 21=-965(LC 18), 18=-270(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 21, 26, 27, 20, 19 except 28=456(LC 19), 18=437(LC 18), 24=1403(LC 18), 22=1361(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-293/299, 7-8=-594/305, 8-9=-696/405, 9-10=-696/404, 10-11=-594/306, 11-12=-293/299, 2-28=-423/336, 16-18=-404/312
BOT CHORD 27-28=-448/367, 26-27=-448/367, 25-26=-448/367, 24-25=-201/351, 22-24=-238/283, 21-22=-201/351
WEBS 7-30=-79/394, 30-32=-77/396, 31-32=-77/396, 31-36=-88/396, 29-36=-88/396, 11-29=-90/394, 2-35=-240/383, 34-35=-244/403, 25-34=-246/400, 21-38=-221/381, 38-39=-218/384, 16-39=-216/365, 6-24=-504/135, 12-22=-504/126

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-5-6 to 1-6-10, Interior(1) 1-6-10 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 14-0-0, Exterior(2R) 14-0-0 to 18-1-12, Interior(1) 18-1-12 to 23-5-6 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
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- Ceiling dead load (5.0 psf) on member(s). 6-7, 11-12, 7-30, 30-32, 31-32, 31-36, 29-36, 11-29; Wall dead load (5.0psf) on member(s). 6-24, 12-22

Continued on page 2



Julius Lee PE No. 34869
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

April 18, 2023

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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

ANSI/TPI 1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	PAYNE RES. / CASON BUILDERS	T30348366
W0493	T1	GABLE	2	1	Job Reference (optional)	

Duley Truss, Dunnellon, FL - 34430,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 08:30:02 2023 Page 2
ID:LWOUbsDNwCbVNagGiDIH2HzSBiP-bmR9IEfcPP3bdBs3laUW0FAwvb4vcic29To2S8zPXoZ

NOTES-

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 19 except (jt=lb) 28=289, 25=916, 21=965, 18=270.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.



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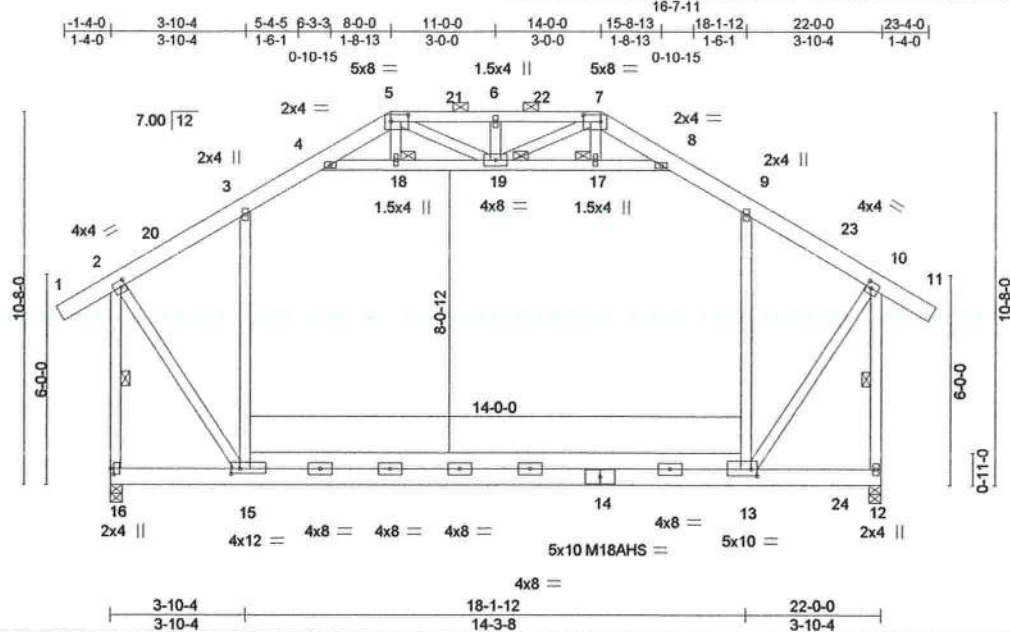


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job W0493	Truss T2	Truss Type ATTIC	Qty 11	Ply 1	PAYNE RES. / CASON BUILDERS	T30348367
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Duley Truss, Dunnellon, FL - 34430,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 08:30:03 2023 Page 1
ID:LWOUBsDNwCbVnagGDIH2HzSBIP-3y7XyagEABSELRFFI7IZTJ457DVLDBO7Xb_azPXoY



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [2:0-1-8,0-2-0], [5:0-6-0,0-2-4], [7:0-6-0,0-2-4], [10:0-1-8,0-2-0], [13:0-2-0,0-2-4], [15:0-3-0,0-1-12], [16:0-2-0,0-1-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		in (loc) I/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.25		TC 0.47		Vert(LL)		-0.30 13-15 >862 240		MT20 244/190	
TCDL	7.0	Lumber DOL 1.25		BC 0.91		Vert(CT)		-0.42 13-15 >623 180		M18AHS 186/179	
BCLL	0.0 *	Rep Stress Incr YES		WB 0.56		Horz(CT)		0.00 12 n/a n/a			
BCDL	10.0	Code FRC2020/TPI2014		Matrix-MS		Attic		-0.27 13-15 627 360		Weight: 229 lb FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except*	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
5-7: 2x4 SP No.2D	
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 2-16, 10-12
	JOINTS 1 Brace at Jt(s): 17, 18, 19

REACTIONS. (size) 16=0-4-0, 12=0-4-0
Max Horz 16=-484(LC 10)
Max Uplift 16=-232(LC 12), 12=-232(LC 12)
Max Grav 16=1476(LC 18), 12=1507(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-904/222, 3-4=-835/329, 4-5=-598/372, 5-6=-701/455, 6-7=-701/455, 7-8=-598/371,
8-9=-833/329, 9-10=-907/222, 2-16=-1748/337, 10-12=-1754/336
BOT CHORD 15-16=-458/376, 13-15=-177/839
WEBS 3-15=-382/208, 9-13=-382/208, 4-18=-633/111, 18-19=-627/114, 17-19=-616/114,
8-17=-623/111, 2-15=-181/1485, 10-13=-181/1484, 7-19=-212/288, 5-19=-212/296

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf, BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -1-5-6 to 1-6-10, Interior(1) 1-6-10 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 14-0-0, Exterior(2R) 14-0-0 to 18-1-12, Interior(1) 18-1-12 to 23-5-6 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-18, 18-19, 17-19, 8-17; Wall dead load (5.0psf) on member(s). 3-15, 9-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-15
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=232, 12=232.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

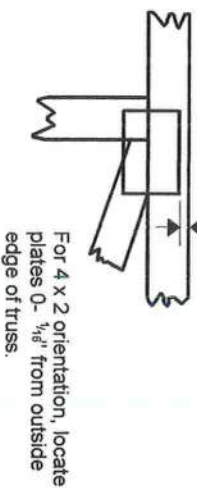
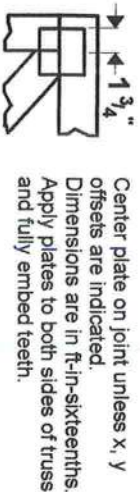
April 18, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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 1 Quality Criteria, DSB-89 and BCSI Building Component**
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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

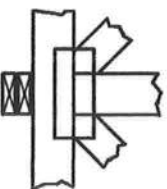
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

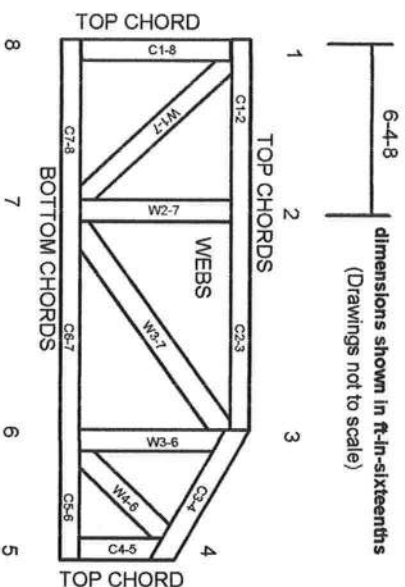


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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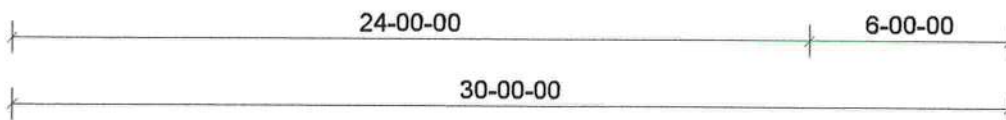
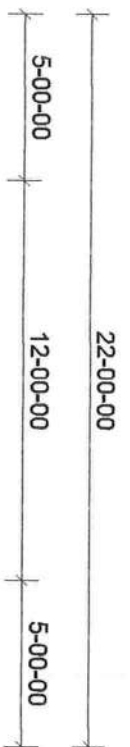
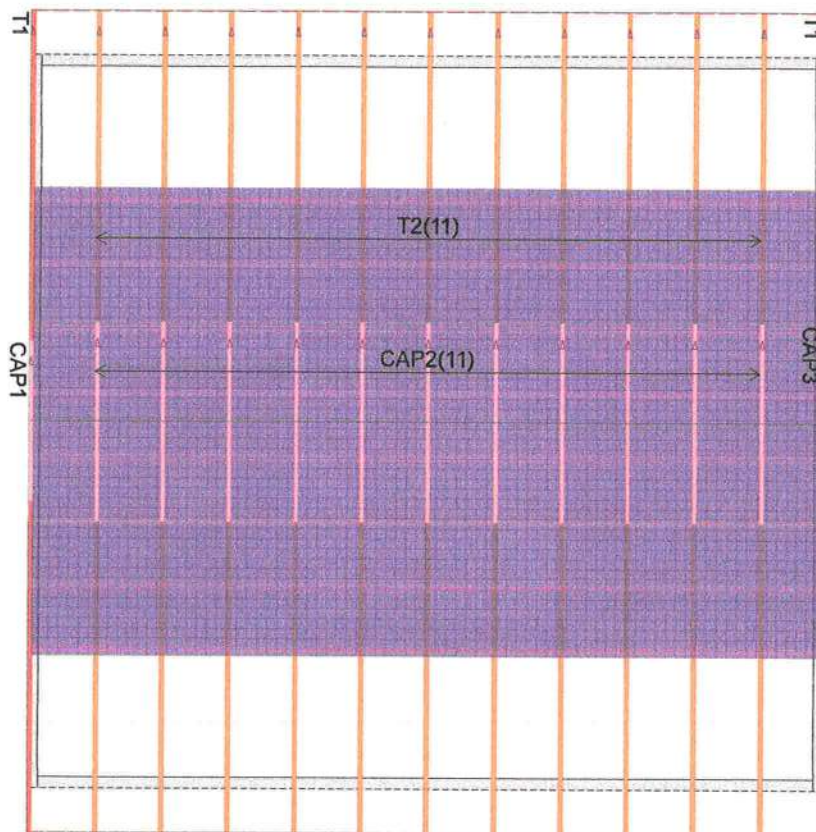
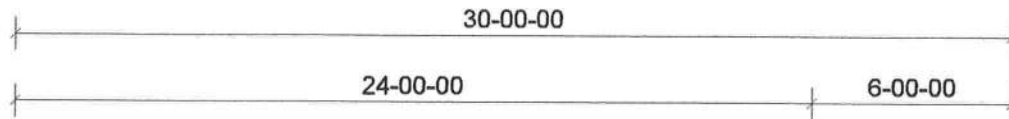


MITek Engineering Reference Sheet, Mill-7473 rev. 5/19/2020

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.



JOB NO.
W0493

Customer: 84 LUMBER
Description: PAYNE RES. /
CASON BUILDERS
Designer: Jack Duley

Pitch: ---
Overhang: ---

PRODUCT APPROVAL NUMBER
FL 2197.4
MT20 PLATES
MITEK INDUSTRIES, INC.

DULEY
TRUSS INC.
(352) 465-0964

Quote # W0493
Order #



Duley Truss, Inc.
P.O. Box 340 Dunnellon, FL 34430
Office: (352) 465-0964
Fax: (352) 465-0463
duleytruss@bellsouth.net

Mailing Address:

84 LUMBER

Contact:
Glenda Dampier
Phone:

(352)

Phone: (866) 755-7754

Fax: Email: gddampier@aol.com

Job Delivery Address:

Name:

PAYNE RES. / CASON BUILDERS

Address:

P.O. Number:

Designer:
Jack Duley

Quote # W0493

Order #

Printed: 04/17/23

Bldg Code: FRC2020/TPI2014

Wind Des Method

Exposure Cat

Occupancy Cat

Velocity / TC Dead / BC Dead

Bldg Cat: Residential

C

II

140.000 / 4.200 / 6.000






ROOF TRUSSES**LOADING INFORMATION**

TCCL-TCCL-BCCL-BCCL
20.0,7.0,0.0,10.0

STRESS INCR.

1.25

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY	TOP	ID	BASE	TOP	LEFT OH	RIGHT OH	REACTIONS
	PLY	BOT		O/A	BOT			
	1	7.00 0.00	CAP1	03-01-13 03-01-13	2 X 4 2 X 4		Jt High Low Loc-X Loc-Y	2 6 4 95.5 102.0 95.5 -78.2 0.0 -78.2 00-10-03 02-05-01 03-11-15 00-03-06 00-03-06 00-03-06
	11	7.00 0.00	CAP2	04-03-11 04-03-11	2 X 4 2 X 4		Jt High Low Loc-X Loc-Y	2 6 4 117.1 144.6 117.1 -88.9 -9.6 -88.9 00-10-03 03-00-00 05-01-13 00-03-06 00-03-06 00-03-06
	1	7.00 0.00	CAP3	04-03-11 04-03-11	2 X 4 2 X 4		Jt High Low Loc-X Loc-Y	2 6 4 117.1 144.6 117.1 -88.9 -9.6 -88.9 00-10-03 03-00-00 05-01-13 00-03-06 00-03-06 00-03-06
	2	7.00 0.00	T1	22-00-00 22-00-00	2 X 6 2 X 6	01-04-00 01-04-00	Jt High Low Loc-X Loc-Y	28 27 26 25 24 22 456.4 151.7 177.1 0.0 1,402.9 1,360.8 -288.5 -51.0 0.0 -915.7 0.0 0.0 00-01-12 01-00-00 03-00-00 03-10-04 05-00-00 17-00-00 00-02-12 00-02-12 00-02-12 00-02-12 00-05-08 00-05-08
	11	7.00 0.00	T2	22-00-00 22-00-00	2 X 6 2 X 6	01-04-00 01-04-00	Jt High Low Loc-X Loc-Y	16 12 1,476.2 1,506.9 -232.3 -232.3 00-01-12 21-10-04 00-02-12 00-02-12