Permit #38857   *Sapp*

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

RE: LMSAPP-FIN - LMSAPP-FIN

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

Site Information:
Customer Info: Lee Holloway   Project Name: .   Model: .
Lot/Block: .   Subdivision: .
Address: ., .
City: High Springs   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: FBC2017/TPI2014   Design Program: MiTek 20/20 8.2
Wind Code: ASCE 7-10   Wind Speed: 130 mph
Roof Load: 40.0 psf   Floor Load: N/A psf

This package includes 4 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	T19033309	A1	1/3/20
2	T19033310	A2	1/3/20
3	T19033311	A3	1/3/20
4	T19033312	A4	1/3/20

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: Velez, Joaquin
My license renewal date for the state of Florida is February 28, 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.
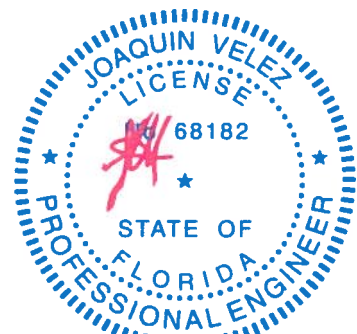
Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

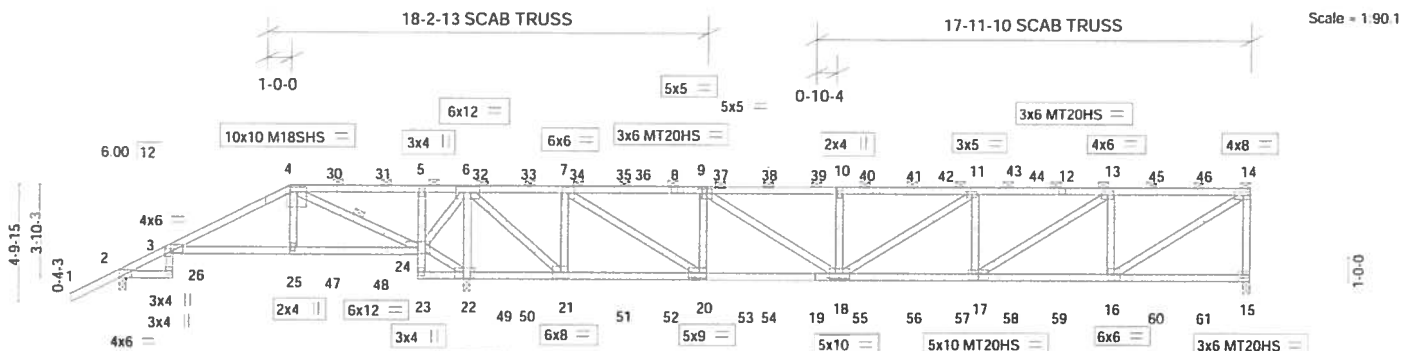January 3,2020

Velez, Joaquin   1 of 1

Job	Truss	Truss Type	Qty	Ply	LMSAPP-FIN	
LMSAPP-FIN	A1	HALF HIP GIRDER	1	1		Units: 1 T19033309
					Job Reference (optional)	Eng: MC

Mayo Truss, Mayo, Fl
8.240 e Dec 6 2019 MiTek Industries, Inc. Fri Jan 3 13:50:31 2020 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-3dXnzCqBfELoDAxU8Nb61p0BRWXvclVOj70CNczz3E6

-2-0-0	2-2-8	7-0-0	12-3-8	18-4-0	24-1-1	29-8-6	35-3-10	40-10-15	46-8-0
2-0-0	2-2-8	4-9-8	5-3-8	6-0-8	5-9-1	5-7-5	5-7-5	5-7-5	5-9-1

Scale = 1:90.1

18-2-13 SCAB TRUSS   **17-11-10 SCAB TRUSS**

REPAIR: INTERIOR BEARING LOCATION HAS CHANGED AS SHOWN.

SHOP FABRICATE SCAB TRUSSES (SHOWN AS SHADED AREA ON TRUSS DESIGN DRAWING) USING THE LUMBER AND PLATES INDICATED. ATTACH SCAB TRUSS TO ONE FACE OF EXISTING TRUSS WITH (0.131" X 3") NAILS (INTO ALL ALIGNING MEMBERS) PER THE FOLLOWING NAIL SCHEDULE:
2 x 4's - 2 ROWS: SPACED @ 4" O.C. USE 2" MEMBER END DISTANCE.

SCAB TRUSS PLATES ARE SHOWN BOXED.

2-2-8	7-0-0	12-3-8	14-2-0	18-4-0	24-1-1	29-8-6	32-8-0 33-8-0	40-10-15	46-8-0
2-2-8	4-9-8	5-3-8	1-10-8	4-2-0	5-9-1	5-7-5	2-11-10 1-0-0	5-7-5	5-9-1

35-3-10
1-7-10

Plate Offsets (X,Y)--   [3:0-1-2,0-1-0], [3:0-5-0,0-1-0], [4:0-8-0,0-2-8], [15:Edge,0-1-8], [17:0-5-0,0-3-0], [22:0-4-8,0-3-0]

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	0.86	Vert(LL)	-0.29	17-18	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.98	Vert(CT)	-0.59	17-18	>656	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.96	Horz(CT)	-0.06	22	n/a	n/a	M18SHS	244/190
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Wind(LL)	0.21	17-18	>999	240	Weight: 256 lb	FT = 15%

TRUSS AND SCAB TRUSS LUMBER-
TOP CHORD   2x4 SP SS *Except*
  12-14,8-12: 2x4 SP No.1
BOT CHORD   2x4 SP No.2 *Except*
  3-24,15-17,17-19: 2x4 SP No.1
WEBS   2x4 SP No.2 *Except*
  7-20: 2x4 SP No.1

BRACING-   [PSA]
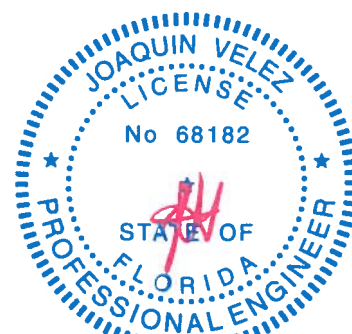TOP CHORD   Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-3-11 max.): 4-14.
BOT CHORD   Rigid ceiling directly applied or 2-11-9 oc bracing.
WEBS   1 Row at midpt   4-24

REACTIONS.   (lb/size)   15=2429/0-3-8, 2=228/0-3-8, 22=5313/0-3-8
  Max Horz 2=145(LC 8)
  Max Uplift15=-217(LC 8), 2=-55(LC 8), 22=-379(LC 8)
  Max Grav 15=2464(LC 18), 2=245(LC 13), 22=5313(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   3-4=-90/570, 4-30=-235/3291, 30-31=-235/3291, 5-31=-235/3291, 5-6=-242/3345,
  6-32=-22/328, 32-33=-22/328, 7-33=-22/328, 7-34=-3094/220, 34-35=-3094/220,
  35-36=-3094/220, 8-36=-3094/220, 8-9=-3094/220, 9-37=-4594/323, 37-38=-4594/323,
  38-39=-4594/323, 10-39=-4594/323, 10-40=-4594/323, 40-41=-4594/323,
  41-42=-4594/323, 42-43=-4594/323, 11-43=-4594/323, 11-44=-4555/322,
  12-44=-4555/322, 12-13=-4555/322, 13-45=-3126/226, 45-46=-3126/226,
  14-46=-3126/226, 14-15=-2355/267
BOT CHORD   3-25=-450/35, 25-47=-412/41, 47-48=-412/41, 24-48=-412/41, 5-24=-564/167,
  22-49=-3522/254, 49-50=-3522/254, 21-50=-3522/254, 21-51=-328/22, 51-52=-328/22,
  20-52=-328/22, 20-53=-220/3094, 53-54=-220/3094, 19-54=-220/3094, 18-19=-220/3094,
  18-55=-330/4582, 55-56=-330/4582, 56-57=-330/4582, 17-57=-330/4582,
  17-58=-226/3126, 58-59=-226/3126, 16-59=-226/3126
WEBS   4-25=0/692, 4-24=-3181/217, 7-21=-2583/341, 7-20=-276/3754, 9-20=-1688/290,
  9-18=-131/1842, 10-18=-677/213, 11-17=-661/199, 13-17=-115/1704, 13-16=-1663/296,
  14-16=-263/3637, 6-22=-3315/291, 22-24=-3829/316, 6-24=-80/352, 6-21=-309/4270

Joaquin Velez PE No. 68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
January 3, 2020

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	LMSAPP-FIN	
LMSAPP-FIN	A1	HALF HIP GIRDER	1	1		T19033309
					Job Reference (optional)	

Mayo Truss, Mayo, Fl

8.240 e Dec 6 2019 MiTek Industries, Inc Fri Jan 3 13:50:31 2020 Page 2
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-3dXnzCqBfELoDAxU8Nb61p0BRWXvcfVOj70CNczz3E6

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=47ft; eave=6ft; Cat. II;
   Exp B; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity
   of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 15, 55 lb uplift at joint 2 and 379 lb uplift at joint 22.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 141 lb down and 138 lb up at 7-0-0, 109 lb down and 69 lb up at 8-8-12,
    109 lb down and 69 lb up at 10-8-12, 121 lb down and 80 lb up at 12-8-12, 121 lb down and 80 lb up at 14-8-12, 121 lb down and 80 lb up at 16-8-12, 121 lb down and 80 lb
    up at 18-8-12, 121 lb down and 80 lb up at 20-8-12, 121 lb down and 80 lb up at 22-8-12, 121 lb down and 80 lb up at 24-8-12, 121 lb down and 80 lb up at 26-8-12, 121 lb
    down and 80 lb up at 28-8-12, 121 lb down and 80 lb up at 30-8-12, 121 lb down and 80 lb up at 32-8-12, 121 lb down and 80 lb up at 34-8-12, 121 lb down and 80 lb up at
    36-8-12, 121 lb down and 80 lb up at 38-8-12, 121 lb down and 80 lb up at 40-8-12, 121 lb down and 80 lb up at 42-8-12, and 121 lb down and 80 lb up at 44-8-12, and 154 lb
    down and 68 lb up at 46-6-4 on top chord, and 442 lb down and 18 lb up at 7-0-0, 78 lb down at 8-8-12, 78 lb down at 10-8-12, 83 lb down at 12-5-4, 83 lb down at 14-8-12,
    83 lb down at 16-8-12, 83 lb down at 18-5-12, 83 lb down at 20-8-12, 83 lb down at 22-8-12, 83 lb down at 24-8-12, 83 lb down at 26-8-12, 83 lb down at 28-8-12, 83 lb
    down at 30-5-15, 83 lb down at 32-8-12, 83 lb down at 34-8-12, 83 lb down at 36-8-12, 83 lb down at 38-8-12, 83 lb down at 40-8-12, and 83 lb down at 42-8-12, and 83 lb
    down at 44-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) 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, 3-4=-60, 4-14=-60, 26-27=-20, 3-24=-20, 15-23=-20
   Concentrated Loads (lb)
     Vert: 4=-109(F) 8=-121(F) 14=-154(F) 24=-59(F) 5=-121(F) 25=-442(F) 21=-59(F) 13=-121(F) 16=-59(F) 12=-121(F) 19=-59(F) 30=-109(F) 31=-109(F) 32=-121(F)
     33=-121(F) 34=-121(F) 35=-121(F) 37=-121(F) 38=-121(F) 39=-121(F) 40=-121(F) 41=-121(F) 43=-121(F) 44=-121(F) 45=-121(F) 46=-121(F) 47=-71(F) 48=-71(F)
     49=-59(F) 50=-59(F) 51=-59(F) 52=-59(F) 53=-59(F) 54=-59(F) 55=-59(F) 56=-59(F) 57=-59(F) 58=-59(F) 59=-59(F) 60=-59(F) 61=-59(F)

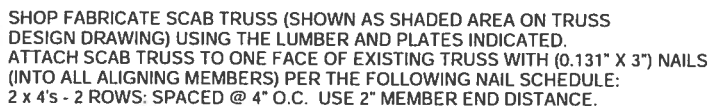| Job	Truss	Truss Type	Qty	Ply	LMSAPP-FIN		Units: 1	T19033310
LMSAPP-FIN	A2	HALF HIP	1	1			Eng: MC	

Mayo Truss, Mayo, Fl

8.240 e Dec 6 2019 MiTek Industries, Inc. Fri Jan 3 11:50:56 2020 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn eGUK5p?ZNjMrwXwVK?MYjlL5OEq9_jpHqLS02_zz5_D

| -2-0-0 | 2-2-8 | 9-0-0 | 12-3-8 | 18-4-0 | 25-5-14 | 32-6-0 | 39-6-2 | 46-8-0 |
| 2-0-0 | 2-2-8 | 6-9-8 | 3-3-8 | 6-0-8 | 7-1-14 | 7-0-2 | 7-0-2 | 7-1-14 |

16-7-10 SCAB TRUSS

REPAIR: INTERIOR BEARING LOCATION
HAS CHANGED AS SHOWN.

Scale = 1:87.2

14-2-0

SHOP FABRICATE SCAB TRUSS (SHOWN AS SHADED AREA ON TRUSS
DESIGN DRAWING) USING THE LUMBER AND PLATES INDICATED.
ATTACH SCAB TRUSS TO ONE FACE OF EXISTING TRUSS WITH (0.131" X 3") NAILS
(INTO ALL ALIGNING MEMBERS) PER THE FOLLOWING NAIL SCHEDULE:
2 x 4's - 2 ROWS: SPACED @ 4" O.C. USE 2" MEMBER END DISTANCE.

SCAB TRUSS PLATES ARE SHOWN BOXED.

| 2-2-8 | 9-0-0 | 12-3-8 | 14-2-0 | 18-4-0 | 25-5-14 | 32-6-0 | 39-6-2 | 46-8-0 |
| 2-2-8 | 6-9-8 | 3-3-8 | 1-10-8 | 4-2-0 | 7-1-14 | 7-0-2 | 7-0-2 | 7-1-14 |

Plate Offsets (X,Y)-- [3:0-1-2,0-1-0], [3:0-5-0,0-1-0], [4:0-7-0,0-2-0], [7:0-2-8,0-3-0], [14:0-2-7,0-1-8]

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	0.59	Vert(LL)	-0.12	15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.24	15-17	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	-0.04	20	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.08	3-23	>999	240	Weight: 265 lb	FT = 15%

TRUSS AND SCAB TRUSS 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, except end verticals, an[PSA]
2-0-0 oc purlins (3-10-9 max.): 4-12.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 13=1064/0-3-8, 2=195/0-3-8, 20=2583/0-3-8
Max Horz 2=174(LC 12)
Max Uplift13=-59(LC 12), 2=-41(LC 12), 20=-188(LC 12)
Max Grav 13=1134(LC 22), 2=196(LC 21), 20=2583(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-28=-286/675, 4-28=-282/862, 4-29=-400/1502, 5-29=-400/1502, 5-6=-397/1503,
6-30=-235/411, 7-30=-235/411, 7-31=-1428/123, 31-32=-1428/123, 8-32=-1428/123,
8-9=-1830/186, 9-33=-1830/186, 10-33=-1830/186, 10-11=-1391/149, 11-34=-1391/149,
12-34=-1391/149, 12-13=-1067/159
BOT CHORD 3-23=-689/167, 22-23=-681/168, 19-20=-1565/405, 18-19=-375/223, 17-18=-375/227,
16-17=-123/1428, 15-16=-123/1428, 14-15=-149/1391
WEBS 4-23=0/269, 4-22=-1184/333, 7-19=-1273/268, 7-17=-257/1677, 8-17=-766/228,
8-15=-132/609, 9-15=-409/146, 10-15=-44/523, 10-14=-734/186, 12-14=-172/1611,
6-20=-1664/271, 20-22=-1727/441, 6-19=-256/1842

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=47ft; eave=6ft; Cat. II;
Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 2-8-0, Interior(1) 2-8-0 to 9-0-0, Exterior(2) 9-0-0 to 15-7-3,
Interior(1) 15-7-3 to 46-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 59 lb uplift at joint 13, 41 lb uplift at joint 2
and 188 lb uplift at joint 20.
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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

January 3,2020

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	LMSAPP-FIN	
LMSAPP-FIN	A3	Half Hip	1	1		Units: 1 T19033311 Eng: MC
					Job Reference (optional)	

Mayo Truss, Mayo, FL

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 3 11:52:16 2020 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-IlKatAzkXIRUWq2t0oolzdfmFU1BkwV3DnqFrLzz4yz

Dimensions (top): -2-0-0 | 2-2-8 | 6-7-4 | 11-0-0 | 12-3-8 | 18-4-0 | 25-4-2 | 32-4-4 | 39-4-6 | 46-8-0
2-0-0 | 2-2-8 | 4-4-12 | 4-4-12 | 1-3-8 | 6-0-8 | 7-0-2 | 7-0-2 | 7-0-2 | 7-3-10

Scale = 1:87.2

18-10-10 SCAB TRUSS

3x5 = 5x5 = 3x4 || 3x5 = 8x8 =

REPAIR: INTERIOR BEARING LOCATION HAS CHANGED AS SHOWN.

3x6 MT20HS =   3x6 MT20HS =   3x4 ||

6.00 [12]

3x5

4x6 =

14-2-0

SHOP FABRICATE SCAB TRUSS (SHOWN AS SHADED AREA ON TRUSS DESIGN DRAWING) USING THE LUMBER AND PLATES INDICATED. ATTACH SCAB TRUSS TO ONE FACE OF EXISTING TRUSS WITH (0.131" X 3") NAILS (INTO ALL ALIGNING MEMBERS) PER THE FOLLOWING NAIL SCHEDULE:
2 x 4's - 2 ROWS; SPACED @ 4" O.C. USE 2" MEMBER END DISTANCE.

NOTE NEW LATERAL BRACING REQUIREMENTS.

SCAB TRUSS PLATES ARE SHOWN BOXED.

	2-2-8	6-7-4	12-3-8	14-2-0	18-4-0	25-4-2	27-8-3	37-0-5	46-8-0
	2-2-8	4-4-12	5-8-4	1-10-8	4-2-0	7-0-2	2-4-1	9-4-3	9-7-11

Plate Offsets (X,Y)-- [3:0-1-2,0-1-0], [3:0-5-0,0-1-0], [5:0-2-8,0-2-4], [24:0-2-8,0-2-12]

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	0.58	Vert(LL)	-0.18	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	-0.38	15-16	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.05	15	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.05	16-18	>999	240	Weight: 286 lb	FT = 15%

TRUSS AND SCAB TRUSS 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, except end verticals, and 2-0-0 oc purlins (4-6-7 max.): 5-14.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-21, 12-15, 8-22

REACTIONS. (lb/size) 15=1089/0-3-8, 2=252/0-3-8, 22=2501/0-3-8
Max Horz 2=203(LC 12)
Max Uplift15=-61(LC 12), 2=-35(LC 12), 22=-191(LC 12)
Max Grav 15=1160(LC 22), 2=252(LC 1), 22=2501(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-30=-192/373, 30-31=-181/403, 4-31=-170/461, 4-5=-253/973, 5-6=-238/1011,
6-7=-236/1014, 7-32=-268/1141, 8-32=-268/1141, 9-10=-1379/123, 10-11=-1379/123,
11-35=-1352/122, 12-35=-1352/122
BOT CHORD 3-25=-341/16, 24-25=-340/15, 20-21=-124/1241, 19-20=-125/1240, 18-19=-125/1240,
17-18=-183/1539, 17-37=-183/1539, 37-38=-183/1539, 16-38=-183/1539,
16-39=-144/1173, 39-40=-144/1173, 15-40=-144/1173
WEBS 4-24=-522/170, 5-24=-623/216, 8-21=-56/1013, 9-21=-1435/216, 9-18=-24/499,
11-18=-341/129, 11-16=-290/96, 12-16=0/513, 12-15=-1437/183, 7-22=-470/132,
22-24=-1216/317, 7-24=-83/334, 8-22=-1688/226

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=47ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 2-8-0, Interior(1) 2-8-0 to 11-0-0, Exterior(2) 11-0-0 to 17-7-3, Interior(1) 17-7-3 to 46-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 3x5 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 61 lb uplift at joint 15, 35 lb uplift at joint 2 and 191 lb uplift at joint 22.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
LOAD CASE(S) Standard

Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

January 3,2020

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.
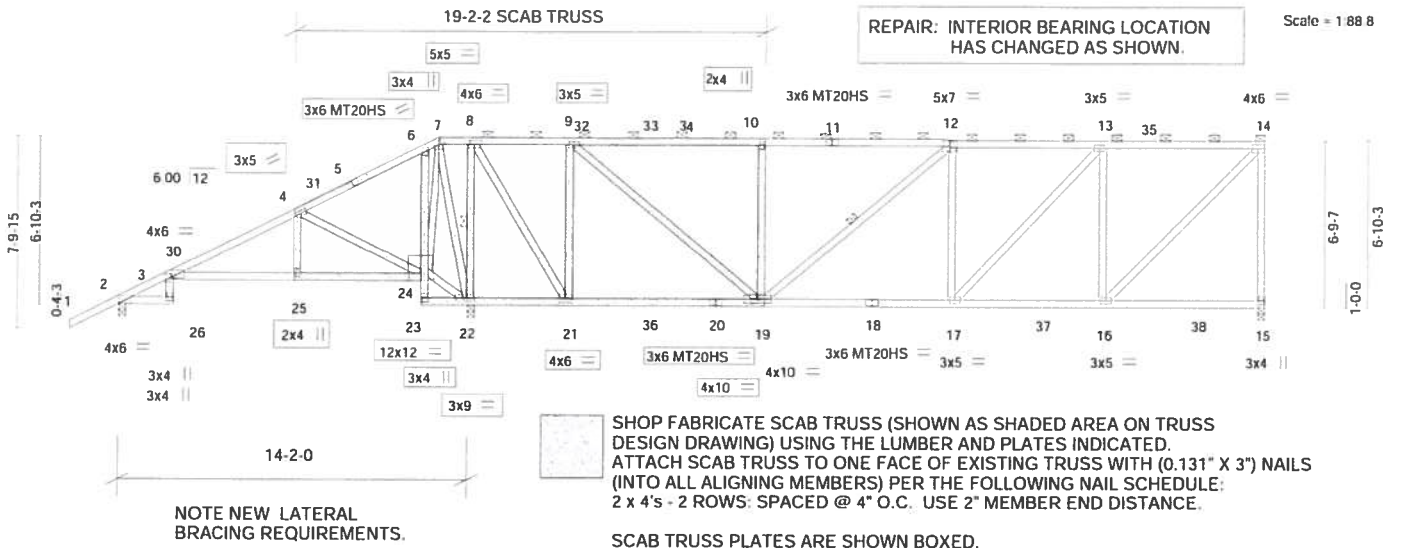
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	LMSAPP-FIN		
LMSAPP-FIN	A4	ROOF SPECIAL	1	1		Units: 1	T19033312
					Job Reference (optional)	Eng: MC	

Mayo Truss, Mayo, Fl

8.240 e Dec 6 2019 MiTek Industries, Inc. Fri Jan 3 11:54:16 2020 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-nlax3CQ0G9ZTwGDx1?yRqxdBer3or51kpSvc3Ozz4x5

```
 -2-0-0   2-2-8     7-3-0       12-3-8   13-0-0    18-4-0              26-1-10         33-8-0   33-9-8   40-1-0     46-8-0
  2-0-0   2-2-8     5-0-8        5-0-8    0-8-8     5-4-0               7-9-10           7-6-6   0-1-8    6-3-8       6-7-0
```

19-2-2 SCAB TRUSS

REPAIR: INTERIOR BEARING LOCATION
HAS CHANGED AS SHOWN.

Scale = 1:88.8

14-2-0

NOTE NEW LATERAL
BRACING REQUIREMENTS.

SHOP FABRICATE SCAB TRUSS (SHOWN AS SHADED AREA ON TRUSS
DESIGN DRAWING) USING THE LUMBER AND PLATES INDICATED.
ATTACH SCAB TRUSS TO ONE FACE OF EXISTING TRUSS WITH (0.131" X 3") NAILS
(INTO ALL ALIGNING MEMBERS) PER THE FOLLOWING NAIL SCHEDULE:
2 x 4's - 2 ROWS: SPACED @ 4" O.C. USE 2" MEMBER END DISTANCE.

SCAB TRUSS PLATES ARE SHOWN BOXED.

```
      2-2-8      7-3-0      12-3-8   14-2-0   18-4-0        26-1-10          33-9-8       40-1-0       46-8-0
      2-2-8      5-0-8       5-0-8   1-10-8    4-2-0        7-9-10           7-7-14        6-3-8        6-7-0
```

Plate Offsets (X,Y)-- [3:0-1-2,0-1-0], [3:0-5-0,0-1-0], [7:0-2-8,0-2-4]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.92	Vert(LL)	-0.12	17-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.24	17-19	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	-0.03	22	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.05	17-19	>999	240	Weight: 308 lb	FT = 15%

TRUSS AND SCAB TRUSS 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, except end verticals, and[PSA]
           2-0-0 oc purlins (4-7-0 max.): 7-14.
BOT CHORD Rigid ceiling directly applied.
WEBS   1 Row at midpt   12-19, 8-22

REACTIONS. (lb/size) 15=1101/0-3-8, 2=245/0-3-8, 22=2495/0-3-8
            Max Horz 2=230(LC 12)
            Max Uplift15=-61(LC 12), 2=-21(LC 12), 22=-206(LC 12)
            Max Grav 15=1224(LC 24), 2=245(LC 1), 22=2495(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   3-30=-224/461, 4-30=-199/563, 4-31=-243/946, 5-31=-231/984, 5-6=-229/1049,
            6-7=-141/978, 7-8=-174/960, 8-32=-280/154, 9-32=-280/154, 9-33=-1202/121,
            33-34=-1202/121, 10-34=-1202/121, 10-11=-1202/121, 11-12=-1204/121,
            12-13=-1366/145, 13-35=-971/106, 14-35=-971/106, 14-15=-1119/176
BOT CHORD   3-25=-413/31, 24-25=-412/30, 21-22=-915/170, 21-36=-154/280, 20-36=-154/280,
            19-20=-154/280, 18-19=-147/1369, 17-18=-147/1369, 17-37=-106/971, 16-37=-106/971
WEBS   4-24=-529/124, 9-21=-1256/257, 9-19=-180/1334, 10-19=-484/175, 12-19=-362/62,
            12-17=-275/121, 13-17=-55/573, 13-16=-820/185, 14-16=-147/1347, 8-22=-1461/221,
            7-22=-455/130, 22-24=-982/204, 8-21=-206/1640

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=47ft; eave=6ft; Cat. II;
   Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 2-8-0, Interior(1) 2-8-0 to 13-0-0, Exterior(2) 13-0-0 to
   17-8-0, Interior(1) 17-8-0 to 46-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
   DOL=1.60
3) Provide adequate drainage to prevent water ponding.
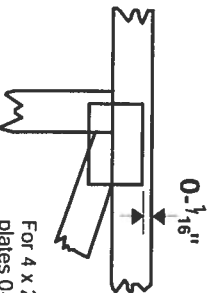4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will
   fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 15, 21 lb uplift at joint 2
   and 206 lb uplift at joint 22.
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.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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January 3,2020

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6904 Parke East Blvd.
Tampa, FL 36610

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.

1 ¾"
0-1/16"

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.
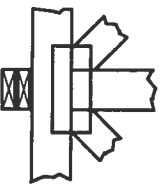
PLATE SIZE

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.

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Numbering System

6-4-8

dimensions shown in ft-in-sixteenths
(Drawings not to scale)
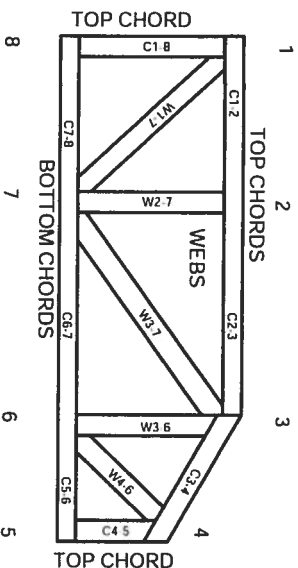
JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

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.

⚠ 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 T or 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.