FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	Sapp Residence	Builder Name:	
Street:		Permit Office:	Columbia County
City, State, Zip:	Lake City , FL , 32024	Permit Number:	
Owner:	Ed Sapp	Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms	4
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft²)	2436
Conditioned floor area below grade (ft²)	0

7. Windows (278.0 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.36	278.00 ft²
SHGC:	SHGC=0.25	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
d. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		5.788 ft.
Area Weighted Average SHGC:		0.250

8. Floor Types (2436.0 sqft.)	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	2436.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types (2163.0 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1929.00 ft²
b. Frame - Wood, Adjacent	R=13.0	234.00 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types (2558.0 sqft.)	Insulation	Area
a. Roof Deck (Unvented)	R=19.0	2558.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Attic, AH: Garage	6	609

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	24.7	SEER:16.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	35.6	HSPF:8.20

14. Hot water systems
a. Electric — Cap: 50 gallons, EF: 0.920
b. Conservation features: None

15. Credits: CV, Pstat

COLUMBIA COUNTY BUILDING DEPT. Received for FILE COPY Code Compliance

Glass/Floor Area: 0.114

Total Proposed Modified Loads: 61.93
Total Baseline Loads: 62.48

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

PREPARED BY: _____
DATE: 10/25/2019

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT: _____
DATE: _____

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

GREAT SEAL OF THE STATE OF FLORIDA * IN GOD WE TRUST *

BUILDING OFFICIAL: _____
DATE: _____

- Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.
- Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	Sapp Residence	Bedrooms:	4	Address Type:	Street Address
Building Type:	User	Conditioned Area:	2436	Lot #	24
Owner Name:	Ed Sapp	Total Stories:	1	Block/Subdivision:	River Rise
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:		Rotate Angle:	0	Street:	
Permit Office:	Columbia County	Cross Ventilation:	Yes	County:	Columbia
Jurisdiction:		Whole House Fan:	No	City, State, Zip:	Lake City , FL , 32024
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	2436	21924

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	2436	21924	Yes	8	4	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulation	Main	242 ft	0	2436 ft²	----	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
_____	1	Hip	Composition shingles	2724 ft²	0 ft²	Medium	N	0.96	No	0.9	No	19	26.6

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Unvented	0	2436 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
_____	1	Under Attic (Unvented)	Main	0	Double Batt	2558 ft²	0.11	Wood

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor	Below Grade%
____	1	S	Exterior	Frame - Wood	Main	13	18		9		162.0 ft²		0.23	0.75	0
____	2	W	Exterior	Frame - Wood	Main	13	4	8	9		42.0 ft²		0.23	0.75	0
____	3	S	Exterior	Frame - Wood	Main	13	14		9		126.0 ft²		0.23	0.75	0
____	4	E	Exterior	Frame - Wood	Main	13	51	4	9		462.0 ft²		0.23	0.75	0
____	5	N	Exterior	Frame - Wood	Main	13	12	6	9		112.5 ft²		0.23	0.75	0
____	6	W	Exterior	Frame - Wood	Main	13	13	4	9		120.0 ft²		0.23	0.75	0
____	7	N	Exterior	Frame - Wood	Main	13	28	8	9		258.0 ft²		0.23	0.75	0
____	8	E	Exterior	Frame - Wood	Main	13	8	4	9		75.0 ft²		0.23	0.75	0
____	9	N	Exterior	Frame - Wood	Main	13	16	10	9		151.5 ft²		0.23	0.75	0
____	10	W	Exterior	Frame - Wood	Main	13	46	8	9		420.0 ft²		0.23	0.75	0
____	11	S	Garage	Frame - Wood	Main	13	26		9		234.0 ft²		0.23	0.75	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
_____	1	S	Insulated	Main	None	.46	3		6	8	20 ft²
_____	2	S	Insulated	Main	None	.46	3		6	8	20 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
_____	1	S	1	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	2 ft 0 in	1 ft 0 in	None	None
_____	2	S	3	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	2 ft 0 in	1 ft 0 in	None	None
_____	3	E	4	Vinyl	Low-E Double	Yes	0.36	0.25	N	45.0 ft²	2 ft 0 in	1 ft 0 in	None	None
_____	4	E	4	Vinyl	Low-E Double	Yes	0.36	0.25	N	4.0 ft²	2 ft 0 in	1 ft 0 in	None	None
_____	5	N	5	Vinyl	Low-E Double	Yes	0.36	0.25	N	15.0 ft²	2 ft 0 in	1 ft 0 in	None	None
_____	6	W	6	Vinyl	Low-E Double	Yes	0.36	0.25	N	15.0 ft²	8 ft 0 in	1 ft 0 in	None	None
_____	7	N	7	Vinyl	Low-E Double	Yes	0.36	0.25	N	45.0 ft²	13 ft 0 in	1 ft 0 in	None	None
_____	8	N	7	TIM	Low-E Double	Yes	0.36	0.25	N	24.0 ft²	13 ft 0 in	1 ft 0 in	None	None
_____	9	N	7	Vinyl	Low-E Double	Yes	0.36	0.25	N	12.0 ft²	13 ft 0 in	1 ft 0 in	None	None
_____	10	E	8	Vinyl	Low-E Double	Yes	0.36	0.25	N	12.0 ft²	8 ft 0 in	1 ft 0 in	None	None
_____	11	N	9	Vinyl	Low-E Double	Yes	0.36	0.25	N	30.0 ft²	2 ft 0 in	1 ft 0 in	None	None
_____	12	W	10	Vinyl	Low-E Double	Yes	0.36	0.25	N	4.0 ft²	2 ft 0 in	1 ft 0 in	None	None
_____	13	W	10	Vinyl	Low-E Double	Yes	0.36	0.25	N	12.0 ft²	2 ft 0 in	1 ft 0 in	None	None

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
_____	1	797.342 ft²	797.342 ft²	87.33 ft	9 ft	1

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INPUT SUMMARY CHECKLIST REPORT

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	1827	100.3	188.63	.1128	5

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump/	None	HSPF:8.2	35.61 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit/	None	SEER: 16	24.74 kBtu/hr	750 cfm	0.7	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	Main	0.92	50 gal	40 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
_____	None	None			ft²		

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	Cool
_____	1	Attic	6	609 ft²	Attic	121.8 ft²	Default Leakage	Garage	(Default) c	(Default) c			1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]
Venting	[ ]	[ ]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[ ]

INPUT SUMMARY CHECKLIST REPORT

Thermostat Schedule: HERS 2006 Reference		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 99

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1.	New (From Plans)
2. Single-family or multiple-family	2.	Single-family
3. No. of units (if multiple-family)	3.	1
4. Number of bedrooms	4.	4
5. Is this a worst case? (yes/no)	5.	No
6. Conditioned floor area (sq. ft.)	6.	2436
7. Windows, type and area		
a) U-factor:(weighted average)	7a.	0.360
b) Solar Heat Gain Coefficient (SHGC)	7b.	0.250
c) Area	7c.	278.0
8. Skylights		
a) U-factor:(weighted average)	8a.	NA
b) Solar Heat Gain Coefficient (SHGC)	8b.	NA
9. Floor type, insulation level:		
a) Slab-on-grade (R-value)	9a.	0.0
b) Wood, raised (R-value)	9b.	
c) Concrete, raised (R-value)	9c.	
10. Wall type and insulation:		
A. Exterior:		
1. Wood frame (Insulation R-value)	10A1.	13.0
2. Masonry (Insulation R-value)	10A2.	
B. Adjacent:		
1. Wood frame (Insulation R-value)	10B1.	13.0
2. Masonry (Insulation R-value)	10B2.	
11. Ceiling type and insulation level		
a) Under attic	11a.	0.0
b) Single assembly	11b.	
c) Knee walls/skylight walls	11c.	
d) Radiant barrier installed	11d.	No

12. Ducts, location & insulation level		
a) Supply ducts	R	6.0
b) Return ducts	R	6.0
c) AHU location		Garage
13. Cooling system:	Capacity	24.7
a) Split system	SEER	
b) Single package	SEER	
c) Ground/water source	SEER/COP	
d) Room unit/PTAC	EER	
e) Other		16.0
14. Heating system:	Capacity	35.6
a) Split system heat pump	HSPF	
b) Single package heat pump	HSPF	
c) Electric resistance	COP	
d) Gas furnace, natural gas	AFUE	
e) Gas furnace, LPG	AFUE	
f) Other		8.20
15. Water heating system		
a) Electric resistance	EF	0.92
b) Gas fired, natural gas	EF	
c) Gas fired, LPG	EF	
d) Solar system with tank	EF	
e) Dedicated heat pump with tank	EF	
f) Heat recovery unit	HeatRec%	
g) Other		
16. HVAC credits claimed (Performance Method)		
a) Ceiling fans		
b) Cross ventilation		Yes
c) Whole house fan		No
d) Multizone cooling credit		
e) Multizone heating credit		
f) Programmable thermostat		Yes

*Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

I certify that this home has complied with the Florida Building Code, Energy Conservation, through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL display card will be completed based on installed code compliant features.

Builder Signature:_____ Date:_____

Address of New Home: _____ City/FL Zip: Lake City, FL 32024

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance
2017 Florida Building Code, Energy Conservation, 6th Edition

Jurisdiction:	Permit #:

Job Information

Builder:	Community:	Lot: NA
Address:		
City: Lake City	State: FL	Zip: 32024

Air Leakage Test Results *Passing results must meet either the Performance, Prescriptive, or ERI Method*

○ **PRESCRIPTIVE METHOD-**The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Climate Zones 1 and 2.

○ **PERFORMANCE or ERI METHOD-**The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on Form R405-2017 (Performance) or R406-2017 (ERI), section labeled as infiltration, sub-section ACH50.

ACH(50) specified on Form R405-2017-Energy Calc (Performance) or R406-2017 (ERI): 5.000

_____ x 60 ÷ 21924 _____ = _____
CFM(50) Building Volume ACH(50)

☐ **PASS**

☐ When ACH(50) is less than 3, Mechanical Ventilation installation must be verified by building department.

Method for calculating building volume:

○ Retrieved from architectural plans

● Code software calculated

○ Field measured and calculated

R402.4.1.2 Testing. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7) *Florida Statues* or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

During testing:
1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, back draft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above Air Leakage results are in accordance with the 2017 6th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____

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 -

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

Site Information:
Customer Info: LDM CONSTRUCTION Project Name: SAPP RESIDENCE Model:
Lot/Block: Subdivision:
Address: 422 SW GREY WAY
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

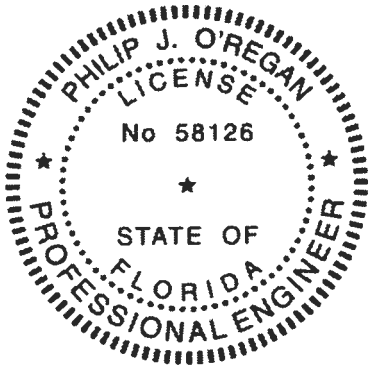
This package includes 35 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T18452780	A1	10/23/19	15	T18452794	A15	10/23/19
2	T18452781	A2	10/23/19	16	T18452795	A16	10/23/19
3	T18452782	A3	10/23/19	17	T18452796	A17	10/23/19
4	T18452783	A4	10/23/19	18	T18452797	A18	10/23/19
5	T18452784	A5	10/23/19	19	T18452798	A19	10/23/19
6	T18452785	A6	10/23/19	20	T18452799	A20	10/23/19
7	T18452786	A7	10/23/19	21	T18452800	A21	10/23/19
8	T18452787	A8	10/23/19	22	T18452801	B	10/23/19
9	T18452788	A9	10/23/19	23	T18452802	BET	10/23/19
10	T18452789	A10	10/23/19	24	T18452803	C	10/23/19
11	T18452790	A11	10/23/19	25	T18452804	CET	10/23/19
12	T18452791	A12	10/23/19	26	T18452805	CGT	10/23/19
13	T18452792	A13	10/23/19	27	T18452806	CJ09	10/23/19
14	T18452793	A14	10/23/19	28	T18452807	CJ09A	10/23/19

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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: ORegan, Philip
My license renewal date for the state of Florida is February 28. 2021.



Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

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.

October 23,2019

RE: LMSAPP -

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

Site Information:

Customer Info: LDM CONSTRUCTION Project Name: SAPP RESIDENCE Model:
Lot/Block: Subdivision:
Address: 422 SW GREY WAY
City: HIGH SPRINGS State: FL

No.	Seal#	Truss Name	Date
29	T18452808	EJ7	10/23/19
30	T18452809	EJ7A	10/23/19
31	T18452810	J01	10/23/19
32	T18452811	J03	10/23/19
33	T18452812	J03A	10/23/19
34	T18452813	J05	10/23/19
35	T18452814	J05A	10/23/19

Job	Truss	Truss Type	Qty	Ply	T18452780
_MSAPP	A1	Half Hip Girder	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:17 2019 Page 1
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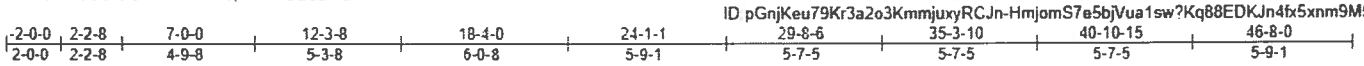

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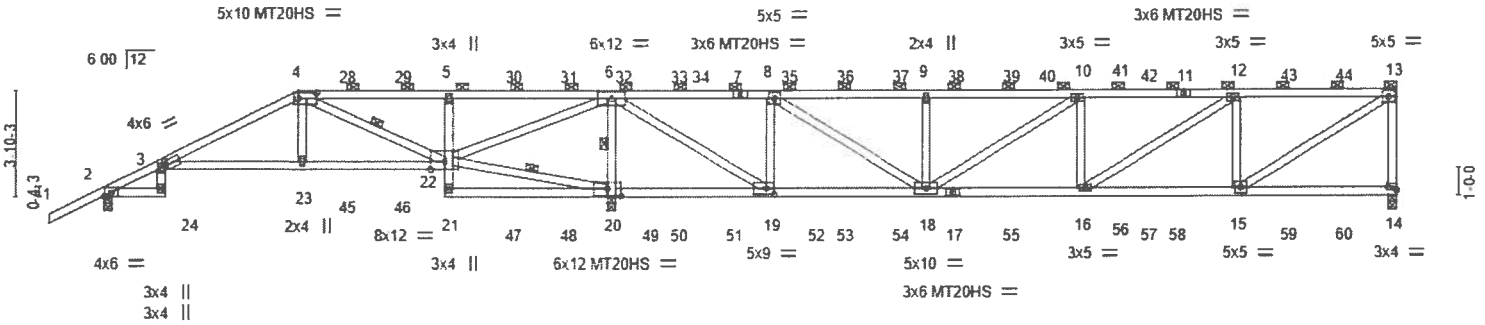

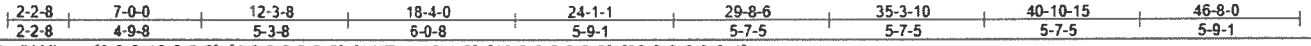

Plate Offsets (X,Y)-- [3:0-0-12,0-2-0], [4:0-8-0,0-2-8], [14:Edge,0-1-8], [19:0-3-8,0-2-8], [20:0-6-0,0-3-4]

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	0.93	Vert(LL)	-0.24	3-23	>903	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-0.49	3-23	>445	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.21	14	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Wind(LL)	0.19	3-23	>999	240	Weight: 254 lb	FT = 15%

LUMBER-

TOP CHORD 2x4 SP No.1 *Except* 1-4: 2x4 SP SS, 11-13: 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 3-22: 2x4 SP No.1
WEBS 2x4 SP No.2 *Except* 6-19: 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-6-9 max.): 4-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 20-21,18-19. 2-4-3 oc bracing: 19-20.
WEBS 1 Row at midpt 4-22, 20-22, 6-20

REACTIONS. (lb/size) 14=1917/0-3-8, 2=603/0-3-8, 20=5450/0-3-8
Max Horz 2=145(LC 8)
Max Uplift 14=-184(LC 5), 2=-80(LC 8), 20=-391(LC 8)
Max Grav 14=1961(LC 18), 2=603(LC 1), 20=5450(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-26=-316/0, 3-4=-719/108, 4-5=-106/1474, 5-6=-98/1464, 6-8=-29/437, 8-9=-2214/179, 9-10=-2214/179, 10-12=-3002/226, 12-13=-2335/174, 13-14=-1854/234
BOT CHORD 3-23=-62/631, 22-23=-55/673, 5-22=-702/216, 19-20=-4344/309, 18-19=-437/29, 16-18=-226/3002, 15-16=-174/2335
WEBS 4-23=0/771, 4-22=-2372/154, 20-22=-4255/281, 6-22=-230/3139, 6-20=-4434/485, 6-19=-329/4674, 8-19=-2172/326, 8-18=-208/2809, 9-18=-685/215, 10-18=-1015/72, 12-16=-62/789, 12-15=-1156/265, 13-15=-202/2702

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) 20 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 100 lb uplift at joint(s) 2 except (jt=lb) 14=184, 20=391.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

Continued on page 2

MiTek
6904 Parke East Blvd
Tampa, FL 36610

NOTES-

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 18-8-12, 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 30-8-12, 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, 4-13=-60, 24-25=-20, 3-22=-20, 14-21=-20

Concentrated Loads (lb)

Vert: 4=-109(F) 7=-121(F) 13=-154(F) 22=-59(F) 5=-121(F) 23=-442(F) 12=-121(F) 15=-59(F) 11=-121(F) 17=-59(F) 28=-109(F) 29=-109(F) 30=-121(F) 31=-121(F) 32=-121(F) 33=-121(F) 35=-121(F) 36=-121(F) 37=-121(F) 38=-121(F) 39=-121(F) 41=-121(F) 42=-121(F) 43=-121(F) 44=-121(F) 45=-71(F) 46=-71(F) 47=-59(F) 48=-59(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)

Job	Truss	Truss Type	Qty	Ply	
LMSAPP	A2	Half Hip	1	1	T18452781

SANTA FE TRUSS COMPANY INC. BELL FL

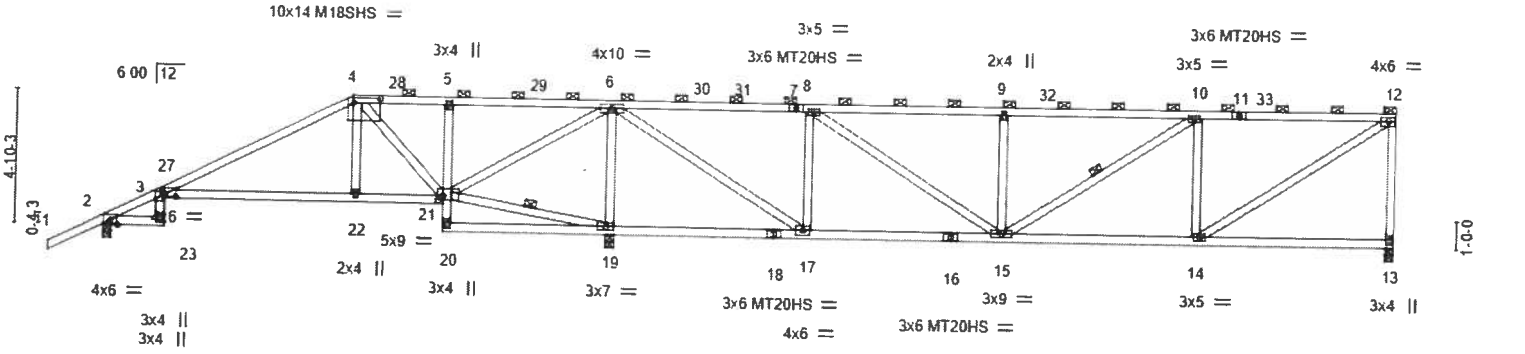
Job Reference (optional)

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:34 2019 Page 1

ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-H1EEKGKI4ps4QCq7Q38pKjRBIAhB8d6RhvnmCbyQp1h

2-0-0	2-2-8	9-0-0	12-3-8	18-4-0	25-5-14	32-5-0	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

Scale = 1:83.4



2-2-8	9-0-0	12-3-8	18-4-0	25-5-14	32-6-0	39-6-2	46-8-0
2-2-8	6-9-8	3-3-8	6-0-8	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], [4:0-11-8,0-2-4], [21:0-2-4,0-2-0]

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	0.69	Vert(LL)	-0.17	3-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.38	3-22	>578	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.12	19	n/a	n/a	M18SHS	244/190
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.16	3-22	>999	240	Weight: 260 lb	FT = 15%

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 (5-0-6 max.): 4-12.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 19-21, 10-15

REACTIONS. (lb/size) 13=789/0-3-8, 2=339/0-3-8, 19=2714/0-3-8
Max Horz 2=174(LC 12)
Max Uplift 13=-58(LC 9), 2=-52(LC 12), 19=-197(LC 12)
Max Grav 13=887(LC 22), 2=339(LC 1), 19=2714(LC 1)

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

TOP CHORD 3-4=-198/444, 4-5=-288/992, 5-6=-275/961, 6-8=-281/263, 8-9=-1070/86, 9-10=-1070/86, 10-12=-1011/92, 12-13=-820/122
BOT CHORD 3-22=-304/86, 21-22=-295/87, 5-21=-259/110, 17-19=-2015/511, 15-17=-263/281, 14-15=-92/1011
WEBS 4-22=0/294, 4-21=-1003/290, 19-21=-1963/466, 6-21=-276/1231, 6-19=-2227/475, 6-17=-343/2185, 8-17=-1038/272, 8-15=-217/1121, 9-15=-411/146, 10-14=-487/149, 12-14=-104/1159

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 100 lb uplift at joint(s) 13, 2 except (jt=lb) 19=197.
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.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

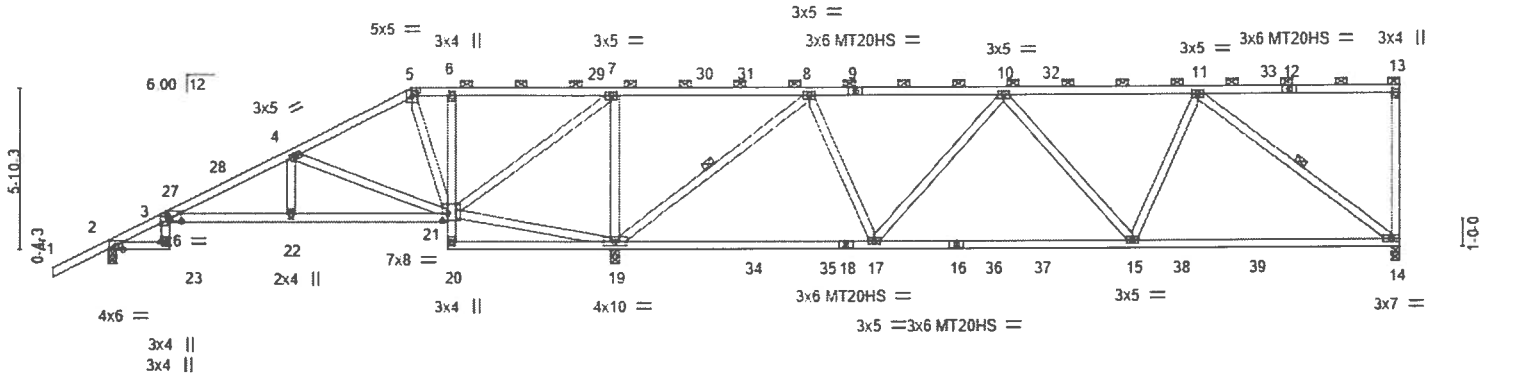
October 23,201

Job	Truss	Truss Type	Qty	Ply	T18452782
MSAPP	A3	Half Hip	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:41 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-aNAtogPhRzl5mGsTK1mS6CDLS_?yHmITlV_dxhyQp1a

-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 = 1:83.4



2-2-8	6-7-4	12-3-8	18-4-0	27-8-3	37-0-5	46-8-0
2-2-8	4-4-12	5-8-4	6-0-8	9-4-3	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], [21:0-2-8,0-2-12]

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	0.79	Vert(LL)	-0.19	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.38	14-15	>890	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.09	14	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.08	3-22	>999	240	Weight: 270 lb	FT = 15%

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 (5-6-5 max.): 5-13.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-19, 11-14

REACTIONS. (lb/size) 14=803/0-3-8, 2=360/0-3-8, 19=2679/0-3-8
Max Horz 2=203(LC 12)
Max Uplift 14=-57(LC 9), 2=-45(LC 12), 19=-203(LC 12)
Max Grav 14=911(LC 22), 2=360(LC 1), 19=2679(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-190/703, 5-6=-166/715, 6-7=-159/704, 7-8=-379/1580, 8-10=-589/35, 10-11=-960/57
BOT CHORD 6-21=-259/115, 17-19=-219/303, 15-17=-83/919, 14-15=-95/853
WEBS 4-22=0/260, 4-21=-600/187, 5-21=-429/162, 19-21=-1513/373, 7-21=-278/1129, 7-19=-1097/313, 8-19=-1851/306, 8-17=-40/856, 10-17=-706/196, 10-15=-9/252, 11-15=0/276, 11-14=-1030/122

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) 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 100 lb uplift at joint(s) 14, 2 except (jt=lb) 19=203.
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.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

Job	Truss	Truss Type	Qty	Ply	T18452783
LMSAPP	A4	Roof Special	1	1	Job Reference (optional)

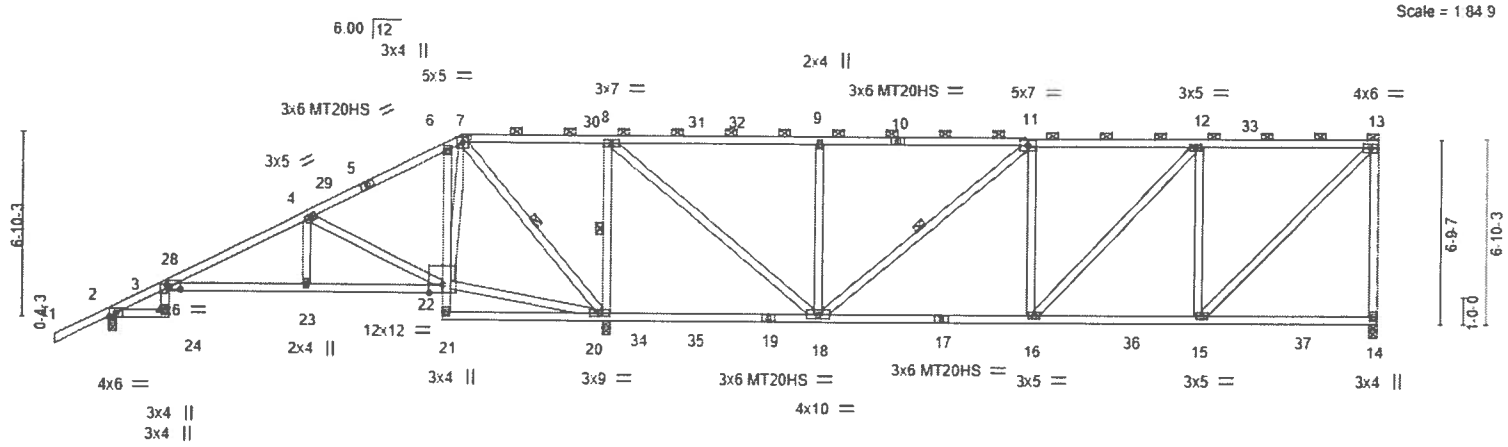
SANTA FE TRUSS COMPANY INC. BELL FL

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:42 2019 Page 1

ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-2ZjF?0QJCGtyOQRfulHhePmWTOP70L_cW9jBU7yQp1Z

-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

Scale = 1:84.9



2-2-8	7-3-0	12-3-8	18-4-0	26-1-10	33-9-8	40-1-0	46-8-0
2-2-8	5-0-8	5-0-8	6-0-8	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-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.77	Vert(LL)	-0.09	18-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.55	Vert(CT)	-0.18	16-18	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.06	20	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.07	3-23	>999	240	Weight: 295 lb	FT = 15%

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 (5-8-7 max.): 7-13.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-20, 8-20, 11-18

REACTIONS. (lb/size) 14=826/0-3-8, 2=323/0-3-8, 20=2693/0-3-8
Max Horz 2=230(LC 12)
Max Uplift 14=-55(LC 9), 2=-28(LC 12), 20=-221(LC 12)
Max Grav 14=999(LC 24), 2=323(LC 1), 20=2693(LC 1)

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

TOP CHORD 3-4=-175/324, 4-6=-202/849, 6-7=-110/811, 7-8=-271/1364, 8-9=-491/84, 9-11=-493/84, 11-12=-931/73, 12-13=-748/69, 13-14=-890/131
BOT CHORD 18-20=-1247/250, 16-18=-75/929, 15-16=-69/748
WEBS 4-23=0/253, 4-22=-582/134, 20-22=-730/132, 7-22=-133/326, 7-20=-1055/253, 8-20=-1557/306, 8-18=-243/1756, 9-18=-482/174, 11-18=-778/131, 12-16=-20/266, 12-15=-591/148, 13-15=-95/1031

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 100 lb uplift at joint(s) 14, 2 except (jt=lb) 20=221.
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.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

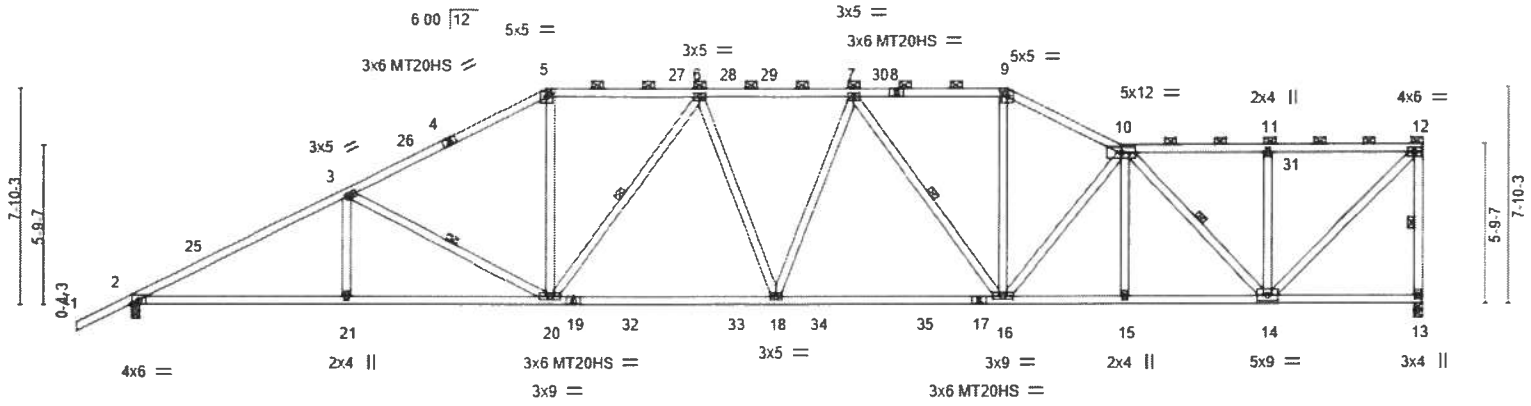
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452784
_MSAPP	A5	Roof Special	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:44 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-_yr?QhSZku7gdkb2?AJ9kqru4C?_UD3v_TCIY0yQp1X

-2-0-0	7-9-4	15-0-0	20-6-11	26-1-5	31-8-0	35-9-8	41-1-0	46-8-0
2-0-0	7-9-4	7-2-12	5-6-11	5-6-11	5-6-11	4-1-8	5-3-8	5-7-0

Scale = 1:83.4



7-9-4	15-0-0	23-4-0	31-8-0	35-9-8	41-1-0	46-8-0
7-9-4	7-2-12	8-4-0	8-4-0	4-1-8	5-3-8	5-7-0

Plate Offsets (X,Y)— [5:0-2-8,0-2-4], [9:0-2-8,0-2-4]

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	0.70	Vert(LL)	-0.30	18-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.85	Vert(CT)	-0.59	18-20	>944	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.19	13	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.18	18	>999	240	Weight: 289 lb	FT = 15%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
17-19: 2x4 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-3-1 max.): 5-9, 10-12.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 12-13, 3-20, 6-20, 7-16, 10-14

REACTIONS. (lb/size) 13=1858/0-3-8, 2=1983/0-3-8
Max Horz 2=201(LC 12)
Max Uplift 13=-120(LC 12), 2=-168(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown
TOP CHORD 2-3=-3599/464, 3-5=-2923/451, 5-6=-2541/457, 6-7=-2878/468, 7-9=-2519/428, 9-10=-2846/438, 10-11=-1664/238, 11-12=-1664/238, 12-13=-1805/302
BOT CHORD 2-21=-534/3154, 20-21=-534/3154, 18-20=-428/2845, 16-18=-422/2829, 15-16=-402/2803, 14-15=-400/2804
WEBS 3-21=0/306, 3-20=-711/158, 5-20=-45/929, 6-20=-641/99, 7-18=-5/251, 7-16=-655/118, 9-16=-77/993, 10-16=-495/103, 10-14=-1643/246, 11-14=-364/145, 12-14=-333/2338

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 15-0-0, Exterior(2) 15-0-0 to 19-8-0, Interior(1) 19-8-0 to 31-8-0, Exterior(2) 31-8-0 to 35-9-8, Interior(1) 35-9-8 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 100 lb uplift at joint(s) except (jt=lb) 13=120, 2=168.
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.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,201

MiTek
6904 Parke East Blvd
Tampa, FL 36610

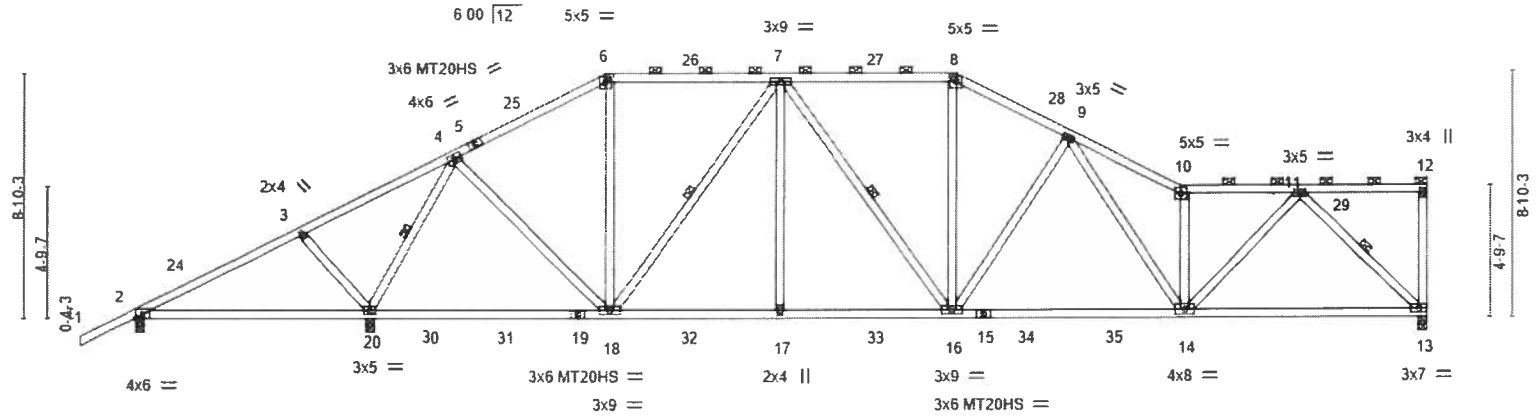
Job	Truss	Truss Type	Qty	Ply	T18452785
_MSAPP	A6	Roof Special	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:45 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-S8POe1SCVBFWFuAEZtqOG2O6scM1DfO2D7yr4SyQp1W

-2-0-0	6-0-5	11-6-3	17-0-0	23-4-0	29-8-0	33-8-12	37-9-8	42-1-0	46-8-0
2-0-0	6-0-5	5-5-13	5-5-13	6-4-0	6-4-0	4-0-12	4-0-12	4-3-8	4-7-0

Scale = 1:83.4



8-5-12	17-0-0	23-4-0	29-8-0	37-9-8	46-8-0
8-5-12	8-6-4	6-4-0	6-4-0	8-1-8	8-10-8

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

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	0.51	Vert(LL)	-0.22	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.79	Vert(CT)	-0.39	14-16	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.07	13	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.16	20-23	>627	240	Weight: 292 lb	FT = 15%

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 (3-10-11 max.): 6-8, 10-12.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-20, 7-18, 7-16, 11-13

REACTIONS. (lb/size) 13=1436/0-3-8, 2=90/0-3-8, 20=2316/0-3-8
Max Horz 2=172(LC 12)
Max Uplift 13=-86(LC 12), 2=-150(LC 24), 20=-255(LC 12)
Max Grav 13=1436(LC 1), 2=168(LC 21), 20=2327(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-114/723, 3-4=-129/921, 4-6=-1137/200, 6-7=-964/213, 7-8=-1602/296, 8-9=-1823/295, 9-10=-2512/310, 10-11=-2169/234
BOT CHORD 2-20=-628/3, 18-20=-59/274, 17-18=-157/1486, 16-17=-157/1486, 14-16=-227/1871, 13-14=-171/1251
WEBS 3-20=-353/176, 4-20=-2142/307, 4-18=-53/1058, 7-18=-927/136, 7-17=0/291, 8-16=-9/542, 9-16=-562/133, 9-14=-35/630, 10-14=-1291/205, 11-14=-95/1353, 11-13=-1749/251

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 17-0-0, Exterior(2) 17-0-0 to 20-0-0, Interior(1) 20-0-0 to 29-8-0, Exterior(2) 29-8-0 to 32-8-0, Interior(1) 32-8-0 to 46-6-4 zone; porch left exposed;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 100 lb uplift at joint(s) 13 except (jt=lb) 2=150, 20=255.
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.

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Philip J. O'Regan PE No.58128
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,201

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	
_MSAPP	A7	Roof Special	1	1	T18452786

SANTA FE TRUSS COMPANY INC. BELL FL

Job Reference (optional)

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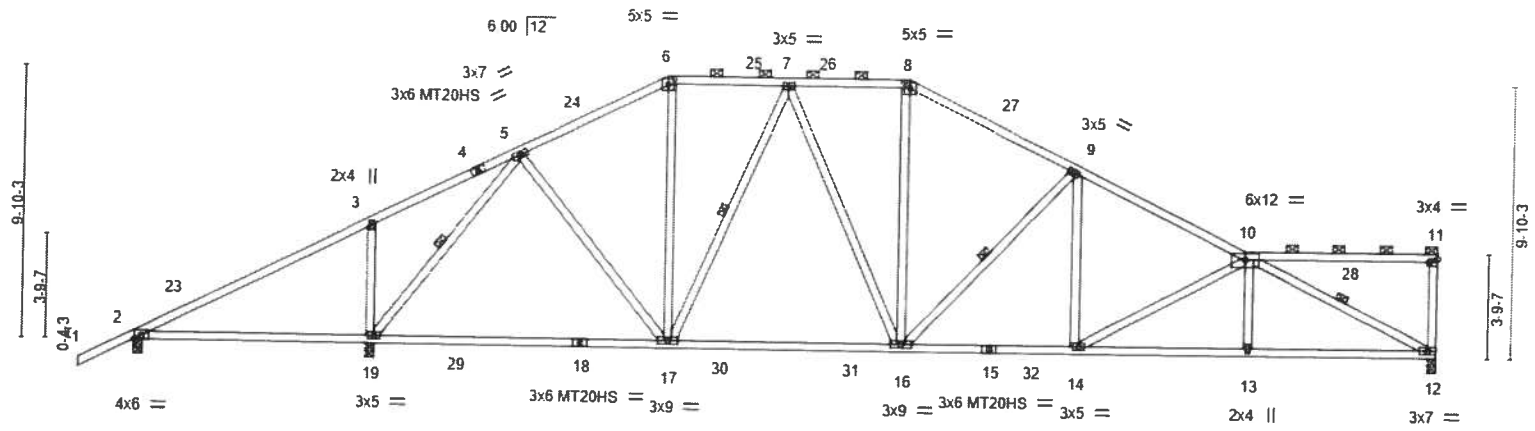
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-xLzmrNTqGVNNs2IR7bLdpFxDT?f7y5?CRnhOduyQp1V

-2-0-0	8-5-12	13-8-14	19-0-0	23-4-0	27-8-0	33-8-12	39-9-8	46-8-0
2-0-0	8-5-12	5-3-2	5-3-2	4-4-0	4-4-0	6-0-12	6-0-12	6-10-8

Scale = 1:82.7



8-5-12	19-0-0	27-8-0	33-8-12	39-9-8	46-8-0
8-5-12	10-6-4	8-8-0	6-0-12	6-0-12	6-10-8

Plate Offsets (X,Y)-- [6:0-2-8,0-2-4], [8:0-2-8,0-2-4], [11:Edge,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	0.71	Vert(LL)	-0.36	17-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.58	17-19	>781	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.09	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.22	19-22	>459	240	Weight: 289 lb	FT = 15%

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 (4-10-10 max.): 6-8, 10-11.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-19, 7-17, 9-16, 10-12

REACTIONS. (lb/size) 12=1447/0-3-8, 2=140/0-3-8, 19=2254/0-3-8
Max Horz 2=149(LC 11)
Max Uplift 12=-87(LC 12), 2=-134(LC 12), 19=-237(LC 12)
Max Grav 12=1447(LC 1), 2=231(LC 21), 19=2266(LC 2)

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

TOP CHORD 2-3=-122/738, 3-5=0/668, 5-6=-1267/244, 6-7=-1085/254, 7-8=-1428/308, 8-9=-1658/297, 9-10=-2189/287
BOT CHORD 2-19=-613/55, 17-19=-89/706, 16-17=-110/1300, 14-16=-200/1896, 13-14=-262/2322, 12-13=-259/2327
WEBS 3-19=-477/226, 5-19=-2003/187, 5-17=0/720, 6-17=0/317, 7-17=-642/126, 7-16=-28/352, 8-16=-14/452, 9-16=-732/137, 9-14=0/432, 10-14=-514/75, 10-13=0/266, 10-12=-2549/279

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 19-0-0, Exterior(2) 19-0-0 to 22-0-0, Interior(1) 22-0-0 to 27-8-0, Exterior(2) 27-8-0 to 30-8-0, Interior(1) 30-8-0 to 46-6-4 zone; porch left exposed;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 100 lb uplift at joint(s) 12 except (jt=lb) 2=134, 19=237.
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.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	
_MSAPP	A8	Roof Special	1	1	T18452787

SANTA FE TRUSS COMPANY INC. BELL FL

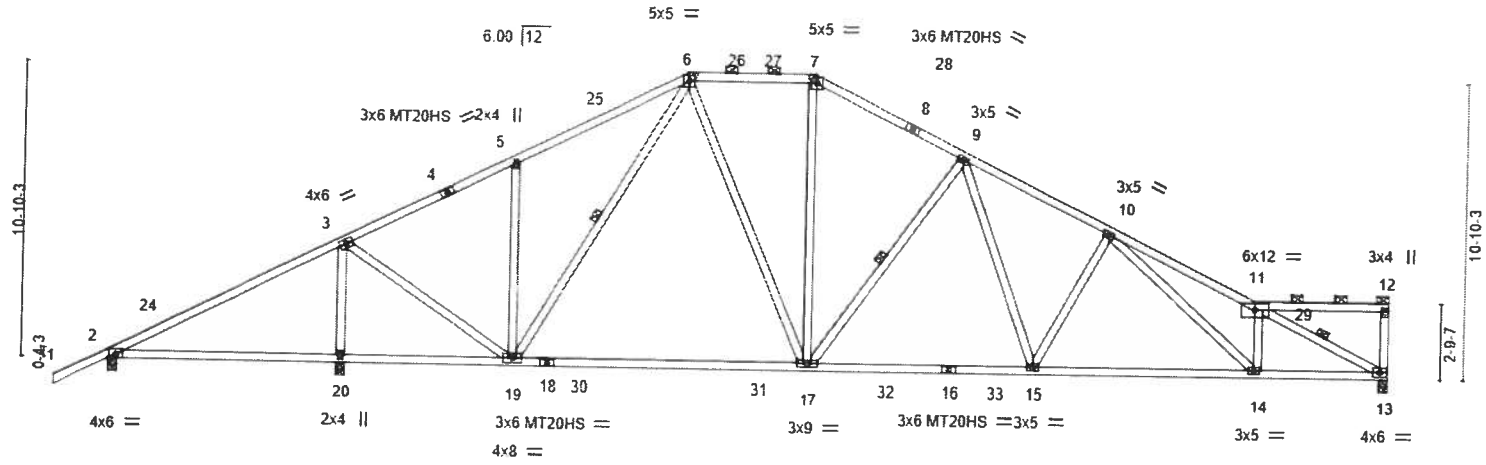
Job Reference (optional)

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:47 2019 Page 1

ID:pGnjKeu79Kr3aZo3KmmjuxyRCJn-PXX83jUS1pVEUBKdhlssLSTOtP0ehYfLgRRy9LyQp1U

-2-0-0	8-5-12	14-8-14	21-0-0	25-8-0	31-0-8	36-5-0	41-9-8	46-8-0
2-0-0	8-5-12	6-3-2	6-3-2	4-8-0	5-4-8	5-4-8	5-4-8	4-10-8

Scale = 1:84.2



	8-5-12	14-8-14	25-8-0	33-8-12	41-9-8	46-8-0
	8-5-12	6-3-2	10-11-2	8-0-12	8-0-12	4-10-8

Plate Offsets (X,Y)— [6:0-2-8,0-2-4], [7:0-2-8,0-2-4]

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	0.73	Vert(LL)	-0.48	17-19	>953	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.81	17-19	>564	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.07	13	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.20	20-23	>500	240	Weight: 284 lb	FT = 15%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 16-18: 2x4 SP No.1
WEBS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-0-15 max.): 6-7, 11-12.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-19, 9-17, 11-13

REACTIONS. (lb/size) 13=1448/0-3-8, 2=143/0-3-8, 20=2250/0-3-8
Max Horz 2=172(LC 11)
Max Uplift 13=-84(LC 12), 2=-133(LC 12), 20=-241(LC 12)
Max Grav 13=1448(LC 1), 2=246(LC 21), 20=2250(LC 1)

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

TOP CHORD 2-3=-100/765, 3-5=-1030/163, 5-6=-1026/265, 6-7=-1311/297, 7-9=-1518/292, 9-10=-2196/311, 10-11=-2801/336
BOT CHORD 2-20=-629/63, 19-20=-629/63, 17-19=-48/1102, 15-17=-133/1686, 14-15=-211/2087, 13-14=-242/2436
WEBS 3-20=-2109/307, 3-19=-84/1717, 5-19=-355/162, 6-19=-543/36, 6-17=-27/645, 7-17=-24/412, 9-17=-733/168, 9-15=-35/629, 10-15=-465/144, 10-14=-53/542, 11-13=-2696/259

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 21-0-0, Exterior(2) 21-0-0 to 24-0-0, Interior(1) 24-0-0 to 25-8-0, Exterior(2) 25-8-0 to 28-8-0, Interior(1) 28-8-0 to 46-6-4 zone; porch left exposed;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 100 lb uplift at joint(s) 13 except (jt=lb) 2=133, 20=241.
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.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452788
_MSAPP	A9	Hip	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:48 2019 Page 1

ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-tj5WG3V4n6d56LupE0O5ug0Y1pNXQzDVv5AVhnyQp1T

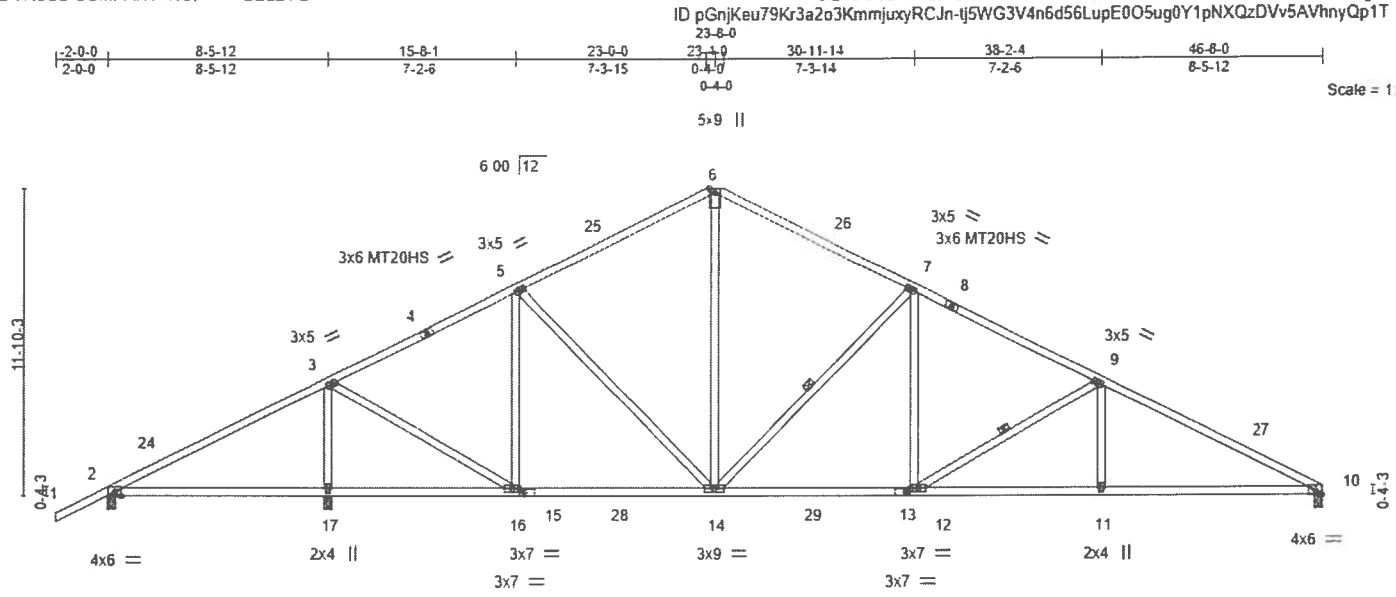

Plate Offsets (X,Y)— [13:0-2-3,0-1-8], [15:0-2-3,0-1-8]

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	0.83	Vert(LL)	-0.17	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.87	Vert(CT)	-0.36	11-23	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.21	17-20	>494	240	Weight: 258 lb	FT = 15%

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.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 7-14, 9-12

REACTIONS. (lb/size) 2=146/0-3-8, 17=2252/0-3-8, 10=1455/0-3-8
Max Horz 2=206(LC 11)
Max Uplift 2=-161(LC 12), 17=-208(LC 12), 10=-89(LC 12)
Max Grav 2=263(LC 21), 17=2252(LC 1), 10=1455(LC 1)

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

TOP CHORD	2-3=-24/746, 3-5=-1096/214, 5-6=-1301/304, 6-7=-1301/307, 7-9=-1991/305, 9-10=-2666/311
BOT CHORD	2-17=-615/77, 16-17=-615/77, 14-16=0/967, 12-14=-57/1690, 11-12=-177/2323, 10-11=-177/2323
WEBS	3-17=-2050/274, 3-16=-47/1670, 5-16=-711/142, 5-14=0/377, 6-14=-67/677, 7-14=-929/174, 7-12=0/580, 9-12=-736/145, 9-11=0/332

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 23-4-0, Exterior(2) 23-4-0 to 27-6-15, Interior(1) 27-6-15 to 46-8-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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) 10 except (jt=lb) 2=161, 17=208.
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.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452789
_MSAPP	A10	Common	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:18 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-lyHAzo7GsurMVkc2Uir3gLmPqj6TOM34?QvwdWyQp1x

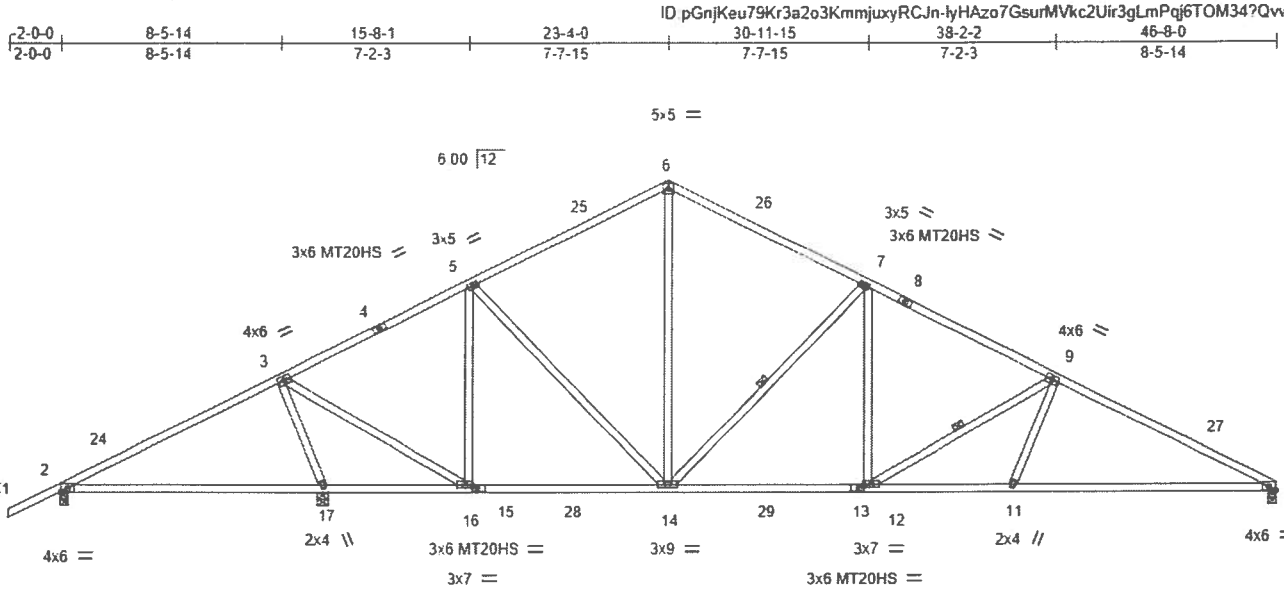

Plate Offsets (X,Y)— [13:0-2-3,0-1-8], [15:0-2-3,0-1-8]

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	0.88	Vert(LL)	-0.26	11-23	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.60	11-23	>732	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.34	17-20	>358	240	Weight: 259 lb	FT = 15%

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.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-14, 9-12

REACTIONS. (lb/size) 2=334/0-3-8, 17=2116/0-4-15, 10=1403/0-3-8
Max Horz 2=208(LC 11)
Max Uplift 2=-180(LC 12), 17=-228(LC 12), 10=-84(LC 12)
Max Grav 2=421(LC 21), 17=2116(LC 1), 10=1403(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-65/378, 3-5=-877/172, 5-6=-1185/273, 6-7=-1186/277, 7-9=-1874/278, 9-10=-2517/295
BOT CHORD 2-17=-309/23, 16-17=-1025/121, 14-16=0/771, 12-14=-32/1584, 11-12=-129/2275, 10-11=-162/2195
WEBS 6-14=-55/601, 7-14=-935/172, 7-12=0/576, 9-12=-801/116, 9-11=0/375, 5-14=0/480, 5-16=-871/154, 3-16=-60/1938, 3-17=-2058/263

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 23-4-0, Exterior(2) 23-4-0 to 26-4-0, Interior(1) 26-4-0 to 46-8-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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) 10 except (jt=lb) 2=180, 17=228.
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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Philip J. O'Regan PE No.58128
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	
_MSAPP	A11	Roof Special	1	1	T18452790

SANTA FE TRUSS COMPANY INC. BELL FL — Job Reference (optional)

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:19 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-D8qZA88udC_D7uBE2QMIDZJdE7U27woEE4eTAyyQp1w

-2-0-0 | 8-0-8 | 15-6-8 | 23-4-0 | 30-1-8 | 35-5-8 | 40-9-8 | 46-8-0
2-0-0 | 8-0-8 | 7-6-0 | 7-9-8 | 6-9-8 | 5-4-0 | 5-4-0 | 5-10-8

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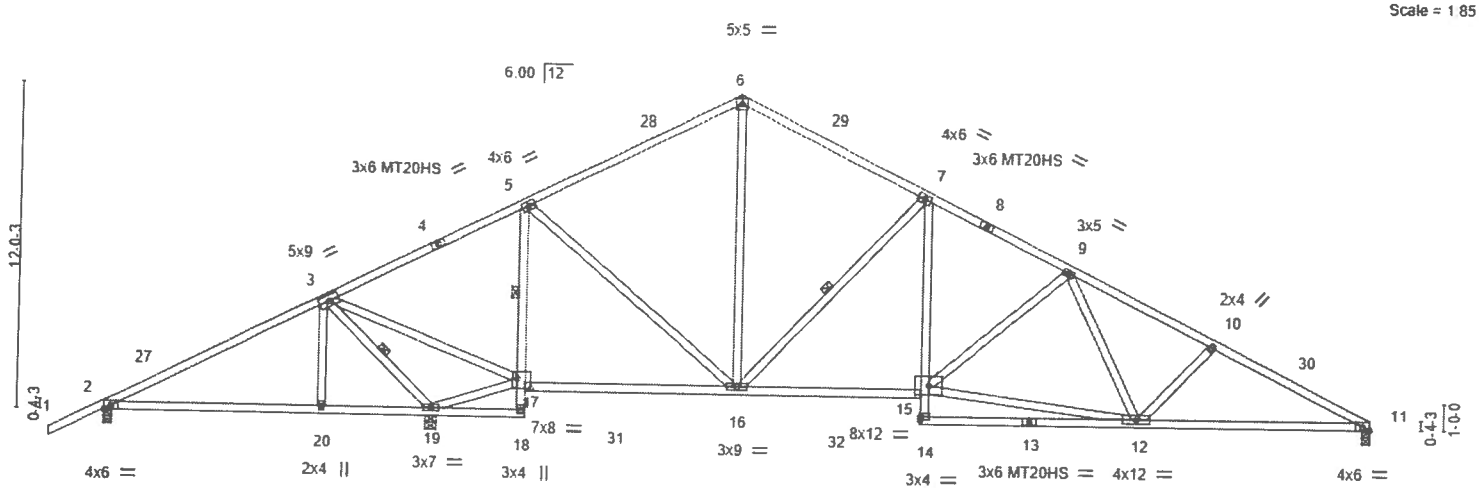

8-0-8 | 12-1-4 | 15-6-8 | 23-4-0 | 30-1-8 | 38-0-9 | 46-8-0
8-0-8 | 4-0-12 | 3-5-4 | 7-9-8 | 6-9-8 | 7-11-1 | 8-7-7

Plate Offsets (X,Y)— [17:0-6-0,0-4-4]

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	0.65	Vert(LL)	-0.13	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.79	Vert(CT)	-0.28	12-14	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.15	20-23	>949	240	Weight: 284 lb	FT = 15%

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.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 5-17
WEBS 1 Row at midpt 3-19, 7-16

REACTIONS. (lb/size) 2=266/0-3-8, 19=2326/0-4-15, 11=1261/0-3-8
Max Horz 2=208(LC 11)
Max Uplift 2=-189(LC 12), 19=-269(LC 12), 11=-73(LC 12)
Max Grav 2=391(LC 21), 19=2326(LC 1), 11=1261(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown
TOP CHORD 2-3=-62/507, 3-5=-262/65, 5-6=-944/220, 6-7=-925/225, 7-9=-1653/239, 9-10=-2125/254, 10-11=-2353/267
BOT CHORD 2-20=-457/0, 19-20=-458/0, 5-17=-1324/224, 15-16=0/1436, 7-15=-11/733, 11-12=-165/2070
WEBS 3-20=-179/284, 3-19=-2222/473, 17-19=-1885/321, 3-17=-128/2048, 5-16=-25/834, 6-16=-18/410, 7-16=-1034/172, 12-15=-77/1649, 9-15=-434/121, 9-12=0/313, 10-12=-349/145

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 23-4-0, Exterior(2) 23-4-0 to 26-4-0, Interior(1) 26-4-0 to 46-8-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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) 11 except (jt=lb) 2=189, 19=269.
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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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452791
_MSAPP	A12	Roof Special	3	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8 240 s Jul 14 2019 MiTek Industries, Inc Tue Oct 22 16 24 20 2019 Page 1
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2-0-0	8-0-8	15-6-8	23-4-0	30-1-8	35-5-8	40-9-8	46-8-0	48-8-0
2-0-0	8-0-8	7-6-0	7-9-8	6-9-8	5-4-0	5-4-0	5-10-8	2-0-0

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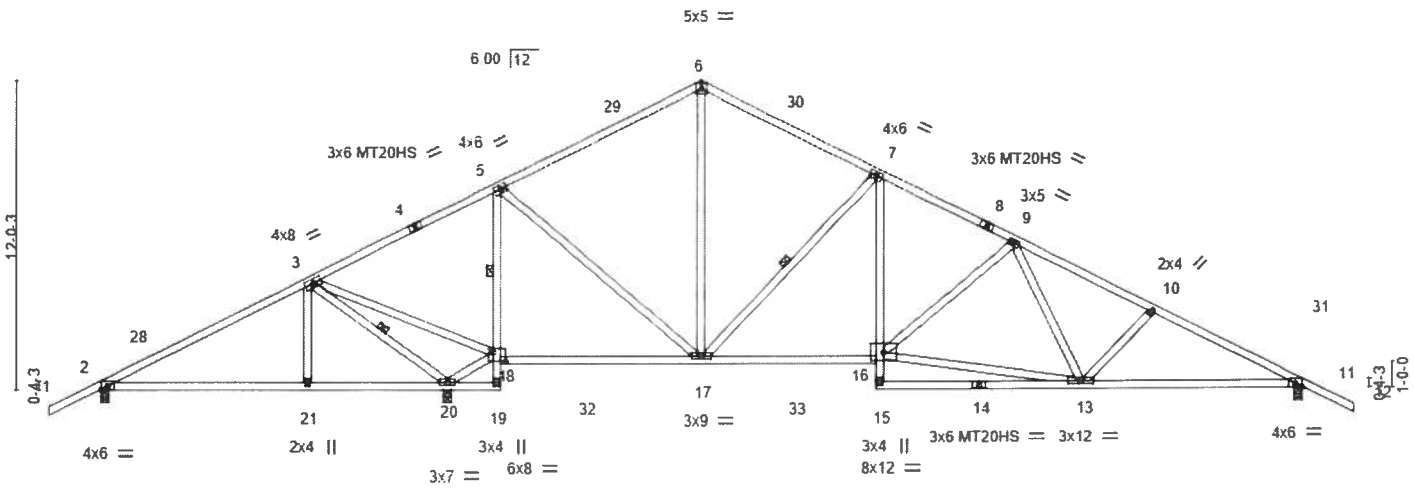

8-0-8	13-5-12	15-6-8	23-4-0	30-1-8	38-0-9	46-8-0
8-0-8	5-5-4	2-0-12	7-9-8	6-9-8	7-11-1	8-7-7

Plate Offsets (X,Y)-- [18 0-6-0,0-4-4]

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	0.63	Vert(LL)	-0 12	16-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1 25	BC	0 76	Vert(CT)	-0.26	13-15	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0 46	Horz(CT)	0 07	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.15	21-24	>999	240	Weight 287 lb	FT = 15%

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
BOT CHORD Rigid ceiling directly applied Except
1 Row at midpt 5-18
WEBS 1 Row at midpt 3-20, 7-17

REACTIONS. (lb/size) 2=295/0-3-8, 20=2379/0-3-8, 11=1300/0-3-8
Max Horz 2=-209(LC 10)
Max Uplift 2=-212(LC 12), 20=-273(LC 12), 11=-136(LC 12)
Max Grav 2=420(LC 21), 20=2379(LC 1), 11=1300(LC 1)

FORCES. (lb) - Max Comp./Max Ten - All forces 250 (lb) or less except when shown
TOP CHORD 2-3=-122/474, 3-5=-31/448, 5-6=-744/193, 6-7=-715/200, 7-9=-1428/200, 9-10=-1908/193, 10-11=-2145/201
BOT CHORD 2-21=-427/31, 20-21=-429/23, 5-18=-1620/260, 17-18=-320/240, 16-17=0/1232, 7-16=0/711, 11-13=-93/1865
WEBS 3-21=-182/303, 3-20=-1910/386, 18-20=-2003/328, 3-18=-13/1564, 5-17=-61/1122, 6-17=-7/270, 7-17=-1013/165, 13-16=-20/1457, 9-16=-440/114, 9-13=0/329, 10-13=-330/127

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=24ft; eave=6ft; Cat II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 23-4-0, Exterior(2) 23-4-0 to 26-4-0, Interior(1) 26-4-0 to 48-8-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1 60 plate grip DOL=1 60
3) All plates are MT20 plates unless otherwise indicated
4) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
5) * This truss has been designed for a live load of 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) except (jt=lb) 2=212, 20=273, 11=136
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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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,201

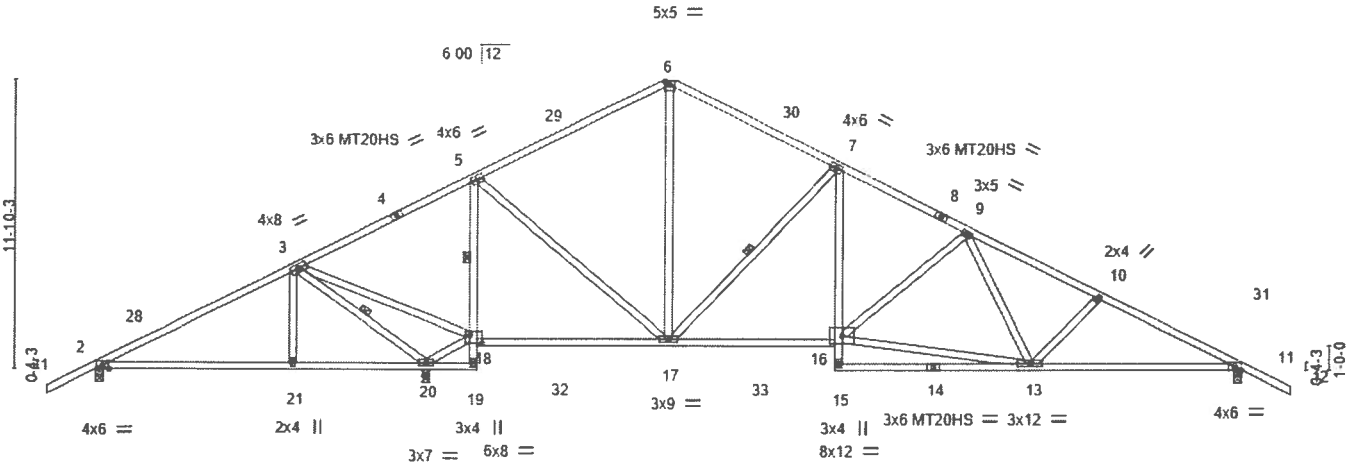
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452792
_MSAPP	A13	Roof Special	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8 240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16 24 22 2019 Page 1
ID pGnjKeu79Kr3a2o3KmmjuxyRCJn-djWhpAAmv7Mn_MvpjYw?qBx8gKXGKHlgw2t7mHyQp1t

2-0-0	8-0-8	15-6-8	23-4-0	30-1-8	35-5-8	40-9-8	46-8-0	48-8-0
2-0-0	8-0-8	7-6-0	7-9-8	6-9-8	5-4-0	5-4-0	5-10-8	2-0-0

Scale = 1 94 0



8-0-8	13-5-12	15-6-8	23-4-0	30-1-8	38-0-9	46-8-0
8-0-8	5-5-4	2-0-12	7-9-8	6-9-8	7-11-1	8-7-7

Plate Offsets (X,Y)— [18 0-6-0,0-4-4]

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 63	Vert(LL)	-0 12	16-17	>999	360	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 76	Vert(CT)	-0 26	13-15	>999	240	MT20HS	187/143
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 46	Horz(CT)	0 07	11	n/a	n/a		
BCDL	10 0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0 15	21-24	>999	240	Weight 287 lb	FT = 15%

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
BOT CHORD Rigid ceiling directly applied. Except
1 Row at midpt 5-18
WEBS 1 Row at midpt 3-20, 7-17

REACTIONS. (lb/size) 2=296/0-3-8, 20=2378/0-3-8, 11=1300/0-3-8
Max Horz 2=-208(LC 10)
Max Uplift 2=-212(LC 12), 20=-272(LC 12), 11=-136(LC 12)
Max Grav 2=421(LC 21), 20=2378(LC 1), 11=1300(LC 1)

FORCES. (lb) - Max Comp./Max Ten. - All forces 250 (lb) or less except when shown
TOP CHORD 2-3=-123/472, 3-5=-29/446, 5-6=-745/203, 6-7=-716/208, 7-9=-1430/210, 9-10=-1909/203, 10-11=-2145/211
BOT CHORD 2-21=-425/32, 20-21=-428/24, 5-18=-1619/269, 17-18=-318/238, 16-17=0/1232, 7-16=0/711, 11-13=-102/1866
WEBS 3-21=-182/303, 3-20=-1910/398, 18-20=-2001/340, 3-18=-19/1563, 5-17=-74/1127, 6-17=-4/264, 7-17=-1007/175, 13-16=-27/1457, 9-16=-440/113, 9-13=0/329, 10-13=-330/127

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=24ft; eave=6ft; Cat II; Exp B; Encl., GCpi=0 18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 23-4-0, Exterior(2) 23-4-0 to 27-6-15, Interior(1) 27-6-15 to 48-8-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1 60 plate grip DOL=1 60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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) except (jt=lb) 2=212, 20=272, 11=136.
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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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,201

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	
LMSAPP	A14	Hip	1	1	T18452793
SANTA FE TRUSS COMPANY INC BELL FL					Job Reference (optional)

8 240 s Jul 14 2019 MiTek Industries, Inc Tue Oct 22 16 24 24 2019 Page 1
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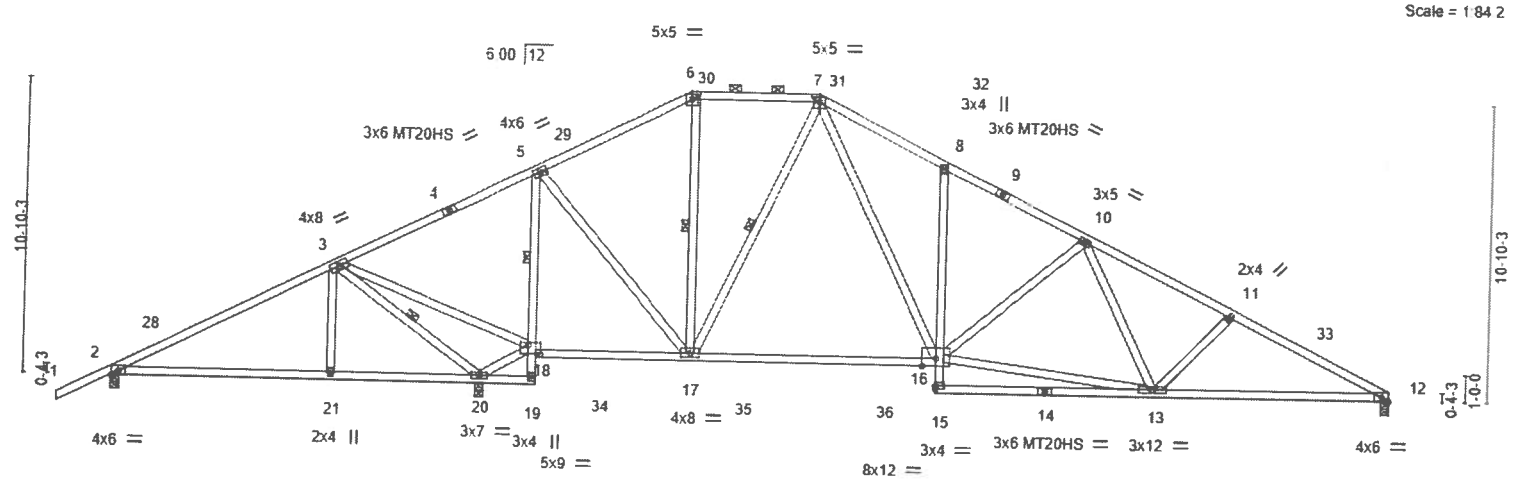
-2-0-0	8-0-8	15-6-8	21-0-0	25-8-0	30-1-8	35-5-8	40-9-8	46-8-0
2-0-0	8-0-8	7-6-0	5-5-8	4-8-0	4-5-8	5-4-0	5-4-0	5-10-8

Scale = 1:84 2



8-0-8	13-5-12	15-6-8	21-0-0	30-1-8	38-0-9	46-8-0
8-0-8	5-5-4	2-0-12	5-5-8	9-1-8	7-11-1	8-7-7

Plate Offsets (X,Y)-- [6 0-2-8,0-2-4], [7 0-2-8,0-2-4], [18 0-5-8,0-4-0]

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 65	Vert(LL)	-0 28	16-17	>999	360	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 84	Vert(CT)	-0 51	16-17	>773	240	MT20HS	187/143
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 44	Horz(CT)	0 07	12	n/a	n/a		
BCDL	10 0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0 15	21-24	>999	240	Weight 295 lb	FT = 15%

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 2-0-0 oc purlins (6-0-0 max.). 6-7.
BOT CHORD	Rigid ceiling directly applied Except: 1 Row at midpt 5-18
WEBS	1 Row at midpt 3-20, 6-17, 7-17

REACTIONS. (lb/size) 2=302/0-3-8, 20=2373/0-3-8, 12=1179/0-3-8
Max Horz 2=189(LC 11)
Max Uplift 2=-197(LC 12), 20=-297(LC 12), 12=-64(LC 12)
Max Grav 2=416(LC 21), 20=2373(LC 1), 12=1179(LC 1)

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

TOP CHORD	2-3=-117/447, 3-5=-56/443, 5-6=-636/178, 6-7=-497/192, 7-8=-1481/324, 8-10=-1459/228, 10-11=-1944/246, 11-12=-2171/259
BOT CHORD	2-21=-406/28, 20-21=-409/20, 5-18=-1651/294, 17-18=-325/234, 16-17=0/772, 8-16=-302/162, 12-13=-157/1907
WEBS	3-21=-181/303, 3-20=-1902/483, 18-20=-2005/363, 3-18=-102/1521, 5-17=-112/1174, 7-17=-724/160, 7-16=-170/1129, 13-16=-54/1596, 10-16=-480/130, 10-13=-0/346, 11-13=-343/143

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=24ft, eave=6ft, Cat II, Exp B, Encl., GCpi=0 18, MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 21-0-0, Exterior(2) 21-0-0 to 25-2-15, Interior(1) 25-2-15 to 25-8-0, Exterior(2) 25-8-0 to 29-10-15, Interior(1) 29-10-15 to 46-8-0 zone; porch left exposed,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 100 lb uplift at joint(s) 12 except (jt=lb) 2=197, 20=297.
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.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,201

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	
_MSAPP	A15	Hip	1	1	T18452794

SANTA FE TRUSS COMPANY INC. BELL FL

Job Reference (optional)

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:26 2019 Page 1

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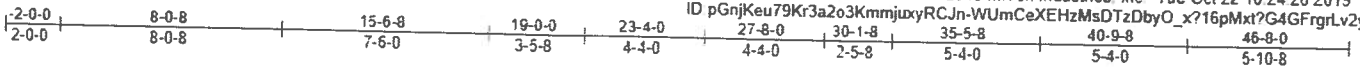

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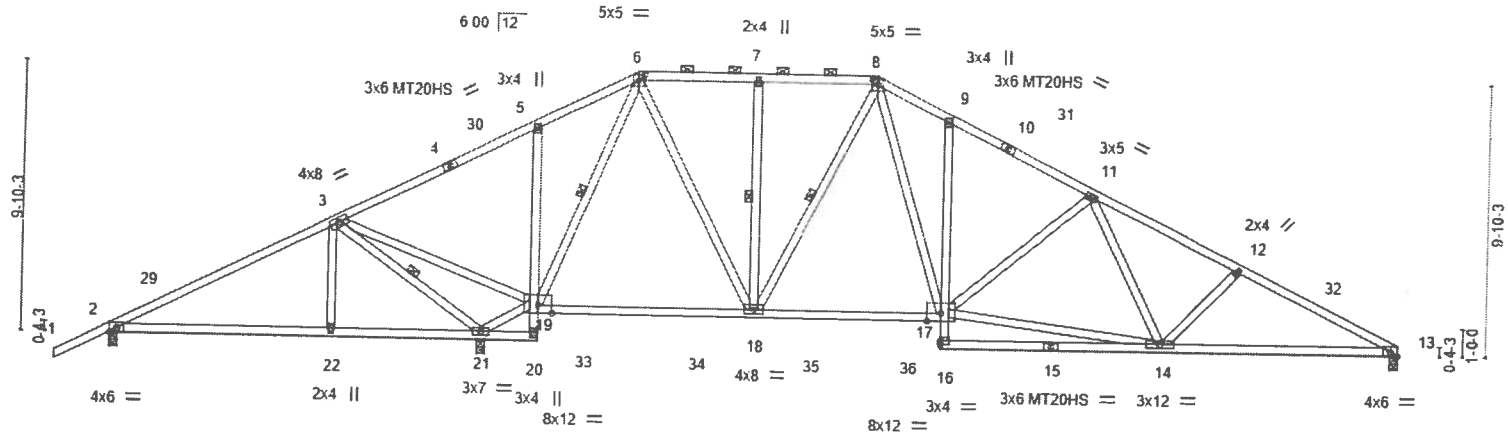

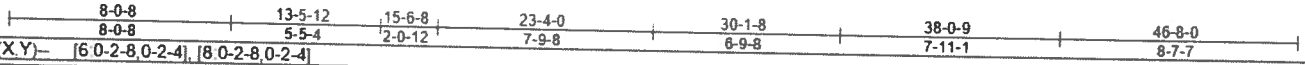

Plate Offsets (X,Y)-- [6:0-2-8,0-2-4], [8:0-2-8,0-2-4]

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	0.65	Vert(LL)	-0.14	18-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.26	14-28	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.07	13	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.15	22-25	>999	240	Weight: 303 lb	FT = 15%

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 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-21, 6-19, 7-18, 8-18

REACTIONS. (lb/size) 2=299/0-3-8, 21=2376/0-3-8, 13=1178/0-3-8
Max Horz 2=172(LC 11)
Max Uplift 2=-191(LC 12), 21=-305(LC 12), 13=-62(LC 12)
Max Grav 2=401(LC 21), 21=2376(LC 1), 13=1179(LC 22)

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

TOP CHORD 2-3=-84/457, 3-5=-67/429, 5-6=0/383, 6-7=-765/201, 7-8=-765/201, 8-9=-1433/316, 9-11=-1445/239, 11-12=-1944/242, 12-13=-2170/254
BOT CHORD 2-22=-405/0, 21-22=-407/0, 5-19=-321/172, 18-19=0/326, 17-18=0/937, 13-14=-162/1907
WEBS 3-22=-180/300, 3-21=-2111/518, 19-21=-2027/423, 3-19=-135/1752, 6-19=-1382/194, 6-18=-133/1077, 7-18=-291/117, 8-18=-516/111, 8-17=-170/933, 14-17=-97/1487, 11-17=-489/131, 11-14=0/359, 12-14=-341/142

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 19-0-0, Exterior(2) 19-0-0 to 23-4-0, Interior(1) 23-4-0 to 27-8-0, Exterior(2) 27-8-0 to 31-10-15, Interior(1) 31-10-15 to 46-8-0 zone; porch left exposed;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 100 lb uplift at joint(s) 13 except (jt=lb) 2=191, 21=305.
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.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	
_MSAPP	A16	Hip	1	1	T18452795

SANTA FE TRUSS COMPANY INC. BELL FL

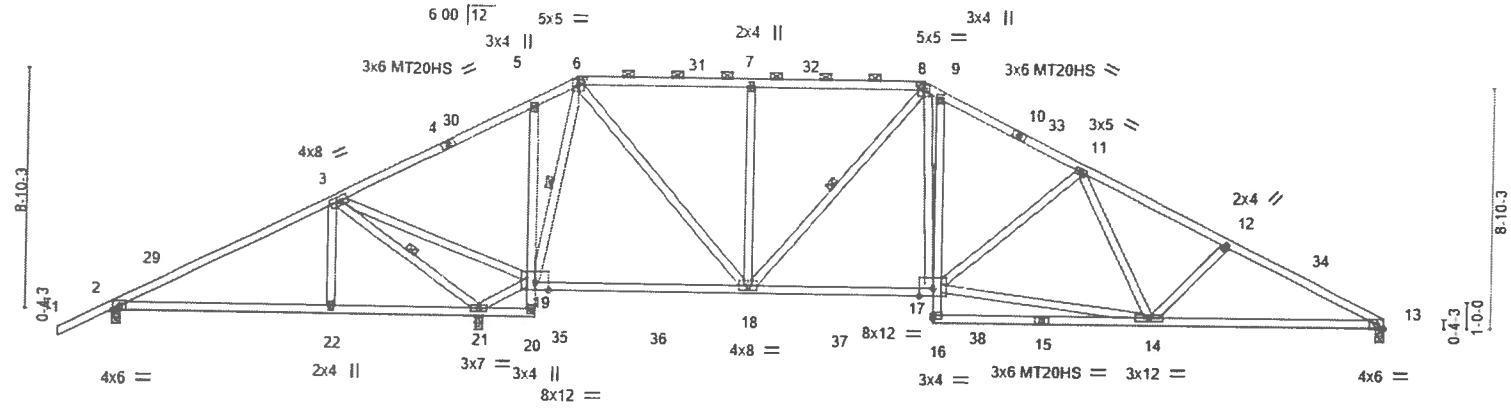
Job Reference (optional)

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:28 2019 Page 1

ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-Stty3DFXVz6xiHNz3p1P4SB9jlaVk?hYI_KR_xyQp1n

-2-0-0	8-0-8	15-6-8	17-0-0	23-4-0	29-8-0	30-1-8	35-5-8	40-9-8	46-8-0
2-0-0	8-0-8	7-6-0	1-5-8	6-4-0	6-4-0	0-5-8	5-4-0	5-4-0	5-10-8

Scale = 1:84.7



8-0-8	13-5-12	15-6-8	23-4-0	30-1-8	38-0-9	46-8-0
8-0-8	5-5-4	2-0-12	7-9-8	6-9-8	7-11-1	8-7-7

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

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	0.66	Vert(LL)	-0.13	18-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.26	14-28	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.07	13	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.15	22-25	>999	240	Weight: 298 lb	FT = 15%

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 2-0-0 oc purlins (5-11-7 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-21, 6-19, 8-18

REACTIONS. (lb/size) 2=281/0-3-8, 21=2403/0-3-8, 13=1170/0-3-8
Max Horz 2=156(LC 11)
Max Uplift 2=-194(LC 12), 21=-301(LC 12), 13=-63(LC 12)
Max Grav 2=374(LC 21), 21=2403(LC 1), 13=1180(LC 22)

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

TOP CHORD	2-3=-24/507, 3-5=-64/469, 5-6=0/396, 6-7=-826/198, 7-8=-826/198, 8-9=-1318/303, 9-11=-1413/251, 11-12=-1948/253, 12-13=-2174/260
BOT CHORD	2-22=-430/0, 21-22=-432/0, 5-19=-261/163, 17-18=0/1142, 13-14=-173/1910
WEBS	3-22=-179/300, 3-21=-2119/530, 19-21=-2072/422, 3-19=-143/1735, 6-19=-1388/222, 6-18=-180/1299, 7-18=-421/159, 8-18=-530/100, 8-17=-146/741, 14-17=-114/1471, 11-17=-494/139, 11-14=0/360, 12-14=-340/142

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 17-0-0, Exterior(2) 17-0-0 to 21-2-15, Interior(1) 21-2-15 to 29-8-0, Exterior(2) 29-8-0 to 33-10-15, Interior(1) 33-10-15 to 46-8-0 zone; porch left exposed;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 100 lb uplift at joint(s) 13 except (jt=lb) 2=194, 21=301.
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.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

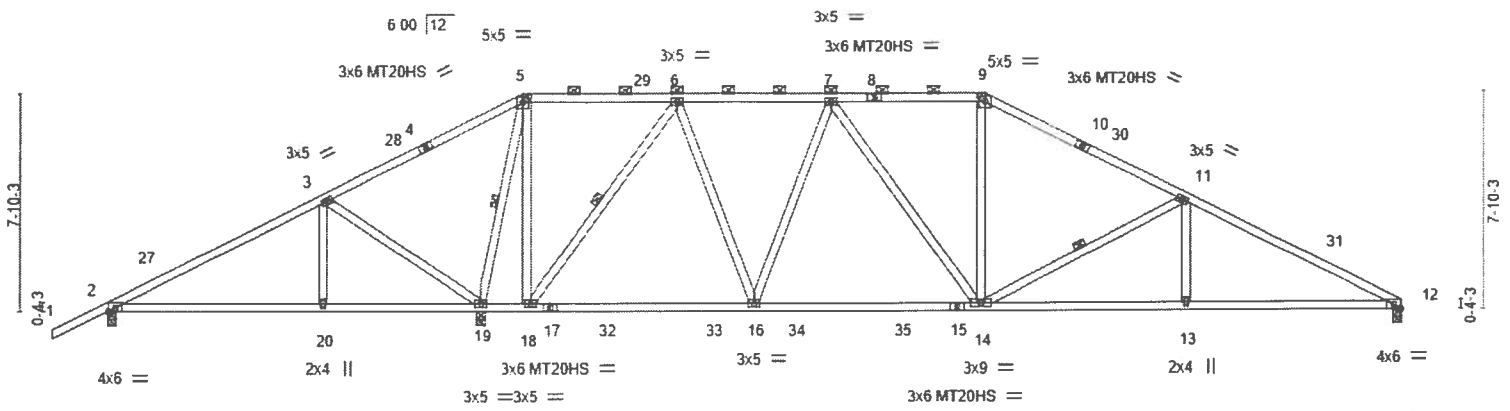
MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452796
MSAPP	A17	Hip	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:29 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-w3RLHZG9GHEoKQy9dWYedgkKF9w4TO?iXe3?WNyQp1m

-2-0-0	7-9-4	15-0-0	20-6-11	26-1-5	31-8-0	38-10-12	46-8-0
2-0-0	7-9-4	7-2-12	5-6-11	5-6-11	5-6-11	7-2-12	7-9-4

Scale = 1:83.2



7-9-4	13-5-12	15-0-0	23-4-0	31-8-0	38-10-12	46-8-0
7-9-4	5-8-8	1-6-4	8-4-0	8-4-0	7-2-12	7-9-4

Plate Offsets (X,Y)-- [5:0-2-8,0-2-4], [9:0-2-8,0-2-4]

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)	-0.16	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.30	14-16	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.12	20-23	>999	240	Weight: 263 lb	FT = 15%

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 2-0-0 oc purlins (5-1-6 max.): 5-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-19, 6-18, 11-14

REACTIONS. (lb/size) 2=286/0-3-8, 19=2395/0-3-8, 12=1172/0-3-8
Max Horz 2=139(LC 11)
Max Uplift 2=-186(LC 12), 19=-312(LC 12), 12=-60(LC 12)
Max Grav 2=362(LC 21), 19=2395(LC 1), 12=1190(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-24/473, 3-5=-132/934, 5-6=0/346, 6-7=-863/168, 7-9=-1218/259, 9-11=-1444/233, 11-12=-2134/253
BOT CHORD 2-20=-385/0, 19-20=-385/0, 18-19=-369/243, 16-18=0/548, 14-16=0/1020, 13-14=-152/1857, 12-13=-152/1857
WEBS 3-20=-171/301, 3-19=-683/434, 5-19=-1977/255, 5-18=-68/1314, 6-18=-1390/232, 6-16=-59/898, 7-16=-647/166, 7-14=-58/334, 9-14=0/326, 11-14=-753/165, 11-13=0/315

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 15-0-0, Exterior(2) 15-0-0 to 19-2-15, Interior(1) 19-2-15 to 31-8-0, Exterior(2) 31-8-0 to 35-10-15, Interior(1) 35-10-15 to 46-8-0 zone; porch left exposed;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 100 lb uplift at joint(s) 12 except (jt=lb) 2=186, 19=312.
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.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,201

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	
_MSAPP	A18	Hip	1	1	T18452797

SANTA FE TRUSS COMPANY INC. BELL FL

Job Reference (optional)

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:31 2019 Page 1
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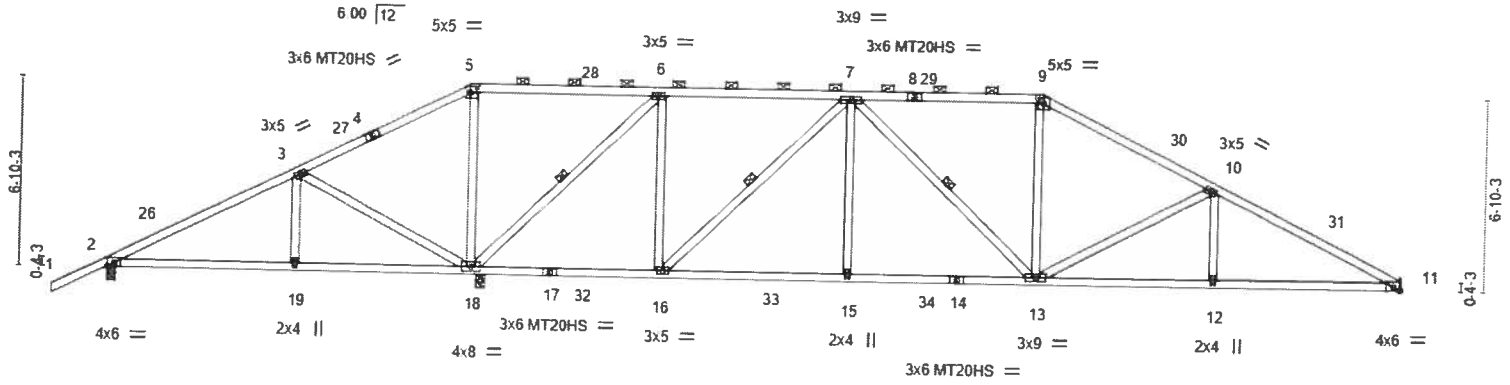
-2-0-0	6-9-4	13-0-0	19-11-4	26-8-12	33-8-0	39-10-12	46-8-0
2-0-0	6-9-4	6-2-12	6-11-4	6-9-8	6-11-4	6-2-12	6-9-4

Scale = 1:83.2



	6-9-4	13-0-0	13-4-0	19-11-4	26-8-12	33-8-0	39-10-12	46-8-0
	6-9-4	6-2-12	0-4-0	6-7-4	6-9-8	6-11-4	6-2-12	6-9-4

Plate Offsets (X,Y)— [5:0-3-0,0-2-8], [9:0-2-8,0-2-4]

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	0.70	Vert(LL)	-0.11	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.22	13-15	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.06	12-22	>999	240	Weight: 255 lb	FT = 15%

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 2-0-0 oc purlins (4-5-0 max.): 5-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-18, 7-16, 7-13

REACTIONS. (lb/size) 11=1148/Mechanical, 2=164/0-3-8, 18=2541/0-3-8
Max Horz 2=123(LC 11)
Max Uplift 11=-60(LC 12), 2=-178(LC 12), 18=-314(LC 12)
Max Grav 11=1167(LC 22), 2=234(LC 21), 18=2541(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown
TOP CHORD 2-3=0/683, 3-5=-170/1123, 5-6=-82/953, 6-7=-480/102, 7-9=-1326/264, 9-10=-1554/244, 10-11=-2135/262
BOT CHORD 2-19=-592/0, 18-19=-592/0, 16-18=0/477, 15-16=0/1204, 13-15=0/1204, 12-13=-169/1863, 11-12=-169/1863
WEBS 3-19=-173/278, 3-18=-626/428, 5-18=-836/225, 6-18=-1891/256, 6-16=-16/950, 7-16=-1043/161, 7-15=0/326, 9-13=0/357, 10-13=-630/145, 10-12=0/272

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=24ft; eave=6ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 13-0-0, Exterior(2) 13-0-0 to 17-2-15, Interior(1) 17-2-15 to 33-8-0, Exterior(2) 33-8-0 to 37-10-15, Interior(1) 37-10-15 to 46-8-0 zone; porch left exposed;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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 2=178, 18=314.
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.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58128
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

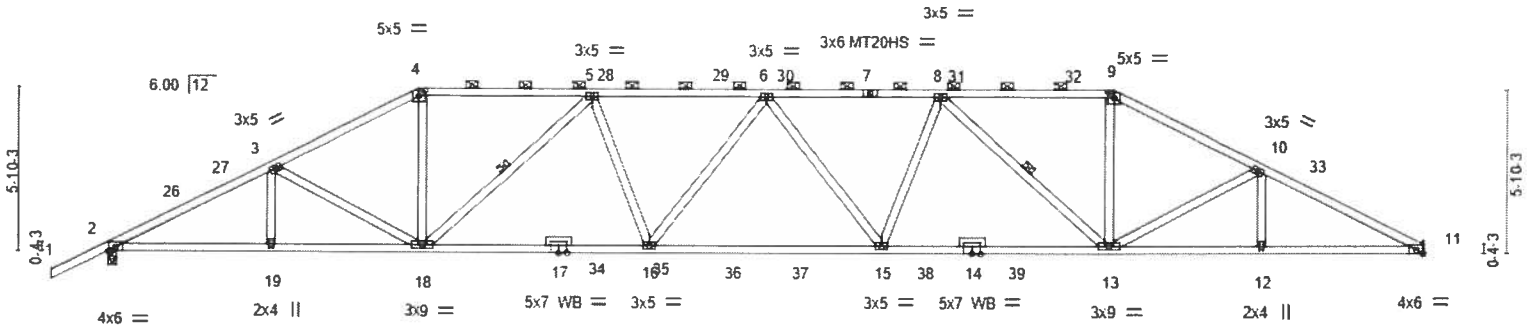
October 23,201

Job	Truss	Truss Type	Qty	Ply	T18452798
_MSAPP	A19	Hip	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:33 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-prhr6xJgKVkDo2FxsMcanWu2cmFgPloHSF1Cf9yQp1i

-2-0-0	5-9-4	11-0-0	17-2-0	23-4-0	29-6-0	35-8-0	40-10-12	46-8-0
2-0-0	5-9-4	5-2-12	6-2-0	6-2-0	6-2-0	6-2-0	5-2-12	5-9-4

Scale = 1:81.8



5-9-4	11-0-0	19-2-11	27-5-5	35-8-0	40-10-12	46-8-0
5-9-4	5-2-12	8-2-11	8-2-11	8-2-11	5-2-12	5-9-4

Plate Offsets (X,Y)— [4:0-2-8,0-2-4], [9:0-2-8,0-2-4]

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	0.52	Vert(LL)	-0.36	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.77	15-16	>728	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.25	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.26	15-16	>999	240	Weight: 250 lb	FT = 15%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
14-17: 2x4 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (2-7-9 max.): 4-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-18, 8-13

REACTIONS. (lb/size) 11=1864/Mechanical, 2=1989/0-3-8
Max Horz 2=124(LC 11)
Max Uplift 11=-111(LC 12), 2=-178(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3680/566, 3-4=-3247/533, 4-5=-2868/520, 5-6=-3792/613, 6-8=-3796/614, 8-9=-2879/515, 9-10=-3260/527, 10-11=-3720/569
BOT CHORD 2-19=-461/3229, 18-19=-461/3229, 16-18=-432/3663, 15-16=-466/3929, 13-15=-434/3668, 12-13=-452/3271, 11-12=-452/3271
WEBS 3-18=-446/157, 4-18=-92/1093, 5-18=-1164/191, 5-16=0/473, 6-16=-290/86, 6-15=-285/78, 8-15=0/470, 8-13=-1159/184, 9-13=-104/1102, 10-13=-481/168

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 35-8-0, Exterior(2) 35-8-0 to 42-3-3, Interior(1) 42-3-3 to 46-8-0 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=111, 2=178.
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.

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Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,201

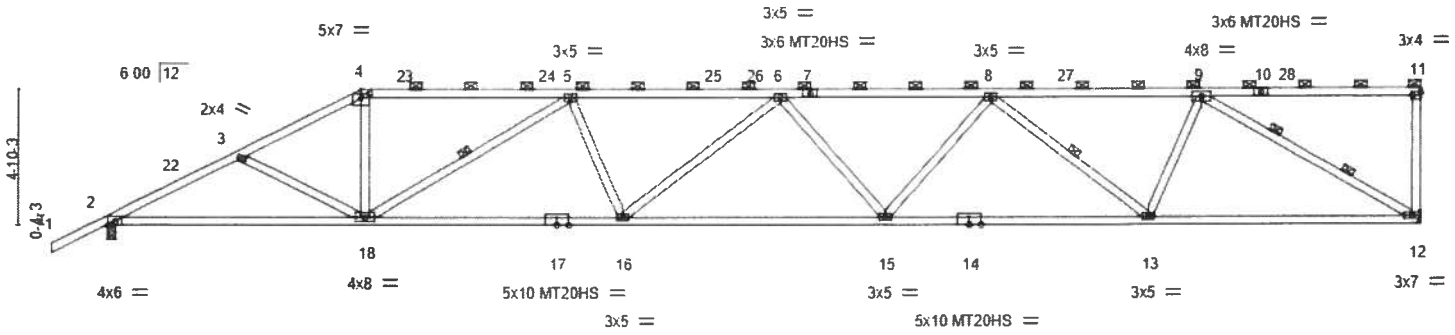
MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452799
_MSAPP	A20	Half Hip	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:35 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-lDocXcLwr7?x2LPJ_nf2sxzJGaxUt3eavZWJk1yQp1g

-2-0-0	4-9-4	9-0-0	16-5-11	23-11-6	31-5-2	38-10-13	46-8-0
2-0-0	4-9-4	4-2-12	7-5-11	7-5-11	7-5-11	7-5-11	7-9-3

Scale = 1:82.0



9-0-0	18-4-2	27-8-4	37-0-6	46-8-0
9-0-0	9-4-2	9-4-2	9-4-2	9-7-10

Plate Offsets (X,Y)— [4:0-3-8,0-1-12], [11:Edge,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	0.83	Vert(LL)	-0.42	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.87	Vert(CT)	-0.94	15-16	>596	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.25	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.31	15-16	>999	240	Weight: 241 lb	FT = 15%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 4-7,7-10: 2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-11.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-18, 8-13 2 Rows at 1/3 pts 9-12

REACTIONS. (lb/size) 12=1858/Mechanical, 2=1983/0-3-8
Max Horz 2=174(LC 12)
Max Uplift 12=-117(LC 12), 2=-171(LC 12)

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

TOP CHORD	2-3=-3666/559, 3-4=-3406/487, 4-5=-3037/476, 5-6=-4543/613, 6-8=-4560/580, 8-9=-3109/385
BOT CHORD	2-18=-619/3228, 16-18=-640/4391, 15-16=-672/4773, 13-15=-577/4196, 12-13=-372/2667
WEBS	3-18=-268/163, 4-18=-65/1144, 5-18=-1662/233, 5-16=0/477, 6-16=-347/118, 6-15=-335/146, 8-15=-4/577, 8-13=-1401/249, 9-13=-37/1165, 9-12=-3041/427

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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=117, 2=171.
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.

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Philip J. O'Regan PE No.58128
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

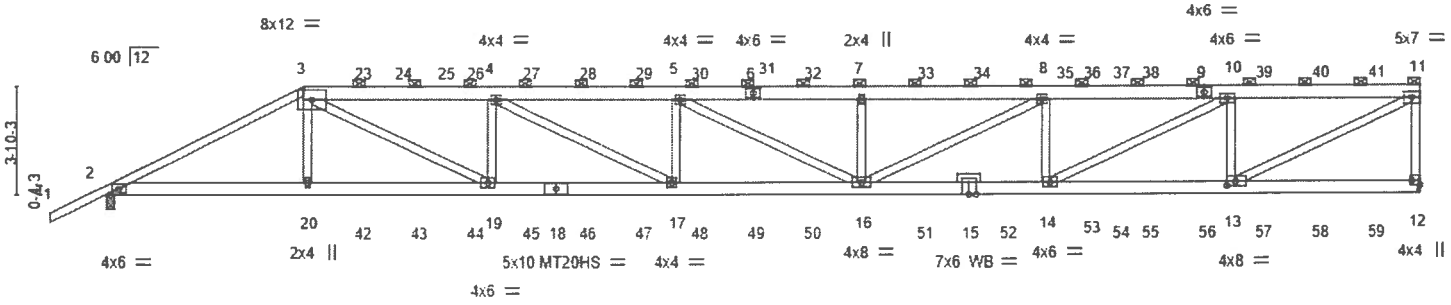
MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452800
_MSAPP	A21	HALF HIP GIRDER	1	2	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:39 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-e_27N_ORvLVNXzi4Ddj_1n8z8BNeptsAqBVXtoyQp1c

-2-0-0	7-0-0	13-8-8	20-3-4	26-10-0	33-4-12	39-11-8	46-8-0
2-0-0	7-0-0	6-8-8	6-6-12	6-6-12	6-6-12	6-6-12	6-8-8

Scale = 1:82.0



7-0-0	13-8-8	20-3-4	26-10-0	33-4-12	39-11-8	46-8-0
7-0-0	6-8-8	6-6-12	6-6-12	6-6-12	6-6-12	6-8-8

Plate Offsets (X,Y)— [12:Edge,0-3-8], [13:0-3-8,0-2-0]

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	0.90	Vert(LL)	-0.55	16-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-1.12	16-17	>501	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.16	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Wind(LL)	0.42	16-17	>999	240	Weight: 621 lb	FT = 15%

LUMBER-

TOP CHORD	2x6 SP No.2 *Except* 1-3: 2x4 SP No.2
BOT CHORD	2x6 SP SS
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-9-11 max.): 3-11.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 12=3926/Mechanical, 2=3844/0-3-8
Max Horz 2=143(LC 25)
Max Uplift 12=-289(LC 8), 2=-339(LC 8)

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

TOP CHORD	2-3=-7924/581, 3-4=-11502/878, 4-5=-13527/1013, 5-7=-13380/995, 7-8=-13380/995, 8-10=-11128/825, 10-11=-6737/497, 11-12=-3768/348
BOT CHORD	2-20=-546/7016, 19-20=-541/7044, 17-19=-877/11497, 16-17=-1013/13527, 14-16=-825/11128, 13-14=-497/6737
WEBS	3-20=0/788, 3-19=-377/5075, 4-19=-2021/349, 4-17=-154/2301, 5-17=-721/235, 7-16=-785/250, 8-16=-191/2535, 8-14=-1941/329, 10-14=-369/4943, 10-13=-3116/444, 11-13=-552/7490

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=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
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=289, 2=339.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

Continued on page 2

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 195 lb down and 152 lb up at 7-0-0, 121 lb down and 80 lb up at 9-0-12, 121 lb down and 80 lb up at 11-0-12, 121 lb down and 80 lb up at 13-0-12, 121 lb down and 80 lb up at 15-0-12, 121 lb down and 80 lb up at 17-0-12, 121 lb down and 80 lb up at 19-0-12, 121 lb down and 80 lb up at 21-0-12, 121 lb down and 80 lb up at 23-0-12, 121 lb down and 80 lb up at 25-0-12, 121 lb down and 80 lb up at 27-0-12, 121 lb down and 80 lb up at 29-0-12, 121 lb down and 80 lb up at 31-0-12, 121 lb down and 80 lb up at 33-0-12, 121 lb down and 80 lb up at 35-0-12, 121 lb down and 80 lb up at 37-0-12, 121 lb down and 80 lb up at 39-0-12, 121 lb down and 80 lb up at 41-0-12, and 121 lb down and 80 lb up at 43-0-12, and 121 lb down and 80 lb up at 45-0-12 on top chord, and 355 lb down and 20 lb up at 7-0-0, 83 lb down at 9-0-12, 83 lb down at 11-0-12, 83 lb down at 13-0-12, 83 lb down at 15-0-12, 83 lb down at 17-0-12, 83 lb down at 19-0-12, 83 lb down at 21-0-12, 83 lb down at 23-0-12, 83 lb down at 25-0-12, 83 lb down at 27-0-12, 83 lb down at 29-0-12, 83 lb down at 31-0-12, 83 lb down at 33-0-12, 83 lb down at 35-0-12, 83 lb down at 37-0-12, 83 lb down at 39-0-12, 83 lb down at 41-0-12, and 83 lb down at 43-0-12, and 83 lb down at 45-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-3=-60, 3-11=-60, 2-12=-20

Concentrated Loads (lb)

Vert: 3=-148(B) 6=-121(B) 20=-355(B) 7=-121(B) 16=-59(B) 9=-121(B) 23=-121(B) 25=-121(B) 26=-121(B) 27=-121(B) 28=-121(B) 29=-121(B) 30=-121(B) 32=-121(B) 33=-121(B) 34=-121(B) 35=-121(B) 37=-121(B) 38=-121(B) 39=-121(B) 40=-121(B) 41=-121(B) 42=-59(B) 43=-59(B) 44=-59(B) 45=-59(B) 46=-59(B) 47=-59(B) 48=-59(B) 49=-59(B) 50=-59(B) 51=-59(B) 52=-59(B) 53=-59(B) 54=-59(B) 55=-59(B) 56=-59(B) 57=-59(B) 58=-59(B) 59=-59(B)

Job	Truss	Truss Type	Qty	Ply	T18452801
LMSAPP	B	ATTIC	15	1	Job Reference (optional)

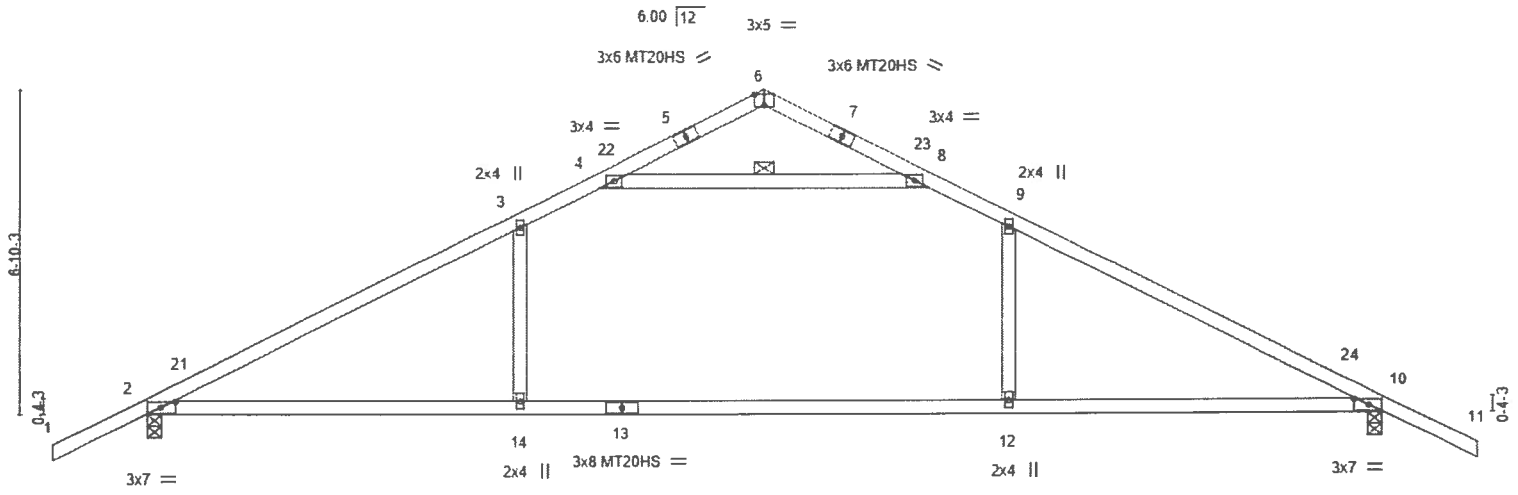
SANTA FE TRUSS COMPANY INC. BELL FL

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:49 2019 Page 1

ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-LweuTPVfYQlyjVT?ojvKRtZfYDjd9Sze7lw2EDyQp1S

-2-0-0	7-10-4	9-10-0	13-0-0	16-2-0	18-1-12	26-0-0	28-0-0
2-0-0	7-10-4	1-11-12	3-2-0	3-2-0	1-11-12	7-10-4	2-0-0

Scale = 1:48.6



7-10-4	18-1-12	26-0-0
7-10-4	10-3-8	7-10-4

Plate Offsets (X,Y)-- [2:0-3-12,0-1-8], [6:0-2-8,Edge], [10:0-3-12,0-1-8]

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	0.65	Vert(LL)	-0.68	14-17	>460	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.88	Vert(CT)	-1.05	12-14	>298	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.32	14-17	>973	240	Weight: 110 lb	FT = 15%

LUMBER-

TOP CHORD	2x4 SP SS *Except* 5-6,6-7: 2x4 SP No.1
BOT CHORD	2x4 SP SS
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-8

REACTIONS. (lb/size) 2=1263/0-3-8, 10=1263/0-3-8
Max Horz 2=126(LC 11)
Max Uplift 2=-64(LC 12), 10=-64(LC 12)
Max Grav 2=1289(LC 18), 10=1289(LC 19)

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

TOP CHORD	2-3=-2098/32, 3-4=-1722/108, 4-6=0/284, 6-8=0/284, 8-9=-1722/108, 9-10=-2098/32
BOT CHORD	2-14=0/1796, 12-14=0/1796, 10-12=0/1796
WEBS	4-8=-2070/27, 3-14=0/523, 9-12=0/523

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=26ft; eave=4ft; Cat. II; Exp B; Encl.; GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 13-0-0, Exterior(2) 13-0-0 to 16-0-0, Interior(1) 16-0-0 to 28-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-8
7) Bottom chord live load (20.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-14
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
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) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

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Date:

October 23,2019

MiTek

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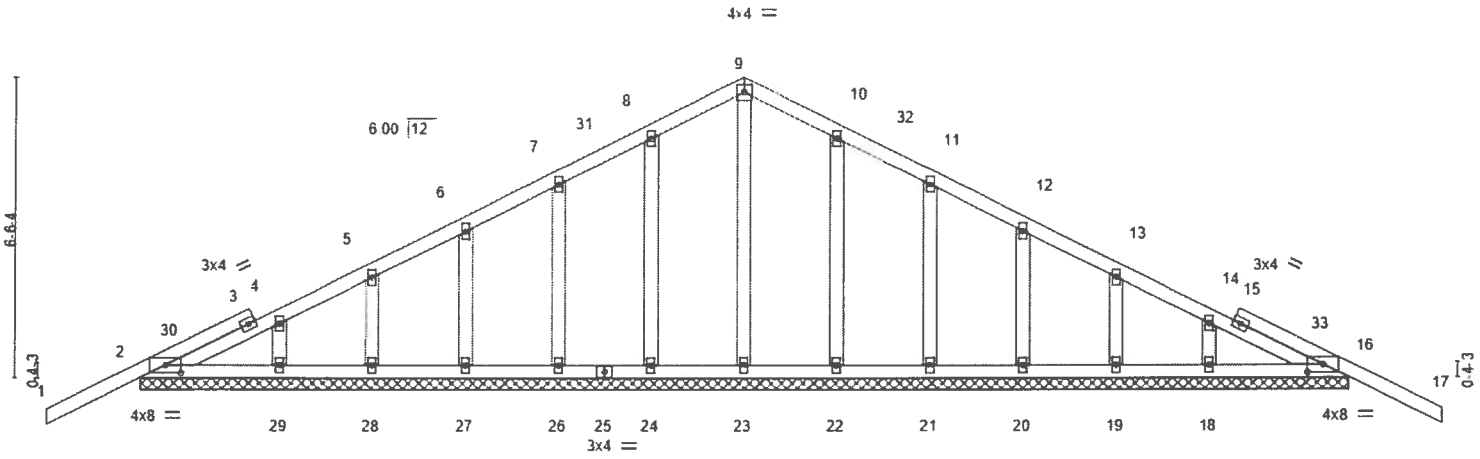
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452802
_MSAPP	BET	Common Supported Gable	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:51 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-HImfu5Xz410gzpdOw8xoWIeB?0b_dVvxb3P9l6yQp1Q

-2-0-0 | 13-0-0 | 26-0-0 | 28-0-0
2-0-0 | 13-0-0 | 13-0-0 | 2-0-0

Scale = 1:49.7



26-0-0
26-0-0

Plate Offsets (X,Y)-- [2:0-4-0,0-2-1], [16:0-4-0,0-2-1]

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	0.27	Vert(LL)	-0.02	17	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	-0.03	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 148 lb	FT = 15%

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 26-0-0.
(lb) - Max Horz 2=120(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 24, 26, 27, 28, 22, 21, 20, 19
Max Grav All reactions 250 lb or less at joint(s) 23, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18 except 2=274(LC 1), 16=274(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=26ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3) -2-0-0 to 1-0-0, Exterior(2) 1-0-0 to 13-0-0, Corner(3) 13-0-0 to 16-0-0, Exterior(2) 16-0-0 to 28-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 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, 16, 24, 26, 27, 28, 22, 21, 20, 19.

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October 23,2019

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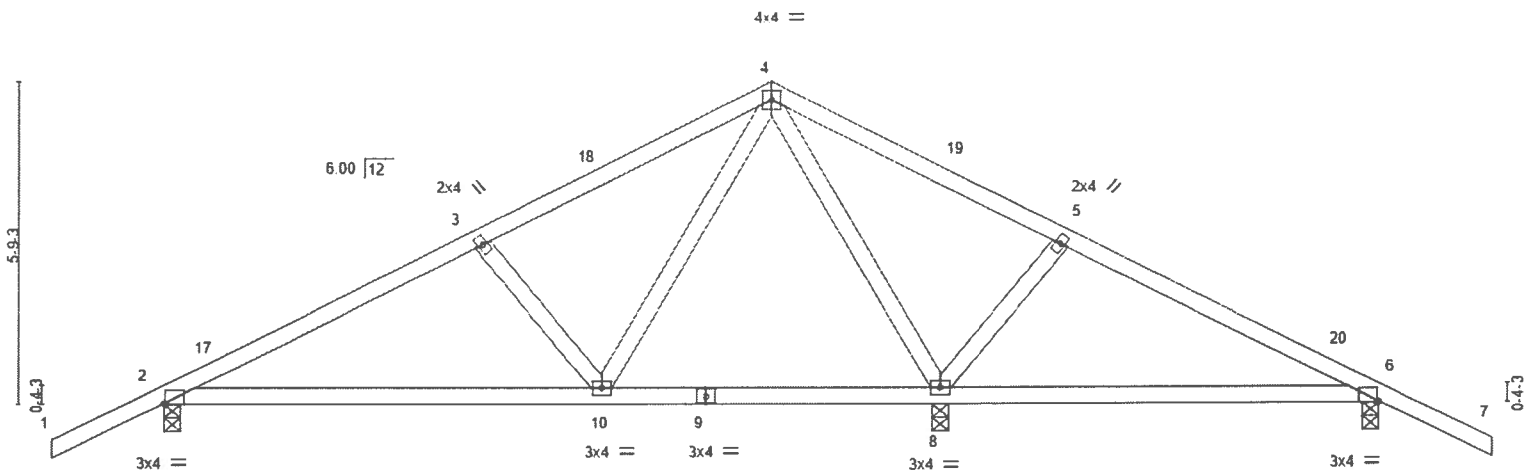
Job	Truss	Truss Type	Qty	Ply	T18452803
_MSAPP	C	Common	2	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:52 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-IUK16QYbrL8XazCaTrS12WBKnQr6Mrz4qj8jqYyQp1P

-2-0-0 | 5-8-4 | 10-10-0 | 15-11-12 | 21-8-0 | 23-8-0
2-0-0 | 5-8-4 | 5-1-12 | 5-1-12 | 5-8-4 | 2-0-0

Scale = 1:41.1



7-9-12 | 13-10-4 | 21-8-0
7-9-12 | 6-0-8 | 7-9-12

Plate Offsets (X,Y)-- [2:0-0-4,Edge], [6:0-0-4,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	0.33	Vert(LL)	-0.08	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.17	10-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.14	8-16	>655	240	Weight: 103 lb	FT = 15%

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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (lb/size) 2=624/0-3-8, 8=1007/0-3-8, 6=343/0-3-8
Max Horz 2=-106(LC 10)
Max Uplift 2=-99(LC 12), 8=-123(LC 12), 6=-165(LC 12)
Max Grav 2=624(LC 1), 8=1007(LC 1), 6=379(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown
TOP CHORD 2-3=-660/99, 3-4=-471/99, 4-5=0/283
BOT CHORD 2-10=0/571
WEBS 3-10=-336/142, 4-10=0/461, 4-8=-682/39, 5-8=-342/192

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=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 10-10-0, Exterior(2) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 23-8-0 zone; porch right exposed C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 8=123, 6=165.
6) 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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October 23,2019

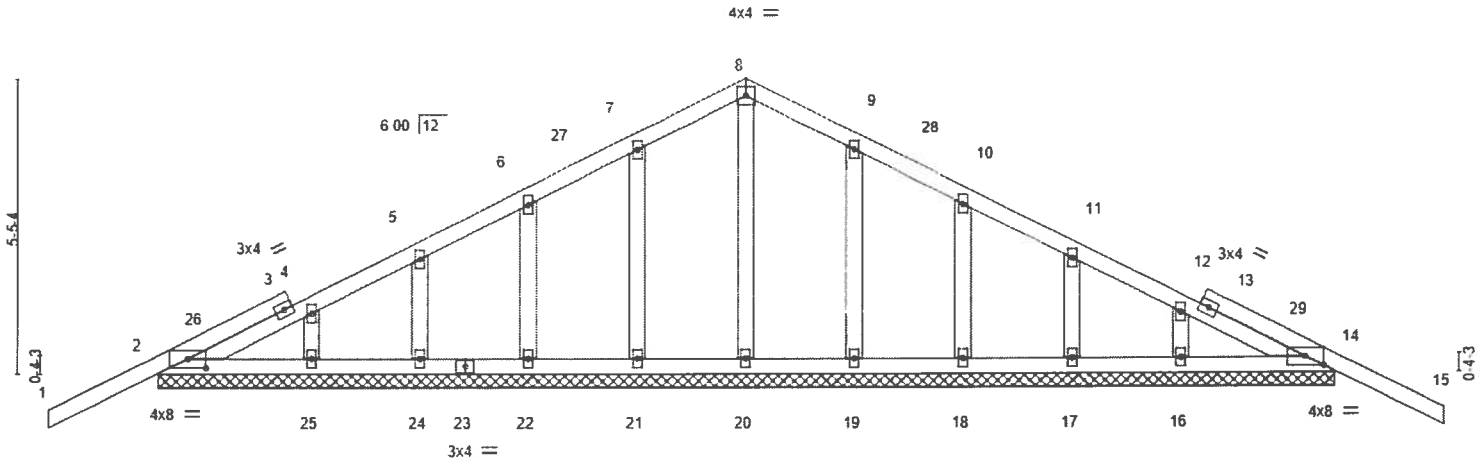
Job	Truss	Truss Type	Qty	Ply	T18452804
_MSAPP	CET	Common Supported Gable	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:53 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-DhuPJmYDcfGOC6nn1ZzGbjjWUqHX5PqE2NuGN_yQp1O

-2-0-0 2-0-0 | 10-10-0 10-10-0 | 21-8-0 10-10-0 | 23-8-0 2-0-0

Scale = 1:42.5



21-8-0
21-8-0

Plate Offsets (X,Y)— [2:0-4-0,0-2-1], [14:0-4-0,0-2-1]

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	0.27	Vert(LL)	-0.02	15	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	-0.03	15	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 117 lb	FT = 15%

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 21-8-0.
(lb) - Max Horz 2=-101(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 21, 22, 24, 19, 18, 17
Max Grav All reactions 250 lb or less at joint(s) 20, 21, 22, 24, 25, 19, 18, 17, 16 except 2=271(LC 1), 14=271(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3) -2-0-0 to 1-0-0; Exterior(2) 1-0-0 to 10-10-0, Corner(3) 10-10-0 to 13-10-0, Exterior(2) 13-10-0 to 23-8-0 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable 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, 14, 21, 22, 24, 19, 18, 17.

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October 23,2019

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Job	Truss	Truss Type	Qty	Ply	T18452805
_MSAPP	CGT	Common Girder	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:54 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-itSnX6ZrNyOFqGMzbGVV7xGW7ETzqhsNH1dpvRyQp1N

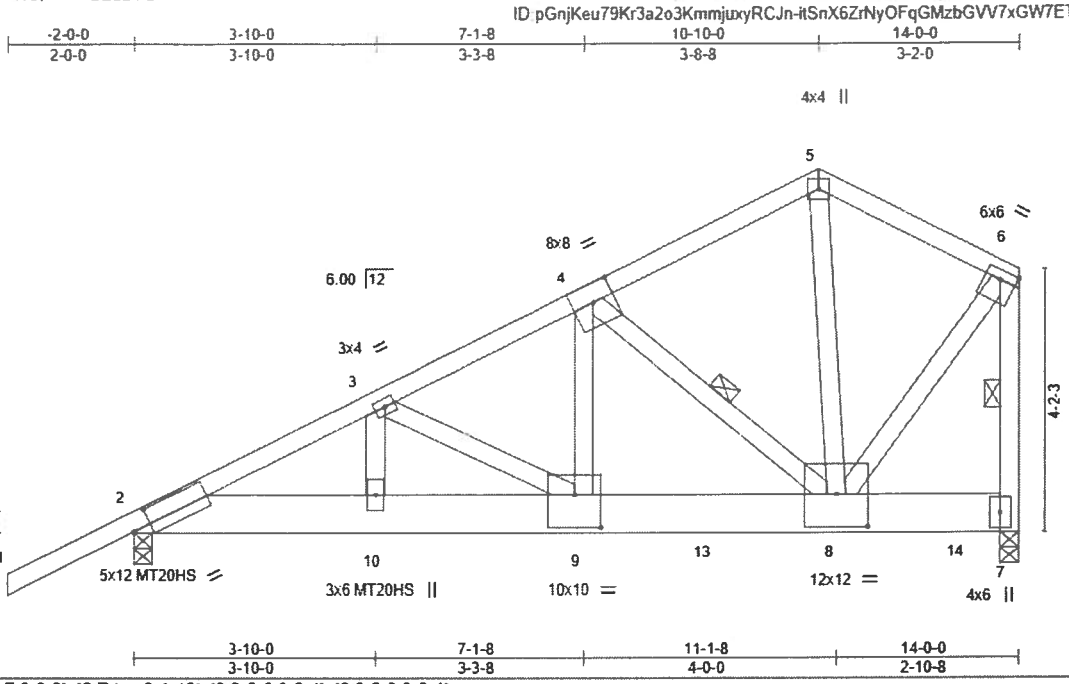

Plate Offsets (X,Y)— [2:0-3-7,0-3-0], [6:Edge,0-1-12], [8:0-6-0,0-6-4], [9:0-5-0,0-6-4]

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	0.98	Vert(LL)	-0.13	9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.25	9	>646	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Wind(LL)	0.09	9	>999	240	Weight: 107 lb	FT = 15%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
4-9,6-8: 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-8, 6-7

REACTIONS. (lb/size) 2=3678/0-3-8, 7=6285/0-3-8
Max Horz 2=157(LC 8)
Max Uplift 2=-314(LC 8), 7=-444(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7268/464, 3-4=-7338/523, 4-5=-3161/248, 5-6=-3324/260, 6-7=-5625/417
BOT CHORD 2-10=-484/6454, 9-10=-484/6454, 8-9=-496/6540
WEBS 4-9=-316/4872, 4-8=-4947/396, 5-8=-164/2689, 6-8=-346/5009

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=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60.
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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) 7 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) except (jt=lb) 2=314, 7=444.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3906 lb down and 309 lb up at 7-0-12, 1838 lb down and 137 lb up at 9-0-12, and 1844 lb down and 131 lb up at 11-0-12, and 1149 lb down and 78 lb up at 13-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) 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: 1-5=-60, 5-6=-60, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-3906(F) 8=-1844(F) 13=-1838(F) 14=-1149(F)

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Date:

October 23,2019

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Job	Truss	Truss Type	Qty	Ply	T18452806
LMSAPP	CJ09	Diagonal Hip Girder	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:54 2019 Page 1
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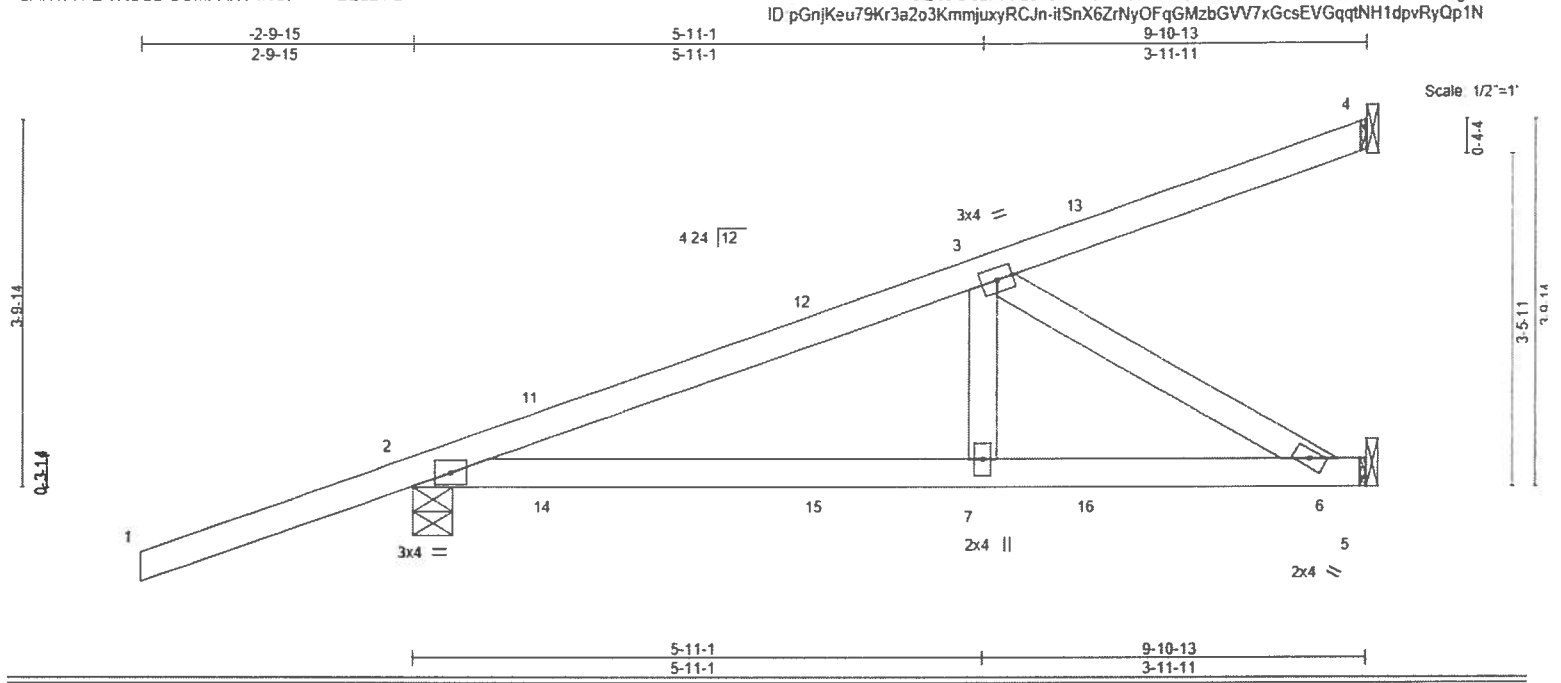

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	-0.09	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	0.06	7-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 44 lb	FT = 15%

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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=110/Mechanical, 2=491/0-4-15, 5=325/Mechanical
Max Horz 2=144(LC 8)
Max Uplift 4=-34(LC 8), 2=-188(LC 8), 5=-10(LC 8)
Max Grav 4=112(LC 17), 2=552(LC 28), 5=340(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-670/15
BOT CHORD 2-7=-61/572, 6-7=-61/572
WEBS 3-7=0/266, 3-6=-662/70

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) 4, 5 except (jt=lb) 2=188.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 57 lb down and 112 lb up at 1-5-4, 57 lb down and 112 lb up at 1-5-4, 56 lb down and 28 lb up at 4-3-4, 56 lb down and 28 lb up at 4-3-4, and 87 lb down and 66 lb up at 7-1-3, and 87 lb down and 66 lb up at 7-1-3 on top chord, and 32 lb down and 78 lb up at 1-5-4, 32 lb down and 78 lb up at 1-5-4, 19 lb down and 2 lb up at 4-3-4, 19 lb down and 2 lb up at 4-3-4, and 33 lb down at 7-1-3, and 33 lb down at 7-1-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) 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: 1-4=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 11=71(F=35, B=35) 13=-74(F=-37, B=-37) 14=80(F=40, B=40) 15=4(F=2, B=2) 16=-50(F=-25, B=-25)

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Date:

October 23,2019

Job	Truss	Truss Type	Qty	Ply	T18452807
LMSAPP	CJ09A	Diagonal Hip Girder	1	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:55 2019 Page 1
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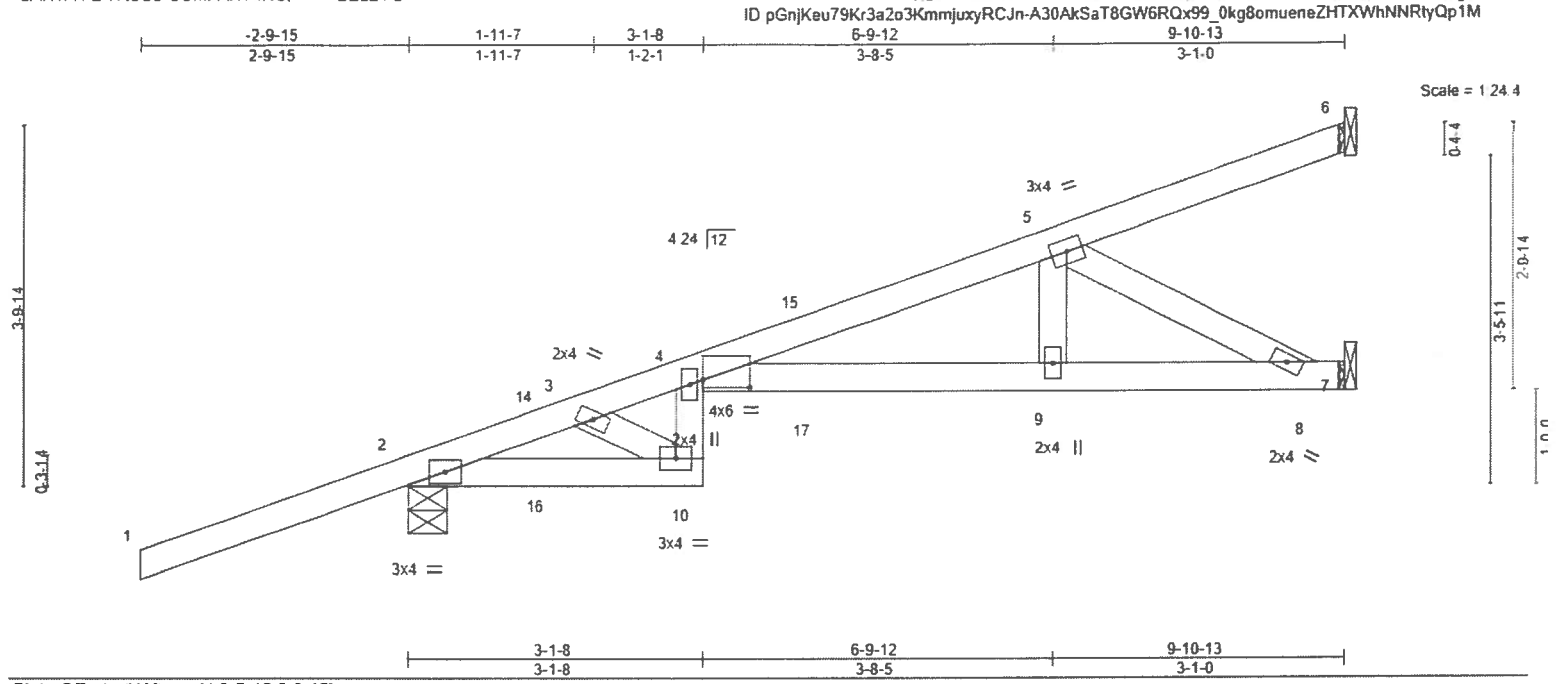

Plate Offsets (X,Y)-- [4:0-5-15,0-0-15]

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	0.66	Vert(LL)	-0.18	4-9	>648	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.31	4-9	>376	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Wind(LL)	-0.17	4-9	>702	240	Weight: 44 lb	FT = 15%

LUMBER-
TOP CHORD 2x4 SP SS
BOT CHORD 2x4 SP No.2 *Except*
4-7: 2x4 SP No.1
WEBS 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. Except:
6-0-0 oc bracing: 4-10.

REACTIONS. (lb/size) 6=42/Mechanical, 2=509/0-4-15, 7=399/Mechanical
Max Horz 2=144(LC 24)
Max Uplift 6=-54(LC 24), 2=-181(LC 8), 7=-9(LC 8)
Max Grav 6=55(LC 17), 2=564(LC 28), 7=405(LC 29)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1046/79, 3-4=-294/0, 4-5=-952/9
BOT CHORD 2-10=-141/934, 4-10=-78/537, 4-9=-55/890, 8-9=-54/892
WEBS 3-10=-1055/158, 5-8=-1005/61, 5-9=0/358

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) 6, 7 except (jt=lb) 2=181.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 57 lb down and 112 lb up at 1-5-4, 57 lb down and 112 lb up at 1-5-4, 53 lb down and 18 lb up at 4-3-4, 53 lb down and 18 lb up at 4-3-4, and 84 lb down and 55 lb up at 7-1-3, and 84 lb down and 55 lb up at 7-1-3 on top chord, and 32 lb down and 78 lb up at 1-5-4, 32 lb down and 78 lb up at 1-5-4, 16 lb down at 4-3-4, 16 lb down at 4-3-4, and 38 lb down at 7-1-3, and 38 lb down at 7-1-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) 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: 1-4=-60, 4-6=-60, 10-11=-20, 4-7=-20
Concentrated Loads (lb)
Vert: 5=-47(F=-24, B=-24) 9=-76(F=-38, B=-38) 14=71(F=35, B=35) 16=80(F=40, B=40) 17=-20(F=-10, B=-10)

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MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

MiTek
6904 Parke East Blvd
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	T18452808
_MSAPP	EJ7	Jack-Open	38	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:56 2019 Page 1
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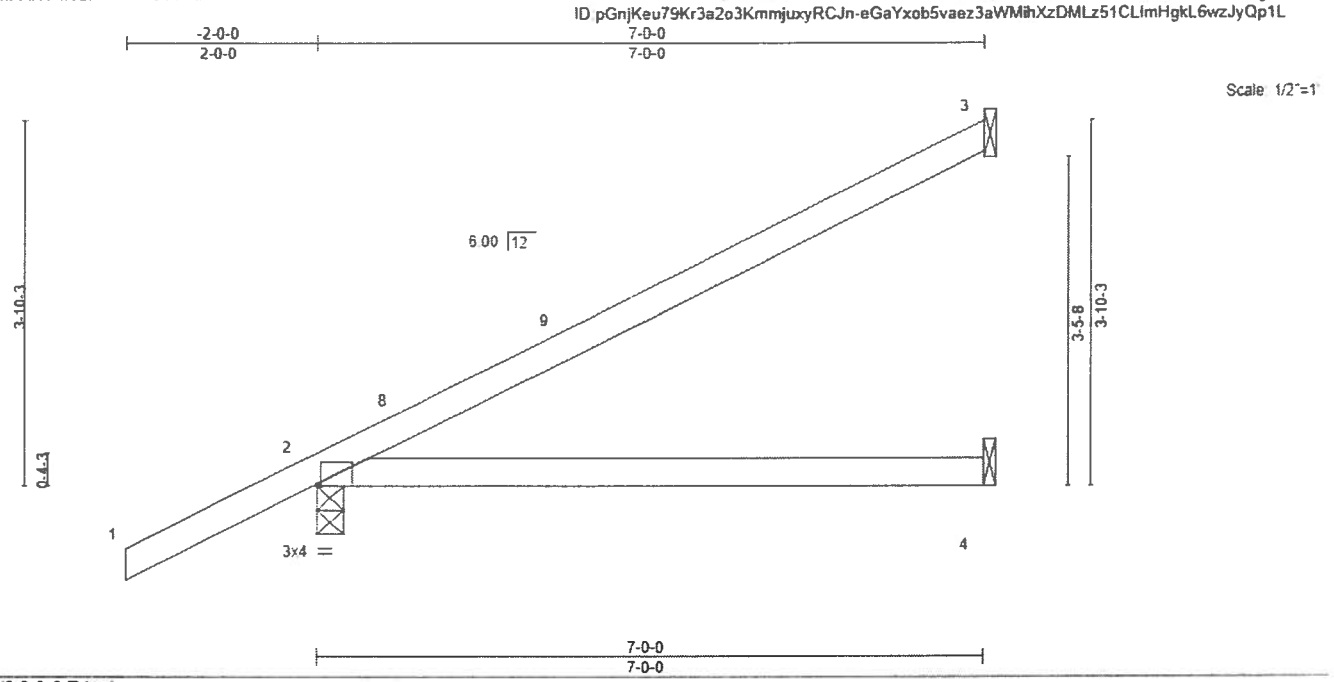

Plate Offsets (X,Y)-- [2:0-0-8,Edge]

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	0.57	Vert(LL)	-0.09	4-7	>969	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.20	4-7	>408	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.08	4-7	>999	240	Weight: 26 lb	FT = 15%

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

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

REACTIONS. (lb/size) 3=181/Mechanical, 2=415/0-3-8, 4=79/Mechanical
Max Horz 2=144(LC 12)
Max Uplift 3=-59(LC 12), 2=-66(LC 12)
Max Grav 3=181(LC 1), 2=415(LC 1), 4=123(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 6-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) 3, 2.
6) 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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Job	Truss	Truss Type	Qty	Ply	T18452809
MSAPP	EJ7A	Jack-Open	3	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:57 2019 Page 1
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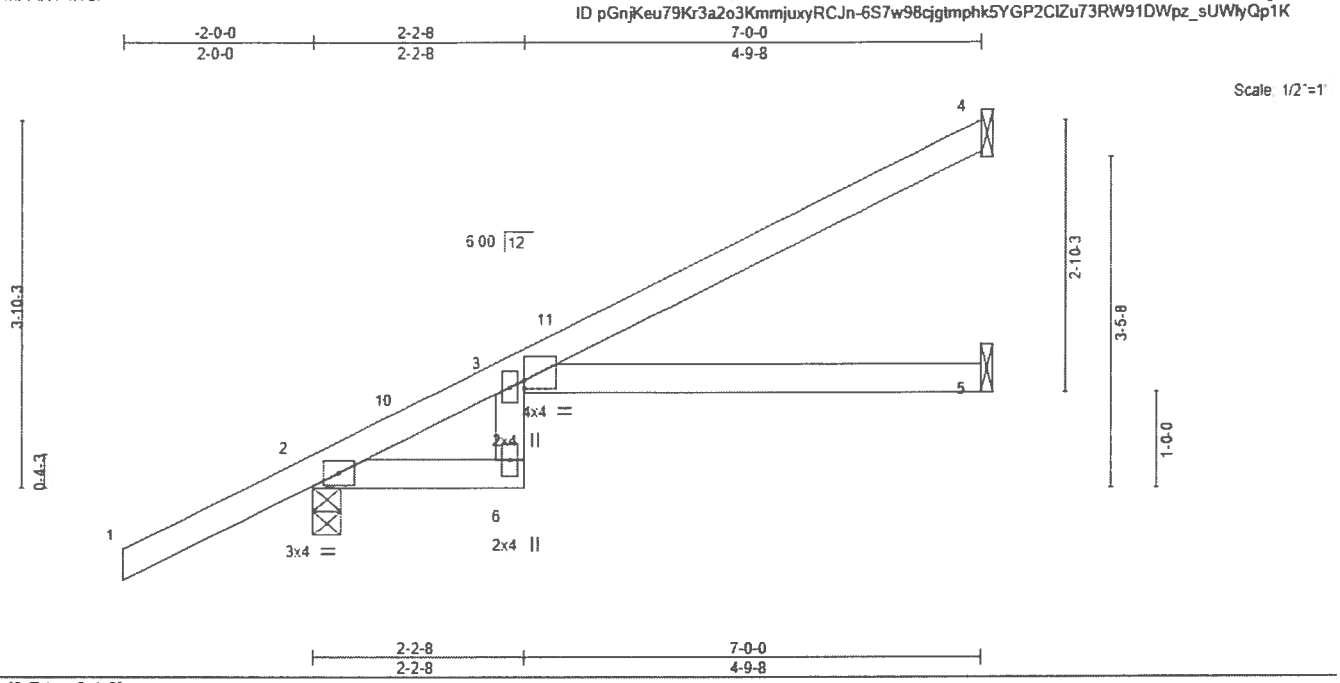

Plate Offsets (X,Y)— [3:Edge,0-1-0]

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	0.62	Vert(LL)	-0.11	3-5	>761	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.24	3-5	>348	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.11	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.13	3-5	>656	240	Weight: 27 lb	FT = 15%

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

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

REACTIONS. (lb/size) 4=169/Mechanical, 2=415/0-3-8, 5=91/Mechanical
Max Horz 2=144(LC 12)
Max Uplift 4=-48(LC 12), 2=-66(LC 12)
Max Grav 4=169(LC 1), 2=415(LC 1), 5=118(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl.; GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 6-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) 4, 2.
6) 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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October 23,2019

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	
LMSAPP	J01	Jack-Open	4	1	T18452810
					Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL

8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:57 2019 Page 1

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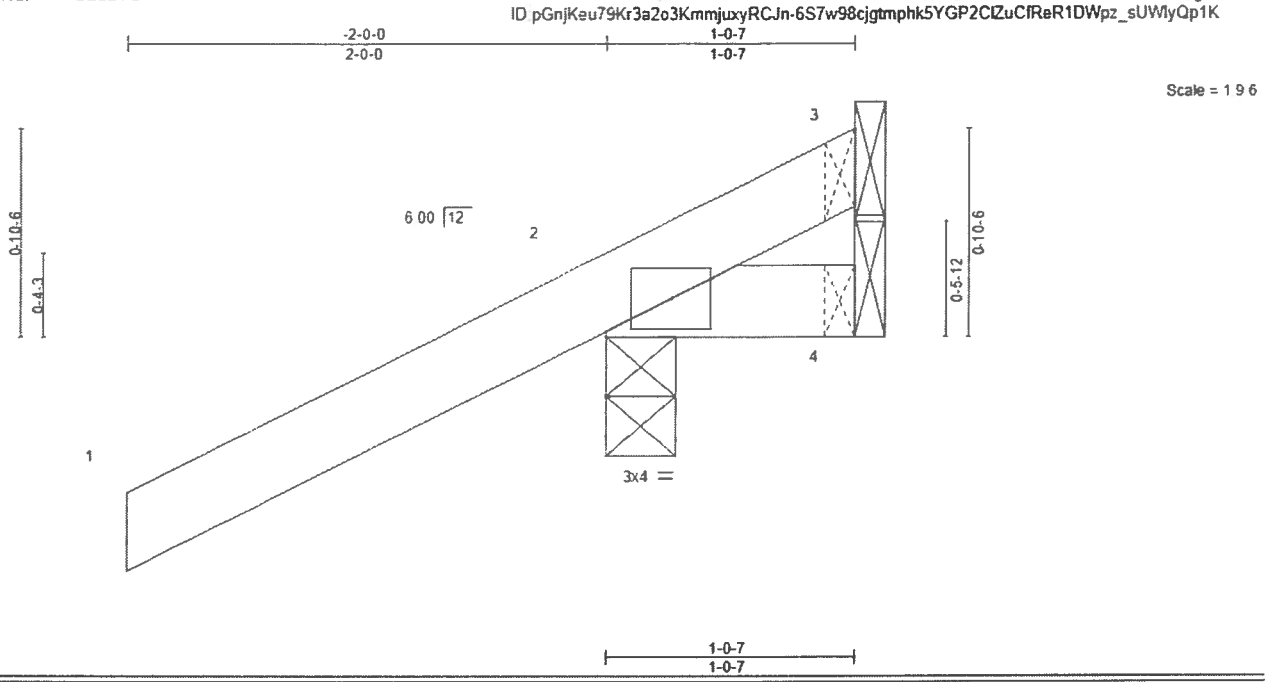

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	0.00	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	0.00	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP		Wind(LL)	-0.00	7	>999	240	Weight: 7 lb	FT = 15%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-0-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=-27/Mechanical, 2=278/0-3-8, 4=-49/Mechanical
Max Horz 2=58(LC 12)
Max Uplift 3=-27(LC 1), 2=-142(LC 12), 4=-49(LC 1)
Max Grav 3=28(LC 12), 2=278(LC 1), 4=46(LC 12)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) 3, 4 except (jt=lb) 2=142.

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Date:

October 23,2019

Job	Truss	Truss Type	Qty	Ply	T18452811
MSAPP	J03	Jack-Open	2	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:58 2019 Page 1
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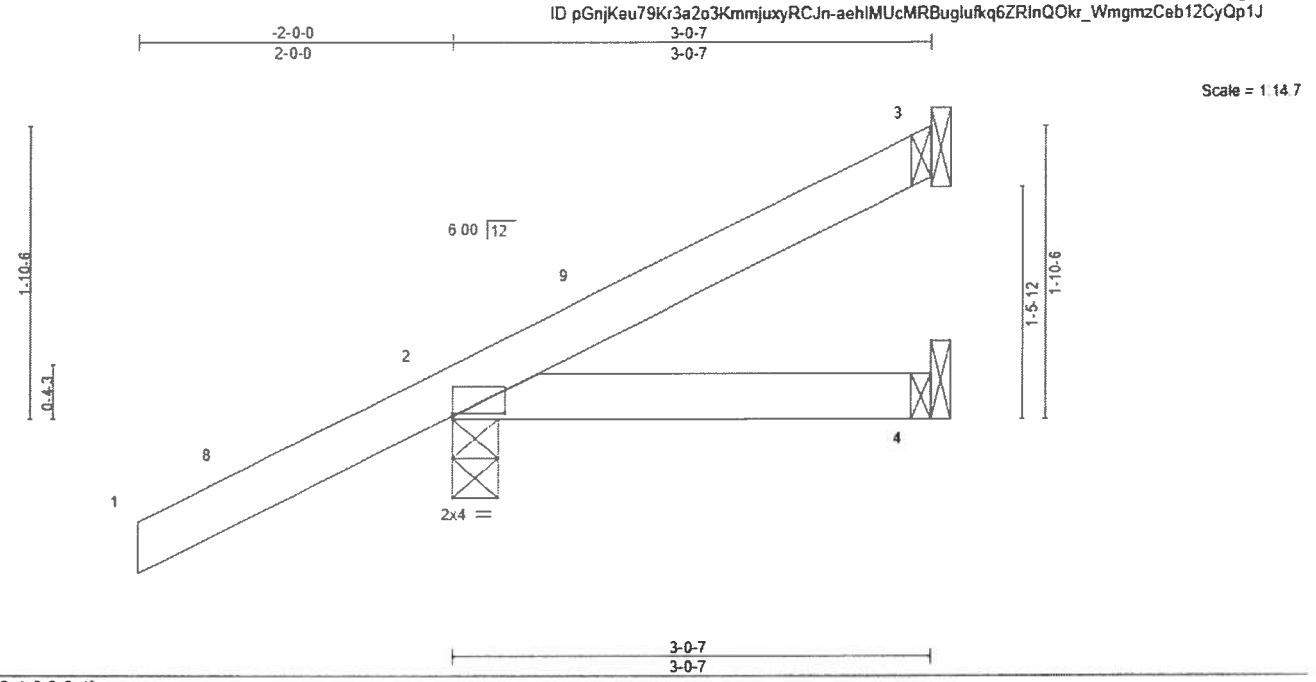

Plate Offsets (X,Y)— [2:0-4-0,0-0-4]

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	0.24	Vert(LL)	-0.00	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	-0.01	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP		Wind(LL)	-0.00	4-7	>999	240	Weight: 13 lb	FT = 15%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=58/Mechanical, 2=279/0-3-8, 4=21/Mechanical
Max Horz 2=86(LC 12)
Max Uplift 3=-13(LC 12), 2=-87(LC 12)
Max Grav 3=58(LC 1), 2=279(LC 1), 4=48(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 2-11-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) 3, 2.

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Date:

October 23,2019

Job	Truss	Truss Type	Qty	Ply	
LMSAPP	J03A	Jack-Open	2	1	T18452812
					Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:58 2019 Page 1
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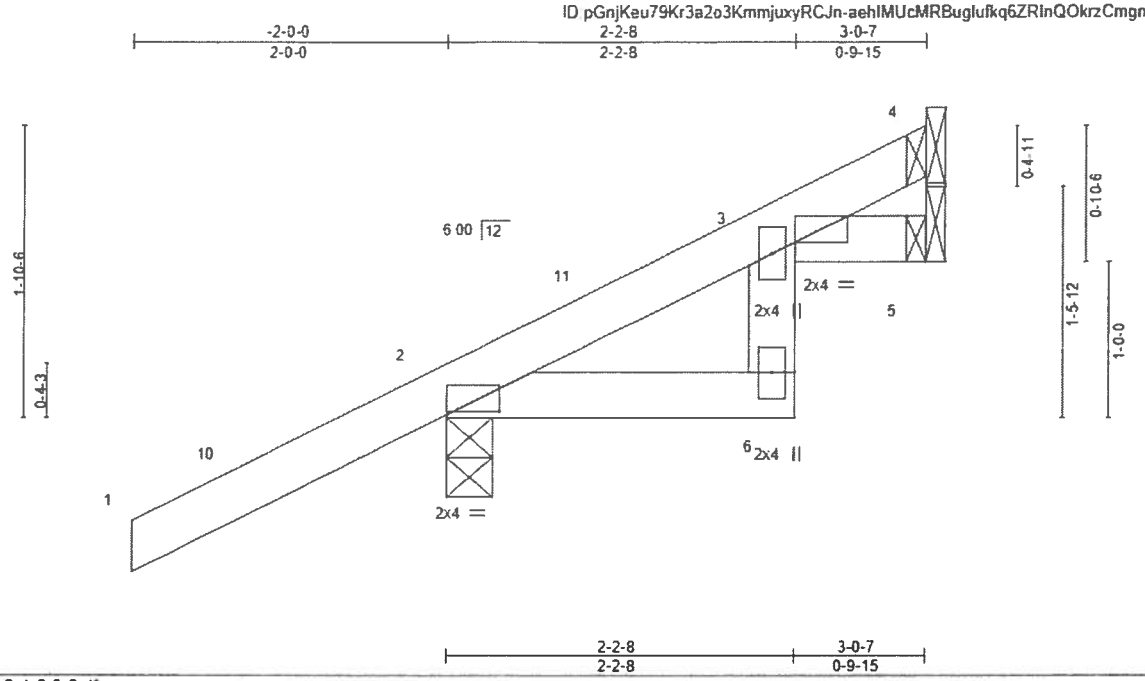

Plate Offsets (X,Y)— [2:0-4-0,0-0-4]

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	0.24	Vert(LL)	-0.00	6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	-0.01	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MR		Wind(LL)	-0.00	6	>999	240	Weight: 14 lb	FT = 15%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 4=45/Mechanical, 2=279/0-3-8, 5=34/Mechanical
Max Horz 2=86(LC 12)
Max Uplift 4=-3(LC 9), 2=-87(LC 12)
Max Grav 4=45(LC 1), 2=279(LC 1), 5=43(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 2-11-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) 4, 2.

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Date:

October 23,2019

MiTek
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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452813
_MSAPP	J05	Jack-Open	2	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8.240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:24:59 2019 Page 1
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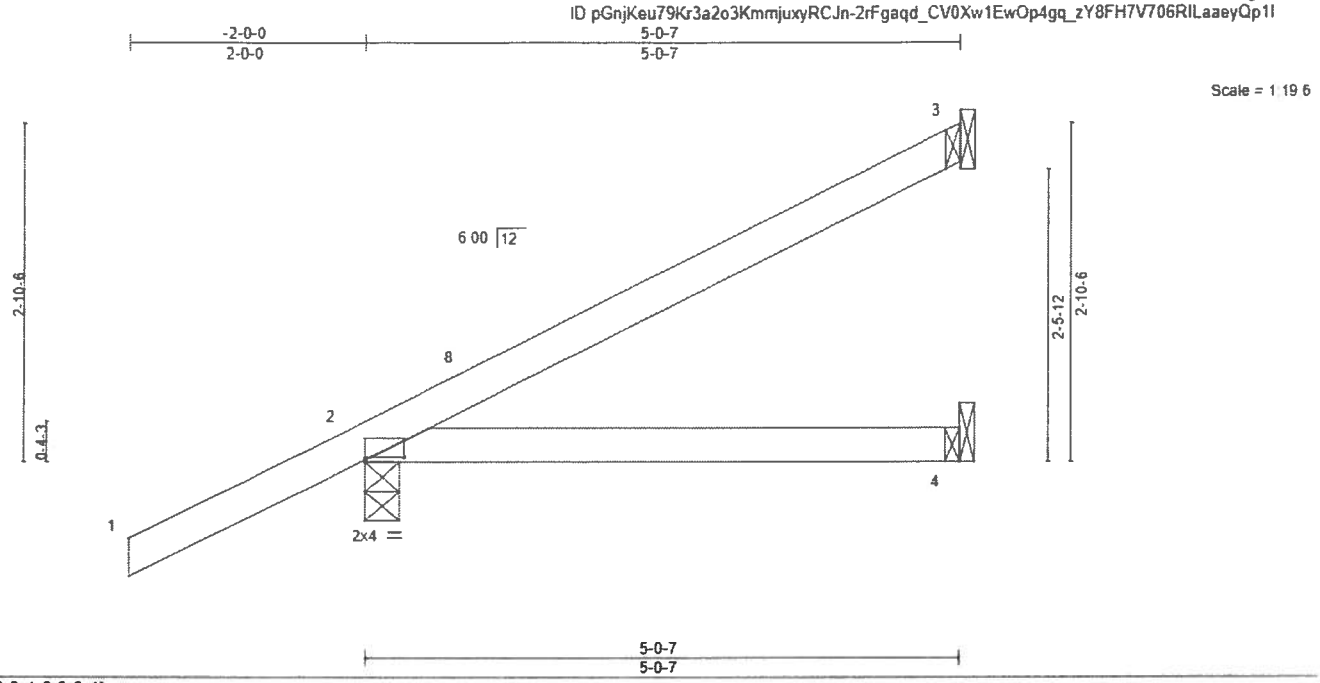

Plate Offsets (X,Y)— [2:0-4-0,0-0-4]

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	0.26	Vert(LL)	-0.02	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.03	4-7	>999	240	Weight: 19 lb	FT = 15%

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

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

REACTIONS. (lb/size) 3=122/Mechanical, 2=343/0-3-8, 4=53/Mechanical
Max Horz 2=115(LC 12)
Max Uplift 3=-37(LC 12), 2=-73(LC 12)
Max Grav 3=122(LC 1), 2=343(LC 1), 4=87(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 4-11-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) 3, 2.
6) 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.

This item has been electronically signed and sealed by ORegan, Philip, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58128
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,201

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	T18452814
_MSAPP	J05A	Jack-Open	2	1	Job Reference (optional)

SANTA FE TRUSS COMPANY INC. BELL FL 8 240 s Jul 14 2019 MiTek Industries, Inc. Tue Oct 22 16:25:00 2019 Page 1
ID:pGnjKeu79Kr3a2o3KmmjuxyRCJn-W1p3n9eczo8OYBp7xXbvNCWipfd6EaGGfy4864yQp1H

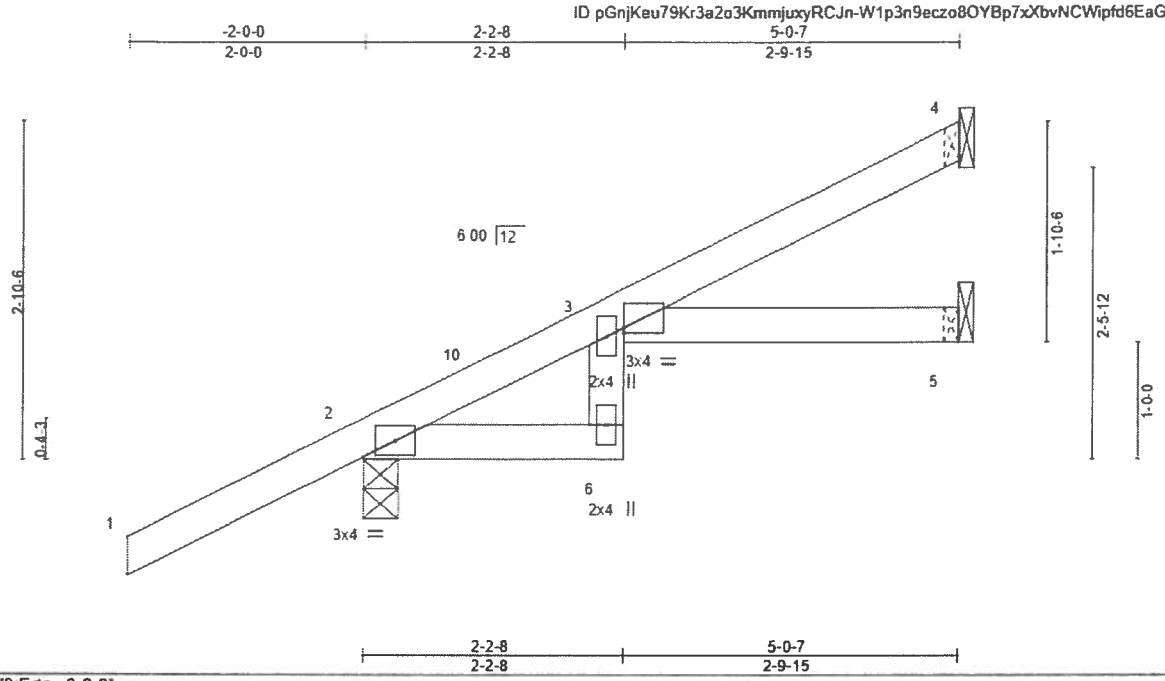

Plate Offsets (X,Y)— [3:Edge,0-0-8]

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	0.33	Vert(LL)	-0.03	3	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	-0.06	3-5	>961	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS		Wind(LL)	0.05	3	>999	240	Weight: 21 lb	FT = 15%

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

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

REACTIONS. (lb/size) 4=109/Mechanical, 2=343/0-3-8, 5=66/Mechanical
Max Horz 2=115(LC 12)
Max Uplift 4=-27(LC 12), 2=-73(LC 12)
Max Grav 4=109(LC 1), 2=343(LC 1), 5=82(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 4-11-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 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) 4, 2.
6) 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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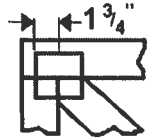
6904 Parke East Blvd. Tampa FL 33610
Date:

October 23,2019

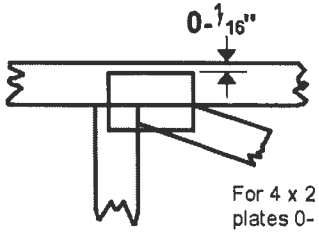
MiTek
6904 Parke East Blvd
Tampa, FL 36610

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.



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

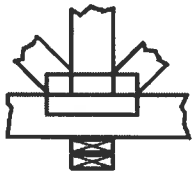
4 x 4

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

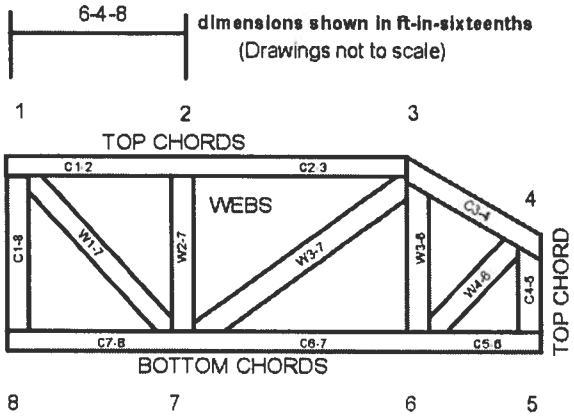


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

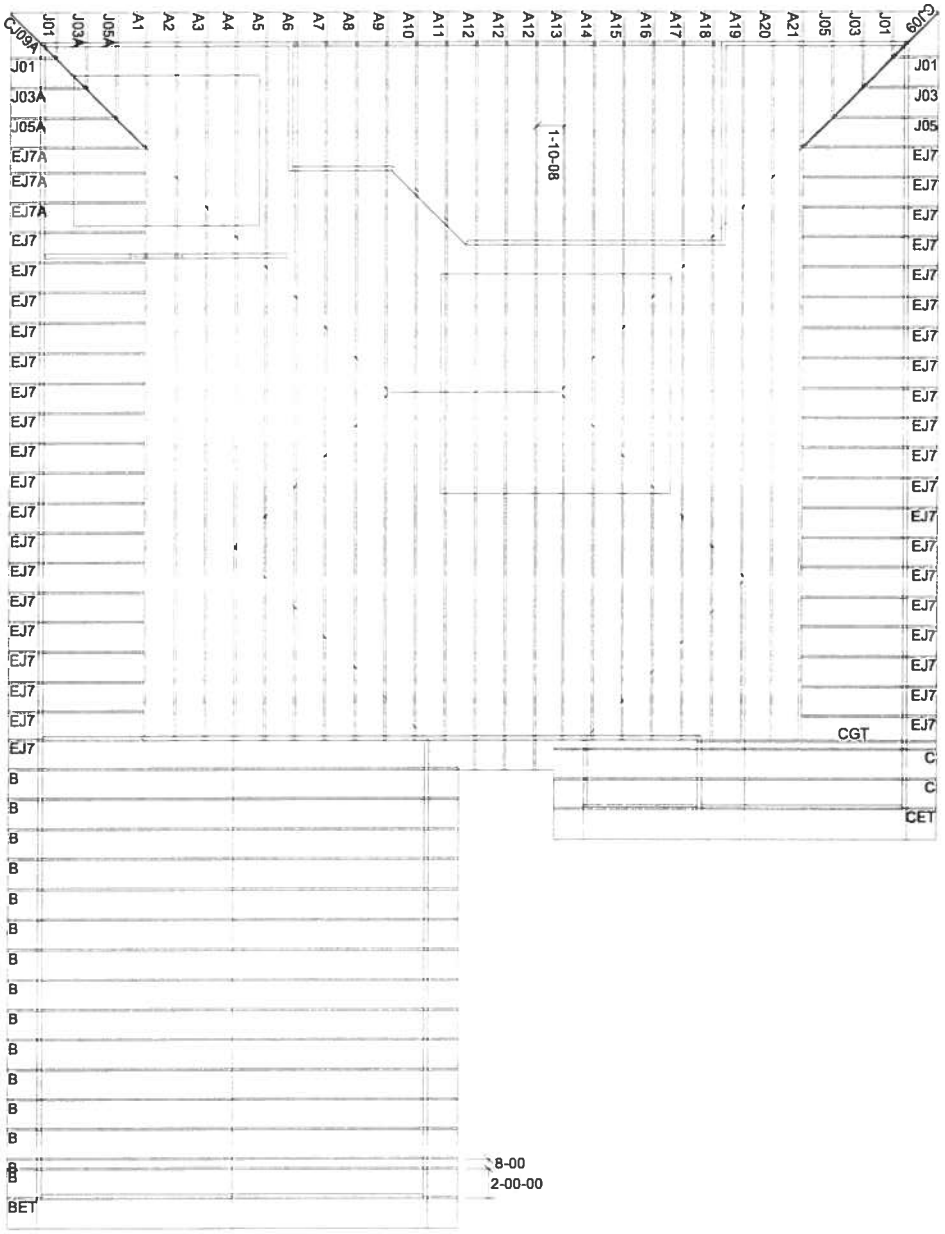
MiTek®

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

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.



Santa Fe Truss

BELL, FL PHONE 386-454-7711 FAX 800-853-1556

Job Name: SAPP RESIDENCE

Customer: LMC CONSTRUCTION

Residential System Sizing Calculation

Summary

Ed Sapp

Lake City, FL 32024

Project Title:
Sapp Residence

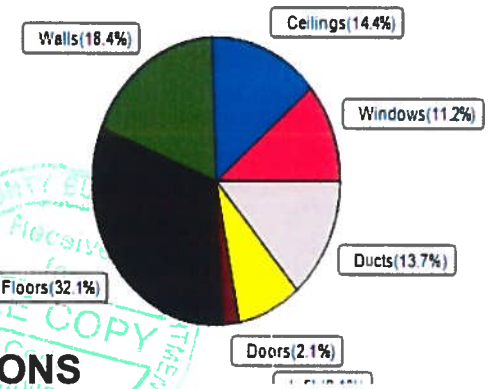
10/25/2019

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(152 ft.) Temp Range(M) Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)					
Winter design temperature(TMY3 99%)	30	F	Summer design temperature(TMY3 99%)	94	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	40	F	Summer temperature difference	19	F
Total heating load calculation	**35615**	**Btuh**	**Total cooling load calculation**	**24848**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	100.0	35615	Sensible (SHR = 0.70)	88.0	17317
Heat Pump + Auxiliary(0.0kW)	100.0	35615	Latent	143.4	7421
			Total (Electric Heat Pump)	99.6	24738

WINTER CALCULATIONS

Winter Heating Load (for 2436 sqft)

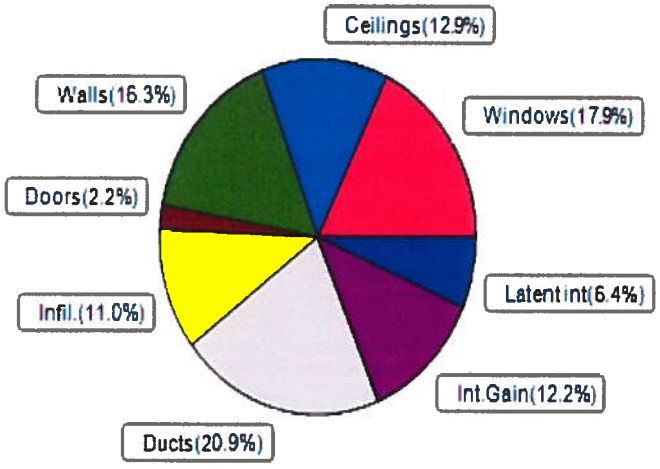
Load component			Load	
Window total	278	sqft	4003	Btuh
Wall total	1845	sqft	6550	Btuh
Door total	40	sqft	736	Btuh
Ceiling total	2558	sqft	5142	Btuh
Floor total	2436	sqft	11422	Btuh
Infiltration	66	cfm	2887	Btuh
Duct loss			4874	Btuh
Subtotal			**35615**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**35615**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 2436 sqft)

Load component			Load	
Window total	278	sqft	4449	Btuh
Wall total	1845	sqft	4052	Btuh
Door total	40	sqft	552	Btuh
Ceiling total	2558	sqft	3214	Btuh
Floor total			0	Btuh
Infiltration	49	cfm	1028	Btuh
Internal gain			3040	Btuh
Duct gain			3338	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**19673**	**Btuh**
Latent gain(ducts)			1868	Btuh
Latent gain(infiltration)			1707	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1600	Btuh
Total latent gain			**5175**	**Btuh**
TOTAL HEAT GAIN			**24848**	**Btuh**



Prepared by ACCA MANUAL J 8th Edition

EnergyGauge® System Sizing
PREPARED BY: _____
DATE: 10/25/2019

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Ed Sapp

Lake City, FL 32024

Project Title:
Sapp Residence
Building Type: User

10/25/2019

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 40.0 F (TMY3 99%)

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
1	2, NFRC 0.25	Vinyl	0.36	S	30.0	14.4	432 Btuh
2	2, NFRC 0.25	Vinyl	0.36	S	30.0	14.4	432 Btuh
3	2, NFRC 0.25	Vinyl	0.36	E	45.0	14.4	648 Btuh
4	2, NFRC 0.25	Vinyl	0.36	E	4.0	14.4	58 Btuh
5	2, NFRC 0.25	Vinyl	0.36	N	15.0	14.4	216 Btuh
6	2, NFRC 0.25	Vinyl	0.36	W	15.0	14.4	216 Btuh
7	2, NFRC 0.25	Vinyl	0.36	N	45.0	14.4	648 Btuh
8	2, NFRC 0.25	TIM	0.36	N	24.0	14.4	346 Btuh
9	2, NFRC 0.25	Vinyl	0.36	N	12.0	14.4	173 Btuh
10	2, NFRC 0.25	Vinyl	0.36	E	12.0	14.4	173 Btuh
11	2, NFRC 0.25	Vinyl	0.36	N	30.0	14.4	432 Btuh
12	2, NFRC 0.25	Vinyl	0.36	W	4.0	14.4	58 Btuh
13	2, NFRC 0.25	Vinyl	0.36	W	12.0	14.4	173 Btuh
	Window Total				278.0(sqft)		4003 Btuh

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	112	3.55	398 Btuh
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	42	3.55	149 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	96	3.55	341 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	413	3.55	1466 Btuh
5	Frame - Wood	- Ext	(0.089)	13.0/0.0	98	3.55	346 Btuh
6	Frame - Wood	- Ext	(0.089)	13.0/0.0	105	3.55	373 Btuh
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	177	3.55	628 Btuh
8	Frame - Wood	- Ext	(0.089)	13.0/0.0	63	3.55	224 Btuh
9	Frame - Wood	- Ext	(0.089)	13.0/0.0	122	3.55	431 Btuh
10	Frame - Wood	- Ext	(0.089)	13.0/0.0	404	3.55	1434 Btuh
11	Frame - Wood	- Adj	(0.089)	13.0/0.0	214	3.55	760 Btuh
	Wall Total				1845(sqft)		6550 Btuh

Doors	Type	Storm	Ueff.	Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.460)	20	18.4	368 Btuh
2	Insulated - Garage,	n	(0.460)	20	18.4	368 Btuh
	Door Total			40(sqft)		736Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
1	Unvent Attic/L/Shing	(0.050)	0.0/19.0	2558	2.0	5142 Btuh
	Ceiling Total			2558(sqft)		5142Btuh

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade	(1.180)	0.0	242.0 ft(perim.)	47.2	11422 Btuh
	Floor Total			2436 sqft		11422 Btuh

	Envelope Subtotal:	27854 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Ed Sapp

Lake City, FL 32024

Project Title:
Sapp Residence
Building Type: User

10/25/2019

Infiltration	Type	Wholehouse	ACH	Volume(cuft)	Wall Ratio	CFM=	
	Natural		0.18	21924	1.00	65.9	2887 Btuh
Duct load	Average sealed, R6.0, Supply(Att), Return(Att)				(DLM of 0.159)		4874 Btuh
All Zones				**Sensible Subtotal All Zones**			**35615 Btuh**

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	35615 Btuh
	Ventilation Sensible Heat Loss	0 Btuh
	Total Heat Loss	35615 Btuh

EQUIPMENT

1. Electric Heat Pump	#	35615 Btuh

Key: Window types - NFRC (Requires U-Factor and Shading coefficient(SHGC) of glass as numerical values)
or - Glass as 'Clear' or 'Tint' (Uses U-Factor and SHGC defaults)
U - (Window U-Factor)
HTM - (ManualJ Heat Transfer Multiplier)

Version 8

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Ed Sapp

Project Title:
Sapp Residence

Lake City, FL 32024

10/25/2019

Reference City: Gainesville, FL Temperature Difference: 19.0F(TMY3 99%) Humidity difference: 51gr.

Component Loads for Whole House

Window	Type* Panes	SHGC	U	InSh	IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	2 NFRC	0.25, 0.36		No	No	S	2.0ft.	1.0ft.	30.0	30.0	0.0	12	14	363 Btuh
2	2 NFRC	0.25, 0.36		No	No	S	2.0ft.	1.0ft.	30.0	30.0	0.0	12	14	363 Btuh
3	2 NFRC	0.25, 0.36		No	No	E	2.0ft.	1.0ft.	45.0	5.9	39.1	12	31	1280 Btuh
4	2 NFRC	0.25, 0.36		No	No	E	2.0ft.	1.0ft.	4.0	2.6	1.4	12	31	74 Btuh
5	2 NFRC	0.25, 0.36		No	No	N	2.0ft.	1.0ft.	15.0	0.0	15.0	12	12	181 Btuh
6	2 NFRC	0.25, 0.36		No	No	W	8.0ft.	1.0ft.	15.0	15.0	0.0	12	31	181 Btuh
7	2 NFRC	0.25, 0.36		No	No	N	13.0f	1.0ft.	45.0	0.0	45.0	12	12	544 Btuh
8	2 NFRC	0.25, 0.36		No	No	N	13.0f	1.0ft.	24.0	0.0	24.0	12	12	290 Btuh
9	2 NFRC	0.25, 0.36		No	No	N	13.0f	1.0ft.	12.0	0.0	12.0	12	12	145 Btuh
10	2 NFRC	0.25, 0.36		No	No	E	8.0ft.	1.0ft.	12.0	12.0	0.0	12	31	145 Btuh
11	2 NFRC	0.25, 0.36		No	No	N	2.0ft.	1.0ft.	30.0	0.0	30.0	12	12	363 Btuh
12	2 NFRC	0.25, 0.36		No	No	W	2.0ft.	1.0ft.	4.0	2.6	1.4	12	31	74 Btuh
13	2 NFRC	0.25, 0.36		No	No	W	2.0ft.	1.0ft.	12.0	2.0	10.0	12	31	334 Btuh
	Excursion													110 Btuh
	Window Total								278 (sqft)					4449 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.09	13.0/0.0	112.0	2.3	253 Btuh
2	Frame - Wood - Ext	0.09	13.0/0.0	42.0	2.3	95 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.0	96.0	2.3	217 Btuh
4	Frame - Wood - Ext	0.09	13.0/0.0	413.0	2.3	935 Btuh
5	Frame - Wood - Ext	0.09	13.0/0.0	97.5	2.3	221 Btuh
6	Frame - Wood - Ext	0.09	13.0/0.0	105.0	2.3	238 Btuh
7	Frame - Wood - Ext	0.09	13.0/0.0	177.0	2.3	401 Btuh
8	Frame - Wood - Ext	0.09	13.0/0.0	63.0	2.3	143 Btuh
9	Frame - Wood - Ext	0.09	13.0/0.0	121.5	2.3	275 Btuh
10	Frame - Wood - Ext	0.09	13.0/0.0	404.0	2.3	914 Btuh
11	Frame - Wood - Adj	0.09	13.0/0.0	214.0	1.7	361 Btuh
	Wall Total			1845 (sqft)		4052 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	20.0	13.8	276 Btuh
2	Insulated - Garage	20.0	13.8	276 Btuh
	Door Total	40 (sqft)		552 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Unvented Attic Light/Shingle	0.050	0.0/19.0	2558.0	1.26	3214 Btuh
	Ceiling Total			2558 (sqft)		3214 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	2436 (ft-perimeter)	0.0	0 Btuh
	Floor Total		2436.0 (sqft)		0 Btuh

		Envelope Subtotal:	12267 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Ed Sapp

Project Title: Sapp Residence

Climate:FL_GAINESVILLE_REGIONAL_A

Lake City, FL 32024

10/25/2019

Infiltration	Type	Average ACH	Volume(cuft)		Wall Ratio		CFM=	Load	
	Natural	0.14	21924		1		49.4	1028	Btuh
Internal gain		Occupants	Btuh/occupant				Appliance	Load	
		8	X	230	+		1200	3040	Btuh
						Sensible Envelope Load:		16336	Btuh
Duct load	Average sealed,Supply(R6.0-Attic), Return(R6.0-Attic)					(DGM of 0.204)		3338	Btuh
						Sensible Load All Zones		**19673**	**Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Ed Sapp

Project Title: Sapp Residence

Climate:FL_GAINESVILLE_REGIONAL_A

Lake City, FL 32024

10/25/2019

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**16336 Btuh**
	Sensible Duct Load	3338 Btuh
	Total Sensible Zone Loads	**19673 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
Whole House	**Total sensible gain**	**19673 Btuh**
Totals for Cooling	Latent infiltration gain (for 51 gr. humidity difference)	1707 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1868 Btuh
	Latent occupant gain (8.0 people @ 200 Btuh per person)	1600 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**5175 Btuh**
	TOTAL GAIN	**24848 Btuh**

EQUIPMENT

1. Central Unit	#	24738 Btuh

*Key: Window types (Panes - Number and type of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value)
(U - Window U-Factor)
(InSh - Interior shading device: none(No), Blinds(B), Draperies(D) or Roller Shades(R))
- For Blinds: Assume medium color, half closed
For Draperies: Assume medium weave, half closed
For Roller shades: Assume translucent, half closed
(IS - Insect screen: none(N), Full(F) or Half(½))
(Ornt - compass orientation)

Version 8