

July 13, 2021

Franklin Structures, LLC
10655 Hey 43, South
Russellville, AL 35653

RE: MFT10886-5078-64-3-47-R1
NTA JOB NUMBER: FH062421-5

Dear Ms. Christie Jackson,

The referenced manufactured building has been reviewed and approved. ICC NTA LLC certifies this plan is in compliance with 2020 Florida Codes – 7th Edition as referenced in the approved drawings. This approval covers the factory build structure only. Any alterations to the factory-built structure, on site, voids the approval. This plan is subject to the following limitations:

1. This plan is **NOT** approved for High Velocity Hurricane Zone (i.e. Broward and Dade Counties).
2. Signed and sealed plans are on file with ICC NTA, LLC
3. The Chapter 633 Plan Review and Inspection shall be conducted by the local fire safety inspector.
4. Items installed on site are subject to review and approval by the local authority having jurisdiction. Please reference the list of site installed items on the approved plans.
5. This review included products for compliance with 553.8425 or FAC Chapter 61G20-3.

If you have any additional questions or comments regarding this matter, please contact me at your convenience at (574) 773-7975.

Respectfully,

Michael Faller

Michael Faller SMP-056
Account Manager
ICC-NTA LLC



A MEMBER OF THE ICC FAMILY OF SOLUTIONS

Notes:

- 1. These plans comply with the 7th Edition (2020) Florida Building Code : Residential, 7th Edition (2020) Florida Building Code: Energy Conservation and 2017 National Electrical Code.
- 2. These plans comply with Rule 61G20–3.006 for product approval.
- 3. The raised seal set (or electronic sealed set) of plans are on file in the third agency’s office as directed by DBPR.
- 4. This building is subject to review and approval of the fire inspector on site with compliance with Chapter 633 Fire Safety Code.
- 5. The manufacturer’s data sheet and the state (DBPR) insignia are permanently mounted to or about the electrical panel.
- 6. This building has been designed for erection or installation on a site built permanent foundation and is not designed to be moved once so erected or installed.

ANY WINDBORNE DEBRIS PROTECTION TO BE PROVIDED ON–SITE BY OTHERS AND SUBJECT TO LOCAL CODES.
WOOD STRUCTRURAL PANELS TO BE PROVIDED FOR ALL GLAZED OPENINGS PER R301.2.1.2

This building has not been designed or approved for placement in high VELOCITY HURRICANE ZONES (HVHZ), (I.E. DADE AND BROWARD COUNTIES)

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Notes:

- 9. Vult wind speed = EXPOSURE–C AT Vult=167MPH & Vasd = 130MPH
- 10. RISK CATEGORY=II
- 11. Building Mean Roof Height 18’
- 12. Roof live load = 20 psf
- 13. Floor live load = 40 psf
- 14. Seismic Zone = A, B or C
- 15. Building Category = Type 5B, Unprotected, Wood Construction.
- 16. Use Group = Single Family Dwelling
- 17. Roof Interior (zone 1) = +34.7/–63.6psf
- 18. Roof Exterior (zone 2) = +34.7/–70 psf
- 19. Roof Corner (zone 3) = +34.7/–108.6 psf
- 20. Wall Interior (zone 4) = +37.9/–41.1 psf
- 21. Wall Exterior (zone 5) = +37.9/–50.7 psf
- 22. OVERHANG EXTERIOR LOAD=(OH Z1) –89.3 psf.
- 23. OVERHANG EXTERIOR LOAD=(OH Z2) –95.7 psf.
- 24. Overhang Corner Load =(OH–Z3) –134.3 psf
- 25. Site address per FRC R319.1
- 26. Internal pressure coefficient = +/- 0.18 psf

COMPONENTS & CLADDING PRESSURES ARE SHOWN AS ALLOWABLE STRENGTH PRESSURES BASED ON ULTIMATE LOADS

SITE INSTALLED ITEMS

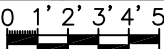
NOTE: THAT THIS LIST DOES NOT NECESSARILY LIMIT THE ITEMS OF WORK AND MATERIALS THAT MAY BE REQUIRED FOR A COMPLETE INSTALLATION.
ALL SITE RELATED ITEMS ARE SUBJECT TO LOCAL BUILDING OFFICIAL REVIEW AND APPROVAL
REQUIRING TO BE IN COMPLIANCE WITH THE FLORIDA BUILDING CODE

- 1) THE COMPLETE FOUNDATION SUPPORT AND TIE DOWN SYSTEM
- 2) RAMPS, STAIRS, AND GENERAL ACCESS TO THE BUILDING
- 3) PORTABLE FIRE EXTINGUISHER(S)
- 4) BUILDING DRAINS, CLEAN OUTS AND HOOKUP TO PLUMBING SYSTEM
- 5) ELECTRICAL SERVICE HOOKUP, INCLUDING THE FEEDERS, TO THE BUILDING
- 6) THE MAIN ELECTRICAL PANEL AND SUB–FEEDERS
- 7) CONNECTION OF ELECTRICAL CIRCUITS CROSSING OVER MODULE MATE LINES (MULTI–UNITS ONLY)
- 8) STRUCTURAL AND AESTHETIC INTERCONNECTIONS BETWEEN MODULES (MULTI–UNITS ONLY)
- 9) ANY SITE FLASHING OR SHINGLES INSTALLED AT SITE REFER TO ARMA PUBLICATION ” RESIDENTIAL ASPHALT ROOFING MANUAL”, IN GUIDE LINES WITH FBC CODE
- 10) ALL FOUNDATION WORK WILL BE COMPLETED ON SITE. IS THE RESPONSIBILITY OF THE LOCAL CONTRACTOR AND IS SUBJECT TO LOCAL JURISDICTION.
- 11) MANDATORY BLOWER DOOR TEST MUST BE COMPLETED PER FLORIDA ENERGY CODE
- 12) MAIN DISCONNECT WILL BE INSTALLED ON–SITE AND SUBJECT TO LOCAL CODES

Florida Plan Number:
Model MFT10886–5078–64–3–47–R1

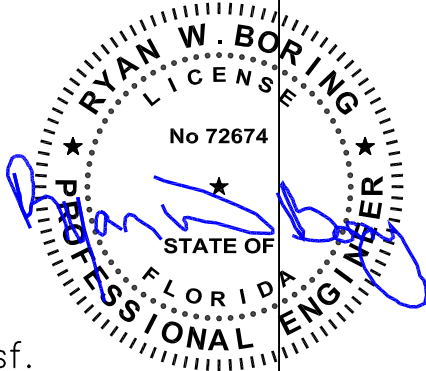
PHYSICAL ADDRESS

STOCK
1800 STATE ROAD 207
ST.AUGUSTINE FL,
ST. JOHNS COUNTY
ONLY FOR EXPOSURE C

		FRANKLIN STRUCTURES LLC 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653		FLORIDA MODULAR			
BY: WAYNE		DATE: 6/16/21		TITLE: MODULAR INDEX			
DRAWN: WAYNE		NO: MFT-10886-5078-64-3-47-R1		REV:		SHEET: 1 OF 8	
GRAPHIC SCALE							

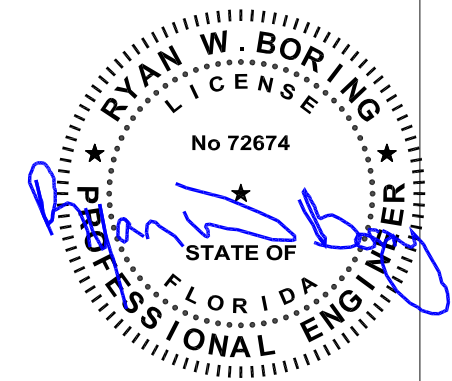
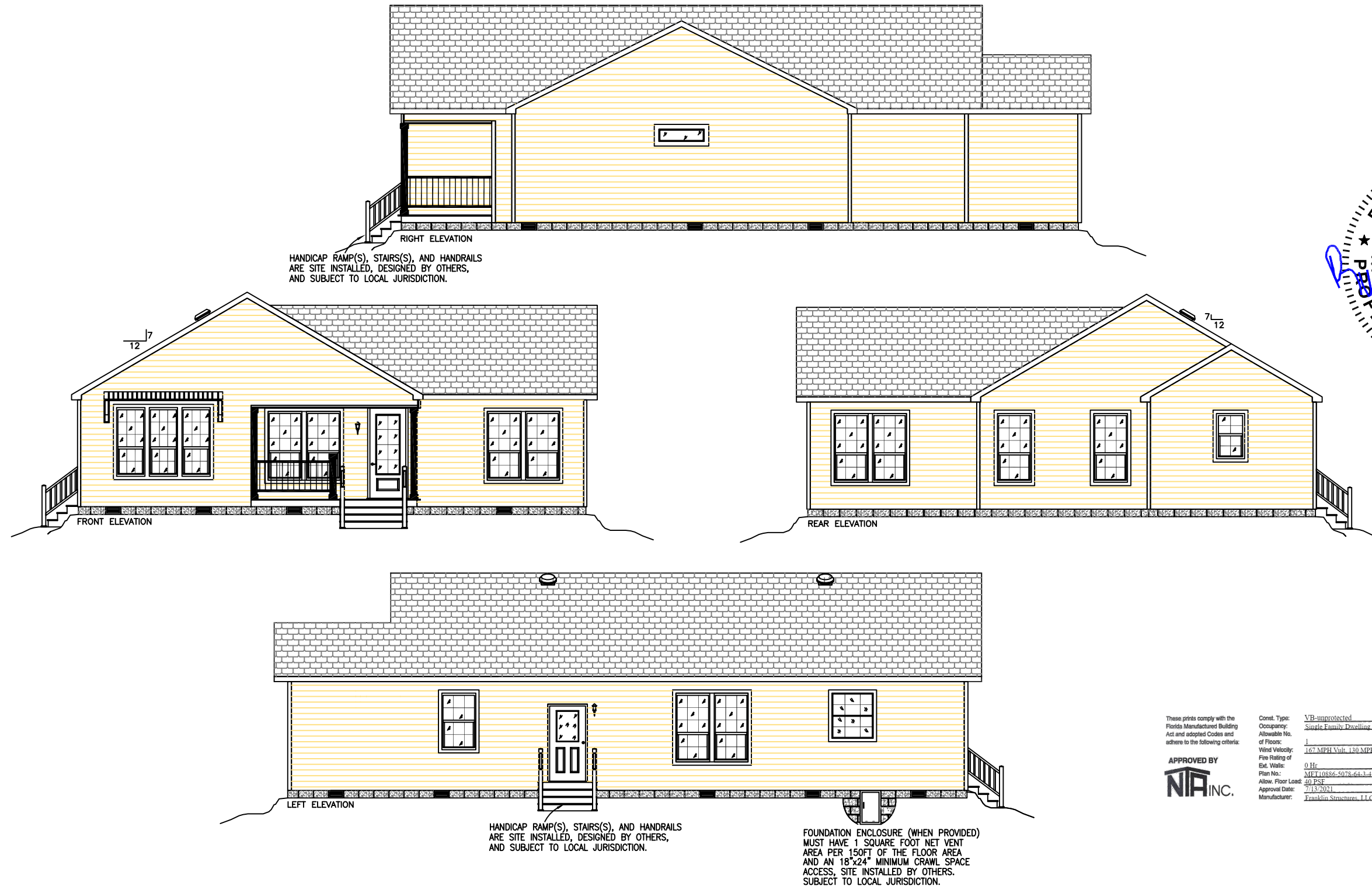
These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:		Const. Type: VB-unprotected	
Occupancy: Single Family Dwelling		Allowable No. of Floors: 1	
Wind Velocity: 167 MPH Vult, 130 MPH Vasd		Fire Rating of Ext. Walls: 0 Hr	
Plan No.: MFT10886-5078-64-3-47-R1		Allow. Floor Load: 40 PSF	
Approval Date: 7/13/2021		Manufacturer: Franklin Structures, LLC	

APPROVED BY

Jul 12, 2021

DATE	7/13/2021	CERT. NO	SMP-056
PLAN NUMBER	MFT10886-5078-64-347R1		
APPROVED BY	Michael Faller		
			
(signature)			



Jul 12, 2021

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

Compl. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vasc.
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

APPROVED BY
NIA INC.

NOTES!!

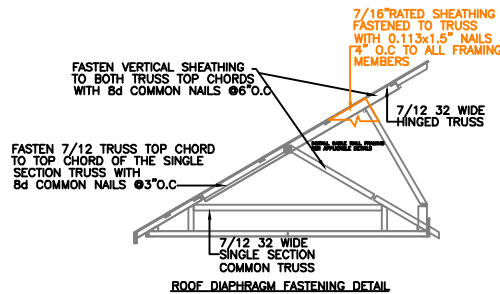
1. EXTERIOR COVERING IS VINYL LAP SIDING WITH VINYL APPURTENANCES STANDARD. OTHER EXTERIOR COVERINGS SHALL CONFORM TO INTERNATIONAL BUILDING CODE. EXTERIOR COVERINGS FOR FRONT AND REAR ELEVATIONS ARE SUPPLIED BY FRANKLIN HOMES AND INSTALLED ON-SITE BY LOCAL CONTRACTOR.
2. ROOF COVERING IS 240# FIBERGLASS SHINGLES. SHINGLES FOR RIDGE ARE SUPPLIED BY FRANKLIN HOMES, INSTALLED ON-SITE BY LOCAL CONTRACTOR.
3. WINDOWS ARE VINYL CLAD THERMOPANE.
4. MINIMUM ATTIC VENTILATION VIA CONTINUOUS VENTILATED SOFFIT & WHIRLY BIRD VENTS IS 8.60 SQ.FT PER 2578 SQ.FT. OF HOME DIVIDED BY 300 SQ.FT. OF CONTINUOUS VENTILATION
5. CRAWL SPACE VENTILATION SHALL CONFORM TO REQUIREMENTS OF 1/150 { BY OTHERS}
6. FOUNDATIONS INSTALLED BY LOCAL CONTRACTOR PER LOCAL CODE REQUIREMENTS.
7. SHUTTERS SHOWN ARE NON-STRUCTURAL (AVAILABLE AS OPTION).

NOTES!!

Plan may be built Flip image (Front end to Rear end) or reverse image (top side to bottom side) without specific plan showing each arrangement using standard model approved

REVISION:	BY:	DATE:

		FRANKLIN STRUCTURES, LLC. 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653		FLORIDA MODULAR		
DRAWN:	WAYNE	DATE:	6/16/21	TITLE:	ELEVATIONS	
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO:	MFT-10886-5078-64-3-47-R1	REV:		SHEET: 2 of 8



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APPROVED BY
NIA INC.

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Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/15/2021
Manufacturer: Franklin Structures, LLC

OPTIONAL ATRIUM DOOR IN PLACE OF (2) 3672 WINDOWS

OPTIONAL FREESTANDING TUB IN PLACE OF DECK TUB

OPTIONAL SGD IN PLACE OF (2) 3672 WINDOWS

172 PLF BACK SIDEWALL WILL BE COVERED WITH 7/16 OSB ONE SIDE, FASTENED WITH .131x2.5 pd Nails AT 6" O.C. EDGE SPACING

CONNECT SIDEWALL TO ENDWALL WITH .131 NAILS @ 4" O.C.

435 PLF FRONT ENDWALL WILL BE COVERED WITH 7/16 OSB ONE SIDE, FASTENED WITH .131x2.5 NAILS AT 4" O.C. EDGE SPACING

281 PLF REAR ENDWALL WILL BE COVERED WITH 7/16 OSB ONE SIDE, FASTENED WITH .131x2.1/2" Nails AT 6" O.C. EDGE SPACING FASTENER SPACING 6" O.C.

(2) SIMPSON LSTA18 HEADER TO POSTS AND FROM POSTS TO FLOOR

STRAP ACROSS FOR 4310#

NOTE: FASTEN MAIN ROOF TO TAG ROOF W/ #10x4" SCREWS 12" O.C.

NOTE: FASTEN MAIN ROOF TO TAG ROOF W/ #10x4" SCREWS 12" O.C.

NOTE:
RIDGEBEAM TO HEADER UPLIFT - 4260LBS EA SIDE OF TAG
HTS16 STRAPS = 1310LBS EA.
(2)=2620LBS
CS20 STRAP 1030LBS
(2)=2060LBS
TOTAL = 4680

(1) HTS16 STRAP AND
(1) CS20 STRAP ON EA. LVL
HEADER TO HEADER BELOW.

NOTE:

HEADER TO COLUMN UPLIFT - 2158LBS
LSTA18: 1115LBS
USE (2) LSTA18 STRAPS AT THE TOP BOTTOM OF EA. COLUMN (2 PER END OF HEADERS)

INTERIOR

NOTE:
ROOF DECKING MUST BE FASTENED WITH 0.131x3"Nails 3" O.C BOUNDARY 3" O.C EDGE 3" O.C FIELD

TIE-DOWNS LOCATIONS
FOR LOAD UP TO 3200LB USE HDQ8 HOLD DOWNS W/(2) SPP STUDS MINIMUM
FOR 3200lbs TO 5500lbs USE HDQ8 HOLD DOWNS W/(3) SPP STUDS MINIMUM
FACTORY INSTALLED

NOTES!!

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WINDOW SCHEDULE	DOOR SCHEDULE	U.Values	SHGC
4812 VINYL THERMOPANE TRANSOM	24"x80" HOLLOW CORE	N/A	N/A
4448 VINYL THERMOPANE	28"x80" HOLLOW CORE	N/A	N/A
3660 VINYL THERMOPANE (S.G.)	30"x80" HOLLOW CORE	N/A	N/A
3672 VINYL THERMOPANE	32"x80" HOLLOW CORE	N/A	N/A
3672 VINYL THERMOPANE (E)*	36"x80" HOLLOW CORE	N/A	N/A
3672 VINYL THERMOPANE (S.G.)	42"x80" BARN DOOR	N/A	N/A
3048 VINYL THERMOPANE OPTIONAL	38"x80" STEEL DOOR	0.43	0.30
U-Values=0.34	38"x96" STEEL DOOR	0.36	0.30
SHGC=0.21	OPTIONAL ATRIUM DOOR	0.43	0.30
(E) = EGRESS WINDOW	OPTIONAL SGD	0.32	0.33
(S.G.) = SAFETY GLAZED			

NOTES!!

- ATTIC ACCESS (22"x36" MINIMUM)
- ALL GLAZING TO BE THERMOPANE.
- APA RATED SHEATHING FASTENED PER APA GUIDELINES TO ACHIEVE REQUIRED PLF's.
- REFER TO ATTACHED CALCULATIONS FOR BRACEWALLS AND STRUCTURAL REQUIREMENTS.
- 3" PVC PIPE VENTED THROUGH ROOF AND TERMINATED BELOW FLOOR JOIST FOR PASSIVE RADON CONTROL PER APPENDIX-F

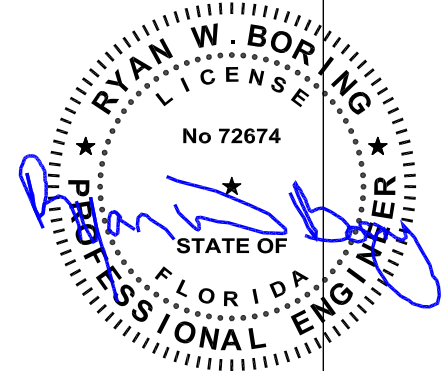


FRANKLIN STRUCTURES, LLC.
10655 HWY. 43 SOUTH
RUSSELLVILLE, ALABAMA 35653

FLORIDA
MODULAR



BY: WAYNE	DATE: 6/16/21	TITLE: FLOORPLAN
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO: MFT-10886-5078-64-3-47-R1
		REV: 3 of 8



Jul 12, 2021

CIR#	DESCRIPTION	BREAKER	POLES	WIRE
1**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
2**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
3**	GENERAL LIGHTING	20 AMP/AFI	1	12-2 W/G
4**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
5	WATER HEATER	NOTE 1		
6	WASHER	20 AMP/AFI/GFI	1	12-2 W/G
7	PORTABLE APPLIANCE	20 AMP/AFI/GFI	1	12-2 W/G
8	PORTABLE APPLIANCE	20 AMP/AFI/GFI	1	12-2 W/G
9	FURNACE	NOTE 2		
10	DRYER	30 AMP		10-3 W/G
11	RANGE	40 AMP	2	8-3 W/G
11A	GAS RANGE	15 AMP/AFI/GFI	1	14-2 W/G
12**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
13**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
14	COOKTOP	40 AMP	2	8-3 W/G

CIR#	DESCRIPTION	BREAKER	POLES	WIRE
14A	GAS COOKTOP IGNITER	15 AMP/AFI	1	14-2 W/G
15	OVEN/MICROWAVE	30 AMP	2	10-3 W/G
16	DISHWASHER	NOTE 3/AFI/GFI		
17	OPT. WHIRLPOOL	20 AMP/AFI/GFI	1	14-2 W/G
18	OPT. EURO RANGE HOOD	20 AMP/AFI	1	12-2 W/G
19	MICROWAVE VENT HOOD	20 AMP/AFI/GFI	1	12-2 W/G
20	BATH RECEPTACLES	20 AMP/GFI	1	12-2 W/G
22	LAUNDRY CIRCUIT	20 AMP/AFI/GFI	1	12-2 W/G
24	SMOKE DETECTORS	15 AMP/AFI		14-2 W/G
40**	GENERAL LIGHTING	20 AMP/AFI	1	12-2 W/G
41**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
42**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
43**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
51**	ELECTRIC FIRE PLACE	15 AMP/AFI/GFI	1	14-2 W/G

SYMBOLS:			
S	- SWITCH		- LIGHT\VENT FAN
	- 15 AMP RECEPTACLE		- C/L=CAN LIGHT
	- 20 AMP RECEPTACLE		- TELEPHONE
	- 30 AMP RECEPTACLE		- TELEVISION
	- 40 AMP RECEPTACLE		- THERMOSTAT
	- LIGHT FIXTURE		- MASTER GFI
	- LAVLIGHT&PORCH LIGHT		- PANEL BOX
	- SMOKE DETECTOR		- WATERPROOF
	- S.D.		- COMBO SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR ALARM
			- FLOOD LIGHT
			- 2' FLUORESCENT
			- 4' FLUORESCENT
			- OPT. CEILING FAN W/LIGHT

1984 SQ.FT. @ 3 WATTS/SQ.FT. = 5952 W
 SMALL APPLIANCES, 3 @ 1500 W = 4500 W
 WATER HEATER..... = 4500 W
 WASHER..... = 1500 W
 DRYER..... = 5000 W
 DISHWASHER..... = 1200 W
 RANGE..... = 13000 W
 MICROWAVE VENT HOOD..... = 1600 W

37252 W

FIRST 10000 W @ 100% = 10000 W
 REMAINDER @ 40% (27252)(.4) = 10901 W
 FURNACE (HVAC) = 23000 W
 43901 W

CALCULATED LOAD FOR SERVICE SIZE
 43901 WATTS / 240 VOLTS = 183 AMPERES
 200 AMP SERVICE STANDARD

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 Fire Rating of Ext. Walls: 0 Hr
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 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

APPROVED BY

THIS HOME IS BUILT FOR THE 2017 NEC!!

ALL CEILING BOXES MUST BE LISTED AS ABLE TO SUPPORT 50lbs.

ALL RECEPTACLES MUST BE LISTED AS TAMPER RESISTANT

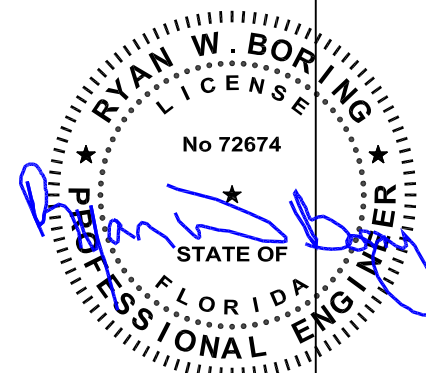
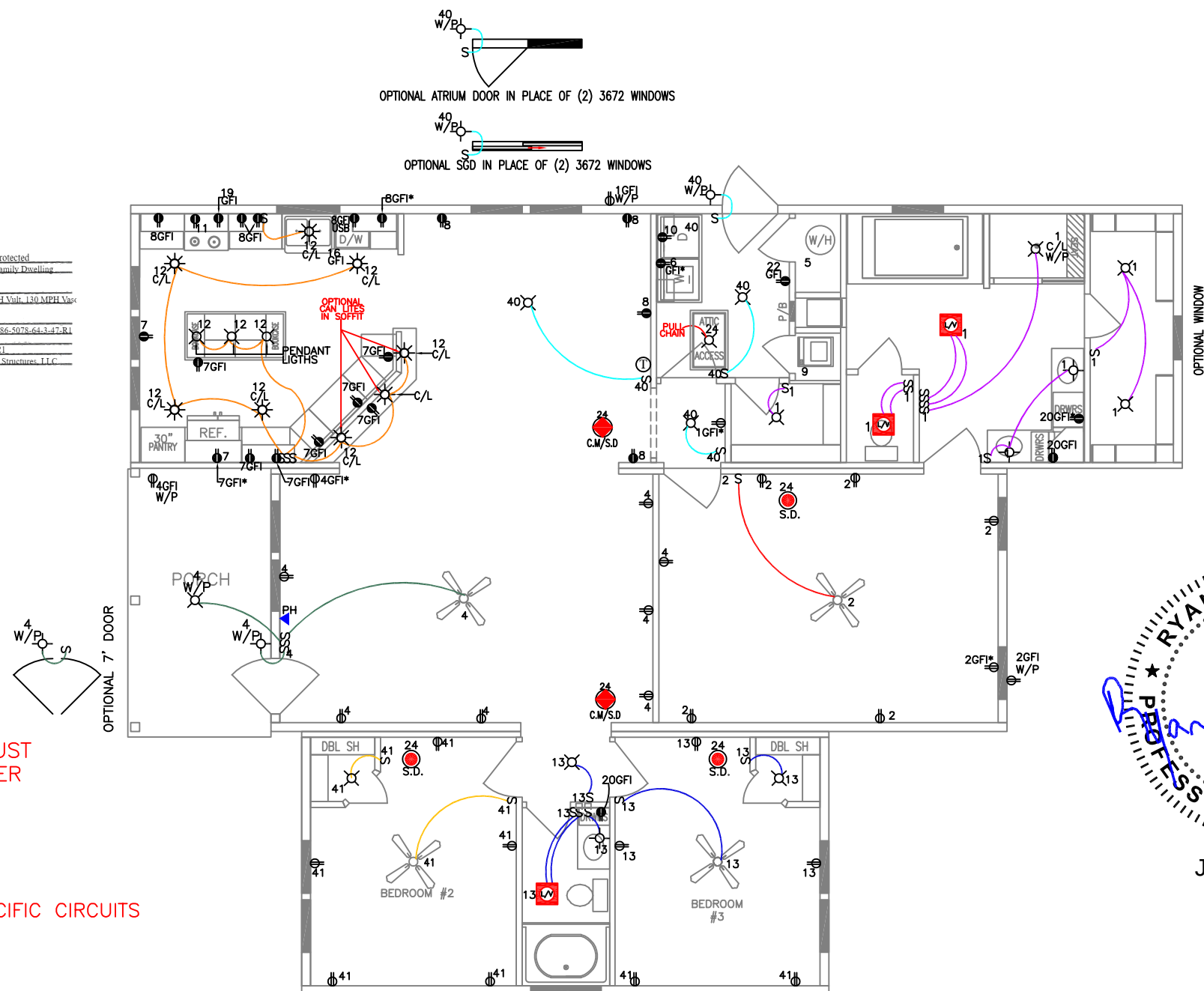
NOTES:

- * ALL CIRCUITS MAY NOT BE USED, SEE APPROVAL DRAWINGS FOR SPECIFIC CIRCUITS
- ** SELECTION IS BASED ON APPLIANCE LOAD AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- *** GENERAL LIGHTING CIRCUITS MAY BE WIRED WITH 12-2 W/G AND 20 AMP BREAKERS

NOTES!!

- *1.a) 20 AMP; 2 POLE; 12-2 w/G or
b) 25 AMP; 2 POLE; 10-2 w/G or
c) 30 AMP; 2 POLE; 10-2 w/G
- 2.a) 15KW; 60 AMP; 2 POLE; 4-4-6 and 30 AMP; 2 POLE; 10-2 W/G
b) 20KW; 60 AMP; 2 POLE; (2) 4-4-6
c) 23KW; 60 AMP; 2 POLE; 6-6-8 and 50 AMP; 2 POLE; 6-6-8
- *3.a) 15 AMP; 1 POLE; 14-2 w/G or
b) 20 AMP; 1 POLE; 12-2 w/G
- *4.a) 15 AMP; GFI; 1 POLE; 14-2 w/G or
b) 20 AMP; GFI; 1 POLE; 12-2 w/G

- CIRCUIT NUMBERS SHOWN HERE ARE USED FOR IDENTIFICATION OF CIRCUITS SHOWN ON ELECTRICAL DIAGRAMS SUBMITTED FOR APPROVALS. CIRCUIT IDENTIFICATION IN THE DISTRIBUTION PANEL BOXES WILL BE ACCOMPLISHED BY DESCRIBING EACH CIRCUIT (EG. WATER HEATER, LIGHTING, ETC.). IT IS PREFERRED THAT CIRCUIT NUMBERS ON DISTRIBUTION PANEL MATCH THOSE SHOWN ON THIS CHART, BUT IT IS NOT A REQUIREMENT.
- SERVICE ENTRANCE WIRE SIZE IS (3)-#2/0 WITH (1)-#4 COPPER GROUND.
- ALL FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSET, HALLWAYS, KITCHEN, LAUNDRY OR SIMILAR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER DEVICE OF THE COMBINATION TYPE.

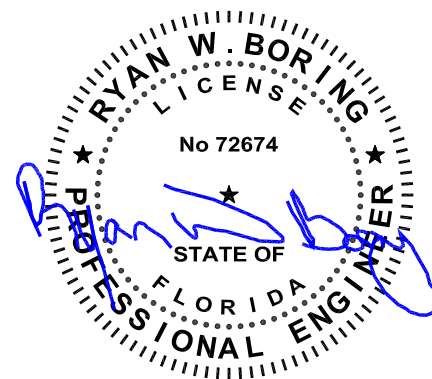
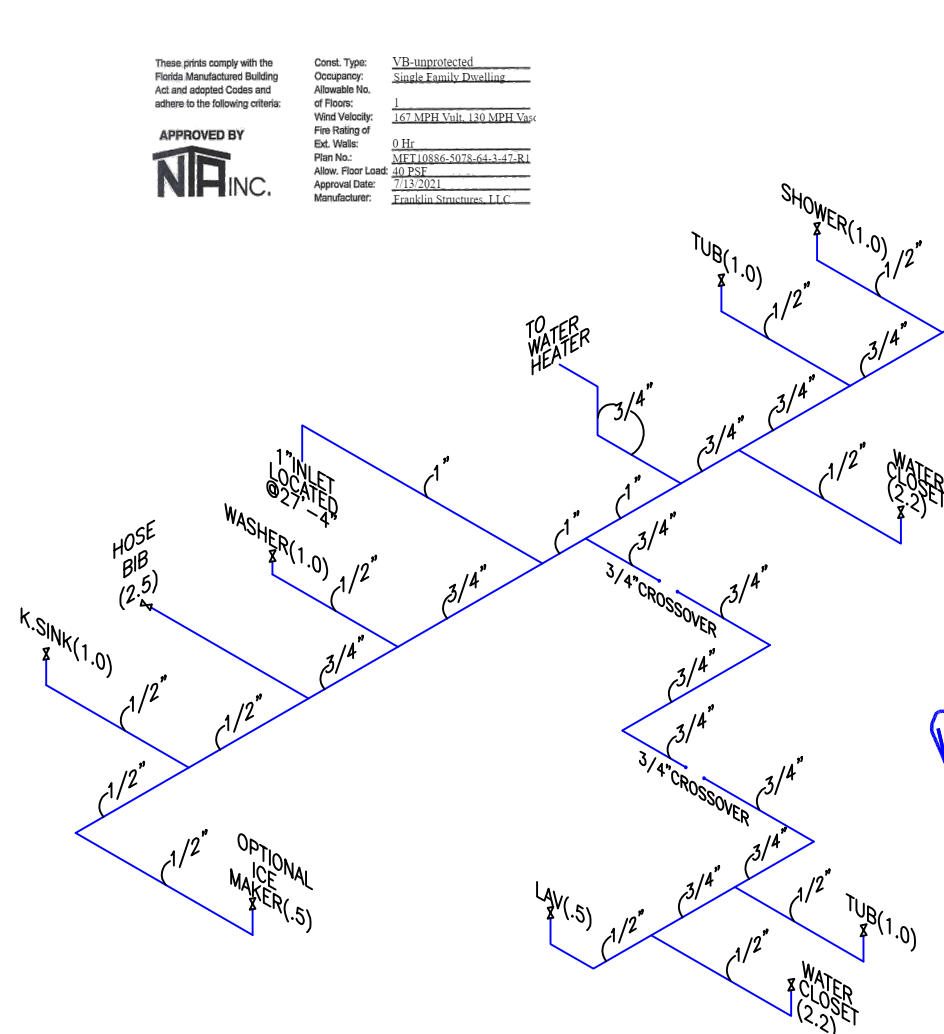


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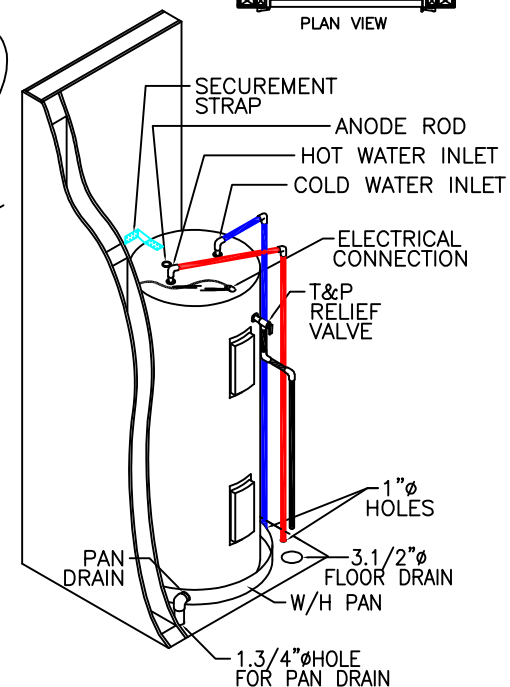
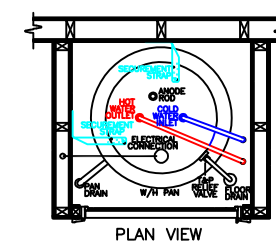
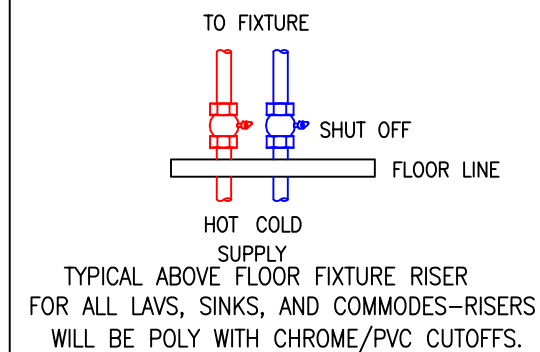
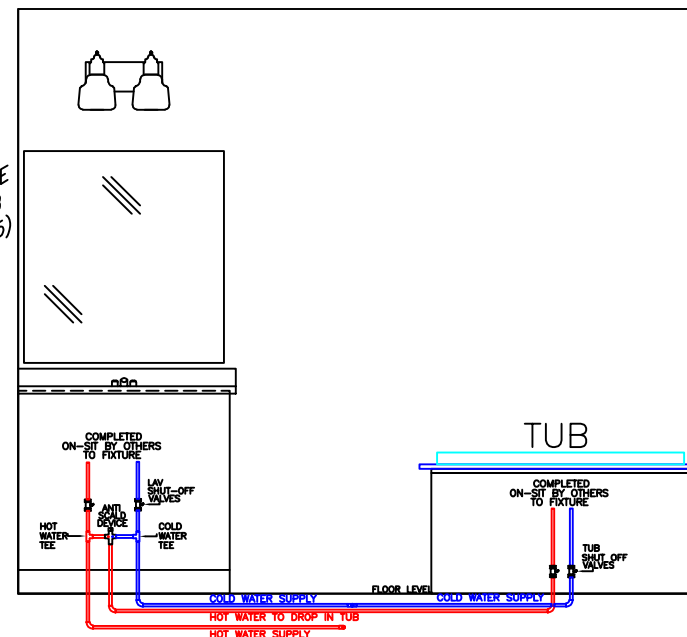
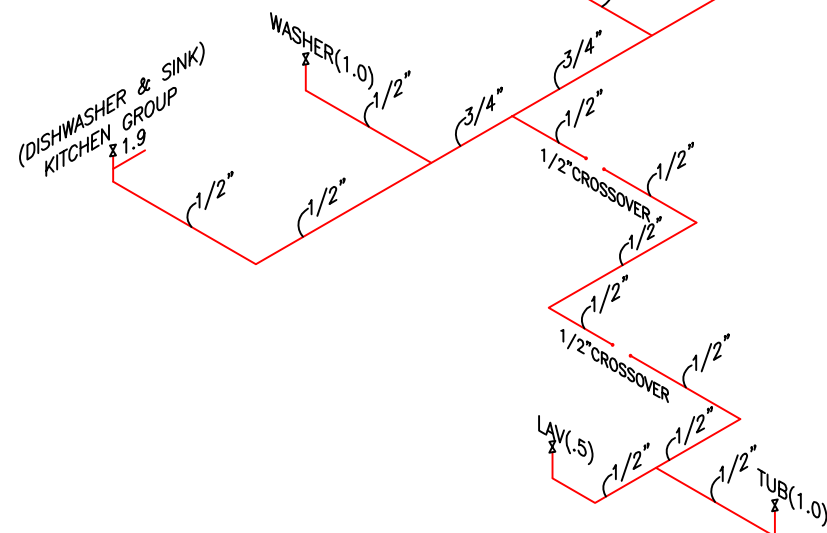
		FRANKLIN STRUCTURES, LLC. 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653		FLORIDA MODULAR	
BY:	DATE:	TITLE:			
DRAWN: WAYNE	6/16/21	ELECTRICAL			
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO: MTF-10886-5078-64-3-47-R1	REV:	SHEET: 4 of 8	

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FRONT VIEW ISOMETRIC

HOT WATER PIPE INSULATION WITH A MINIMUM THERMAL RESISTANCE
OF R-3 SHALL APPLIED TO THE FOLLOWING PER SECTION:
N1103.5.3 OF THE 2018 IECC
R403.5.3 OF THE 2020 FBC-R

- * PIPING 3/4" OR LARGER IN NOMINAL DIAMETER
- * PIPING LOCATED OUTSIDE OF THE CONDITIONED SPACE
- * PIPING SERVING MORE THAN ONE DWELLING UNIT
- * PIPING FROM THE WATER HEATER TO A DISTRIBUTION MANIFOLD
- * PIPING LOCATED UNDER FLOOR SLAB
- * BURIED PIPING
- * SUPPLY AND RETURN PIPING IN RECIRCULATION SYSTEMS OTHER THAN DEMAND RECIRCULATION SYSTEMS

$$1'' = 32$$

1. 50 GAL. 4500 WATT ELECTRIC WATER HEATER.
2. THE PAN DRAIN SHALL EXTEND TO THE EXTERIOR OF THE BUILDING AND TERMINATE NOT LESS THAN 6 INCHES OR MORE THAN 24 INCHES ABOVE THE ADJACENT GROUND SURFACE.
3. ALL WATER LINES ARE MADE USING (CROSSLINKED POLYETHYLENE) PEX WITH INSERT FITTING
4. WATER HAMMER ARRESTORS TO BE INSTALLED WHERE QUICK CLOSING VALVES ARE UTILIZED. ARRESTORS SHALL CONFORM TO ASSE 1010.

REVISION:		BY:	DATE:



FRANKLIN STRUCTURES, LLC.
10655 HWY. 43 SOUTH
RUSSELLVILLE, ALABAMA 35653

FLORIDA
MODULAR

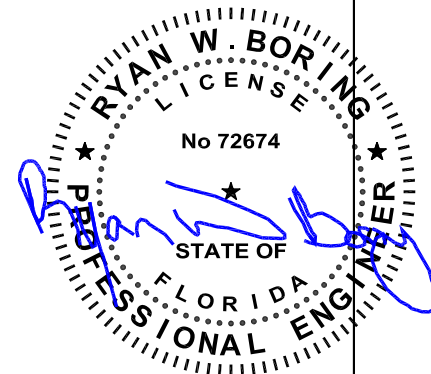
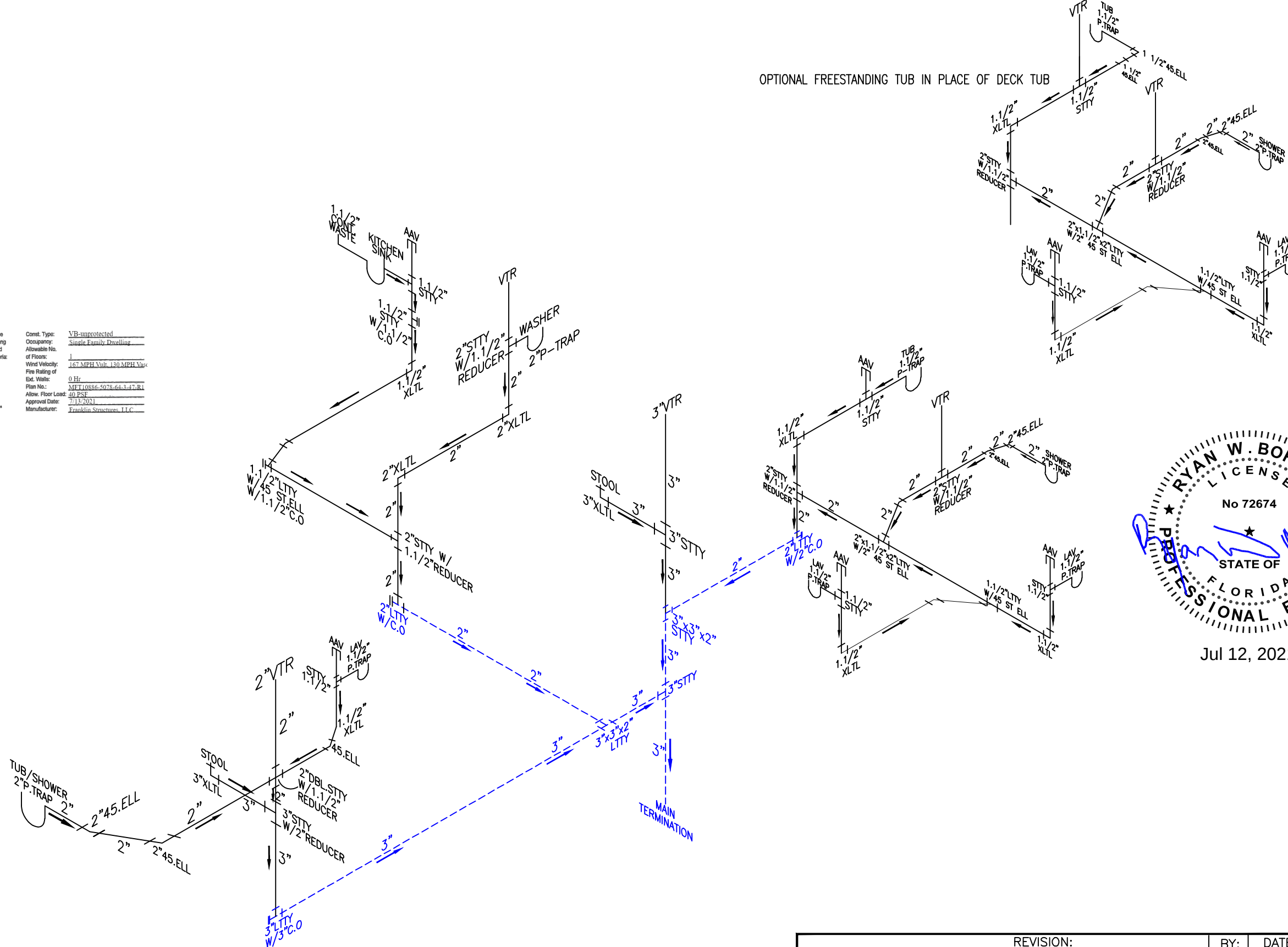


BY:		DATE:		TITLE: WATER SCHEMATIC	
DRAWN: WAYNE		6/16/21			
GRAPHIC SCALE		0 1' 2' 3' 4' 5'		NO: 10886-5078-64-3-47-R1	
				REV: SHEET: 5 of 8	

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt. 130 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 30 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC



Jul 12, 2021

NOTES!!

1. AIR ADMITTANCE VALVES MEET ASSE 1051 REQUIREMENTS
2. AIR ADMITTANCE VALVES SHALL BE LOCATED PER MANUFACTURERS SPECS. OR A MIN. OF 4\" ABOVE THE FIXTURE DRAIN.
3. ALL DWV LINES ARE SCHEDULE 40 PVC

ELL = 90° VENT ELL or 90° ELL
XLTL = 90° LONG TURN ELL
45° St. ELL = 45° St. ELL or 45° ELL
45° ELL = 45° St. ELL or 45° ELL
STTY = SANITARY TEE
LTYY = LONG RADIUS TY or WYE with 1/8th BEND COMBINATION
→ = FLOW DIRECTION

DBL. ELL = DOUBLE ELL
VTR = VENT THRU ROOF
CO = CLEANOUT ADAPTER WITH PLUG
ALL P-TRAPS SHALL BE P-TRAP WITH UNION JOINT.
SHOWER STALLS & WASHER P-TRAPS SHALL BE 2\"
ALL OTHER P-TRAPS SHALL BE 1.1/2\" MIN.
RE-VENTING MAY BE REPLACED WITH INDIVIDUAL VTR'S.
4. - - - - - = FIELD INSTALLED PLUMBING.
5. - - - - - = PLUMBING VENTS IN THE CEILING.

REVISION:		BY:	DATE:

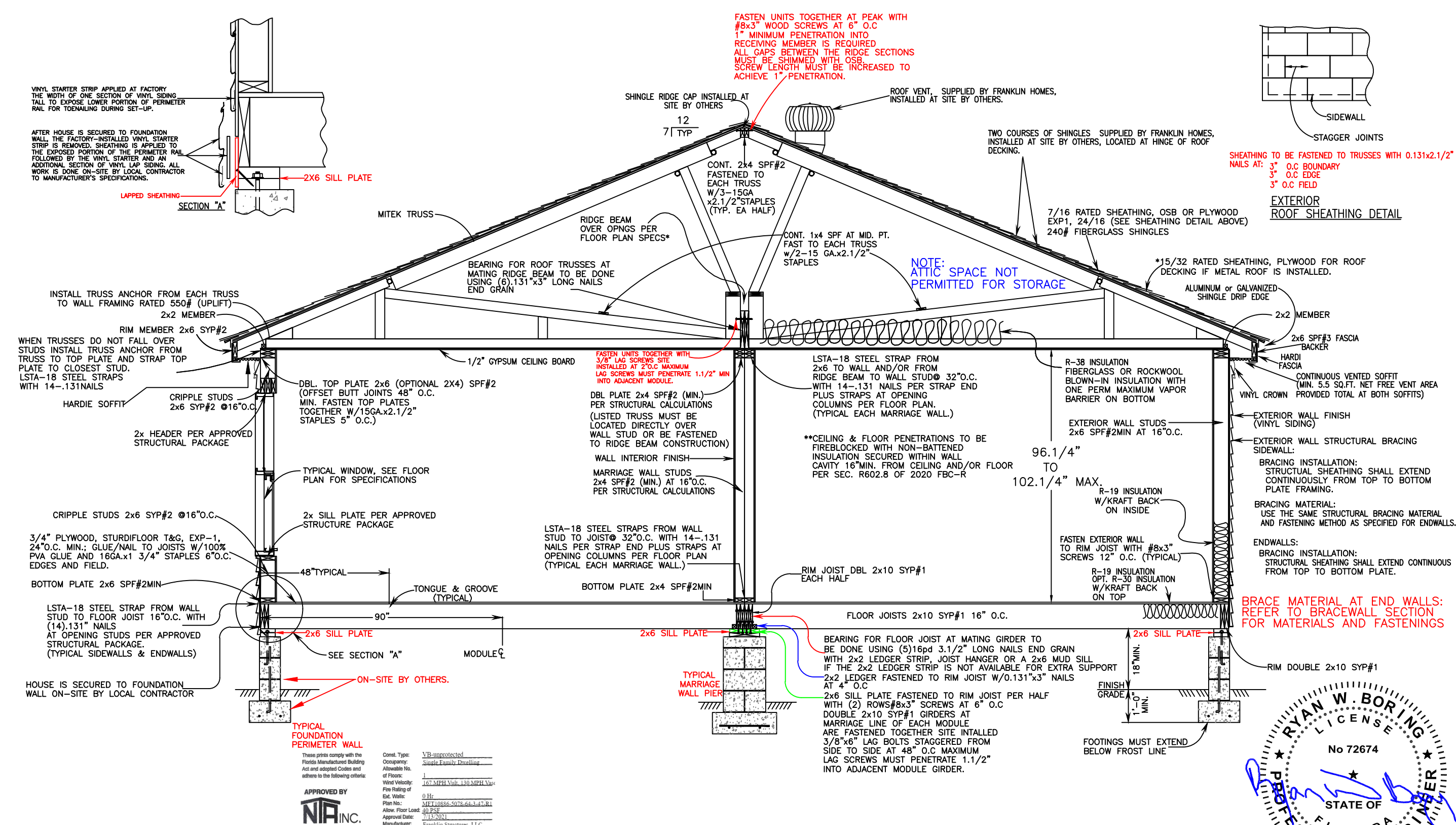


FRANKLIN STRUCTURES, INC.
10655 HWY. 43 SOUTH
RUSSELLVILLE, ALABAMA 35653

FLORIDA
MODULAR



BY:	DATE:	TITLE:
WAYNE	6/16/21	DRAIN SCHEMATIC
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO: MFT-10886-5078-64-3-47-R1
REV:	SHEET:	6 of 8



RIDGE BEAM CONSTRUCTION	
1 LAYER 1.1/2"x18" MICROLAM, EACH MODULE.	
NOTES:	
1. MICROLAM GRADE 2.0	
2. MICROLAM MUST BE CONTINUOUS OVER CLEARSPAN(S) AND EXTEND PAST OPENING STUDS.	
3. BEAMS SUPPORTED BY ENDWALL COLUMNS MUST EXTEND CONTINUOUS OVER COLUMNS TO EXTERIOR FACE OF ENDWALL.	
4. INSTALL (2x4) X 20" RIDGE BEAM STIFFENER OVER SUPPORT COLUMNS WHEN SPECIFIED ON FLOOR PLAN; FASTEN THE FACE OF THE STIFFENER TO THE RIDGE BEAM WITH 100% GLUE COVERAGE AND 6-16GA. STAPLES WITH 3/4" MINIMUM PENETRATION INTO MICROLAM BEAM.	
5. FIREBLOCKING TO BE INSTALLED AT ALL MODULE MATE LINES AT THE MARRIAGE WALL CEILING HEIGHT AND AT THE FLOOR SYSTEM WITH 2" NOMINAL LUMBER PER SECTION R602.8 OF '2020 FBC-R.	

GENERAL CROSS SECTION NOTES	
1. UNLESS OTHERWISE SPECIFIED, ALL STEEL MUST COMPLY WITH ASTM A36, YIELD STRENGTH = 36 KSI.	
2. ALL LAG SCREWS MUST COMPLY WITH ASTM A307.	
3. SEE FOUNDATION PLAN FOR PIER AND TIE DOWN STRAPPING LOCATIONS, ORIENTATIONS, AND SPECIFICATIONS.	
4. ALL GRADE LUMBER IS MINIMUM SPECS.	
INTERIOR FINISH MATERIAL	
CEILING-1/2" MINIMUM GYPSUM BOARD INSTALLED PER MANUFACTURER'S SPECIFICATIONS. (CLASS-A)	
WALL -1/2" VC GYPSUM BOARD THROUGH OUT (CLASS-A)	
FLOOR -VINYL IN BATHS, UTILITY RM, KITCHEN & BREAKFAST RM-CARPET ALL OTHER AREAS.	
EXTERIOR FINISH MATERIAL	
ROOF -FIBERGLASS ROOF SHINGLES INSTALLED ON ROOFS WITH LESS THAN 4/12 ROOF PITCH SHALL HAVE TWO LAYERS OF #15 FELT	
WALL -VINYL LAP SIDING	

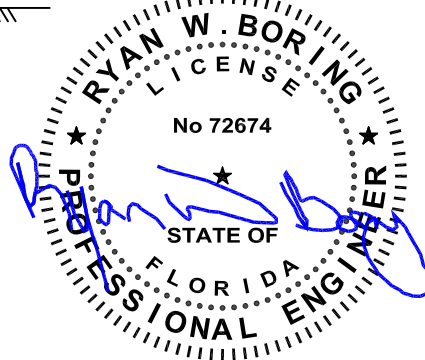
FRANKLIN STRUCTURES, LLC.

10655 HWY. 43 SOUTH

RUSSELLVILLE, ALABAMA 35653

FLORIDA MODULAR

BY:	DATE:	TITLE:
DRAWN: WAYNE	6/16/21	TYPICAL OFF-FRAME CROSS SECTION
SCALE:	N.T.S.	
NO:	MTF-10886-5078-64-3-47-R1	REV:
SHEET:	7 of 8	



Jul 12, 2021

Franklin Structures, LLC

MTF-5078-64-3-47

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult, 130 MPH Vasc
Fire Rating of: 0 Hr
Exd. Walls: MTF10886-5078-64-3-47-R1
Plan No.: 40 PSF
Allow. Floor Load: 7/13/2021
Approval Date: Franklin Structures, LLC
Manufacturer:

Width: 30'1/2" with 15'1/4" Tag

Length: 60'

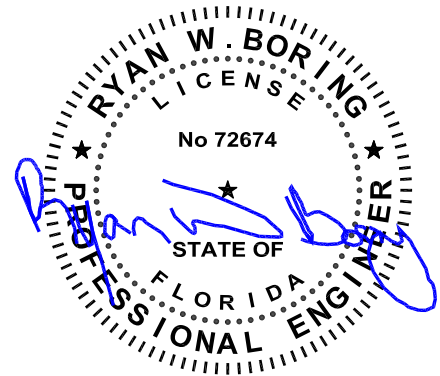
Roof Live Load: 20psf Roof LL

Wind Speeds: 167mph Vult

Wind Exposure: C

Wall Height: 9'

Max Mean Roof Height: 18'



Jul 12, 2021

Page	Description
1-5	Design Criteria and Load Cases (C&C page 1)
6	Matewall Headers
7	Matewall Columns
8	Sidewall Headers
9-10	Sidewall Columns (King & Jack)
11-12	Uplift Straps (Sidewall & Matewall)
13	Sill Plates and Lateral Only Sill/Header Connection (Sill must also be installed at top of window/door)
14-19	Shearwalls and Diaphragms
20-21	Connections
22	Floor Joist
23-24	Matewall Girders
25-26	Porch Design
27-30	Tag Header, Columns and Straps
31-34	On-Frame Floor Joists (w/ and w/out setback)

NOTE: These calculations are applicable only to the structural elements and loading criteria specifically noted herein. These calculations shall not be construed in any way to specify, certify, or design any aspects of the structure not contained herein. Structural elements not contained herein are to be constructed in accordance with the prescriptive requirements of the adopted building code or designed by other registered design professionals, as applicable. Specified design criteria are based solely on information provided by the client and must be verified and approved by the local authority having jurisdiction. Ryan W. Boring, P.E. is not responsible for fabrication or erection. If it is suspected that the calculations listed in this index have been modified, substituted, or altered in any way, contact Ryan W. Boring, P.E. directly to obtain a file copy.

Wind Pressures for Low-rise buildings or buildings with h<60ft

ASCE 7-10 (and 16) Chapter 30 Part I:

Wind Speed:	167 MPH	Roof Style:	Gable	(Gable or Hip)
Wind Exposure:	C	Roof Pitch:	7 /12	tag 6/12
Mean Roof Height:	18 FT	Roof Angle:	30.3	
Elevation:	0 FT	Max Width:	30.04 ft	Main truss width
Ke:	1.00			
Kd:	0.85			
Kzt:	1			
kt:	0.88			
qh:	53.53 psf			
Building Type:	Enclosed			
Gcpi:	0.18			
	-0.18			
Min net pressure:	16 psf			

Roof								
GCP	Area	Pos	Neg	Pressure	Area	Pos	Neg	
Zone 1		Min	0.9	-1.8	Zone 1	Min	57.8	-106.0
		100	0.9	-0.8		100	57.8	-52.5
Zone 2		Min	0.9	-2	Zone 2	Min	57.8	-116.7
		100	0.9	-1.2		100	57.8	-73.9
Zone 3		Min	0.9	-3.2	Zone 3	Min	57.8	-180.9
		100	0.9	-1.5		100	57.8	-89.9
OH Z1		Min		-2.6	OH Z1	Min		-148.8
		100		-1.6		100		-95.3
OH Z2		Min		-2.8	OH Z2	Min		-159.5
		100		-2		100		-116.7
OH Z3		Min		-4	OH Z3	Min		-223.8
		100		-2.3		100		-132.8

Walls								
Gcp	Area	Pos	Neg	Pressure	Area	Pos	Neg	
Zone 4		10	1	-1.1	Zone 4	10	63.2	-68.5
		100	0.825	-0.93		100	53.8	-59.2
Zone 5		10	1	-1.4	Zone 5	10	63.2	-84.6
		100	0.825	-1.1		100	53.8	-68.5

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt. 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Design Pressures

Pressure	Area	Pos	Neg
Zone 1		Min	34.7
		100	34.7
Zone 2		Min	34.7
		100	34.7
Zone 3		Min	34.7
		100	34.7
OH Z1		Min	
		100	
OH Z2		Min	
		100	
OH Z3		Min	
		100	
Zone 4		10	37.9
		100	32.3
Zone 5		10	37.9
		100	32.3

Note: Min area provides the highest loads, 10 sq. ft could have a lower load

MWFRS

Transverse

	1	2	3	4	1e	2e	3e	4e
+GCpi	20.34	1.61	-32.65	-29.44	27.30	4.82	-38.01	-35.33
-Gcpi	39.61	20.88	-13.38	-10.17	46.57	2.00	-18.74	-16.06
Max	39.61	20.00	-32.65	-29.44	46.57	4.82	-38.01	-35.33

Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-33.72	-46.57	-29.44	-33.72	11.78	-25.16	-35.33	-66.91	-38.01	-35.33	23.02	-32.65
-Gcpi	-14.45	-27.30	-10.17	-14.45	31.05	-5.89	-16.06	-47.64	-18.74	-16.06	42.29	-13.38
Max	-33.72	-46.57	-29.44	-33.72	31.05	-25.16	-35.33	-66.91	-38.01	-35.33	42.29	-32.65

	Vertical						Horz					
	End			Int			End			Int		
	WW	LW		WW	LW		Roof	Wall		Roof	Wall	
Trans	4.82	-38.01		20.00	-32.65		-28.3717	-31.5836		42.83	62.63	34.26
Long	-66.91	-38.01		-46.57	-29.44		-28.3717	-		-28.91	55.67	-17.13
											36.94	

Design Loading

	Vertical						Horz			
	End			Int			End		Int	
	WW	LW		WW	LW		Roof	Wall	Roof	Wall
Trans	2.89	-22.80		12.00	-19.59		-17.02	-18.95	25.70	37.58
Long	-40.15	-22.80		-27.94	-17.67		-65.84	-53.64	25.70	33.40
									20.56	29.87
									20.56	22.16

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt. 130 MPH Vag.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Design Criteria:

Total Length:	60 ft				
Total Width:	30.04 ft	Top chord DL:	10 psf	Vult:	167 mph
Unit Width:	15.02 ft	Bottom chord DL:	10 psf	Vasd:	129 mph
Pitch:	7 /12	Bottom chord LL:	0 psf	Exposure:	C
Roof Angle:	30.3 deg	Stories:	1	Internal Press:	0.18
Wall height:	9 ft	Floor Live Load:	40 psf	End zone, 2a:	6.0083333 ft
Overhang:	12 in	Floor Dead Load:	10 psf		
Blocking Height:	36 in	Wall Dead Load:	5 psf		
Eave Height:	10 ft	Ceiling R value:	30		
Min Mean Roof ht:	18 ft	Framing Rafters?:	N		
Mean Roof Height:	19.26 ft	Truss Spacing:	24 in oc		

Snow Loading:

Ground Snow Load:	0 psf
Snow Thermal factor:	1.1
Snow exposure factor:	1
Snow importance Factor:	1
Flat Roof Snow, Pf:	0 psf
Sloped Roof Snow Ps:	0 psf
Unbalanced Roof Load:	0.00 psf
Minimum Roof Lr:	17 psf

Wind Loading:

	WW	LW	WVOH
Transverse End:	2.89	-22.80	-17.02
Interior:	12.00	-19.59	-18.95
Long End:	-40.15	-22.80	-65.84
Interior:	-27.94	-17.67	-53.64

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type:	<u>VB-unprotected</u>
Occupancy:	<u>Single Family Dwelling</u>
Allowable No. of Floors:	<u>1</u>
Wind Velocity:	<u>167 MPH Vult, 130 MPH Vasd</u>
Fire Rating of Ext. Walls:	<u>0 Hr</u>
Plan No.:	<u>MFT10886-5078-64-3-47-R1</u>
Allow. Floor Load:	<u>40 PSF</u>
Approval Date:	<u>7/13/2021</u>
Manufacturer:	<u>Franklin Structures, LLC</u>

Snow Loading

Design Parameters:

Eave to ridge Distance, W: 16 ft
Ground Snow Load, p_g : 0 psf
Exposure Factor, C_e : 1.0
Thermal Factor, C_t : 1.1
Importance Factor, I: 1.0
Framing Type: Trusses/Other

Snow Density (g):

density: 14 pcf

Flat-Roof Snow Load (p_f):

P_f : 0.0 psf

Rain on Snow Surcharge:

amax: 0.3204167 deg
prss: 0.0 psf
pf: 0.0 psf

Minimum Values for Low-Slope Roofs:

Mono: 15.0 deg
amin: 4.9 deg
amin: 2.38 deg
amin: 15.0 deg

pf, $pg \leq 20$: 0.0 psf
pf, $pg > 20$: 20.0 psf
pfmin: 0.0 psf
pf: 0.0 psf

Sloped Roof Snow Loads:

degrees: 30.3
Cs
Ct=1: 0.99
Ct=1.1: 1.00
Ct=1.2: 1.00
Ps: 0.0

Unbalanced Snow Loads:

amax: 70.00 deg
amin: 4.87 deg
amin: 2.38 deg
minimum: 2.38 deg
S: 1.71 /1
W: 20.0 ft
hd: 0.58 ft
Pww: 0.0
Plw Ridge: 0.0
Plw Length: 0.0
Plw Eave: 0.0

Ice Dams Along Eaves²:

ps: 0.0 psf

Minimum Roof Live Load:

R1: 1.0
R2: 0.85
F: 7.0
Lr: 17.0 psf

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt. 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Truss Reactions

Gravity Matewall: 552 lbs Uplift: Matewall: 697 lbs
 Sidewall: 671 lbs Sidewall: 494 lbs
 Truss Spacing: 24 in oc. Snow Load: 0 psf

Worst case truss reactions

Load Cases for Ranch		Roof			Roof and 1 Story			LDF
Load Case		Sidewall	Matewall	Endwall	Sidewall	Matewall	Endwall	
1	D	160	150	30	280	270	85	0.9
2	S	0	0	0	0	0	0	1.15
3	Su	0	0	0	0	0	0	1.15
4	Lr	145	128	34	145	128	34	1.25
5	L	0	0	0	300	300	40	1
6	Wp	5	22	6	5	22	6	1.6
7	Wn	-343	-439	-106	-343	-439	-106	1.6
8	.75(L+Lr)	109	96	26	334	321	56	1.25
9	.75(L+S)	0	0	0	225	225	30	1.15
10	.75(L+Su)	0	0	0	225	225	30	1.15
11	.75(L+S+Wp)	4	16	4	229	242	34	1.6
12	D+L	160	150	30	581	571	125	1
13	D+Lr	305	278	64	425	398	119	1.25
14	D+S	160	150	30	280	270	85	1.15
15	D+Su	160	150	30	280	270	85	1.15
16	D+.75(L+Lr)	269	246	56	614	591	141	1.25
17	D+.75(L+S)	160	150	30	506	496	115	1.15
18	D+.75(L+Su)	160	150	30	506	496	115	1.15
19	D+.75(L+S+Wp)	164	166	34	509	512	119	1.6
20	.6D+Wn	-247	-349	-88	-175	-276	-55	1.6
Dead Load:		160	150	30	280	270	85	
Dead LC:		D	D	D	D	D	D	
Live Load:		145	128	34	334	321	56	
Live LC:		Lr	Lr	Lr	.75(L+Lr)	.75(L+Lr)	.75(L+Lr)	
Total Load:		305	278	64	614	591	141	
Total LC:		D+Lr	D+Lr	D+Lr	D+.75(L+Lr)	D+.75(L+Lr)	D+.75(L+Lr)	
Uplift Load:		-247	-349	-88	-175	-276	-55	
Uplift LC:		.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	
Design Load:		336	278	64	581	571	125	
Design LC:		D+Lr	D+Lr	D+Lr	D+L	D+L	D+L	
Design LDF:		1.25	1.25	1.25	1	1	1	

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY


Const. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 167 MPH Vult. 130 MPH Vult.
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT10886-5078-64-3-47-R1
 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

Floor Load only

Live	300	300	1
Dead	75	75	0.9

Combined Loading:

Max Bending:

1 D	160	150	30	280	270	85 plf
2 D+Wp	165	172	36	285	292	91 plf
Max down	165	172	36	285	292	91 plf
Lateral	27.94	5	27.94	27.94	5	27.94 psf

Max Axial

1 D+.75(L+Lr)	269	246	56	614	591	141 plf
2 D+.75(L+S)	160	150	30	506	496	115 plf
3 D+.75(L+Su)	160	150	30	506	496	115 plf
4 D+.75(L+S+Wp)	164	166	34	509	512	119 plf
Max down	269	246	56	614	591	141 plf
Lateral	20.96	3.75	20.96	20.96	3.75	20.96 psf

Matewall Headers Supporting Roof

Location: Matewall
Supporting: Roof

Vertical Load

Dead Load: 150 plf D
Live Load: 128 plf Lr
Total Load: 278 plf D+Lr
Uplift Load: -349 plf .6D+Wn

Wall height: 108 in
Min sill height: 18 in
LVL: Microllam

LVL MOE (E): 2000000 psi

E min: 1016411 psi

Fb: 2750 psi

Fv: 285 psi

Fcperp: 750 psi

Volume effect exp (e): 0.136

Cr (LVL): 1.04

Cr: 1.15 LL defl L/ 240

Cd: 1.25 TL defl L/ 180

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	10.9	13.1	47.6
2	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	21.4	98.9
3	1	1.5	11.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3468	285	16.9	31.6	178.0
4	1	1.5	14	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3366	285	21.0	49.0	343.0
5	1	1.5	16	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3306	285	24.0	64.0	512.0
6	1	1.5	7.25	SYP	#2	Edge	1	1.0	925	175	565	1400000	510000	1156	219	10.9	13.1	47.6
7	1	1.5	9.25	SYP	#2	Edge	1	1.0	925	175	565	1400000	510000	1156	219	13.9	21.4	98.9
8	1	1.5	11.25	SYP	#2	Edge	1	1.0	750	175	565	1400000	510000	938	219	16.9	31.6	178.0
9							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	193	129	102	134
2	246	162	130	171
3	299	195	158	208
4	373	239	196	259
5	426	270	224	296
6	151	72	90	119
7	193	92	115	152
8	235	101	140	185
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

Member	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (1) 2x 7.25 LVL	101 in	1200	-1470	1.1
2 (1) 2x 9.25 LVL	129 in	1500	-1880	1.1
3 (1) 2x 11.25 LVL	157 in	1900	-2280	1.1
4 (1) 2x 14 LVL	196 in	2300	-2850	1.1
5 (1) 2x 16 LVL	224 in	2600	-3260	1.1
6 (1) 2x 8 SYP #2	72 in	900	-1050	1.5
7 (1) 2x 10 SYP #2	92 in	1100	-1340	1.5
8 (1) 2x 12 SYP #2	101 in	1200	-1470	1.5
9 () 0x 0	#N/A in	#N/A	#N/A	#N/A
10 () 0x 0	#N/A in	#N/A	#N/A	#N/A

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt, 130 MPH Valt
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MET10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Matewall Columns Supporting Roof Side Column

Vertical Load

NDS Load:	285 plf	D+Lr
Total Load:	285 plf	D+Lr
Uplift Load:	-326 plf	.6D+Wn

Lateral Load

Lateral only		
Stud area:	27.0 ft^2	
Lateral:	5 psf	W

Combined Vert and Lat (max Lat)

Vertical: 150 plf
Lateral: 5 psf W
Combined Vert and Lat (max Vert)

Wall height: 108 in
0 Top/Btm Plate (tp): 4.5 in
LVL: Microllam
LVL MOE (E): 2000000 psi

Combined Vert and Lat (max Vert)

Vertical:	285 plf	0
Lateral:	3.8 psf	.75W

LVL MOE (E): 2000000 psi

E min: 1016411 psi
Fb: 2750 psi

Combined Uplift and Lat

Vertical:	-326 plf	.6D+Wn
Lateral:	3.8 psf	W

Fv: 285 psi

Fcperp: 750 psi
Vol eff (e): 0.136

def=.7 C&C

Cr: 1

Cd: 1.6

Cd grav: 1.25

lateral deflection $L/120$

Vertical

Spacing	B	D	Species	Grade	c	le/D	Cfb	CFC	Fb	Fc (grav)	Fc (comb)	Fcperp	E	Emin	FcE	Ft	
1	16	1.5	3.5	SPF	#3	0.8	29.6	1.5	1.15	500	650	650	425	1200000	440000	414	250
									Cp		0.39	0.32					
	Header	1.5	inches						Allowable:	1200	366	379	425	1200000	440000		600

# of Studs	1	2	3	4	5	6	7	8
<u>Properties</u>								
Area in^2	5.3	10.5	15.8	21.0	26.3	31.5	36.8	42.0
Sx in^3	3.1	6.1	9.2	12.3	15.3	18.4	21.4	24.5
Ix in^4	5.4	10.7	16.1	21.4	26.8	32.2	37.5	42.9
<u>Axial Loading</u>								
Fc compression	81	162	243	323	404	485	566	647
Fc Perp compression	40	80	121	161	201	241	281	322
Tension	116	232	348	464	580	696	812	928
Fcperp								
<u>Combined Loading</u>								
Uplift/Lateral	116	232	348	464	580	696	812	928
Vert/Lateral max Lat	137	295	453	612	778	936	1095	1254
Vert/Lateral Max Vert	75	158	242	325	379	460	542	624
<u>Deflection Check</u>								
L/	802	1604	2406	3208	4009	4811	5613	6415
	OK	OK	OK	OK	OK	OK	OK	OK
	40	80	121	161	201	241	281	322

Max Span

Max Trib

1	40 in	62 in =	5 ft -	2 in
2	80 in	141 in =	11 ft -	9 in
3	121 in	220 in =	18 ft -	3 in
4	161 in	299 in =	24 ft -	11 in
5	201 in	378 in =	31 ft -	6 in
6	241 in	457 in =	38 ft -	1 in
7	281 in	536 in =	44 ft -	7 in
8	322 in	615 in =	51 ft -	3 in

Notes: Center column is total span on both sides of column. Side column is total clear span.
All studs are to be braced in weak axis by gypsum or sheathing.
Center column must be in center 1/3 of span.
Studs must be as wide as header.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vasc.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Sidewall Headers Supporting Roof U-Headers
 For Lateral Loading See Sill Plate, This calculation is only for vertical load and a sill plate must be used at the top of the opening

Location: Sidewall
 Supporting: Roof

Vertical Load

Dead Load: 160 plf D
 Live Load: 145 plf Lr
 Total Load: 336 plf D+Lr
 Uplift Load: -247 plf .6D+Wn

Wall height: 108 in
 Min sill height: 18 in
 LVL: Microllam
 LVL MOE (E): 2000000 psi
 E min: 1016411 psi
 Fb: 2750 psi
 Fv: 285 psi
 Fcperp: 750 psi
 Volume effect exp (e): 0.136
 Cr (LVL): 1.04

Cr: 1.15 LL defl L/ 240
 Cd: 1.25 TL defl L/ 180

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	2	1.5	2.5	SPF	#2	Edge	1	1.5	875	135	425	1400000	510000	1641	169	7.5	3.1	3.9
2	2	1.5	3.5	SPF	#2	Edge	1	1.5	875	135	425	1400000	510000	1641	169	10.5	6.1	10.7
3	2	1.5	5.5	SPF	#2	Edge	1	1.3	875	135	425	1400000	510000	1422	169	16.5	15.1	41.6
4	2	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	21.8	26.3	95.3
5	2	1.5	2.5	SYP	#2	Edge	1	1.0	1100	175	565	1400000	510000	1375	219	7.5	3.1	3.9
6	2	1.5	3.5	SYP	#2	Edge	1	1.0	1100	175	565	1400000	510000	1375	219	10.5	6.1	10.7
7	2	1.5	5.5	SYP	#2	Edge	1	1.0	1100	175	565	1400000	510000	1375	219	16.5	15.1	41.6
8	2	1.5	7.25	SYP	#2	Edge	1	1.0	925	175	565	1400000	510000	1156	219	21.8	26.3	95.3
9							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	65	38	44	50
2	92	54	62	70
3	144	78	97	110
4	190	99	128	145
5	83	35	44	50
6	117	49	62	70
7	183	77	97	110
8	241	93	128	145
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

Member	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (2) 2x 3 SPF #2	38 in	600	-400	0.5
2 (2) 2x 4 SPF #2	53 in	800	-550	0.5
3 (2) 2x 6 SPF #2	78 in	1100	-810	0.5
4 (2) 2x 8 SPF #2	99 in	1400	-1020	0.5
5 (2) 2x 3 SYP #2	35 in	500	-370	0.4
6 (2) 2x 4 SYP #2	49 in	700	-510	0.4
7 (2) 2x 6 SYP #2	77 in	1100	-800	0.4
8 (2) 2x 8 SYP #2	93 in	1400	-960	0.4
9 () 0x 0	#N/A in	#N/A	#N/A	#N/A
10 () 0x 0	#N/A in	#N/A	#N/A	#N/A

can be based off span or header
 # .131x3" nails per header

.131x3"			# nails	
Grav	Uplift		Grav	Uplift
69.1	88.4	lb	4.34	2.26
		lb	5.79	3.11
			7.96	4.58
			10.13	5.77
			3.62	2.09
			5.07	2.88
			7.96	4.52
			10.13	5.43

5
6
8
11
4
6
8
11

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY


Const. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 167 MPH Valt. 130 MPH Valt.
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT10886-5078-64.3-47.R1
 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

Sidewall Studs (King)															Location: Sidewall Supporting: Roof				
<u>Vertical Load</u>					<u>Lateral Load</u>					<u>Combined Vert and Lat (max Lat)</u>					Wall height: 108 in				
NDS Load:	336	plf	D+Lr		Lateral only					Vertical:	165	plf	0	Top/Btm Plate (tp):	4.5	in			
Total Load:	336	plf	D+Lr		Stud area:	27.0	ft^2			Lateral:	38	psf	W	Header height:	80	in			
Uplift Load:	-247	plf	.6D+Wn		Zone 5:	46	psf	W		<u>Combined Vert and Lat (max Vert)</u>					LVL: Microllam				
					Zone 4:	39	psf	W		Vertical:	269	plf	0	LVL MOE (E):	2000000	psi			
					def=.7 C&C					Lateral:	28.2	psf	.75W	E min:	1016411	psi			
										<u>Combined Uplift and Lat</u>					Fb:	2750	psi		
Cr:	1									Vertical:	-247	plf	.6D+Wn	Fv:	285	psi			
Cd:	1.6									Lateral:	28.2	psf	W	Fcperp:	750	psi			
Cd grav:	1.25				lateral deflection L/ 120									Vol eff (e):	0.136				
Vertical														Cr (LVL):	1.04				
Trib	B	D	Species	Grade	c	le/D	Cfb	CfC	Fb	Fc (grav)	Fc (comb)	Fcperp	E	Emin	FcE	Ft	Fv		
1	16	1.5	5	SYP	#2	0.8	20.7	1.0	1.00	1000	1400	1400	565	1400000	510000	978	600	175.0	
									Cp	0.47	0.39								
									Allowable:	1600	829	868	565	1400000	510000		960		

<u>Single King Stud</u>																			
Opening:	16	in			Lateral Only		Vertical Only		<u>Combined Max Lat</u>					<u>Combind Max Vert</u>					
					Fb:	1092	psi	Fc:	60	psi	CSI:	0.70		CSI:	0.54	Max CSI:	0.70	OK	

Check Single stud for a max given max opening
Then check jacks and kings seperately and take controlling number , say calc 1 king for wind and it spans X distance and it takes 3 jacks to span that
give results for different combinations

	King Studs End Zone					King Studs Int Zone				
	1	2	3	4	5	1	2	3	4	5
<u>Properties</u>										
Area in^2	7.5	15.0	22.5	30.0	37.5	7.5	15.0	22.5	30.0	37.5
Sx in^3	6.3	12.5	18.8	25.0	31.3	6.3	12.5	18.8	25.0	31.3
Ix in^4	15.6	31.3	46.9	62.5	78.1	15.6	31.3	46.9	62.5	78.1
<u>Lateral Only (trib)</u>	1	2	3	4	5	1	2	3	4	5
Moment at Center	23	47	70	94	117	28	56	83	111	139
Moment at Header	31	63	94	126	157	37	74	112	149	186
Shear	53	106	159	212	265	63	126	189	252	315
<u>Combined Loading</u>										
Max Lat	308	802	1281	1757	2233	308	802	1281	1757	2233
Max Vert	217	515	808	1100	1391	217	515	808	1100	1391
<u>Deflection Check</u>	L/	203	203	203	203	171	171	171	171	171
	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Max Span	23	47	70	94	117	28	56	83	111	139

<u>Max Span</u>		End Zone						Interior Zone					
1		30 in	=	2	ft	-	6 in	39 in	=	3	ft	-	3 in
2		77 in	=	6	ft	-	5 in	95 in	=	7	ft	-	11 in
3		124 in	=	10	ft	-	4 in	150 in	=	12	ft	-	6 in
4		171 in	=	14	ft	-	3 in	206 in	=	17	ft	-	2 in
5		218 in	=	18	ft	-	2 in	262 in	=	21	ft	-	9 in

All studs are to be braced in weak axis by gypsum or sheathing.
Center column must be in center 1/3 of span.
Studs must be as wide as header.

NOTE: RIPPED LUMBER MUST BE REGRADED!

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY



Const. Type: VB-unprotected

Occupancy: Single Family Dwelling

Allowable No. of Floors: 1

Wind Velocity: 167 MPH Valt. 130 MPH Valt.

Fire Rating of Ext. Walls: 0 Hr

Plan No.: MFT10886-5078-64-3-47-R1

Allow. Floor Load: 40 PSF

Approval Date: 7/13/2021

Manufacturer: Franklin Structures, LLC

Sidewall Studs (Jack) Location: Sidewall
Supporting: Roof

Vertical Load

NDS Load: 336 plf D+Lr
Total Load: 336 plf D+Lr
Uplift Load: -247 plf .6D+Wn

Wall height: 108 in
Top/Btm Plate (tp): 4.5 in
LVL: Microllam
LVL MOE (E): 2000000 psi
E min: 1016411 psi
Fb: 2750 psi
Fv: 285 psi
Fcperp: 750 psi
Vol eff (e): 0.136
Cr (LVL): 1.04

Cr: 1
Cd: 1.6
Cd grav: 1.25 lateral deflection L/ 120

Vertical	Spacing	B	D	Species	Grade	c	le/D	Cfb	CfC	Fb	Fc (grav)	Fc (comb)	Fcperp	E	Emin	FcE	Ft
1	16	1.5	5	SYP	#2	0.8	20.7	1.0	1.00	1000	1400	1400	565	1400000	510000	978	600
										Cp	0.47	0.39					
										Allowable:	1600	829	868	565	1400000	510000	960

Header width: 1.5 in
3 in
4.5 in

# of Studs	1	2	3	4	5	6	7	8	9	10
<u>Properties</u>										
Area in^2	7.5	15.0	22.5	30.0	37.5	45.0	52.5	60.0	67.5	75.0
Sx in^3	6.3	12.5	18.8	25.0	31.3	37.5	43.8	50.0	56.3	62.5
Ix in^4	15.6	31.3	46.9	62.5	78.1	93.8	109.4	125.0	140.6	156.3

<u>Axial Loading</u>										
Fc compression	222	445	667	890	1112	1334	1557	1779	2002	2224
Fc Perp compression 1.5 in	45	91	136	182	227	273	318	364	409	455
Fc Perp compression 3 in	91	182	273	364	455	546	637	728	818	909
Fc Perp compression 4.5 in	136	273	409	546	682	818	955	1091	1228	1364
Tension	350	700	1049	1399	1749	2099	2449	2798	3148	3498

Trib taken by King stud: 0 in Increase of span: 0

Max Span

	Double Headers	Triple Headers
1	175 in = 14 ft - 7 in	266 in = 22 ft - 2 in
2	351 in = 29 ft - 3 in	533 in = 44 ft - 4 in
3	527 in = 43 ft - 11 in	800 in = 66 ft - 8 in

NOTE: RIPPED LUMBER MUST BE REGRADED!

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vag.
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Uplift Straps: Matewall

Uplift: -349 plf

Stud Spacing: 16 in

Strapping

Strap All: 921.3 lbs LSTA18 (.83 reduction for .131)

fasteners: 14 .131x 2.5" (.83 REDUCTION)

Strap Spacing: 2.64 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	46	62
2	110	126
3	174	190
4	236	252
5	300	316
6	364	380
7	428	444
8	490	506
	total span	

If sheathing is being used for uplift NOT at openings:

Max OSB per E510A: 1500 plf
 .131 Nail: 108 lb
 15ga: 82 lb

Spacing from OSB to rail:
 .131 Nail: 3.72 " oc
 15ga: 2.82 " oc

fasteners into Studs:
 .131 Nail: 4.3 lb Use 3
 15ga: 5.7 lb Use 4

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vult.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT 0886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Uplift Straps: Sidewall

Uplift: -247 plf Estimated

Stud Spacing: 16 in

Strapping

Strap All: 921.3 lbs LSTA18 (.83 reduction for .131)

fasteners: 14 .131x 2.5" (.83 REDUCTION)

Strap Spacing: 3.73 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	72	88
2	162	178
3	252	268
4	342	358
5	430	446
6	520	536
7	610	626
8	700	716
total span		

If sheathing is being used for uplift NOT at openings:

Max OSB per E510A: 1500 plf
.131 Nail: 108 lb
15ga: 82 lb

Spacing from OSB to rail:

.131 Nail: 5.25 " oc
15ga: 3.98 " oc

fasteners into Studs:

.131 Nail: 3.0 lb Use 2
15ga: 4.0 lb Use 3

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vult.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT 0886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Sill Plates

Lateral Load

Lateral only

Wind: 192 plf (C&C)

def=.7 C&C

Wall height: 108 in

Min sill height: 18 in

LVL: Microllam

LVL MOE (E): 2000000 psi

E min: 1016411 psi

Fb: 2750 psi

Fv: 285 psi

Fcperp: 750 psi

Volume effect exp (e): 0.136

Cr (LVL): 1.04

Cr: 1.15

Cd: 1.6 Lateral deflection L/ 120

Vertical

Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	5	SPF	#2	Edge	1	1.4	875	135	425	1400000	510000	1960	216	7.5	15.6
2	2	1.5	5	SPF	#2	Edge	1	1.4	875	135	425	1400000	510000	1960	216	15.0	31.3
3	3	1.5	5	SPF	#2	Edge	1	1.4	875	135	425	1400000	510000	2254	216	22.5	46.9
4	1	1.5	5	SYP	#2	Edge	1	1.0	1000	175	565	1400000	510000	1600	280	7.5	15.6
5	2	1.5	5	SYP	#2	Edge	1	1.0	1000	175	565	1400000	510000	1600	280	15.0	31.3
6	3	1.5	5	SYP	#2	Edge	1	1.0	1000	175	565	1400000	510000	1840	280	22.5	46.9
7																	
8																	
9																	
10																	

lu	le	Fbe	Cl
1	1.0	2.1	133689
2	1.0	2.1	133689
3	1.0	2.1	133689
4	1.0	2.1	133689
5	1.0	2.1	133689
6	1.0	2.1	133689
7			
8			
9			
10			

Shear	Moment	Def
145	78	96
280	111	120
414	145	138
185	71	96
359	100	120
534	131	138

Sill and header lateral connection:

Member
1 (1) 2x 5 SPF #2
2 (2) 2x 5 SPF #2
3 (3) 2x 5 SPF #2
4 (1) 2x 5 SYP #2
5 (2) 2x 5 SYP #2
6 (3) 2x 5 SYP #2
7
8
9
10

Max Span	Reactions (lbs)
78 in	Gravity
110 in	700
137 in	900
70 in	1100
99 in	600
131 in	800
	1100

Span (ft)	Load @ Ends (lbs)	Nail Zeg(lb)	0.131 Nails	15ga Zeg(lb)	15gax2.5" Staples
2	192.30	88	3	48	5
3	288.45		4		7
4	384.60		5		9
5	480.75		6		11
6	576.90		7		13
7	673.05		8		15
8	769.19		9		17
9	865.34		10		19
10	961.49		11		21
11	1057.64		12		23
12	1153.79		14		25
13	1249.94		15		27
14	1346.09		16		29

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt 130 MPH Valt
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC
 Model: 5078-64-3-47
 Date: 8/6/2019

Main

Wind Pressures for Low-rise buildings or buildings with h<60ft
 ASCE 7-10 Chapter 30 Part I:

Wind Speed, Vult:	167 MPH	Roof Style:	Gable	
Wind Exposure:	C	Roof Pitch:	7 /12	
Mean Roof Height:	18 FT	Roof Angle:	30.3	
Elevation:	0 FT	Width	30.04 ft	Actual Width 42'6.75"
Ke:	1.00	2a:	6 ft	
Kd:	0.85	Wall Height:	9 ft	
Kzt:	1	Heel Ht:	6 in	
kt:	0.88	Roof Ht:	8.76 ft	
qh:	53.53 psf	Stud Spacing:	16 "oc	
Building Type:	Enclosed	Overhang:	12 "	
Gcpi:	0.18	Int. Shearwall:	YES	
	-0.18			
Min net pressure:	16 psf			

MWFRS

Transverse

	1	2	3	4 1e	2e	3e	4e
+GCpi	20.3	1.6	-32.7	-29.4	27.3	4.8	-38.0
-Gcpi	39.6	20.9	-13.4	-10.2	46.6	24.1	-18.7
Max	39.6	20.9	-32.7	-29.4	46.6	24.1	-38.0

Longitudinal

	1	2	3	4	5	6 1e	2e	3e	4e	5e	6e
+GCpi	-33.7	-46.6	-29.4	-33.7	11.8	-25.2	-35.3	-66.9	-38.0	-35.3	23.0
-Gcpi	-14.5	-27.3	-10.2	-14.5	31.0	-5.9	-16.1	-47.6	-18.7	-16.1	42.3
Max	-33.7	-46.6	-29.4	-33.7	31.0	-25.2	-35.3	-66.9	-38.0	-35.3	42.3

	Vertical				Horz			
	End		Int		Overhang		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall
Trans	24.1	-38.0	20.9	-32.7	-28.4	-31.6	42.8	62.6
Long	-66.9	-38.0	-46.6	-29.4	-28.4	-	-28.9	55.7

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	14.5	-22.8	12.5	-19.6	-17.0	-19.0	25.7	37.6	20.6	29.9
Long	-40.1	-22.8	-27.9	-17.7	-65.8	-53.6	25.7	33.4	20.6	22.2

These prints comply with the
 Florida Manufactured Building
 Act and adopted Codes and
 adhere to the following criteria:

APPROVED BY


Const. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 167 MPH Vult, 130 MPH Vap
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT10886-5078-64-3-47-R1
 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC
 Model: 5078-64-3-47
 Date: 8/6/2019

Reduction due to tag:
 Left wall: 3533.58 lb
 Interior wall: 1766.79 lb

Shearwalls:**Left Endwall:**

End Zone: Yes
 Trib: 15 ft
 End Roof: 1351 lb
 End Wall: 1127 lb
 Int Roof: 1621 lb
 Int Wall: 1344 lb
 Total force: 1910 lb
 Sheathing Thickness: 7/16 in
 Fastener: .131 nail
 Wall Length: 15 ft
 FHS Length: 6.8 ft
 Wall Height: 9 ft
 Tallest Opening: h/2
 r: 0.62
 Co: 0.79
 Perf or Segmented: S
 Blocked: YES
 PLF required: 281.28
 Framing: SPF
 Required Spacing: 6 " OC
 Tiedown: 2531.5 lb

Right Endwall:

End Zone: Yes
 Trib: 15 ft
 End Roof: 1351 lb
 End Wall: 1127 lb
 Int Roof: 1621 lb
 Int Wall: 1344 lb
 Total force: 5443 lb
 Sheathing Thickness: 7/16 in
 Fastener: .131 nail
 Wall Length: 15 ft
 FHS Length: 12.5 ft
 Wall Height: 9 ft
 Tallest Opening: h/3
 r: 0.94
 Co: 1.00
 Perf or Segmented: P
 Blocked: YES
 PLF required: 435.48
 Framing: SPF
 Required Spacing: 4 " OC
 Tiedown: 3919.3 lb

Interior Shearwall:

End Zone: Yes
 Trib: 30 ft
 End Roof: 1351 lb
 End Wall: 1127 lb
 Int Roof: 4323 lb
 Int Wall: 3584 lb
 Total force: 8619 lb
 Sheathing Thickness: 7/16 in
 Fastener: .131 nail
 Wall Length: 14.19 ft
 FHS Length: 14.19 ft
 Wall Height: 9 ft
 Tallest Opening: h
 r: 1.00
 Co: 1.00
 Perf or Segmented: S
 Blocked: YES
 PLF required: 607.49
 Framing: SPF
 Required Spacing: 3 " OC
 Tiedown: 5467.4 lb
 Strap for: 4309.355 lb

Top Sidewall:

End Zone: yes
 Trib: 18.00 ft
 End Wall: 1522 lb
 Int Wall: 3834 lb
 Total force: 5356 lb
 Sheathing Thickness: 7/16 in
 Fastener: .131 nail
 Wall Length: 60 ft
 FHS Length: 43.8 ft
 Wall Height: 9 ft
 Tallest Opening: 5h/6
 r: 0.76
 Co: 0.71
 Perf or Segmented: P
 Blocked: YES
 PLF required: 172.16
 Framing: SPF
 Required Spacing: 6 " OC
 Tiedown: 2178.9 lb

Bottom Sidewall:

End Zone: Yes
 Trib: 18.00 ft
 End Wall: 1522 lb
 Int Wall: 3834 lb
 Total force: 7544 lb
 Sheathing Thickness: 7/16 in
 Fastener: .131 nail
 Wall Length: 42 ft
 FHS Length: 36.8 ft
 Wall Height: 9 ft
 Tallest Opening: h
 r: 0.88
 Co: 0.80
 Perf or Segmented: P
 Blocked: YES
 PLF required: 256.59
 Framing: SPF
 Required Spacing: 6 " OC
 Tiedown: 2886.6 lb

Strap: 2200 S20
 Sidewall interconnection: 4 "oc .131 Nails OR #8 Screw
 Capacity: 130 lbs per nail
 Total Capacity: 3510 lbs

These prints comply with the
 Florida Manufactured Building
 Act and adopted Codes and
 adhere to the following criteria:



Const. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 167 MPH Valt. 130 MPH Vasc
 Fire Rating of Ext. Walls: 0 Hr.
 Plan No.: MET10886-5078-64-3-47.R1
 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

Summary:	Fastener	Edge Spacing	Tiedown Force	Perf/ Segment	# of S20 or equal	Corner Connection**
Left Endwall	.131 nail	6 "OC	2531.5 lb	S	2	
Right Endwall	.131 nail	4 "OC	3919.3 lb	P	2	
Interior Shearwall	.131 nail	3 " OC	5467.4 lb	S	3	
Top Sidewall	.131 nail	6 "OC	2178.9 lb	P	1	YES
Bottom Sidewall	.131 nail	6 "OC	2886.6 lb	P	2	YES

** 4 "oc .131 nails from sidewall to endwall where both walls have tiedown at the corner, then the sidewall is transferred
 2" oc fastener spacing requires double studs and staggered fasteners at panel seams.

Franklin Structures, LLC
 Model: 5078-64-3-47
 Date: 8/6/2019

Diaphragm:

Max Force: 8618.7 lbs
 Load: 269.0 plf
 Sheathing: 7/16 in
 Fastener: .131 Nail
 Framing: SPF
 Unblocked Capacity: 294.4 plf
 Blocked: 200.9 plf
 Blocking distance: 0.0 ft

**0 ft blocked each end with .131 Nail or fasten with .131 nails (unblocked)
 6" oc Boundary, 6" oc Edge**

Notes:

all 15ga staples minimum length of 1.5"
 all .131 nails minimum length of 2"

Single to double connection:

Max Force: 5443 lb
 Length: 180 "
 .131 nail: 108 lb
 Spacing: 3.6 " OC

Connect single wide truss top chords to double wide top chord/gabe endwall w/ .131 nails @ 3" oc

Tag to Main connection:

Connection force: 2188 lb
 Length: 30 ft
 #10x4" screw: 159 lb
 spacing: 12.0 "

Screw tag to main module with #10x4" screw across bottom chord of tag to rail of main unit

These prints comply with the
 Florida Manufactured Building
 Act and adopted Codes and
 adhere to the following criteria:



Const. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 167 MPH Vult, 130 MPH Vap
 Free Rating of Ext. Walls: 0 Hr
 Plan No.: MFT10886-5078-64-3-47-R1
 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC
 Model: 5078-64-3-47
 Date: 8/6/2019

Tag Unit

Wind Pressures for Low-rise buildings or buildings with h<60ft
 ASCE 7-10 Chapter 30 Part I:

Wind Speed, Vult:	167 MPH	Roof Style:	Gable
Wind Exposure:	C	Roof Pitch:	6 /12
Mean Roof Height:	18 FT	Roof Angle:	26.6
Elevation:	0 FT	Width	30.00 ft
Ke:	1.00	2a:	6 ft
Kd:	0.85	Wall Height:	9 ft
Kzt:	1	Heel Ht:	8 in
kt:	0.88	Roof Ht:	7.50 ft
qh:	53.53 psf	Stud Spacing:	16 "oc
Building Type:	Enclosed	Overhang:	12 "
Gcpi:	0.18	Int. Shearwall:	NO
	-0.18		
Min net pressure:	16 psf		

MWFRS

Transverse

	1	2	3	4 1e	2e	3e	4e
+GCpi	19.8	-14.9	-33.6	-30.5	29.3	-19.8	-40.9
-Gcpi	39.1	4.3	-14.3	-11.3	48.6	-0.6	-21.7
Max	39.1	-14.9	-33.6	-30.5	48.6	-19.8	-40.9

Longitudinal

	1	2	3	4	5	6 1e	2e	3e	4e	5e	6e
+GCpi	-33.7	-46.6	-29.4	-33.7	11.8	-25.2	-35.3	-66.9	-38.0	-35.3	23.0
-Gcpi	-14.5	-27.3	-10.2	-14.5	31.0	-5.9	-16.1	-47.6	-18.7	-16.1	42.3
Max	-33.7	-46.6	-29.4	-33.7	31.0	-25.2	-35.3	-66.9	-38.0	-35.3	42.3

	Vertical				Horz			
	End				End			
	Int				Overhang			
	WW				Roof			
	LW				Wall			
Trans	-19.8	-40.9	-14.9	-33.6	-53.0	-48.1	21.1	67.6
Long	-66.9	-38.0	-46.6	-29.4	-53.0	-	-28.9	55.7

Wall forces reduced due to wind hitting main unit

Design Loading

	Vertical							Horz			
	End							End			
	Int							Overhang			
	WW							Roof			
	LW							Wall			
Trans	-11.9	-24.6	-9.0	-20.1	-31.8	-28.9		12.7	40.6	11.2	30.2
Long	-40.1	-22.8	-27.9	-17.7	-65.8	-53.6		12.7	33.4	11.2	22.2

These prints comply with the
 Florida Manufactured Building
 Act and adopted Codes and
 adhere to the following criteria:



Const. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 167 MPH Vult, 130 MPH Vap
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT10886-5078-64-3-47-R1
 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC
 Model: 5078-64-3-47
 Date: 8/6/2019

Pressure reduction for house blocking wind:
 Pressure to tag: -22.96 psf End
 -18.33 psf Int

Shearwalls:

Left Endwall:

End Zone: Yes
 Trib: 7.5 ft
 End Roof: 570 lb
 End Wall: 1257 lb
 Int Roof: 126 lb
 Int Wall: 234 lb
 Total force: 2188 lb
 Sheathing Thickness: 7/16 in
 Fastener: 15ga staple
 Wall Length: 30.08 ft
 FHS Length: 26.00 ft
 Wall Height: 9 ft
 Tallest Opening: h/2
 r: 0.93
 Co: 0.94
 Perf or Segmented: P
 Blocked: YES
 PLF required: 89.85
 Framing: SPF
 Required Spacing: 6 " OC
 Tiedown: 863.5 lb

Right Endwall:

Transferred to house

End Zone: Yes
 Trib: 7.5 ft
 End Roof: 570 lb
 End Wall: 1257 lb
 Int Roof: 126 lb
 Int Wall: 234 lb
 Total force: 2188 lb

These prints comply with the
 Florida Manufactured Building
 Act and adopted Codes and
 adhere to the following criteria:



Correl. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 167 MPH Vult, 130 MPH Valt
 Fire Rating of Ext. Walls: 0 Hr
 Plan No: MET10886-5078-64-3-47-B1
 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

Top Sidewall:

End Zone: yes
 Trib: 15 ft
 End Wall: 919 lb
 Int Wall: 1718 lb
 Total force: 3305 lb
 Sheathing Thickness: 7/16 in
 Fastener: .131 nail
 Wall Length: 6.24 ft
 FHS Length: 6.24 ft
 Wall Height: 9 ft
 Tallest Opening: 5h/6
 r: 1.00
 Co: 1.00
 Perf or Segmented: P
 Blocked: YES
 PLF required: 529.63
 Framing: SPF
 Required Spacing: 3 " OC
 Tiedown: 4766.7 lb

Bottom Sidewall:

End Zone: Yes
 Trib: 15 ft
 End Wall: 919 lb
 Int Wall: 1718 lb
 Total force: 3305 lb
 Sheathing Thickness: 7/16 in
 Fastener: .131 nail
 Wall Length: 6.24 ft
 FHS Length: 6.24 ft
 Wall Height: 9 ft
 Tallest Opening: h
 r: 1.00
 Co: 1.00
 Perf or Segmented: P
 Blocked: YES
 PLF required: 529.63
 Framing: SPF
 Required Spacing: 3 " OC
 Tiedown: 4766.7 lb

Strap: 2490 CS14 (lbs)
 Sidewall interconnection: 6 "oc .131 Nails
 Capacity: 130 lbs per nail
 Total Capacity: 2340 lbs

Summary:	Fastener	Edge Spacing	Tiedown Force	Perf/ Segment	# CS14 or equal	Corner Connection**
Left Endwall	15ga staple	6 "OC	863.5 lb	P	1	
Right Endwall	See connection below					
Top Sidewall	.131 nail	3 "OC	4766.7 lb	P	2	NO
Bottom Sidewall	.131 nail	3 "OC	4766.7 lb	P	2	NO

** 6 "oc .131 nails from sidewall to endwall where both walls have tiedown at the corner, then the sidewall is transferred
 2" oc fastener spacing requires double studs and staggered fasteners at panel seams.

Franklin Structures, LLC
 Model: 5078-64-3-47
 Date: 8/6/2019

Diaphragm:

Max Force:	3304.7 lbs
Load:	103.3 plf
Sheathing:	7/16 in
Fastener:	15ga staple
Framing:	SPF
Unblocked Capacity:	172.2 plf
Blocked @ 6" edge:	188.6 plf
Blocking distance:	0.0 ft

0 ft blocked each end with 15ga staple

Notes:

all 15ga staples minimum length of 1.5"
 all .131 nails minimum length of 2"

Connection to main unit:

Force:	2188 lb
Length:	30 ft
#10x4" screw	159 lb
Z: Spacing:	12 "oc

12 in oc #10x4 in screws from tag ceiling to main ceiling

Tag added for endwall vertical projection:

Pressure difference:	11.9 psf
Area per wall:	56.25 ft^2
Force:	667.92 lbs

These prints comply with the
 Florida Manufactured Building
 Act and adopted Codes and
 adhere to the following criteria:



Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Valt. 130 MPH Vasc
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Connections

Truss to exterior wall uplift:

Uplift Force: 494 lb
H2.5A: 535 lb
MTS18: 1030 lb

Truss to exterior wall Lateral:

End: 50.7 psf
Int: 41.1 psf
Height: 9 ft
Spacing: 24 in oc
Load:
End: 456.7 lb
Int: 370.0 lb
.131 nail: 114.84 lb
.131x3"Nails End: 4.0
.131x3" Nails Int: 3.2

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt, 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-d7-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Truss king post to Header:

Uplift: 697 lb
Gravity: 552 lb
.131 nail EG: 88.44 lb
.131 nail EG LL: 69.09 lb

.131x3": 8.0 Nails

Or hanger rated for 552lb grav and 652lb uplift

Stud to Plate:

End: 50.75 psf
Int: 41.11 psf
Height: 9 ft
Spacing: 16 in oc
Load:
End: 304.5 lb
Int: 246.7 lb
.131 nail: 88.44 lb
Nails End: 3.4
Nails Int: 2.8

End Zone: Use (4) .131x3" nails to connect studs to plates.

Int Zone: Use (3) .131x3" nails to connect studs to plates.

Plate to floor and plate interconnection (top plate):

End: 50.7 psf
 Int: 41.1 psf
 Height: 9 ft
 Load: 228.37 plf
 .131 Nailx3": 108 lb
 Spacing of .131 nail: 5.7 " OC int and end zones

15gax2.5" staple: 72 lb
 Spacing of 15ga: 3.78 " OC int and end zones

Sheathing Suction Connections (wall and roof)

	End	Int	
Wall:	-50.75	-41.11	psf
Roof:	-108.6	-63.6	psf
.131x2.5:	66	66	lbs
15gax2.5" staple:	56.8	56.8	lbs

Wall

Member spacing:	16	16	" oc
Nail:	11.7	12.0	" oc
Staple:	10.1	12.0	" oc

Roof

Member spacing:	24	24	" oc
Nail:	3.6	6.2	" oc
Staple:	3.1	5.4	" oc

Note End zone is 3ft from the end of the house and from eave/ridge on roof
 This spacing is a minimum for edge AND field fastening.

Truss Kneewall Connection:

Tension:	687 lb	Compare to truss print,
Shear:	338 lb	Must be higher then truss.

Tension:

CS 22:	845 lb	(8- .131 x2.5" nails each side)
--------	--------	---------------------------------

Shear:

Rail to king post toed
 .131x3" nail: 93.31 lb
 #: 3.6 Use 4
 Rail to rail:
 .131x3" nail: 103.125 lbs
 #: 3.3 Use 4 per bay

These prints comply with the
 Florida Manufactured Building
 Act and adopted Codes and
 adhere to the following criteria:



Const. Type:	<u>VB-unprotected</u>
Occupancy:	<u>Single Family Dwelling</u>
Allowable No. of Floors:	<u>1</u>
Wind Velocity:	<u>167 MPH Vult. 130 MPH Vasc</u>
Fire Rating of Ext. Walls:	<u>0 Hr</u>
Plan No.:	<u>MTL0886-5078-64-3-47-R1</u>
Allow. Floor Load:	<u>40 PSF</u>
Approval Date:	<u>7/13/2021</u>
Manufacturer:	<u>Franklin Structures, LLC</u>

Matewall Girders Supporting Floor Load Only

Location: Matewall
Supporting: Roof & 1 Floor

Vertical Load

Dead Load: 76 plf D
Live Load: 304 plf .75(L+Lr)
Total Load: 380 plf D+L
Uplift Load: 0 plf

Wall height: 108 in
Min sill height: 18 in
LVL: Microllam
LVL MOE (E): 2000000 psi
E min: 1016411 psi
Fb: 2750 psi
Fv: 285 psi
Fcperp: 750 psi
Volume effect exp (e): 0.136
Cr (LVL): 1.04

Cr: 1.15 LL defl L/ 360
Cd: 1 TL defl L/ 240

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	13.9	21.4	98.9
2	1.5	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	20.8	32.1	148.4
3	2	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	27.8	42.8	197.9
4							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
5							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
6							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
7							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
8							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
9							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	121	75	110	121
2	172	92	126	139
3	223	107	139	153
4	#N/A	#N/A	#N/A	#N/A
5	#N/A	#N/A	#N/A	#N/A
6	#N/A	#N/A	#N/A	#N/A
7	#N/A	#N/A	#N/A	#N/A
8	#N/A	#N/A	#N/A	#N/A
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

Member	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (1) 2x 10 SYP #1	75 in	1200	0	1.5
2 (1.5) 2x 10 SYP #1	92 in	1500	0	1.0
3 (2) 2x 10 SYP #1	106 in	1700	0	0.8
4 () 0x 0	#N/A in	#N/A	#N/A	#N/A
5 () 0x 0	#N/A in	#N/A	#N/A	#N/A
6 () 0x 0	#N/A in	#N/A	#N/A	#N/A
7 () 0x 0	#N/A in	#N/A	#N/A	#N/A
8 () 0x 0	#N/A in	#N/A	#N/A	#N/A
9 () 0x 0	#N/A in	#N/A	#N/A	#N/A
10 () 0x 0	#N/A in	#N/A	#N/A	#N/A

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt, 130 MPH Valt
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MET10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Matewall Girders Supporting Roof & 1 Floor

Location: Matewall
Supporting: Roof & 1 Floor

Vertical Load

Dead Load: 270 plf D
Live Load: 321 plf .75(L+Lr)
Total Load: 571 plf D+L
Uplift Load: -276 plf

Wall height: 108 in
Min sill height: 18 in
LVL: Microllam
LVL MOE (E): 2000000 psi
E min: 1016411 psi
Fb: 2750 psi
Fv: 285 psi
Fcperp: 750 psi
Volume effect exp (e): 0.136
Cr (LVL): 1.04

Cr: 1.15 LL defl L/ 360
Cd: 1 TL defl L/ 240

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	13.9	21.4	98.9
2	1.5	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	20.8	32.1	148.4
3	2	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	27.8	42.8	197.9
4							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
5							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
6							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
7							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
8							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
9							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	87	61	108	110
2	121	75	124	126
3	155	87	136	139
4	#N/A	#N/A	#N/A	#N/A
5	#N/A	#N/A	#N/A	#N/A
6	#N/A	#N/A	#N/A	#N/A
7	#N/A	#N/A	#N/A	#N/A
8	#N/A	#N/A	#N/A	#N/A
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

Member	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (1) 2x 10 SYP #1	61 in	1500	-710	1.8
2 (1.5) 2x 10 SYP #1	75 in	1800	-870	1.2
3 (2) 2x 10 SYP #1	86 in	2100	-1000	0.9
4 () 0x 0	#N/A in	#N/A	#N/A	#N/A
5 () 0x 0	#N/A in	#N/A	#N/A	#N/A
6 () 0x 0	#N/A in	#N/A	#N/A	#N/A
7 () 0x 0	#N/A in	#N/A	#N/A	#N/A
8 () 0x 0	#N/A in	#N/A	#N/A	#N/A
9 () 0x 0	#N/A in	#N/A	#N/A	#N/A
10 () 0x 0	#N/A in	#N/A	#N/A	#N/A

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt, 130 MPH Valt
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MET10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Floor Joist Calculation

Vertical Load

Dead Load: 13 plf D
Live Load: 53 plf L
Total Load: 67 plf D+Lr
Uplift Load: 0 plf

Cr: 1.15 LL defl L/ 360
Cd: 1 TL defl L/ 240

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	13.9	21.4	98.9
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

	Shear	Moment	LL def	TL def
1	603	180	197	217
2				
3				
4				
5				
6				
7				
8				
9				
10				

Member	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (1) 2x 10 SYP #1	180 in	500	0	0.6
2				
3				
4				
5				
6				
7				
8				
9				
10				

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY

NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MCT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Porch Headers matеwall and sidewall

Location: Matеwall
Supporting: Roof

Vertical Load

Dead Load: 150 plf D
Live Load: 128 plf Lr
Total Load: 334 plf D+Lr
Uplift Load: -341 plf .6D+Wn

Wall height: 108 in
Min sill height: 18 in
LVL: Microllam
LVL MOE (E): 2000000 psi
E min: 1016411 psi
Fb: 2750 psi
Fv: 285 psi
Fcperp: 750 psi
Volume effect exp (e): 0.136
Cr (LVL): 1.04

Since deflection doesn't govern the LDF between uplift and gravity (1.6 vs 1.25)
allow a maximum uplift per truss of (334*1.6/1.25*1.33ft=572lb)

Cr: 1.15 LL defl L/ 240
Cd: 1.25 TL defl L/ 180

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	2	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	21.8	26.3	95.3
2	2	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	21.8	26.3	95.3
3	1	1.5	11.25	SPF	#2	Edge	1	1.0	875	135	425	1400000	510000	1094	169	16.9	31.6	178.0
4	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	21.4	98.9
5	2	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	21.8	26.3	95.3
6							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
7							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
8							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
9							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	243	109	166	157
2	191	100	159	150
3	159	100	196	185
4	208	148	181	171
5	312	167	179	169
6	#N/A	#N/A	#N/A	#N/A
7	#N/A	#N/A	#N/A	#N/A
8	#N/A	#N/A	#N/A	#N/A
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

Connections:

Connect truss to header with LTS18 strap: capacity 755lbs
Max truss reaction for header @ 16" oc is 465lb====> OK

Header to column corner:
RTC-44 Bracket: Capacity 1980lbs
Max reaction for header @ 8' is 1860LB OK

Header to standard column:
(2) lsta18 straps:1105
BC4:605 uplift
Max reaction @ 8': 1860lb

Column to Floor:
BC-40 bracket: 510lbs
(2) lsta18 straps:1105
Total:2720lbs
Max reaction for 8' span: 1860lb OK

Member	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (2) 2x 8 SYP #1	108 in	1600	-1540	1.0
2 (2) 2x 8 SPF #2	99 in	1400	-1410	1.3
3 (1) 2x 12 SPF #2	99 in	1400	-1410	2.6
4 (1) 2x 9.25 LVL	148 in	2100	-2110	1.5
5 (2) 2x 7.25 LVL	166 in	2400	-2360	0.8
6 () 0x 0	#N/A in	#N/A	#N/A	#N/A
7 () 0x 0	#N/A in	#N/A	#N/A	#N/A
8 () 0x 0	#N/A in	#N/A	#N/A	#N/A
9 () 0x 0	#N/A in	#N/A	#N/A	#N/A
10 () 0x 0	#N/A in	#N/A	#N/A	#N/A

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt. 130 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64.3-47.R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Porch Column

Lateral Load
Lateral only
Stud area: 27.0 ft²
Lateral: 5 psf W

Vertical: 150 plf
Lateral: 5 psf W
Combined Vert and Lat (max Vert)

Vertical:	336 plf	0
Lateral:	3.8 psf	.75W

Vertical:	-349 plf	.6D+Wn
Lateral:	3.8 psf	W

Fcperp: 750 psi
Vol eff (e): 0.136
Cr (LVL): 1.04

Vertical

Header	1.5	inches	Allowable:	1040	395	407	565	1300000	470000	640
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Deflection Check

112 in = 9 ft - 4 in	
--	--

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vals
Fire Rating of Ext. Walls: 0 HR
Plan No.: ME110886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC



WoodWorks®
SOFTWARE FOR WOOD DESIGN

COMPANY

Aug. 26, 2019 21:06

PROJECT

Ryan W. Boring
Franklin
point load beam

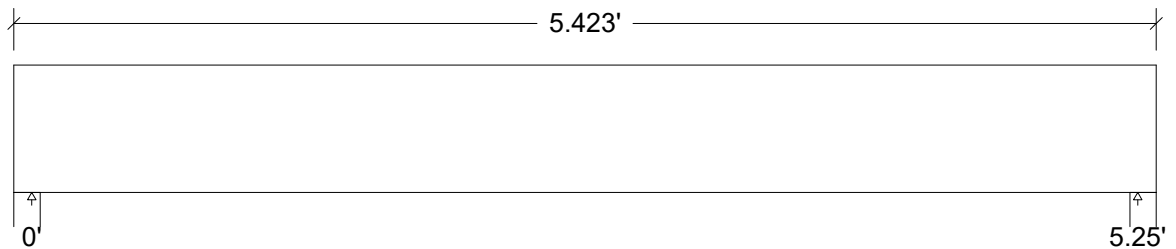
Design Check Calculation Sheet

WoodWorks Sizer 11.1

Loads:

Load	Type	Distribution	Pat- tern	Location [ft] Start End	Magnitude Start End	Unit
Point Load	Roof live	Point		2.62	4140	lbs
Self-weight	Dead	Full UDL			6.3	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:					
Dead	16				16
Roof Live	2141				1999
Factored:					
Total	2158				2015
Bearing:					
Capacity					
Beam	3375				3375
Support	5951				5951
Des ratio					
Beam	0.64				0.60
Support	0.36				0.34
Load comb	#2				#2
Length	1.50				1.50
Min req'd	0.96				0.90
Cb	1.00				1.00
Cb min	1.00				1.00
Cb support	1.00				1.00
Fc sup	1150				1150

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adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr
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Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

LVL n-ply, 2.0E, 3100Fb, 1-1/2"x7-1/4", 2-ply (3"x7-1/4")

Supports: All - Lumber n-ply Column, S-P-F No.1/No.2

Total length: 5.25'; Clear span: 5.249'; volume = 0.8 cu.ft.

Lateral support: top= at supports, bottom= at supports;

Analysis vs. Allowable Stress and Deflection using NDS 2015 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 149$	$F_v' = 285$	psi	$f_v/F_v' = 0.52$
Bending(+)	$f_b = 2488$	$F_b' = 2535$	psi	$f_b/F_b' = 0.98$
Live Defl'n	$0.11 = L/557$	$0.26 = L/240$	in	0.43
Total Defl'n	$0.11 = L/553$	$0.35 = L/180$	in	0.33

point load beam

WoodWorks® Sizer 11.1

Page 2

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrt	Ci	Cn	LC#
Fv'	285	1.00	-	1.00	-	-	-	-	1.00	-	1.00	2
Fb'+	3100	1.00	-	1.00	0.818	1.00	-	1.00	1.00	-	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-	-
E'	2.0 million	-	-	1.00	-	-	-	-	1.00	-	-	2
Eminy'	1.04 million	-	-	1.00	-	-	-	-	1.00	-	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D+Lr, V max = 2158, V design = 2154 lbs

Bending(+): LC #2 = D+Lr, M = 5449 lbs-ft

Deflection: LC #2 = D+Lr (live)

LC #2 = D+Lr (total)

D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake

All LC's are listed in the Analysis output

Load combinations: ASCE 7-10 / IBC 2015

CALCULATIONS:Deflection: EI = 95.3e06 lb-in²/ply

"Live" deflection = Deflection from all non-dead loads (live, wind, snow...)

Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.

Lateral stability(+): Lu = 5.25' Le = 10.38' RB = 20.0; b = single ply width

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2015), the National Design Specification (NDS 2015), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.
3. SCL-BEAMS (Structural Composite Lumber): the attached SCL selection is for preliminary design only. For final member design contact your local SCL manufacturer.
4. Size factors vary from one manufacturer to another for SCL materials. They can be changed in the database editor.
5. BUILT-UP SCL-BEAMS: contact manufacturer for connection details when loads are not applied equally to all plies.
6. FIRE RATING: Joists, wall studs, and multi-ply members are not rated for fire endurance.

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
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APPROVED BY



Const. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 167 MPH Vult. 130 MPH Vasc
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT10886-5078-64-3-47-R1
 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC



COMPANY

Aug. 26, 2019 21:10

PROJECT

Ryan W. Boring
Franklin
Column1

Calc is for jack studs only, king studs per other calculations.

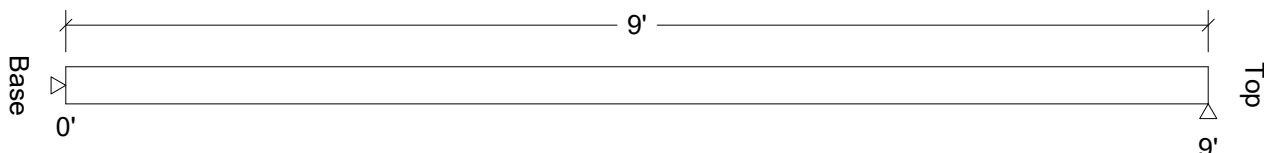
Design Check Calculation Sheet

WoodWorks Sizer 11.1

Loads:

Load	Type	Distribution	Location [ft] Start End	Magnitude Start End	Unit
Point Load	Roof live	Axial	(Ecc. = 0.58")	2158	lbs
Self-weight	Dead	Axial		24	lbs

Lateral Reactions (lbs):



Unfactored: Dead			
Roof Live	12		-12
Factored: R->L			-12
Load comb			#2
L->R	12		
Load comb	#2		#1

Point Load Jack Studs

Lumber n-ply, S. Pine, No.2, 2x4, 2-ply (3"x3-1/2")

Support: Lumber-soft Sill plate, S. Pine No.2; Bearing length = column width; continuous lower support

Total length: 9.0'; Clear span: 8.75'; volume = 0.7 cu.ft.

Pinned base; Load face = width(b); Built-up fastener: nails; Ke x Lb: 1.0 x 0.0 = 0.0 [ft]; Ke x Ld: 1.0 x 9.0 = 9.0 [ft];

Repetitive factor: applied where permitted (refer to online help);

2x4 ran since studs are ripped to 5", all ripped lumber must be regraded

Analysis vs. Allowable Stress and Deflection using NDS 2015 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 2$	$F_v' = 175$	psi	$f_v/F_v' = 0.01$
Bending(+)	$f_b = 206$	$F_b' = 1100$	psi	$f_b/F_b' = 0.19$
Axial	$f_c = 208$	$F_c' = 408$	psi	$f_c/F_c' = 0.51$
Combined (axial + eccentric moment)				Eq. 15.4-3 = 0.65
Axial Bearing	$f_c = 208$	$F_c^* = 1450$	psi	$f_c/F_c^* = 0.14$
Support Bearing	$f_{cp} = 208$	$F_{cp} = 636$	psi	$f_{cp}/F_{cp} = 0.33$
Live Defl'n	$0.06 = < L/999$	$0.90 = L/120$	in	0.07
Total Defl'n	$0.06 = < L/999$	$0.90 = L/120$	in	0.07

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



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Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vel. 130 MPH Vel.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL/CP	CF	Cfu	Cr	Cfrt	Ci	LC#
Fv'	175	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Fb'+	750	1.00	1.00	1.00	1.000	1.467	1.00	1.00	1.00	1.00	2
Fc'	1250	1.00	1.00	1.00	0.282	1.160	-	-	1.00	1.00	2
E'	1.4 million	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Emin'	0.51 million	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Fc*	1250	1.00	1.00	1.00	-	1.160	-	-	1.00	1.00	2
Fcp sup	565	-	1.00	1.00	-	-	-	-	1.00	1.00	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D+Lr, V max = 12, V design = 12 lbs
 Bending(+): LC #2 = D+Lr, M = 105 lbs-ft
 Deflection: LC #2 = D+Lr (live)
 LC #2 = D+Lr (total)
 Axial : LC #2 = D+Lr, P = 2182 lbs Kf = 1.00
 Eq. 15.4-3 : LC #2 = D+Lr Fb' = 1100
 FcE = 440 Pxe/S = fc(6xe/d) = 206
 Support : LC #2 = D+Lr; R = 2182 lbs, Cap = 6674, Lb = 3.00", Cb = 1.13
 D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake
 All LC's are listed in the Analysis output
 Load combinations: ASCE 7-10 / IBC 2015

CALCULATIONS:

Deflection: EI = 7.50e06 lb-in²/ply
 "Live" deflection = Deflection from all non-dead loads (live, wind, snow...)
 Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2015), the National Design Specification (NDS 2015), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.
3. BUILT-UP COLUMNS: nailed or bolted built-up columns shall conform to the provisions of NDS Clause 15.3.
4. FIRE RATING: Joists, wall studs, and multi-ply members are not rated for fire endurance.
5. Axial load eccentricity applied in direction of load face only. It is the designers responsibility to check for effect of eccentricity in the other direction.

ridgebeam to header

uplift- 4260lbs each side of tag

HTS16 strap=1310lbs each

(2)=2620lbs

CS20 strap 1030lbs

(2)= 2060lbs

total =4680

use (1) HTS16 strap AND (1) CS20 strap on each LVL header to header below

header to column

uplift-2158lbs

Ista18: 1115lbs

Use (2) Ista18 straps at the top and bottom of each column (2 per end of headers)

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 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC

On-frame floor joist

Home Properties:

Unit Width:	180 in
Overhang:	12 in
Roof Live Load:	20 psf
Roof Dead Load:	20 psf
Wall Dead Load:	5 psf
Wall height:	9 ft
Floor Live Load:	40 psf
Floor Dead Load:	10 psf

Joist Properties:

Size:	2x8
Species/Gr	SYP #1
Fb:	1250 psi
Cr:	1.15
Cf:	1
Fb':	1437.5 psi
Cd:	1.25
E:	1600000 psi
Fv:	175 psi
Spacing:	16 in
Area:	10.875 in^2
I:	47.63 in^4
S:	13.14 in^3

Chassis Properties:

I-beam spacing:	95.5 in
I-beam height:	10 in
Outrigger thick:	13 ga
Outrigger thick:	0.0897 in
Outrigger height:	9.5 in
Outrigger width:	1.5 in
Outrigger Str:	21780 psi
Outrigger Fy:	33,000 psi
Outrigger Fv:	13200 psi
Outrigger Spacing:	96 in
Outrigger setback:	0 in
X-member thick:	13 ga
X-member thick:	0.0897 in
X-member width:	1.5 in
X-member shape:	C
X-member depth:	2 "

PV= 513.3 lb

Cantilever Moment:

Ext wall thickness:	3.5
B':	40.5 in
Floor Loads:	5.56 lb/in
M floor:	379.69 lb-ft
M Joist:	1967.67 lb-ft
M residual:	1587.98 lb-ft
PV1:	470.5 lb
Mid span moment:	
M:	-1439.9 lb-ft
M allowable:	1967.7 lb-ft
M:	0.73

OK

Determine Max PVL due to deflection:

PVL:	227 lb
WL:	4.4 lb/in
L/120:	0.23 in
Max PVL @ L/180	150.67 lb
Defl @ mid span:	0.10
L\360:	0.27
Live Load to frame:	76.00 lb

OK

PV2 due to moment:	42.8 lb
PV2 due to deflection:	76.00 lb
# joists:	6
MO:	18467 lb-in
V:	456 lb
Actual PV1:	437 lb

crossmember properties

A1:	0.135 in^2
A2:	0.135 in^2
A3:	0.163 in^2
C1:	0.75 in
C2:	0.75 in
C3C:	1.455 in
AC1:	0.101 in^3
AC2:	0.101 in^3
AC3:	0.238 in^3
Sum A:	0.432 in^2
Sum AC:	0.439 in^3
Cprime:	1.016 in
I1:	0.0252 in^4
I2:	0.0252 in^4
I3:	0.0001 in^4
y'1:	0.416 in
y'2:	0.416 in
y'3:	0.439 in
Ay21:	0.023 in^4
Ay22:	0.023 in^4
Ay23:	0.031 in^4
Sum I:	0.0506 in^4
Sum Ay2:	0.078 in^4
Iy-y:	0.129 in^4
r:	0.55 in

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC**On-frame floor joist**

Outrigger design:

I: 12.48 in⁴
S_y: 2.63
M allow: 57226 lb-in
M: 18467 lb-in **OK**
Area: 0.852 in²
Vallow: 11248.38 lbs
V: 456 lb **OK**
1/8" weld:
Applied M: 1944 lb
Weld Strength: 18 ksi
Throat thick: 0.125 for 1/8" weld
Load: 1590.75 lb/in
L for moment: 1.22 in
L for shear: 0.29 in
Length needed: 1.30 in

Crossmember design:

k: 0.5 fixed
kl/r: 87.5
F_a: 15.3 ksi
Allowable Comp: 6616 lbs
P_H= 1944 lbs
Weld, L: 1.22 in

Lateral design:

of Lags: 7
Lag strength: 310 lb (9mmx76mm Fastec or equal)
LDF: 1.25
Lag strength: 387.5 lb
Total: 2712.5 lb
mu: 0.2
Friction: 192.2 lb/joist
Friction total: 1153 lb
Total lateral: 3865 lb
Lateral force: 1943.9 lb **OK**

Short outrigger increased moment:

Moment:
Short out M: 0.00 in-lb
M: 22268.44 in-lb
Total M: 22268.44 in-lb
M Allowable: 23612.06 in-lb
M/Mallow: **0.94 ok**

Note: all exterior doors must have piers under each side.

These prints comply with the
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Act and adopted Codes and
adhere to the following criteria:

APPROVED BY


Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt. 130 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10686-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC

On-frame floor joist

Home Properties:

Unit Width:	180 in
Overhang:	12 in
Roof Live Load:	20 psf
Roof Dead Load:	20 psf
Wall Dead Load:	5 psf
Wall height:	9 ft
Floor Live Load:	40 psf
Floor Dead Load:	10 psf

Joist Properties:

Size:	2x8
Species/Gr	SYP #1
Fb:	1250 psi
Cr:	1.15
Cf:	1
Fb':	1437.5 psi
Cd:	1.25
E:	1600000 psi
Fv:	175 psi
Spacing:	16 in
Area:	10.875 in^2
I:	47.63 in^4
S:	13.14 in^3

Chassis Properties:

I-beam spacing:	95.5 in
I-beam height:	10 in
Outrigger thick:	13 ga
Outrigger thick:	0.0897 in
Outrigger height:	9.5 in
Outrigger width:	1.5 in
Outrigger Str:	21780 psi
Outrigger Fy:	33,000 psi
Outrigger Fv:	13200 psi
Outrigger Spacing:	96 in
Outrigger setback:	8 in
X-member thick:	13 ga
X-member thick:	0.0897 in
X-member width:	1.5 in
X-member shape:	C
X-member depth:	2 "

PV= 513.3 lb

Cantilever Moment:

Ext wall thickness:	3.5
B':	40.5 in
Floor Loads:	5.56 lb/in
M floor:	379.69 lb-ft
M Joist:	1967.67 lb-ft
M residual:	1587.98 lb-ft
PV1:	470.5 lb
Mid span moment:	
M:	-1439.9 lb-ft
M allowable:	1967.7 lb-ft
M:	0.73

OK

Determine Max PVL due to deflection:

PVL:	227 lb
WL:	4.4 lb/in
L/120:	0.23 in
Max PVL @ L/180	150.67 lb
Defl @ mid span:	0.10
L\360:	0.27
Live Load to frame:	76.00 lb

OK

PV2 due to moment:	42.8 lb
PV2 due to deflection:	76.00 lb
# joists:	6
MO:	18467 lb-in
V:	456 lb
Actual PV1:	437 lb

crossmember properties

A1:	0.135 in^2
A2:	0.135 in^2
A3:	0.163 in^2
C1:	0.75 in
C2:	0.75 in
C3C:	1.455 in
AC1:	0.101 in^3
AC2:	0.101 in^3
AC3:	0.238 in^3
Sum A:	0.432 in^2
Sum AC:	0.439 in^3
Cprime:	1.016 in
I1:	0.0252 in^4
I2:	0.0252 in^4
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APPROVED BY
NIA INC.

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Wind Velocity: 167 MPH Valt 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC**On-frame floor joist**

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LDF: 1.25
Lag strength: 387.5 lb
Total: 2712.5 lb
mu: 0.2
Friction: 192.2 lb/joist
Friction total: 1153 lb
Total lateral: 3865 lb
Lateral force: 1943.9 lb **OK**

Short outrigger increased moment:

Moment:
Short out M: 3647.78 in-lb
M: 22268.44 in-lb
Total M: 25916.22 in-lb
M Allowable: 23612.06 in-lb
M/Mallow: **1.10 MUST DOUBLE JOIST OVER OUTRIGGER**

Note: all exterior doors must have piers under each side.

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APPROVED BY


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Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt. 130 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10686-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 225$	$F_v' = 285$	psi	$f_v/F_v' = 0.79$
Bending(+)	$f_b = 3056$	$F_b' = 2961$	psi	$f_b/F_b' = 1.03$
Live Defl'n	$0.11 = L/577$	$0.26 = L/240$	in	0.42
Total Defl'n	$0.11 = L/575$	$0.35 = L/180$	in	0.31

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrt	Ci	Cn	LC#
Fv'	285	1.00	-	1.00	-	-	-	-	1.00	-	1.00	2
Fb'+	3100	1.00	-	1.00	0.955	1.00	-	1.00	1.00	-	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-	-
E'	2.0 million	-	-	1.00	-	-	-	-	1.00	-	-	2
Eminy'	1.04 million	-	-	1.00	-	-	-	-	1.00	-	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D+Lr, V max = 2077, V design = 2077 lbs

Bending(+): LC #2 = D+Lr, M = 5448 lbs-ft

Deflection: LC #2 = D+Lr (live)

LC #2 = D+Lr (total)

D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake

All LC's are listed in the Analysis output

Load combinations: ASCE 7-10 / IBC 2015

CALCULATIONS:

Deflection: EI = 198e06 lb-in²

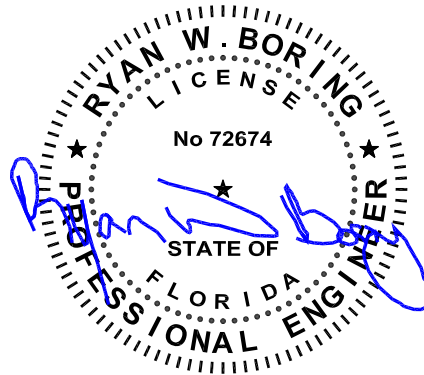
"Live" deflection = Deflection from all non-dead loads (live, wind, snow...)

Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.

Lateral stability(+): Lu = 2.00' Le = 4.13' RB = 14.3

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2015), the National Design Specification (NDS 2015), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.
3. SCL-BEAMS (Structural Composite Lumber): the attached SCL selection is for preliminary design only. For final member design contact your local SCL manufacturer.
4. Size factors vary from one manufacturer to another for SCL materials. They can be changed in the database editor.
5. BUILT-UP SCL-BEAMS: contact manufacturer for connection details when loads are not applied equally to all plys.
6. FIRE RATING: Joists, wall studs, and multi-ply members are not rated for fire endurance.



Jul 12, 2021

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Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:

APPROVED BY

NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC



COMPANY

Sep. 5, 2019 16:02

PROJECT

Ryan W. Boring
Franklin
point load beam

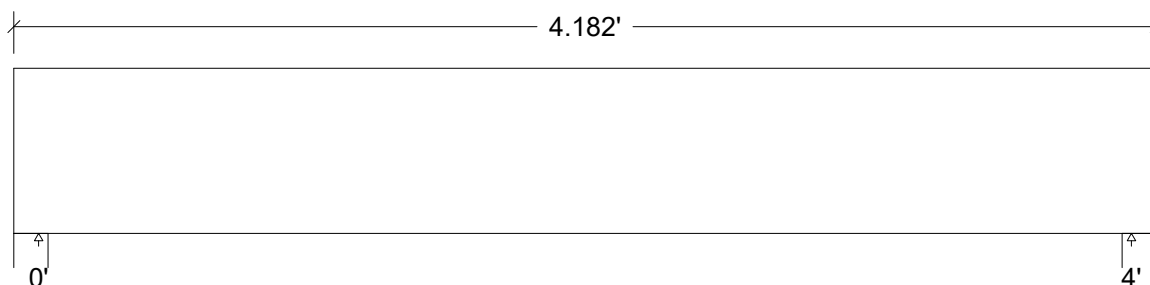
Design Check Calculation Sheet

WoodWorks Sizer 11.1

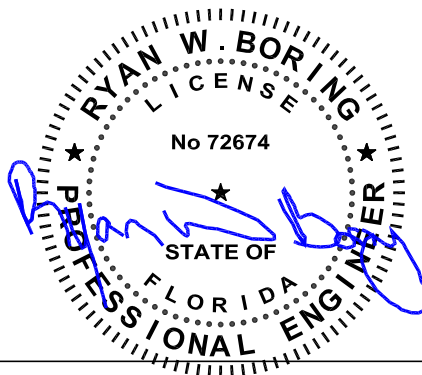
Loads:

Load	Type	Distribution	Pat- tern	Location [ft] Start End	Magnitude Start End	Unit
Point Load	Roof live	Point		2.09	4140	lbs
Self-weight	Dead	Full UDL			8.5	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	17		17
Roof Live	2070		2070
Factored:			
Total	2087		2087
Bearing:			
Capacity			
Beam	3814		3814
Support	8539		8539
Des ratio			
Beam	0.55		0.55
Support	0.24		0.24
Load comb	#2		#2
Length	1.50		1.50
Min req'd	0.82		0.82
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.00		1.00
Fc sup	1150		1150



Jul 12, 2021

Lumber n-ply, S. Pine, No. 1, 2x8, 3-ply (4-1/2"x7-1/4")

Supports: All - Lumber n-ply Column, S-P-F No.1/No.2

Total length: 4.0'; Clear span: 3.999'; volume = 0.9 cu.ft.

Lateral support: top= at supports, bottom= at supports; Repetitive factor: applied where permitted (refer to online help);

Analysis vs. Allowable Stress and Deflection using NDS 2015 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	f _v = 96	F _v ' = 175	psi	f _v /F _v ' = 0.55
Bending(+)	f _b = 1265	F _b ' = 1333	psi	f _b /F _b ' = 0.95
Live Defl'n	0.04 = <L/999	0.20 = L/240	in	0.21
Total Defl'n	0.04 = <L/999	0.27 = L/180	in	0.16

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult, 130 MPH Vag
Fire Rating of Ext. Walls: 0 Hr
Plan No: MET10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CF	Cfu	Cr	Cfrt	Ci	Cn	LC#
Fv'	175	1.00	1.00	1.00	-	-	-	-	1.00	1.00	1.00	2
Fb'+	1000	1.00	1.00	1.00	0.927	1.250	1.00	1.15	1.00	1.00	-	2
Fcp'	565	-	1.00	1.00	-	-	-	-	1.00	1.00	-	-
E'	1.6 million	-	1.00	1.00	-	-	-	-	1.00	1.00	-	2
Emin'	0.58 million	-	1.00	1.00	-	-	-	-	1.00	1.00	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D+Lr, V max = 2082, V design = 2082 lbs

Bending(+): LC #2 = D+Lr, M = 4157 lbs-ft

Deflection: LC #2 = D+Lr (live)

LC #2 = D+Lr (total)

D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake

All LC's are listed in the Analysis output

Load combinations: ASCE 7-10 / IBC 2015

CALCULATIONS:

Deflection: EI = 76.2e06 lb-in²/ply

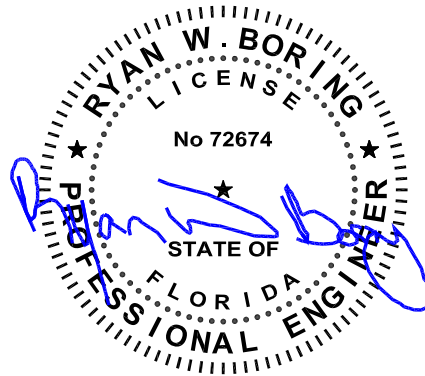
"Live" deflection = Deflection from all non-dead loads (live, wind, snow...)

Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.

Lateral stability(+): Lu = 4.00' Le = 8.25' RB = 17.8; b = single ply width

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2015), the National Design Specification (NDS 2015), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.
3. Sawn lumber bending members shall be laterally supported according to the provisions of NDS Clause 4.4.1.
4. BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
5. FIRE RATING: Joists, wall studs, and multi-ply members are not rated for fire endurance.



Jul 12, 2021

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NIA INC.

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Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
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Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MET10886-5078-64-3-47.R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

FLORIDA BUILDING CODE, ENERGY CONSERVATION	
Residential Building Thermal Envelope Approach	
R-Value Computation Method	
FORM R402—2020	Florida Climate Zone
	BUILDER: Michael F Powell
PROJECT NAMEAND ADDRESS: Coby Fincher 355 SE Kerce Glen LuLu Fl	PERMITTING OFFICE:
10886-5078-64-3-47	JURISDICTION NUMBER:
OWNER: STOCKXXXXX Fincher	PERMIT NUMBER:
PERMIT TYPE: Residential	NUMBER OF UNITS: 3
WORST CASE?	CONDITIONED FLOOR AREA:2136

Scope: Compliance with Section R402.1.2 of the Florida Building Code, Energy Conservation, shall be demonstrated by the use of Form R402 for single- and multiple-family residences of three stories or less in height, additions to existing residential buildings, alterations, renovations and building systems in existing buildings, as applicable. To comply, a building must meet or exceed all of the energy efficiency requirements and applicable mandatory requirements summarized on this form. If a building does not comply with this method, or by the UA Alternative method, it may still comply under Section R405 or R406 of the Florida Building Code, Energy Conservation.

- General Instructions:
- 1.Fill in all the applicable spaces of the “INSTALLED” row in the INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT table with the information requested. All “INSTALLED” values must be equal to or more efficient than the required levels. “AVG” indicates an area weighted average is allowed; “LOWEST” indicates the lowest R-value to be installed must be entered.
 - 2.Complete the tables for air infiltration and installed equipment.
 - 3.Read the MANDATORY REQUIREMENTS table and check each box to indicate your intent to comply with all applicable items.
 - 4.Read, sign and date the “Prepared By” certification statement at the bottom of this form. The owner or owner’s agent must also sign and date the form.

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INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT ¹										
REQUIREMENTS	FENESTRATION ^U - FACTOR ^{2, 3, 4}	SKYLIGHT ² ^U - FACTOR	GLAZEDFENESTRATIONS ^{SHGC} ² ³	CEILING ^R - VALUE	WOODFRAMEWALL ^R - VALUE ⁵	MASS WALL ^R - VALUE ^{5, 6}	FLOOR ^R - VALUE	BASEMENTWALL ^R - VALUE	SLAB ⁷ ^R - VALUE &DEPTH	CRAWLSPACEWALL ^R - VALUE
CLIMATE ZONE ¹	NR	0.75	0.25	30	13	3/4	13	0	0	0
CLIMATE ZONE ²	0.40	0.65	0.25	38	13	4/6	13	0	0	0
VALUE	AVG	AVG	AVG	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST
INSTALLED:	.34		.21 for GRID/ .24 NO GRID	38	19		19			

- R-Value Calculation Method - [PASS / FAIL]
For SI: 1 foot = 304.8 mm; NR = No requirement.
- (1)R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.
 - (2)The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.
 - (3)For impact rated fenestration complying with Section R301.2.1.2 of the Florida Building Code, Residential or Section 1609.1.2 of the Florida Building Code, Building, the maximum U-factor shall be 0.65 in Climate Zone 2. An area-weighted average of U-factor and SHGC shall be accepted to meet the requirements, and up to 15 square feet of glazed fenestration area are exempted from the U-factor and SHGC requirement based on Section R402.3.1, R402.3.2 and R402.3.3.
 - (4)One side-hinged opaque door assembly up to 24 square feet is exempted from this U-factor requirement based on Section R402.3.4.
 - (5)R-values are for insulation material only as applied in accordance with manufacturer’s installation instructions.
 - (6)The second R-value applies when more than half the insulation is on the interior of the mass wall.
 - (7)R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.

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Air infiltration:	Blower door test is required on the building envelope to verify leakage ≤ 7 ACH50; test report must be provided to code official before CO is issued. Florida Building Code, Energy Conservation Section R402.4.1.2 testing exception may apply for additions, alterations, or renovations.
-------------------	---

apps

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APPROVED BY



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Fire Rating of Ext. Walls: 0 Hr
Plan No.: MF10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

FORM R402—continued	
EQUIPMENT REQUIREMENTS AND INSTALLED VALUES	
Fill in the “INSTALLED EFFICIENCY LEVEL” column with the information requested. For multiple systems of the same type, indicate the minimum efficient system. All “INSTALLED” values must be equal to or more efficient than the required level. If a listed “SYSTEM TYPE” is not to be installed, write in “N/A” for not applicable.	

SYSTEM TYPE	MINIMUM EFFICIENCY LEVEL REQUIRED	INSTALLED EFFICIENCY LEVEL
Air distribution system ¹	Not allowed in attic	Location: ON SITE
Air handling unit	Factory Sealed	Factory Sealed? Y/N
Duct R-value	= R-8 (Ducts in unconditioned attics, Diameter ≥ 3 in.)	R-Value (In unc. attic) =
	= R-6 (Ducts in unconditioned non attics, Diam. ≥ 3 in.)	R-Value (In unc. non attics) =
	= R-6 (Ducts in unconditioned attics, Diameter < 3 in.)	R-Value (Small ducts in attic) =
	= R-4.2 (Ducts in unconditioned not attics, Diam. < 3 in.)	R-Value (Small ducts in unc) =
	All ducts are in conditioned space (No minimum)	All in conditioned space ? N
Air leakage/Duct test	Air handler installed: Total leakage = 4 cfm/100 s.f.	ON SITE
	Air handler not installed: Total leakage = 3 cfm/100 s.f.	Total leakage = _____ cfm/100 s.f.
		Air handler installed? Y
Duct testing	Test not required if all ducts and AHU are within the building thermal envelope andfor additions or alterations where ducts extended from existing heating andcooling system through unconditioned space are < 40 linear ft.	Test report required? N
Air conditioning systems:	Minimum federal standard required by NAECA ² :	ON SITE
Central system ≤ 65,000 Btu/h	SEER 14.0	SEER (Min)=
PTAC	EER [from Table C403.2.3(3)]	EER (Min)=
Other:	See Tables C403.2.3(1)–(11)	Type = Effic. (min) =
Heating systems:	Minimum federal standard required by NAECA ² :	
Heat pump ≤ 65,000 Btu/h	HSPF ≥ 8.2	HSPF (Min) =
Gas furnace, non-weatherized	HSPF ≥ 80%	AFUE (Min) =
Oil furnace, non-weatherized	HSPF ≥ 83%	AFUE (Min) =
Other:		Type = Effic. (min) =
Water heating system (storage type):	Minimum federal standard required by NAECA ² :	Capacity =
Electric ^{3, 6}	UEF 40 gal. 0.923; 50 gal.: 0.921; 60 gal.: 2.051	UEF (Min) =
Gas fired ^{4, 6}	UEF 40 gal. 0.580; 50 gal.: 0.563; 60 gal.: 0.766	UEF (Min) =
Other (describe) ^{5, 6} :		Type = Effic. (min) =

Equipment Efficiency—[PASS / FAIL]

1. (1)Ducts & AHU installed “substantially leak free” per Section R403.3.2. Test required by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i), Florida Statutes. The total leakage test is not required for ducts and air handlers located entirely within the building thermal envelope, and for additions where ducts from an existing heating and cooling system extended to the addition through unconditioned space are less than 40 linear ft.
2. (2)Minimum efficiencies are those set by the *National Appliance Energy Conservation Act* of 1987 for typical residential equipment and are subject to NAECA rules and regulations. For other types of equipment, see Tables C403.2.3 (1-11) of the Commercial Provisions of the Florida Building Code, Energy Conservation.
3. (3)For electric storage volumes ≤ 55 gallons, minimum UEF = 0.9349 – (0.0001 * volume). For electric storage volumes > 55 gallons, minimum UEF = 2.2418 – (0.0011 * volume).
4. (4)For natural gas storage volumes ≤ 55 gallons, minimum UEF = 0.692 – (0.0013 * volume). For natural gas storage volumes > 55 gallons, minimum UEF = 0.8072 – (0.0003 * volume).
5. (5)For electric tankless, min. UEF = 0.92. For natural gas tankless, min. UEF = 0.81.
6. (6)Referenced UEFs shown are for medium draw pattern value provided by manufacturer.

MANDATORY REQUIREMENTS			
Component	Section	Summary of Requirements	Check
Air leakage	R402.4	To be caulked, gasketed, weatherstripped or otherwise sealed perTable R402.4.1.1. Recessed lighting IC-rated as having ≤ 2.0 cfmtested to ASTM E283.Windows and doors: 0.3 cfm/sq.ft (swinging doors: 0.5 cfm/sf) whentested to NFRC 400 or AAMA/WDMA/CSA 101/I.S. 2/A440.Fireplaces: Tight-fitting flue dampers & outdoor combustion air	X
Programmable thermostat	R403.1.2	A programmable thermostat is required for the primary heating orcooling system.	X

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult, 130 MPH Vals
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10856-5078-64-1-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

<u>Air distribution system</u>	<u>R403.3.2R403.3.4</u>	<u>Ducts shall be tested as per Section R403.3.2 by either individualsas defined in Section 553.993(5) or (7), Florida Statutes, orindividuals licensed as set forth in Section 489.105(3) (f), (g) or (i),Florida Statutes. Air handling units are not allowed in attics.</u>	ON SITE
<u>Water heaters</u>	<u>R403.5</u>	<u>Comply with efficiencies in Table C404.2. Hot water pipes insulatedto ≥ R-3 to kitchen outlets, other cases. Circulating systems to havean automatic or accessible manual OFF switch. Heat trap requiredfor vertical pipe risers.</u>	X
<u>Cooling/heating equipment</u>	<u>R403.7</u>	<u>Sizing calculation performed & attached. Special occasion coolingor heating capacity requires separate system or variable capacitysystem.</u>	X
<u>Swimming pools & spas</u>	<u>R403.10</u>	<u>Spas and heated pools must have vapor-retardant covers or aliquid cover or other means proven to reduce heat loss except if70% of heat from site-recovered energy. Off/timer switch required.Gas heaters minimum thermal efficiency is 82%. Heat pump poolheaters minimum COP is 4.0.</u>	NA
<u>Lighting equipment</u>	<u>R404.1</u>	<u>Not less than 90% of the lamps in permanently installed luminairesshall have an efficacy of at least 45 lumens-per-watt or shall utilizelamps with an efficacy of not less than 65 lumens-per-watt.</u>	ON SITE
<u>I hereby certify that the plans and specifications covered by this form arein compliance with the Florida Building Code, Energy Conservation.PREPARED BY: _____Tracie Terry_____</u> <u>Date _____2/25/21_____ I hereby certify that this building is in compliance with the Florida Building Code, Energy Conservation.OWNER/AGENT: _____Michael E Powell_____ Date: _____11/8/2021_____</u>		<u>Review of plans and specifications covered by this form indicatecompliance with the Florida Building Code, Energy Conservation. Beforeconstruction is complete, this building will be inspected for compliance inaccordance with Section 553.908, F.S.CODE</u> <u>OFFICIAL: _____ Date: _____</u>	

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vals
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC



Load Short Form Entire House

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult, 130 MPH Vavg
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFL0886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Job: 5078-64-3-47UFL-FL
Date: 8/6/19
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN HOMES, 5078-64-3-47UFL-FL

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	27	96	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	43	21	Fireplaces	1 (Average)
Daily range	-	L		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	16	78		

HEATING EQUIPMENT

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	
Efficiency	100 AFUE
Heating input	8.5 kW
Heating output	29101 Btuh
Temperature rise	24 °F
Actual air flow	1112 cfm
Air flow factor	0.041 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Generic
Trade	
Cond	SEER 13.0
Coil	
AHRI ref	
Efficiency	11.6 EER, 13 SEER
Sensible cooling	25923 Btuh
Latent cooling	11110 Btuh
Total cooling	37033 Btuh
Actual air flow	1112 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.75

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
UTILITY	108	1610	1019	66	46
PTY	33	0	0	0	0
M BA	187	2275	1341	93	60
TOILET	23	103	91	4	4
C1	79	2348	1472	96	66
M BED	296	3469	3957	141	178
B3	184	3241	3370	132	152
B2	191	3303	3020	134	136
BA	56	661	387	27	17
ALCOVE	22	0	0	0	0
ALCOV	21	0	0	0	0
KIT\DIN\LIV	784	10304	10023	419	452

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Right-Suite® Universal 2018 18.0.32 RSU02009

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Page 1

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Entire House	1984	27315	24680	1112	1112
Other equip loads		1787	885		
Equip. @ 1.01 RSM			25923		
Latent cooling			8415		
TOTALS	1984	29101	34339	1112	1112

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47.R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Right-Suite® Universal 2018 18.0.32 RSU02009

F:\DS\Franklin\5078-64-3-47UFL-FL.rup Calc = MJ8 Front Door faces: W

2019-Aug-06 13:22:50

Page 2

Project Information

For: FRANKLIN HOMES, 5078-64-3-47UFL-FL

Notes:

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vdir, 130 MPH Vdir
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Design Information

Weather: St Augustine, FL, US

Winter Design Conditions

Outside db	27 °F
Inside db	70 °F
Design TD	43 °F

Heating Summary

Structure	20296 Btuh
Ducts	7019 Btuh
Central vent (38 cfm)	1787 Btuh
Outside air	
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	29101 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

	Heating	Cooling
Area (ft ²)	1984	1984
Volume (ft ³)	17854	17854
Air changes/hour	0.45	0.20
Equiv. AVF (cfm)	133	60

Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	
Efficiency	100 AFUE
Heating input	8.5 kW
Heating output	29101 Btuh
Temperature rise	24 °F
Actual air flow	1112 cfm
Air flow factor	0.041 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

Summer Design Conditions

Outside db	96 °F
Inside db	75 °F
Design TD	21 °F
Daily range	L
Relative humidity	50 %
Moisture difference	78 gr/lb

Sensible Cooling Equipment Load Sizing

Structure	17926 Btuh
Ducts	6754 Btuh
Central vent (38 cfm)	885 Btuh
Outside air	
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	1.01
Equipment sensible load	25923 Btuh

Latent Cooling Equipment Load Sizing

Structure	4140 Btuh
Ducts	2292 Btuh
Central vent (38 cfm)	1984 Btuh
Outside air	
Equipment latent load	8415 Btuh

Equipment Total Load (Sen+Lat)	34339 Btuh
Req. total capacity at 0.70 SHR	3.1 ton

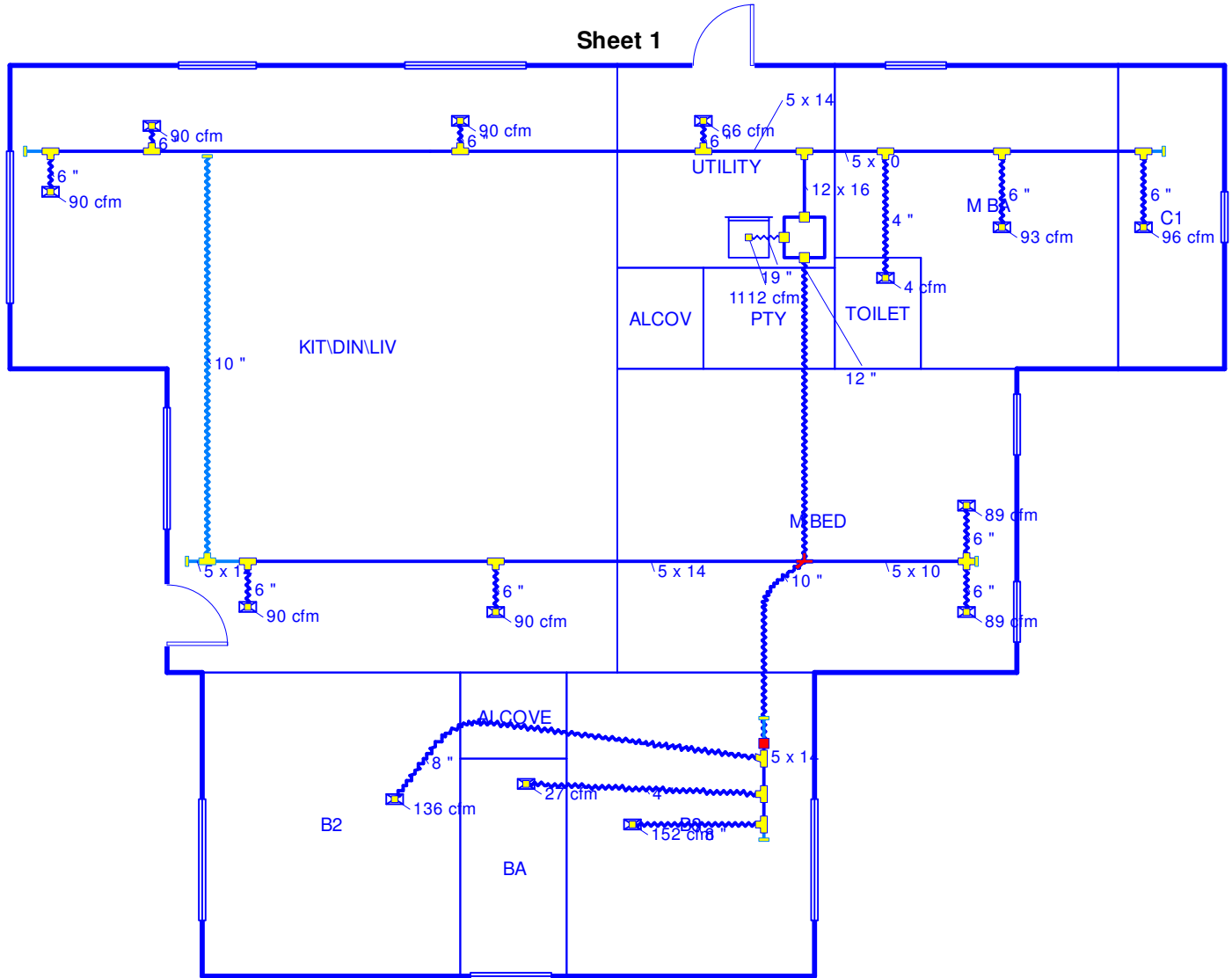
Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER 13.0
Coil	
AHRI ref	
Efficiency	11.6 EER, 13 SEER
Sensible cooling	25923 Btuh
Latent cooling	11110 Btuh
Total cooling	37033 Btuh
Actual air flow	1112 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.75

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Sheet 1



These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Valt. 130 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Job #: 5078-64-3-47UFL-FL
Performed by AMS of Indiana, Inc. for:
FRANKLIN HOMES

Scale: 1 : 100
Page 1
Right-Suite® Universal 2018
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Duct System Summary

Entire House

Job: 5078-64-3-47UFL-FL
Date: 8/6/19
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN HOMES, 5078-64-3-47UFL-FL

	Heating	Cooling
External static pressure	0.30 in H ₂ O	0.30 in H ₂ O
Pressure losses	0.06 in H ₂ O	0.06 in H ₂ O
Available static pressure	0.24 in H ₂ O	0.24 in H ₂ O
Supply / return available pressure	0.203 / 0.037 in H ₂ O	0.203 / 0.037 in H ₂ O
Lowest friction rate	0.060 in/100ft	0.060 in/100ft
Actual air flow	1112 cfm	1112 cfm
Total effective length (TEL)	398 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
B2	c 3020	134	136	0.060	8.0	0x0	VIFx	46.1	290.0	st10
B3	c 3370	132	152	0.067	8.0	0x0	VIFx	35.5	265.0	st10
BA	h 661	27	17	0.065	4.0	0x0	VIFx	39.3	275.0	st10
C1	h 2348	96	66	0.093	6.0	0x0	VIFx	23.8	195.0	st3
KIT\ DIN\LIV	c 2005	84	90	0.084	6.0	0x0	VIFx	36.8	205.0	st4
KIT\ DIN\LIV-A	c 2005	84	90	0.086	6.0	0x0	VIFx	21.8	215.0	st4
KIT\ DIN\LIV-B	c 2005	84	90	0.081	6.0	0x0	VIFx	44.8	205.0	st7
KIT\ DIN\LIV-C	c 2005	84	90	0.082	6.0	0x0	VIFx	32.8	215.0	st7
KIT\ DIN\LIV-D	c 2005	84	90	0.085	6.0	0x0	VIFx	42.5	195.0	st4
M BA	h 2275	93	60	0.091	6.0	0x0	VIFx	16.8	205.0	st3
M BED	c 1979	71	89	0.092	6.0	0x0	VIFx	25.8	195.0	st8
M BED-A	c 1979	71	89	0.092	6.0	0x0	VIFx	25.5	195.0	st8
TOILET	c 103	4	4	0.089	4.0	0x0	VIFx	13.5	215.0	st3
UTILITY	h 1610	66	46	0.086	6.0	0x0	VIFx	9.8	225.0	st4

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vag.
Fire Rating of Ext. Walls: 0 Hr.
Plan No: MET10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st10	Peak AVF	293	305	0.060	628	9.8	14 x 5	ShtMetl	st9
st7	Peak AVF	168	181	0.081	372	10.0	14 x 5	ShtMetl	st2
st3	Peak AVF	192	131	0.089	554	7.6	10 x 5	ShtMetl	st1
st4	Peak AVF	317	317	0.084	653	10.7	14 x 5	ShtMetl	st1
st2	Peak AVF	602	664	0.060	846	12.0	0 x 0	VinlFlx	
st8	Peak AVF	141	178	0.092	513	10.0	10 x 5	ShtMetl	st2
st9	Peak AVF	293	305	0.060	560	10.0	0 x 0	VinlFlx	st2
st1	Peak AVF	510	448	0.084	382	11.8	16 x 12	ShtMetl	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	1112	1112	61.8	0.060	565	19.0	0x 0		VIFx	

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 167 MPH Vult. 130 MPH Valt.
 Fire Rating of Ext. Walls: 0 Hr.
 Plan No.: MFT10886-5078-64-3-47-R1
 Allow. Floor Load: 40 PSF
 Approval Date: 7/13/2021
 Manufacturer: Franklin Structures, LLC

Bold/italic values have been manually overridden



wrightsoft®
A Mittek® / Berkshire Hathaway Company

Right-Suite® Universal 2018 18.0.32 RSU02009

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Page 2



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

RE: MH80182R10FL-20-167 -

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Customer Info: Franklin Structures, LLC Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: . State: .

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

Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 167 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 2 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	I46079313	A3	5/12/21
2	I46079314	A3P	5/12/21

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:



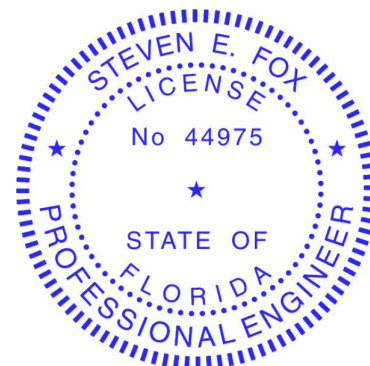
Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vag.
Fire Rating of Ext. Walls: 0 Hr.
Plan No: MET10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

This item has been electronically signed and sealed by Fox, Steve, 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 Franklin Structures, LLC..

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

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.



Steven E. Fox PE No. 44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

May 12, 2021

Fox, Steve

1 of 1

Job	Truss	Truss Type	Qty	Ply	
MH80182R10FL-20-167	A3	HINGED COMMON	1	1	146079313

Franklin Structures, LLC., Russellville, AL - 35653,

ID:BRaPv9Nif1RAr?agFqchHTAyUDZv-z3kQnndKulxBmaynYtmbNxmQYXI?QSB0yXsKEzHHV5 8:500 s Feb 23 2021 MiTek Industries, Inc. Wed May 12 09:35:36 2021 Page 1

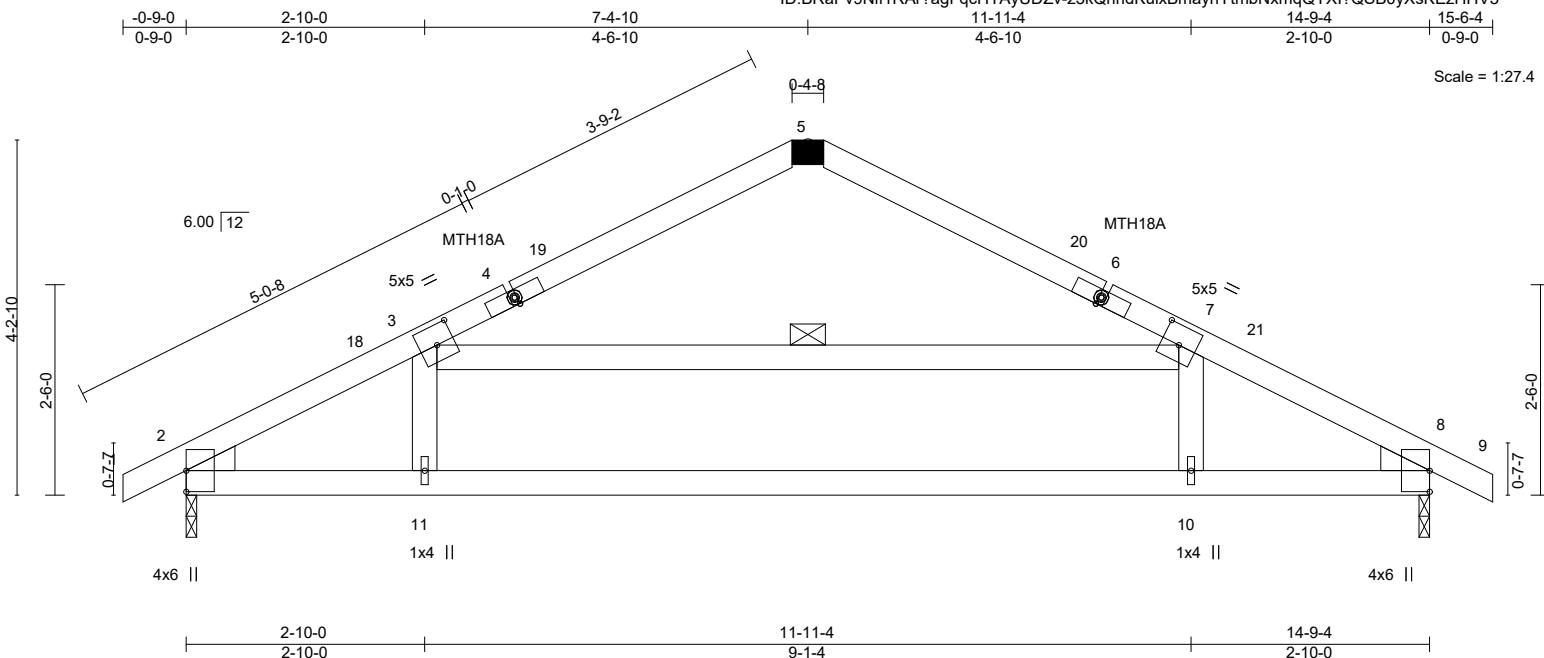


Plate Offsets (X,Y)-- [3:0-2-8,0-2-12], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-2-8,0-2-12]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.55	Vert(LL) 0.27	10-11	>663	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.25	BC 0.64	Vert(CT) -0.35	10-11	>511	180	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.37	Horz(CT) -0.04	8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MR						
							Weight: 53 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

REACTIONS. (size) 2=0-1-8, 8=0-1-8
Max Horz 2=149(LC 10)
Max Uplift 2=-412(LC 10), 8=-411(LC 11)
Max Grav 2=636(LC 1), 8=636(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1050/1017, 3-5=-316/424, 5-7=-316/426, 7-8=-1050/1015
BOT CHORD 2-11=-811/921, 10-11=-801/927, 8-10=-811/921
WEBS 3-11=-11/331, 7-10=-11/330, 3-7=-793/769

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=209/428/213/0

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-0 to 2-3-0, Interior(1) 2-3-0 to 4-5-1, Exterior(2R) 4-5-1 to 10-5-1, Interior(1) 10-5-1 to 12-6-4, Exterior(2E) 12-6-4 to 15-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are MT20 plates unless otherwise indicated.
- See HINGE PLATE DETAILS for plate placement.
- Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
- All additional member connections shall be provided by others for forces as indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 8.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 412 lb uplift at joint 2 and 411 lb uplift at joint 8.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vasd
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

This item has been electronically signed and sealed by Fox, Steve, 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.

Steven E. Fox PE No.44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

May 12,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
MH80182R10FL-20-167	A3P	HINGED COMMON	1	1	146079314

Franklin Structures, LLC., Russellville, AL - 35653,

8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 12 09:35:41 2021 Page 1
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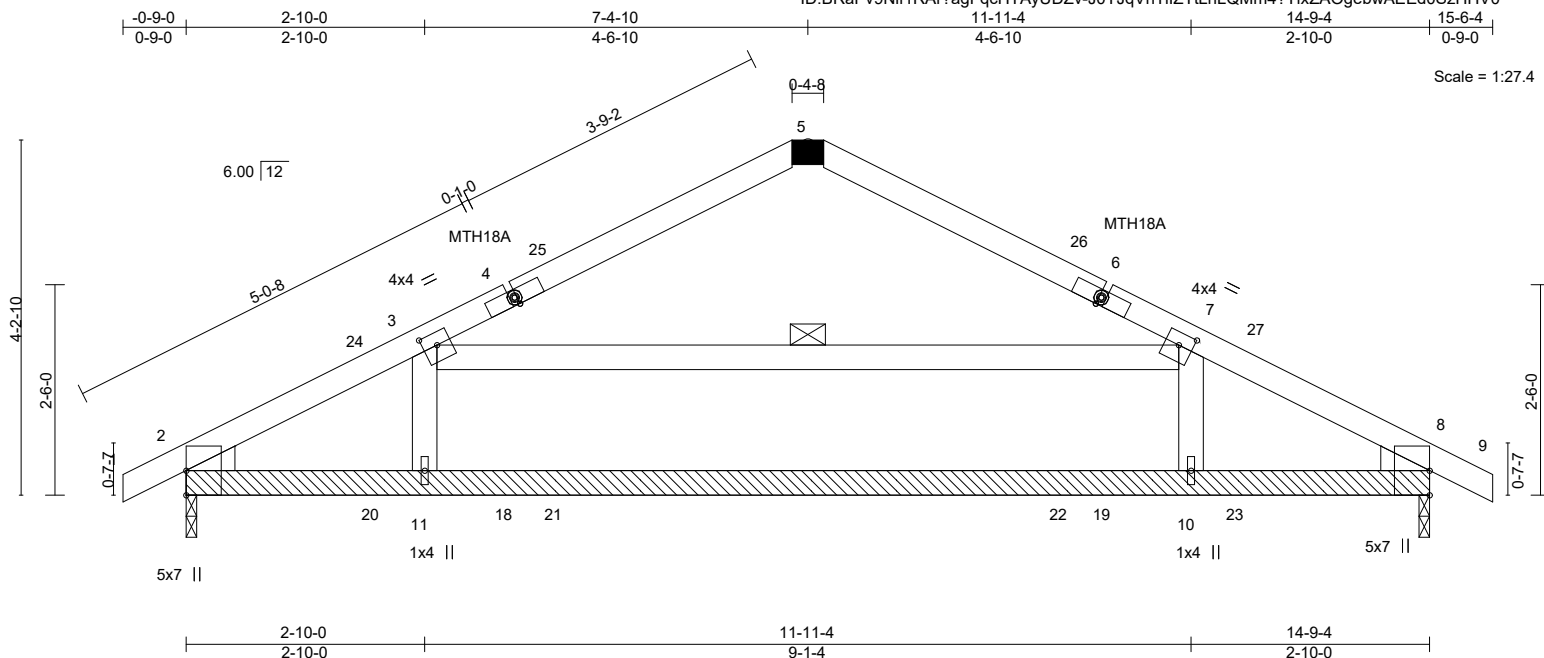


Plate Offsets (X,Y)-- [3:0-2-0,0-1-12], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-2-0,0-1-12]

LOADING (psf)	SPACING-	1-4-0	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.63	Vert(LL)	0.43 10-11	>408	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.25	BC 0.84	Vert(CT)	0.38 10-11	>460	180	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.56	Horz(CT)	-0.03 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MR						
								Weight: 69 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
OTHERS 2x4 SPF No.2
LBR SCAB 2-8 2x4 SPF No.2 one side
WEDGE
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

REACTIONS. (size) 2=0-1-8, 8=0-1-8
Max Horz 2=99(LC 10)
Max Uplift 2=-310(LC 7), 8=-310(LC 6)
Max Grav 2=424(LC 1), 8=424(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-685/2133, 3-5=-210/283, 5-7=-210/284, 7-8=-685/2132
BOT CHORD 2-11=-1816/607, 10-11=-1848/610, 8-10=-1816/607
WEBS 3-11=-580/209, 7-10=-577/208, 3-7=-467/1827

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb-in) / Maximum Moment (lb-in)
5=140/286/142/0

- NOTES-**
- Attached 14-9-4 scab 2 to 8, front face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 1-3-0 from end at joint 2, nail 1 row(s) at 4" o.c. for 4-2-1; starting at 9-5-1 from end at joint 2, nail 1 row(s) at 4" o.c. for 4-1-3.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-0 to 2-3-0, Interior(1) 2-3-0 to 4-5-1, Exterior(2R) 4-5-1 to 10-5-1, Interior(1) 10-5-1 to 12-6-4, Exterior(2E) 12-6-4 to 15-6-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - All plates are MT20 plates unless otherwise indicated.
 - See HINGE PLATE DETAILS for plate placement.
 - Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
 - All additional member connections shall be provided by others for forces as indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 8.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 310 lb uplift at joint 2 and 310 lb uplift at joint 8.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult, 130 MPH Vasd
Free Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

This item has been electronically signed and sealed by Fox, Steve, 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.

Steven E. Fox PE No.44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

May 12,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

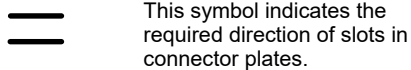
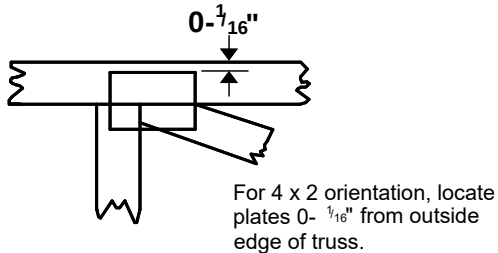
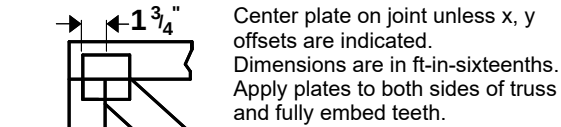
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



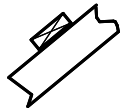
* Plate location details available in MiTek 20/20 software or upon request.

PLATE SIZE

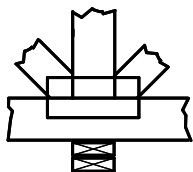
4 x 4

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

LATERAL BRACING LOCATION



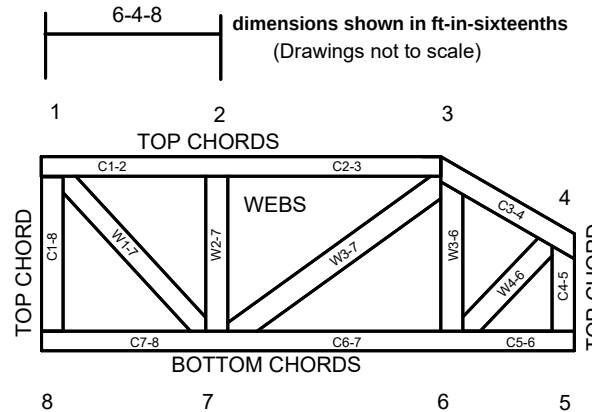
BEARING



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, ESR-1906, ESR-1397, ESR-1482, ESR-2362, ESR-1397, ESR-1482, ESR-2362

These prints comply with the International Building Code and adopted Codes and adhere to the following criteria:

APPROVED BY

FRANKLIN STRUCTURES, INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH W. 100
Fire Rating of Ect. Walls: 0 Hr
Plan No.: MET10886-5078-64-B-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, Inc.

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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



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

RE: MH7632R11 -

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Customer Info: Franklin Structures, LLC Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: . State: .

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

Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 168 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 2 individual, Truss Design Drawings and 0 Additional Drawings.

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

No.	Seal#	Truss Name	Date
1	I46576448	HP127-7	6/15/21
2	I46576449	HP127-7P	6/15/21

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:

APPROVED BY

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vag.
Fire Rating of Ext. Walls: 0 Hr.
Plan No: MET10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

This item has been electronically signed and sealed by Fox, Steve, PE using a Digital Signature.

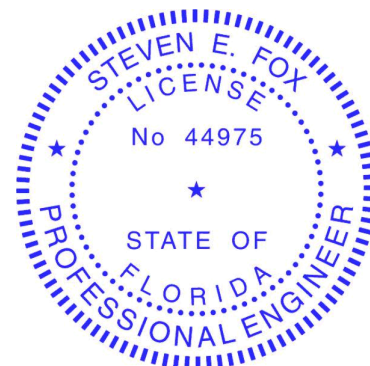
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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

Truss Design Engineer's Name: Fox, Steve

My license renewal date for the state of Florida is February 28, 2023.

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.



Steven E. Fox PE No. 44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

June 15, 2021

Fox, Steve

1 of 1

Job	Truss	Truss Type	Qty	Ply	
MH7632R11	HP127-7	HINGED COMMON	1	1	146576448

Franklin Structures, LLC., Russellville, AL - 35653,

8.500 s Feb 23 2021 MiTek Industries, Inc. Tue Jun 15 08:21:45 2021 Page 1
ID:p724LddEAiSbfoka?444S_ylst-lckJf2sGS1KgUnnPfGgbH_FYUnqMxvg?Bgvm_pz65OK

Job Reference (optional)

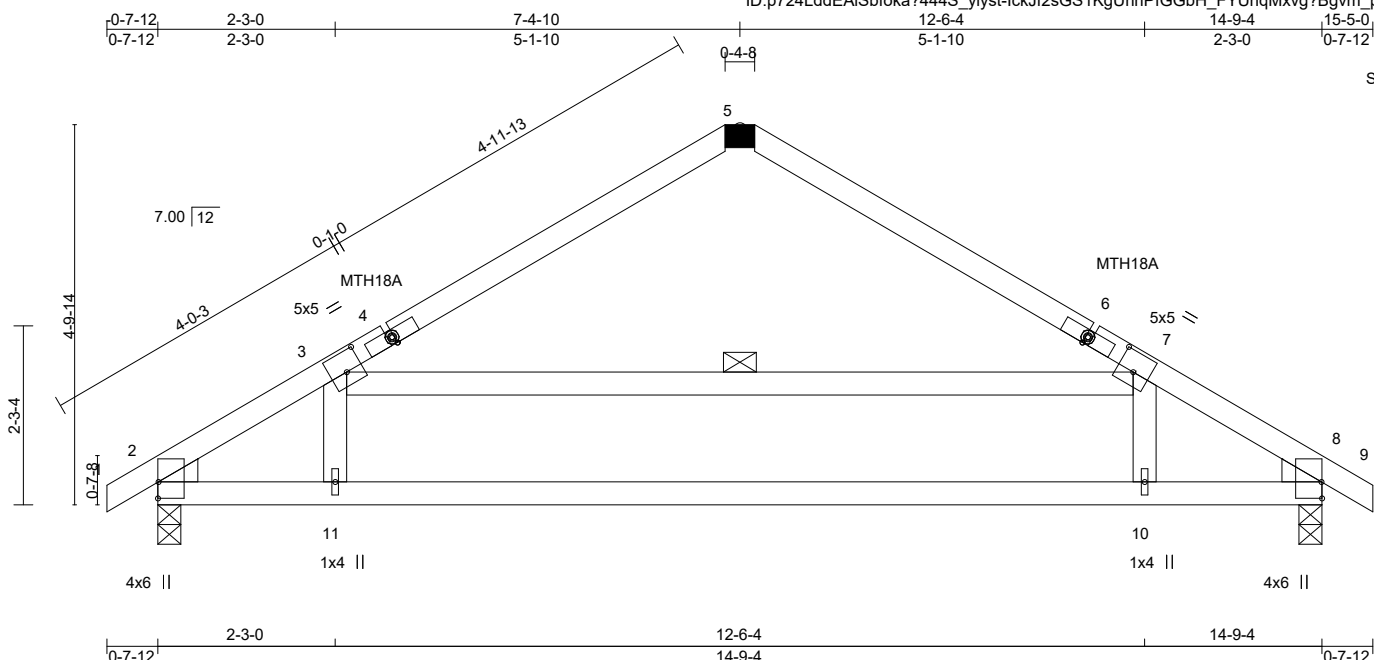


Plate Offsets (X,Y)--	[2:Edge,0-0-1], [3:0-2-8,0-3-0], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-2-8,0-3-0], [8:Edge,0-0-1]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.58	Vert(LL)	0.33 10-11	>545	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.25	BC 0.95	Vert(CT)	-0.47 10-11	>377	180	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.51	Horz(CT)	0.06 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MR					Weight: 54 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
WEDGE
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-7

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=270(LC 9)
Max Uplift 2=-433(LC 10), 8=-435(LC 11)
Max Grav 2=630(LC 1), 8=630(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1176/606, 3-5=-358/303, 5-7=-358/300, 7-8=-1176/602
BOT CHORD 2-11=-493/1000, 10-11=-470/1007, 8-10=-470/1000
WEBS 3-11=-131/432, 7-10=-131/431, 3-7=-869/389

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=305/306/211/0

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=168mph (3-second gust) Vasd=130mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) See HINGE PLATE DETAILS for plate placement.
 - 6) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
 - 7) All additional member connections shall be provided by others for forces as indicated.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 433 lb uplift at joint 2 and 435 lb uplift at joint 8.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

This item has been electronically signed and sealed by Fox, Steve, 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.

Steven E. Fox PE No.44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

June 15,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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

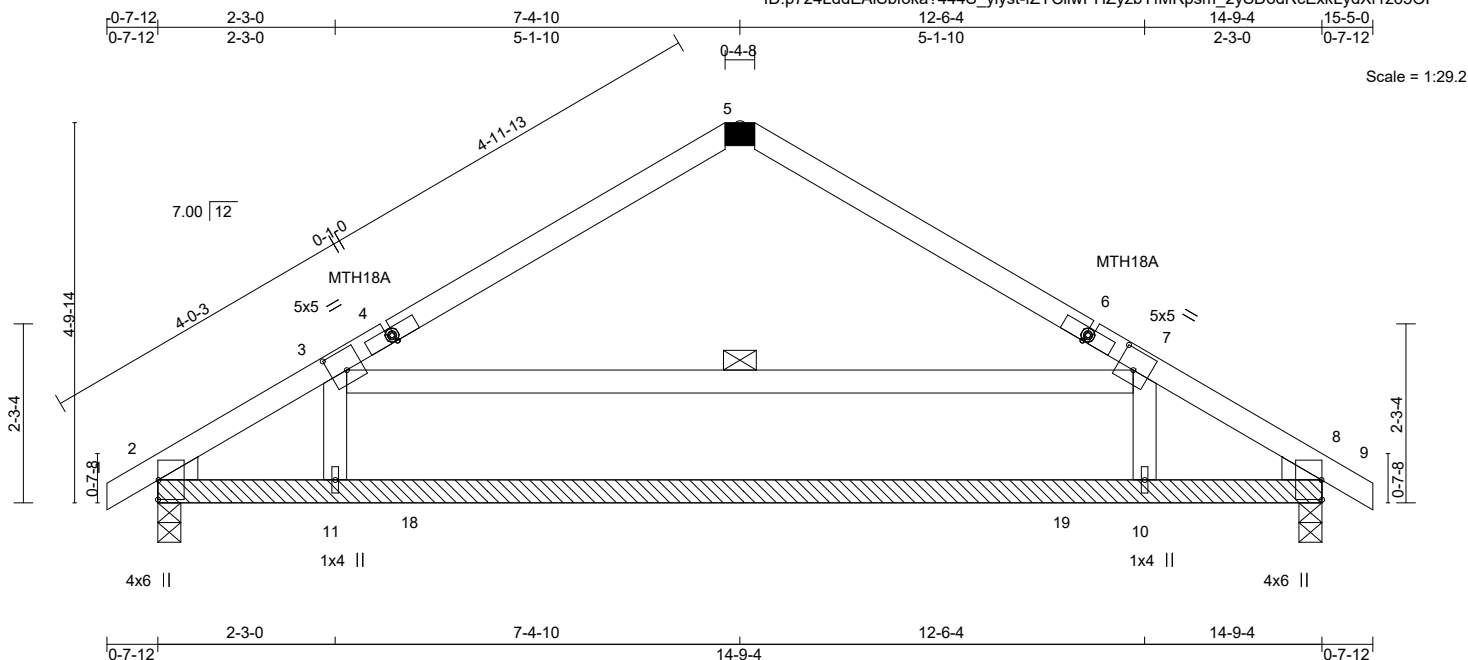


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job MH7632R11	Truss HP127-7P	Truss Type HINGED COMMON	Qty 1	Ply 1	146576449
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Franklin Structures, LLC., Russellville, AL - 35653,

8:500 s Feb 23 2021 MiTek Industries, Inc. Tue Jun 15 08:21:50 2021 Page 1
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Scale = 1:29.2

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

LOADING (psf)	SPACING-	1-4-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	0.27 10-11	>666	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	0.22 10-11	>823	180	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.25	Horz(CT)	-0.03 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MR						
								Weight: 71 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
OTHERS 2x4 SPF No.2
LBR SCAB 2-8 2x4 SPF No.2 one side
WEDGE
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-180(LC 8)
Max Uplift 2=-289(LC 10), 8=-290(LC 11)
Max Grav 2=420(LC 1), 8=420(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-650/505, 7-8=-650/501
BOT CHORD 2-11=-413/557, 10-11=-414/561, 8-10=-393/557
WEBS 3-11=-329/250, 7-10=-329/250, 3-7=-429/358

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=203/204/141/0

- NOTES-**
- Attached 14-9-4 scab 2 to 8, front face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 1-3-0 from end at joint 2, nail 1 row(s) at 3" o.c. for 3-0-0; starting at 10-6-4 from end at joint 2, nail 1 row(s) at 3" o.c. for 3-0-0.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=168mph (3-second gust) Vasd=130mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - All plates are MT20 plates unless otherwise indicated.
 - See HINGE PLATE DETAILS for plate placement.
 - Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
 - All additional member connections shall be provided by others for forces as indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 289 lb uplift at joint 2 and 290 lb uplift at joint 8.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult, 130 MPH Vasd
Free Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

This item has been electronically signed and sealed by Fox, Steve, 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.

Steven E. Fox PE No.44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

June 15,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

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



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

RE: MH7281R16-FL20 -

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Customer Info: Franklin Structures, LLC Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: . State: .

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

Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 167 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 2 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	I45076586	A1	3/5/21
2	I45076587	A1P	3/5/21

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:



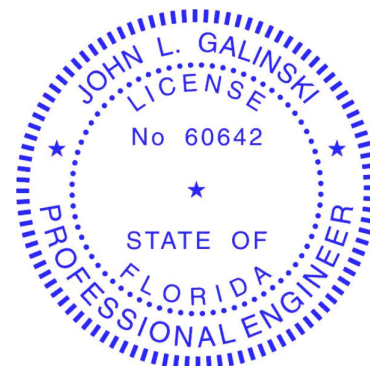
Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vag.
Fire Rating of Ext. Walls: 0 Hr.
Plan No: MET10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

This item has been electronically signed and sealed by Galinski, John, 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 Franklin Structures, LLC..

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

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.



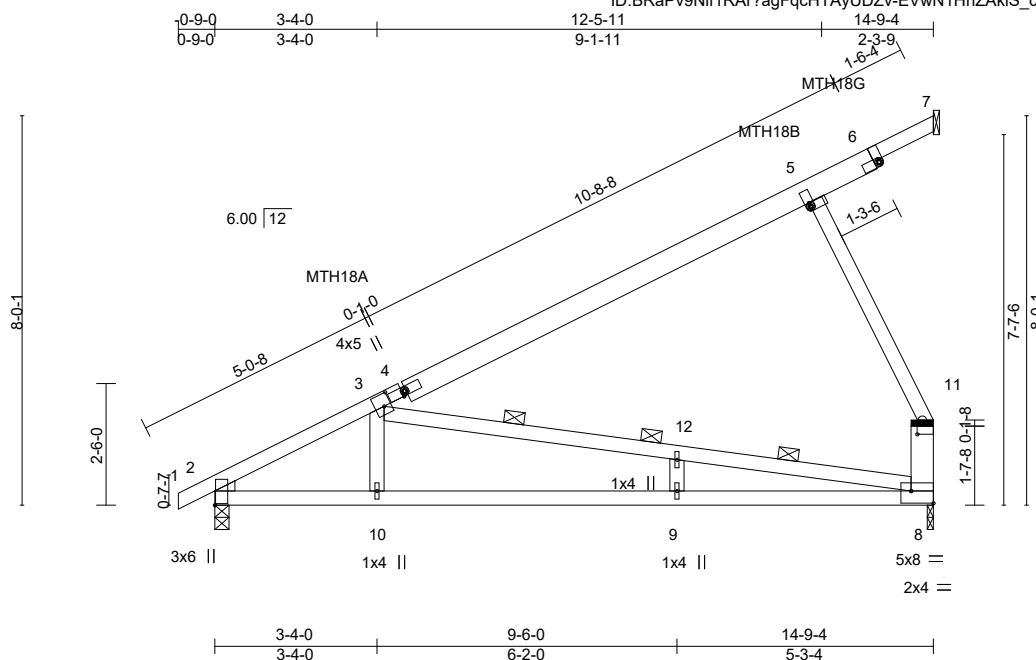
John L. Galinski PE No. 60642
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

March 5, 2021

Job	Truss	Truss Type	Qty	Ply	
MH7281R16-FL20	A1	HINGED MONO	1	1	145076586

Franklin Structures, LLC., Russelville, AL - 35653,

ID:BRaPv9Nif1RAR?agFqcHTAyUDZv-EVwN1HhZAKiS_ccYDHkhz0atlR3g_wNRA1GIXDzdzPK
8.430 e Nov 30 2020 MiTek Industries, Inc. Fri Mar 5 12:38:33 2021 Page 1



Scale = 1:47.4

Plate Offsets (X,Y)-- [2:0-3-0,0-0-4], [3:0-3-0,0-1-12], [4:0-0-11,0-1-2], [5:0-0-0,0-1-0], [6:0-2-7,15-4-6], [8:Edge,0-3-0], [8:0-1-8,1-2-0]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.58	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.33 8-9 >523 240	MT18HS	197/144
BCLL 0.0 *	Lumber DOL 1.15	WB 0.99	Vert(CT) -0.61 9-10 >284 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.03 8 n/a n/a		
	Code FBC2020/TPI2014			Weight: 68 lb	FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-6: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-2-4 oc purlins, except [P] end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 4-10-0 oc bracing.
WEBS 2x4 SPF Stud *Except* 8-11: 2x6 SPF No.2	WEBS 3 Rows at 1/4 pts 3-8
WEDGE Left: 2x3 SPF No.2	

REACTIONS. (size) 2=0-3-8, 8=0-1-8, 7=Mechanical
Max Horz 2=542(LC 6), 7=116(LC 6)
Max Uplift 2=-382(LC 6), 8=-568(LC 6)
Max Grav 2=667(LC 1), 8=552(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1130/416, 3-5=-341/70, 8-11=-299/477
BOT CHORD 2-10=-833/874, 9-10=-833/874, 8-9=-833/874
WEBS 3-10=0/384, 3-12=-740/618, 8-12=-745/609, 5-11=-332/529

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-1-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
11=332/529/229/0

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 3) All plates are MT20 plates unless otherwise indicated.
 - 4) See HINGE PLATE DETAILS for plate placement.
 - 5) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
 - 6) All additional member connections shall be provided by others for forces as 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 at joint(s) 8.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 382 lb uplift at joint 2 and 568 lb uplift at joint 8.

This item has been electronically signed and sealed by Galinski, John, 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.

John L. Galinski PE No.60642
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

March 5,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

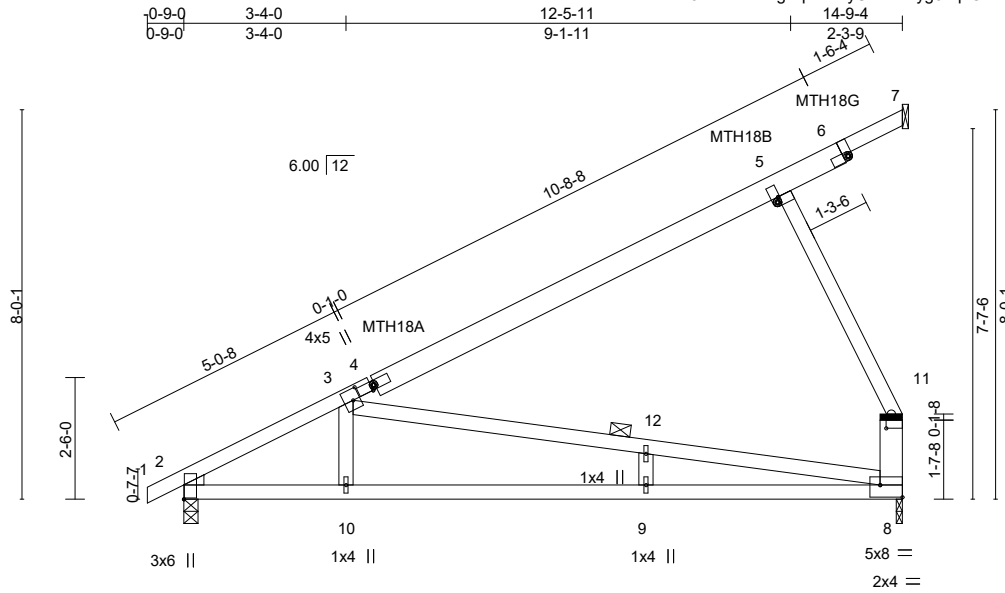


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
MH7281R16-FL20	A1P	HINGED MONO	1	1	145076587

Franklin Structures, LLC., Russellville, AL - 35653,

8.430 e Nov 30 2020 MiTek Industries, Inc. Fri Mar 5 12:44:08 2021 Page 1
ID:BRaPv9Nif1RAr?agFqchHTAyUDZv-wyg0LqliGfwg5kwL8FE2fyAIUV8zZ6lCfwwnlzdzK5



Scale = 1:47.4

Plate Offsets (X,Y)-- [2:0-3-0,0-0-4], [3:0-2-12,0-1-12], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [6:0-2-7,15-4-6], [8:Edge,0-3-0], [8:0-1-8,1-2-0]

LOADING (psf)	SPACING-		CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	0.35	9-10	>506	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.36	9	>489	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.42	Horz(CT)	-0.02	8	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-R						
								Weight: 68 lb	FT = 0%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.6E
WEBS 2x4 SPF Stud *Except*
8-11: 2x6 SPF No.2, 3-8: 2x4 SPF No.2

WEDGE

Left: 2x3 SPF No.2

REACTIONS.

(size) 2=0-3-8, 8=0-1-8, 7=Mechanical
Max Horz 2=361(LC 6), 7=78(LC 6)
Max Uplift 2=-301(LC 5), 8=-385(LC 5)
Max Grav 2=444(LC 1), 8=368(LC 1)

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

TOP CHORD 2-3=-753/525, 8-11=-200/318
BOT CHORD 2-10=-642/583, 9-10=-642/583, 8-9=-642/583
WEBS 3-10=-179/254, 3-12=-493/562, 8-12=-496/568, 5-11=-221/352

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)

11=221/352/152/0

NOTES-

- 1) Wind: ASCE 7-16; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) See HINGE PLATE DETAILS for plate placement.
- 5) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
- 6) All additional member connections shall be provided by others for forces as 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 at joint(s) 8.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 301 lb uplift at joint 2 and 385 lb uplift at joint 8.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:



Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-1-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

This item has been electronically signed and sealed by Galinski, John, 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.

John L. Galinski PE No.60642
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

March 5,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

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



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

RE: MH7303R29 -

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Customer Info: Franklin Structures, LLC Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: . State: .

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

Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 168 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 2 individual, Truss Design Drawings and 0 Additional Drawings.

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

No.	Seal#	Truss Name	Date
1	I46576446	HM177-7	6/15/21
2	I46576447	HM177-7P	6/15/21

These prints comply with the
Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:

APPROVED BY

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult. 130 MPH Vag.
Fire Rating of Ext. Walls: 0 Hr.
Plan No: MET10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

This item has been electronically signed and sealed by Fox, Steve, PE using a Digital Signature.

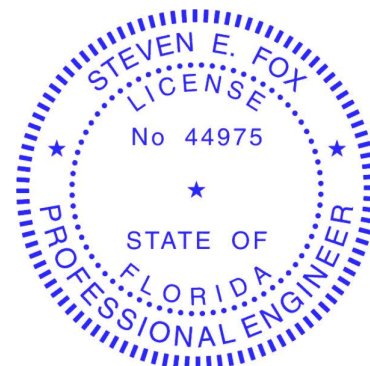
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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

Truss Design Engineer's Name: Fox, Steve

My license renewal date for the state of Florida is February 28, 2023.

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.



Steven E. Fox PE No. 44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

June 15, 2021

Fox, Steve

1 of 1

16023 Swingley Ridge Rd
Chesterfield, MO 63017

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
MH7303R29	HM177-7P	HINGED MONO	1	1	I46576447
Job Reference (optional)					

Franklin Structures, LLC.,
Russelville, AL - 35653,

8.500 s Feb 23 2021 MiTek Industries, Inc.
Tue Jun 15 08:23:27 2021
Page 2
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NOTES-

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 409 lb uplift at joint 8 and 272 lb uplift at joint 2.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY



Const. Type: VB-unprotected

Occupancy: Single Family Dwelling

Allowable No. of Floors: 1

Wind Velocity: 167 MPH Valt. 130 MPH Vasc

Fire Rating of Ext. Walls: 0 Hr

Plan No.: MFT10886-5078-64-3-47-R1

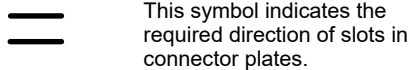
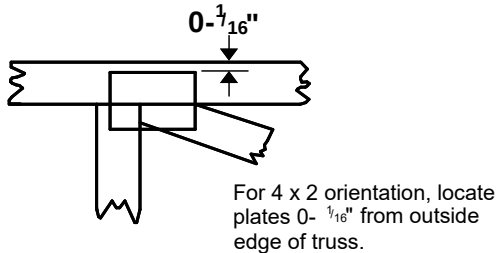
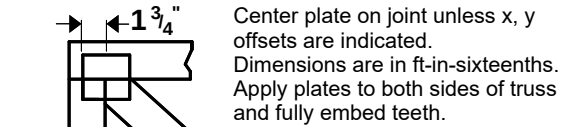
Allow. Floor Load: 40 PSF

Approval Date: 7/13/2021

Manufacturer: Franklin Structures, LLC

Symbols

PLATE LOCATION AND ORIENTATION



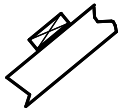
* Plate location details available in MiTek 20/20 software or upon request.

PLATE SIZE

4 x 4

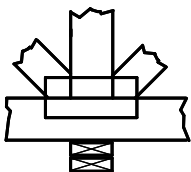
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

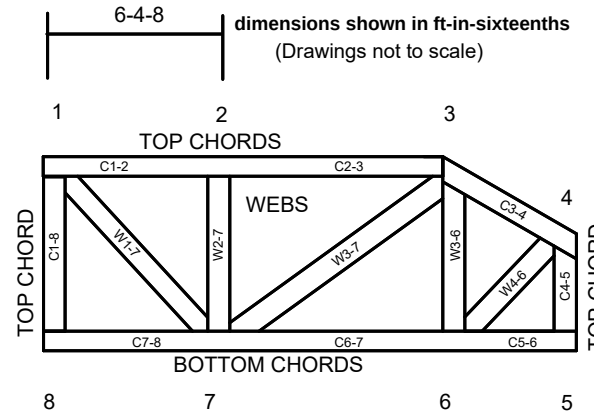


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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, ESR-1988
ER-3907, ESR-2362, ESR-1990, ESR-3282

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vel. 130 MPH Vel.
Plan No.:	0 Hr
Allow. Floor Load:	MT10856-5078-64-3-47-R1
Approval Date:	40 PSF
Manufacturer:	7/13/2021
	Franklin Structures, LLC

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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



PRODUCT APPROVAL SPECIFICATION SHEET

Manufacturer: Franklin Structures, LLC. **Plan #:** MFT10866-5078-64-3-47-R1

As required by Florida Statute 553.842 and Florida Administrative Code 61G20-3.006 please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the manufactured building for which you are applying for a DBPR insignia. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at www.floridabuilding.org.

Category	Manufacturer	Product Description	Approval #(s)
EXTERIOR DOORS			
Swinging	Dunbarton	Achiever Steel Frame	FL-9231-R7
Sliding	Jeld-Wen	Sliding Glass Door	FL11109.2-R9
Swinging	Dunbarton	ATRUIM Frame	15362.1-R3
15362.1, 15362.3,15362.9, 15362.12,			
Sliding	VIWINCO	Sliding Glass Door	FL15590.1-R9
WINDOWS			
Single Hung	KINRO	WINDOWS	FL993.2/993.5 R-17
ROOFING PRODUCTS			
Asphalt Shingles	Tamko Shingles	Classic 3-Tab	FL18355-R6
Underlayments	Owens Corning	Oakridge	FL17420.1-R6
PANEL WALL			
Siding	ROYAL BUILDING PRODUCTS(D45DLSTD)		FL21069-R3
Soffits	HARDIESOFFIT		FL13265-R6
STRUCTURAL COMPONENTS			
Wood Connector / Anchor	Simpson	HDU11-11473.8	FL10441.-R6
Wood Connector / Anchor	Simpson	HD3B	FL11496-R5
Wood Connector / Anchor	Simpson	HDQ8	FL10441-R5
Wood Connector / Anchor	Simpson	CMSTC16	FL13872- R4
Wood Connector / Anchor	Simpson	STHD14	FL10441.12
Wood Connector / Anchor	Simpson	LSTA18	FL10456.15
Truss Plates	MiTek	MT18 & MT20	FL2197-R7
Engineered Lumber	Weyerhauser	Microllam LVL	FL6527.1- R11
Engineered Lumber	VERSA-LAM	Microllam LVL	FL1644-R9

The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector at the manufacturing plant: (1) Copy of the product approval from the Local or State Building Commission, or supply all of the information listed on Form No. 9B-72.130(5). (2) Copy of the applicable manufacturers' installation requirements.

I understand these products may have to be removed if approval cannot be demonstrated during inspection.

CHRISTIE JACKSON

CHRISTIE JACKSON

6/2/2021

Manufacturer's Authorized Agent Signature

Printed Name

Date