



June 15, 2022

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

RE: MFT-10886-8015-70-3-32-2-FL
NTA JOB NUMBER: FH060622-51

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 w/2021 Supplement 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

Notes:

- 1. These plans comply with the: 7th Edition (2020) w/ 2021 Supplement 7th Edition (2020)Energy Conservation w/2021 Supplement 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.

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

APPROVED BY

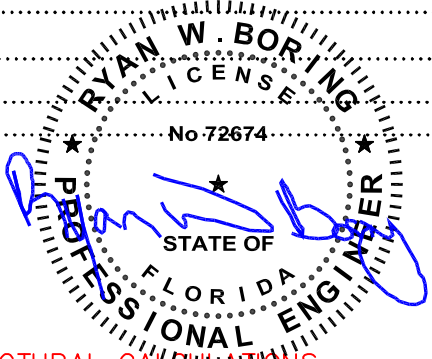

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 130 MPH Vult, 101 MPH Vas
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

DATE 6/15/2022 CERT. NO SMP-056
PLAN NUMBER MFT10886-8015-70-3-32-2
APPROVED BY Michael Faller

(signature)

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

INDEX TO DRAWINGS DESCRIPTION:	SHEET NUMBER
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TYPICAL OFF-FRAME CROSS SECTION.....	7 of 7



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FLORIDA ENERGY FORM R402	Jun.14, 2022 3 PAGE
HVAC CALCULATIONS (WRIGHTSOFT).....	7 PAGES
FLORIDA PRODUCT APPROVAL SPEC SHEET.....	1 PAGE
TRUSS PRINTS.....	4 PAGES
PORCH DETAIL.....	1 PAGE

Notes:

- 9. Vult wind speed = EXPOSURE–C AT Vult=130 MPH & Vasd = 101MPH
- 10. RISK CATEGORY=II
- 11. Building Mean Roof Height 20’
- 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) = +18.9/–36.1sf
- 18. Roof Exterior (zone 2) = +18.9/–57.5sf
- 19. Roof Corner (zone 3) = +18.9/–81.1 psf
- 20. Wall Interior (zone 4) = +25.3/–27.5psf
- 21. Wall Exterior (zone 5) = +25.3/33.9 psf
- 22. ROOF OVERHANG(Zone 1) = –46.8 psf.
- 23. ROOF OVERHANG(Zone 2) = –68.2 psf.
- 24. ROOF OVERHANG(Zone 2) = –104.7 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
- 13) PROTECTION OF GLAZING FROM WINDBORNE DEBRIS

PHYSICAL ADDRESS

sw coyote cir
FORT WHITE FL, 32038
COLUMBIA COUNTY

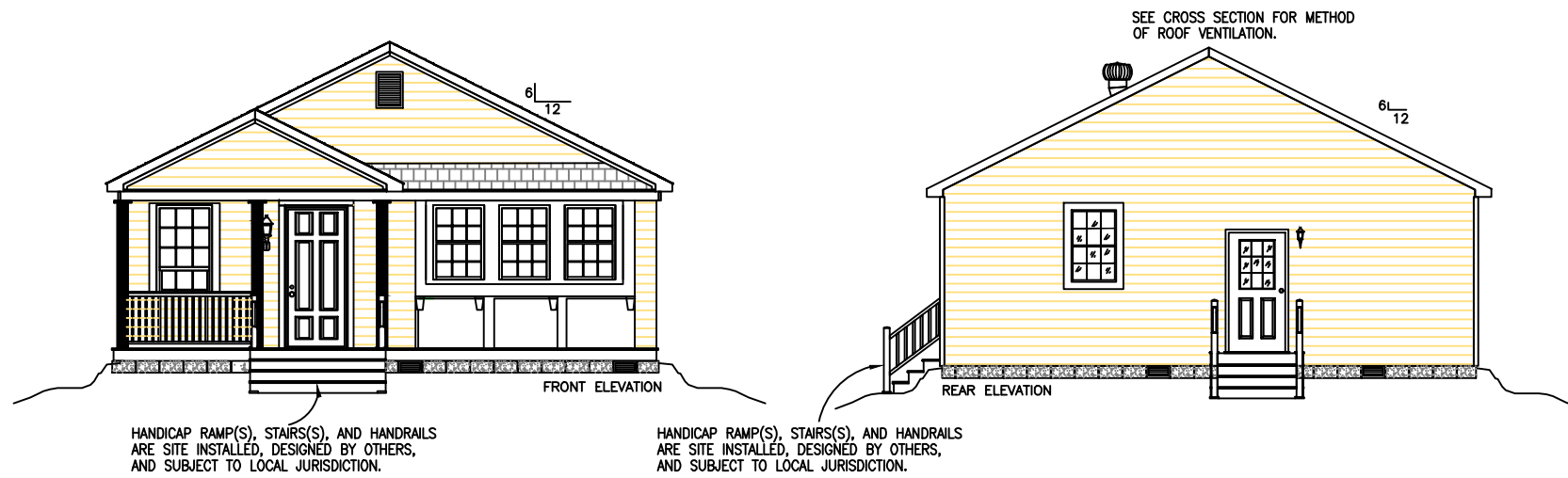
FRANKLIN STRUCTURES LLC
10655 HWY. 43 SOUTH
RUSSELLVILLE, ALABAMA 35653

FLORIDA
MODULAR



BY: DATE: TITLE:
DRAWN: M.W.W 5/25/22 MODULAR INDEX

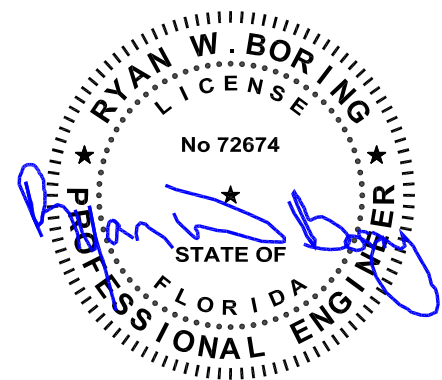
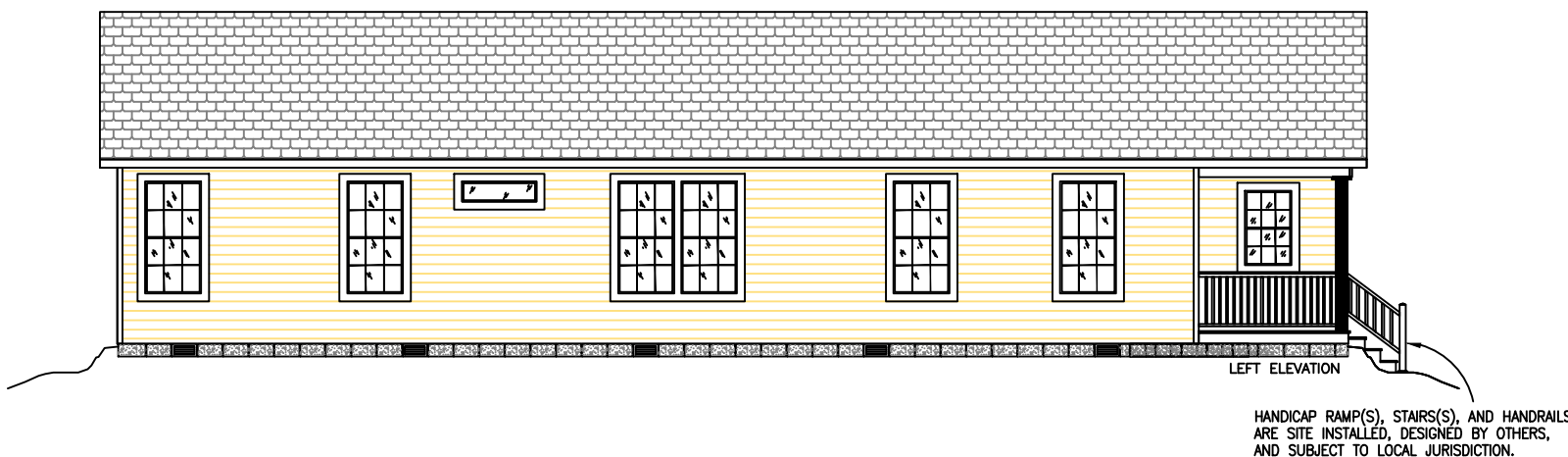
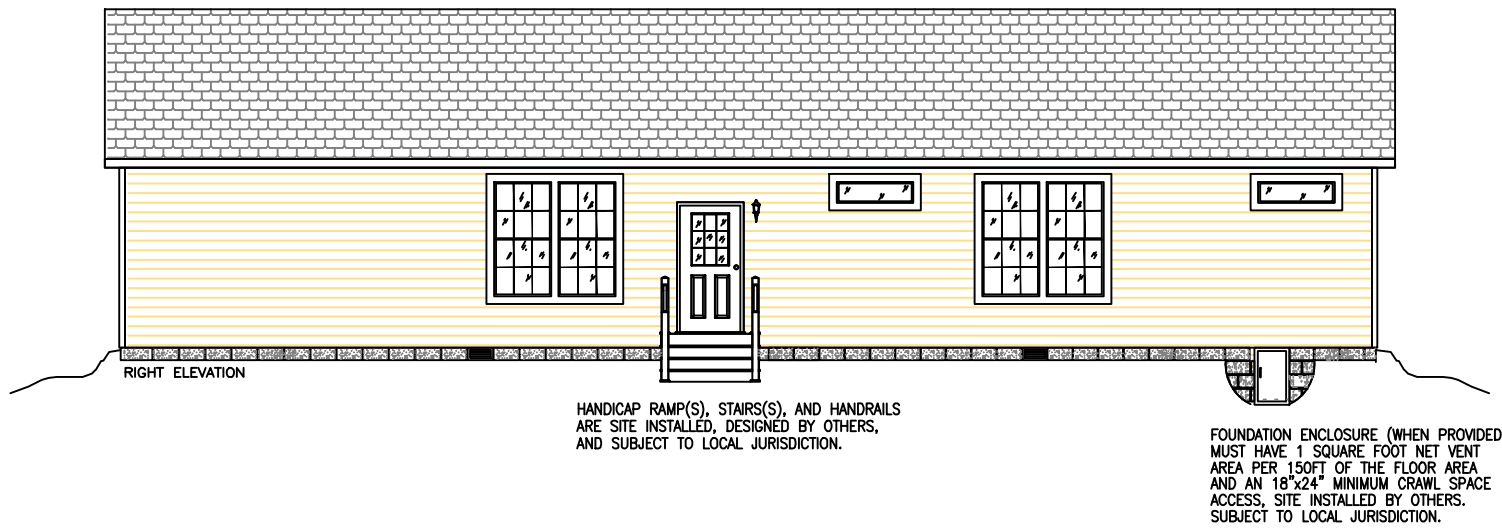
GRAPHIC NO: REV: SHEET:
SCALE 0 1' 2' 3' 4' 5' MFT-10886-8015-70-3-32-2 1 OF 7



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

APPROVED BY
NIA INC.

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Allowable No. of Floors: 1
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Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC



Jun 14, 2022

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

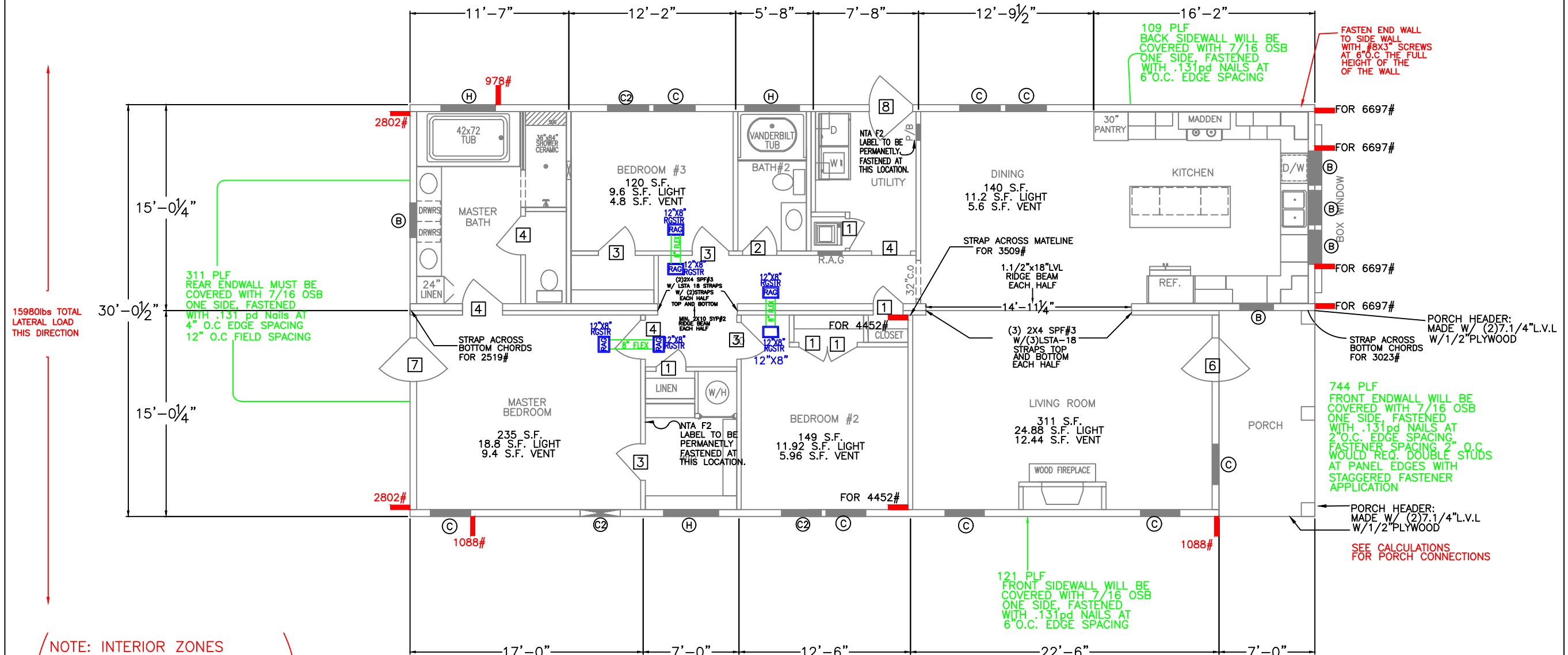
- NOTES!!
1. EXTERIOR COVERING IS VINYL LAP SIDING WITH VINYL APPURTENANCES STANDARD. OTHER EXTERIOR COVERINGS SHALL CONFORM TO INTERNATIONAL BUILDING CODE. EXTERIOR COVERINGS FOR FRONT AND REAR ELEVATIONS ARE SUPPLIED BY FRANKLIN HOMES AND INSTALLED ON-SITE BY LOCAL CONTRACTOR.
 2. ROOF COVERING IS 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 6.61 SQ.FT PER 1983 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).

REVISION:	BY:	DATE:

		FRANKLIN HOMES, INC. 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653			
BY:	DATE:	TITLE:			
DRAWN: M.W.W.	6/1/22	ELEVATIONS			
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO:	MFT-10886-8015-70-3-32-2	REV:	SHEET: 2 of 7

ALL TIE DOWNS ARE
REQUIRED IN TENSION
AND COMPRESSION

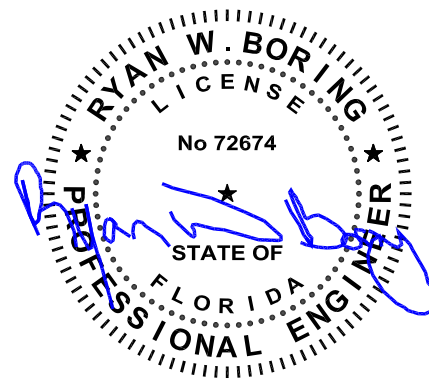
8298lbs TOTAL
LATERAL LOAD
THIS DIRECTION



(NOTE: INTERIOR ZONES
ROOF DECKING MUST BE
FASTENED WITH 0.131x2.5Nails
6" O.C BOUNDARY
6" O.C EDGE
11" O.C FIELD

(NOTE: END ZONES
ROOF DECKING MUST BE
FASTENED WITH 0.131x2.5Nails
4" O.C BOUNDARY
4" O.C EDGE
4" O.C FIELD

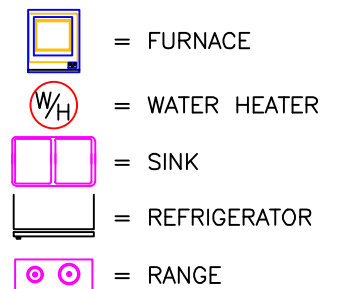
TIE-DOWNS LOCATIONS
ON-SITE BY OTHERS



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Allow. Floor Load: 20 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC



NOTES!!

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WINDOW SCHEDULE	DOOR SCHEDULE	U.Values	SHGC	NOTES!!
Ⓑ 3048 VINYL THERMOPANE	1 24"X80" HOLLOW CORE	N/A	N/A	1. ATTIC ACCESS (22"X36"MINIMUM)
Ⓒ 3672 VINYL THERMOPANE	2 28"X80" HOLLOW CORE	N/A	N/A	2. ALL GLAZING TO BE THERMOPANE.
Ⓒ 3672 VINYL THERMOPANE (E)	3 30"X80" HOLLOW CORE	N/A	N/A	3. APA RATED SHEATHING FASTENED PER APA GUIDELINES TO ACHIEVE REQUIRED PLF's.
Ⓓ 4812 VINYL THERMOPANE	4 32"X80" HOLLOW CORE	N/A	N/A	4. REFER TO ATTACHED CALCULATIONS FOR BRACEWALLS AND STRUCTURAL REQUIREMENTS.
	5 36"X80" HOLLOW CORE	N/A	N/A	5. 3" PVC PIPE VENTED THROUGH ROOF AND TERMINATED BELOW FLOOR JOIST FOR PASSIVE RADON CONTROL PER APPENDIX-F
	6 38"X80" STEEL DOOR	0.17	0.01	6. TRUSSES FOR THIS MODEL ARE 24" MAIN HOUSE & 16" O.C PORCH AREA FACTORY INSTALLED
	7 38"X80" 1/2 ATRIUM	0.43	0.30	
	8 38"X80" STEEL DOOR	0.34	0.19	
	9			
U-Values=0.34 (E) = EGRESS WINDOW SHGC=0.24 (S.G.) = SAFETY GLAZED	9'-0" SIDEWALLS			

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

FLORIDA
MODULAR

BY: M.W.W	DATE: 5-1-22	TITLE: FLOORPLAN
DRAWN: M.W.W	SCALE: 0 1' 2' 3' 4' 5'	NO: MFT-10886-8015-70-3-32-2
GRAPHIC		REV: SHEET: 3 of 7

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	15 AMP/AFI	1	14-2 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	2	10-3 W/G
11	RANGE	40 AMP	2	8-3 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
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

CIR#	DESCRIPTION	BREAKER	POLES	WIRE
18	OPT. EURO RANGE HOOD	20 AMP/AFI	1	12-2 W/G
19	MIC/VENT COMBO	20 AMP/AFI	1	12-2 W/G
20	BATH RECEPTACLES	20 AMP/GFI	1	12-2 W/G
21	PORTABLE APPLIANCE	20 AMP/AFI/GFI	1	12-2 W/G
22	LAUNDRY CIRCUIT	20 AMP/AFI/GFI	1	12-2 W/G
24	SMOKE DETECTORS	15 AMP/AFI	1	14-2 W/G
40**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 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**	RANGE HOOD VENT	15 AMP/AFI	1	14-2 W/G
44**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
51**	ELECTRIC FIREPLACE	15 AMP/AFI	1	14-2 W/G
60	REFRIGERATOR	20 AMP/AFI/GFI	1	12-2 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

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

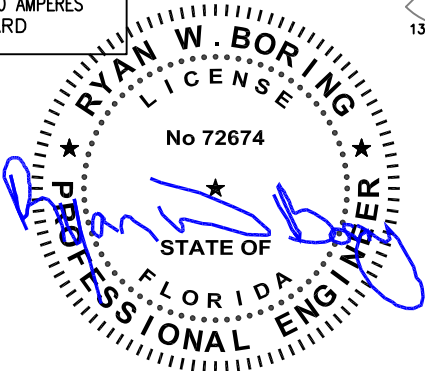
ALL RECEPTACLES MUST
BE LISTED AS TAMPER
RESISTANT

THIS HOME IS
BUILT FOR
THE 2017 NEC!!

2040 SQ.FT. @ 3 WATTS/SQ.FT. = 6120 W
SMALL APPLIANCES, 3 @ 1500 W = 4500 W
WATER HEATER = 4500 W
WASHER = 1500 W
DRYER = 5000 W
RANGE = 13000 W
DISHWASHER = 1200 W
MICROWAVE = 1200 W
37020 W

FIRST 10000 W @ 100% = 10000 W
REMAINDER @ 40% (27020)(.4) = 10808 W
FURNACE (HVAC) = 20000 W
40808 W

CALCULATED LOAD FOR SERVICE SIZE
40808 WATTS / 240 VOLTS = 170 AMPERES
200 AMP SERVICE STANDARD



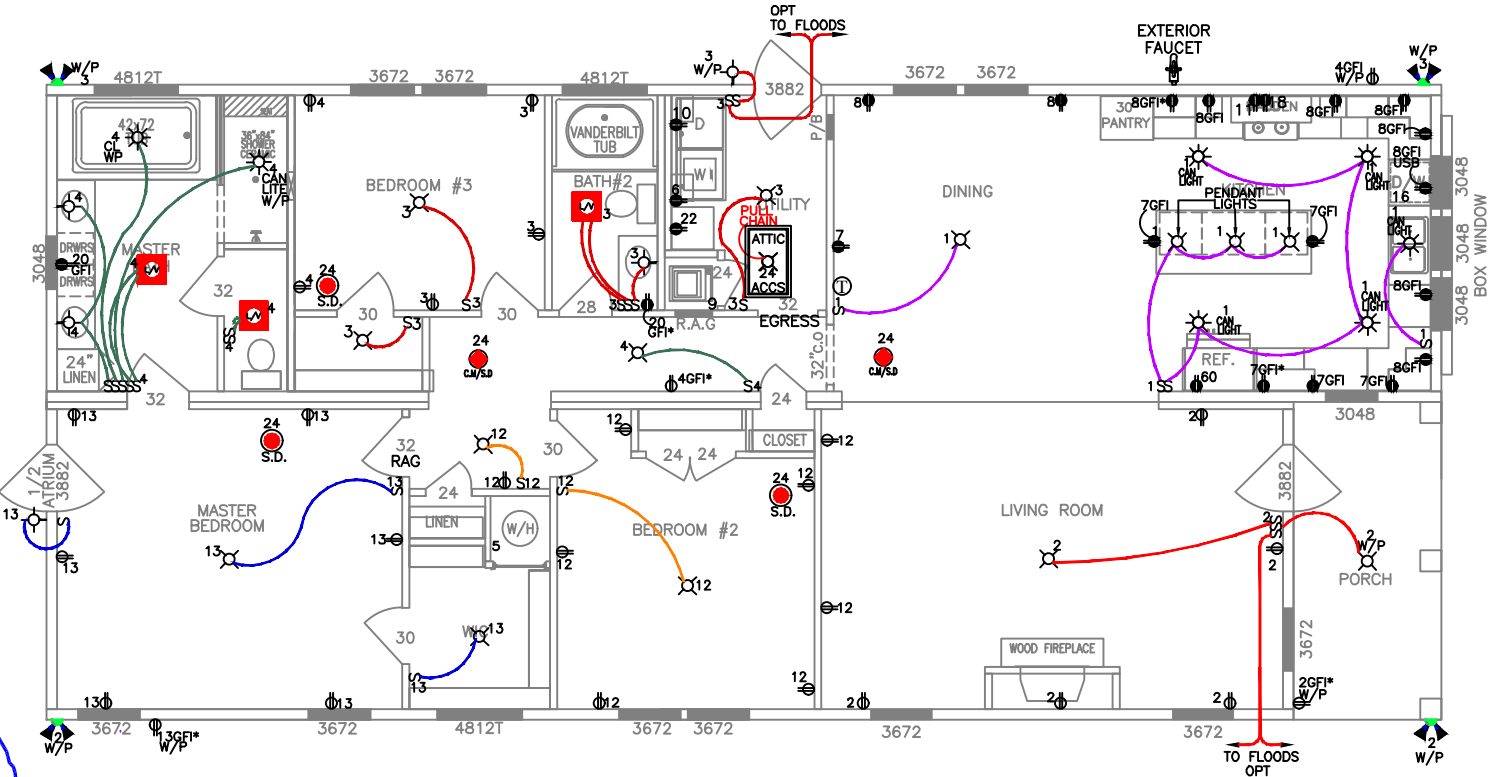
Jun 14, 2022

- * 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)12KW: 70 AMP; 2 POLE; 6-6-10
b)15KW: 60 AMP; 2 POLE; 6-6-10 and 30 AMP; 2 POLE; 10-2 w/G
c)20KW: 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

5. 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.
6. SERVICE ENTRANCE WIRE SIZE IS (3)-#2/0 WITH
(1)-#4 COPPER GROUND.
7. ALL FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES,
DENS, BEDROOMS, SUNROOMS, RECREATIONS ROOMS, CLOSET, HALLWAYS,
KITCHEN, LAUNDRY OR SIMILAR AREAS
MUST BE PROTECTED BY AN ARC-FAULT CIRCUIT
INTERRUPTER IN ACCORDANCE WITH SEC. 210-12(b) OF THE NEC.

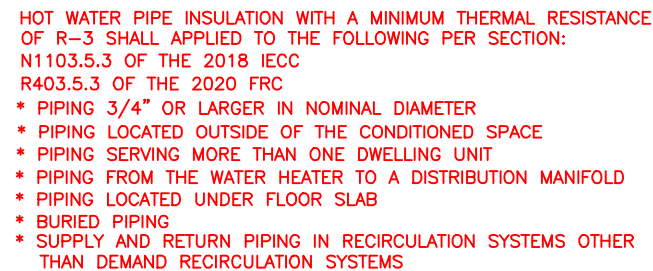
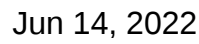


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APPROVED BY
NIA INC.

REVISION:		BY:	DATE:
FRANKLIN STRUCTURES LLC 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653 Phone:256.332.4510 Fax:256.331.2206			
BY:	DATE:	TITLE:	
MMW	5-1-22	ELECTRICAL	
NO:		REV:	SHEET:
MFT-10886-8015-70-3-32-2			4 of 7



TOTAL FIXTURE UNITS ON HOT WATER SUPPLY: 7.4

TOTAL FIXTURE UNITS (INLET): 21.8

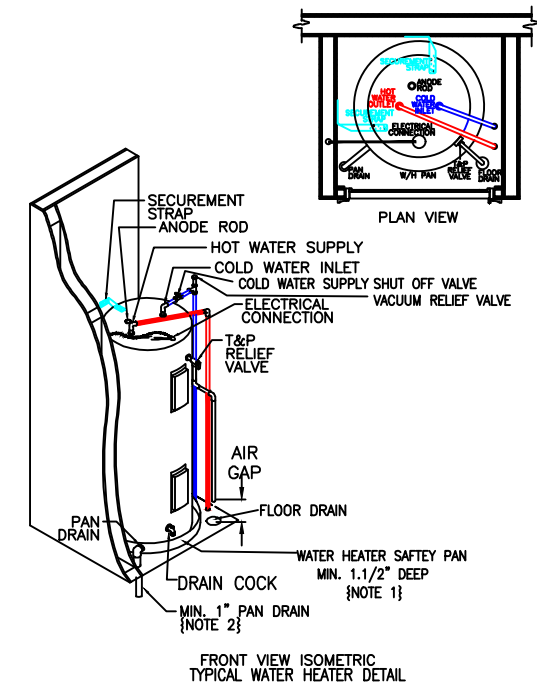
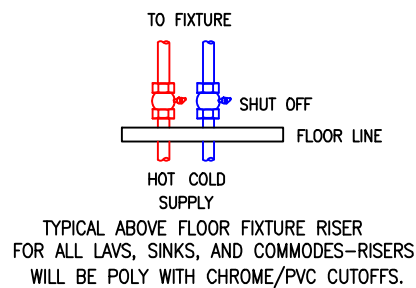
MAXIMUM FIXTURE UNITS PER TABLE P2903.6

FOR 50-60 PSI AND 80' COLUMN MAXIMUM ALLOWABLE LENGTH PER 2020 FBC-R (APPENDIX P) TABLE AP201.1

$$1/2'' = 2.5$$
$$3/4'' = 9.5$$
$$1'' = 32$$

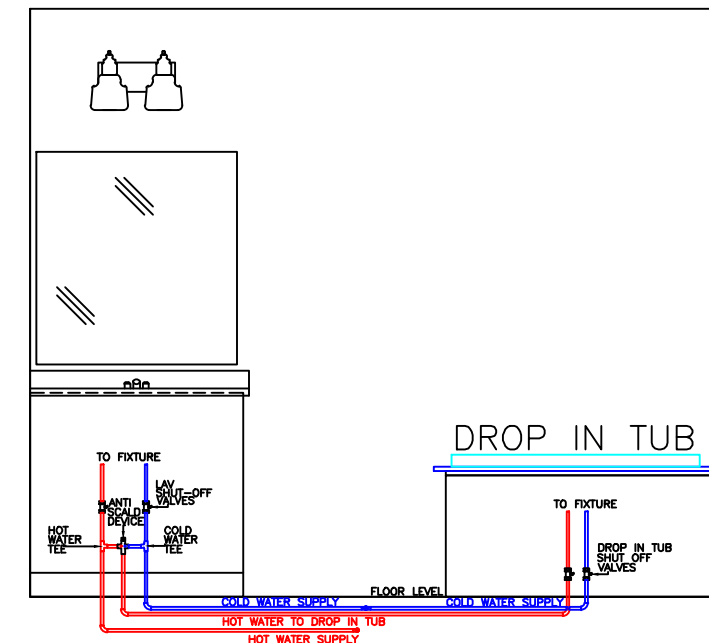
NOTES!!

1. 40 GAL. GAS 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.

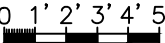


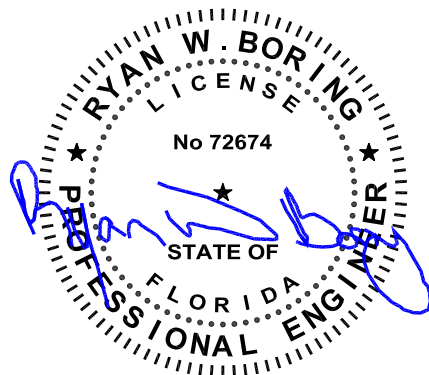
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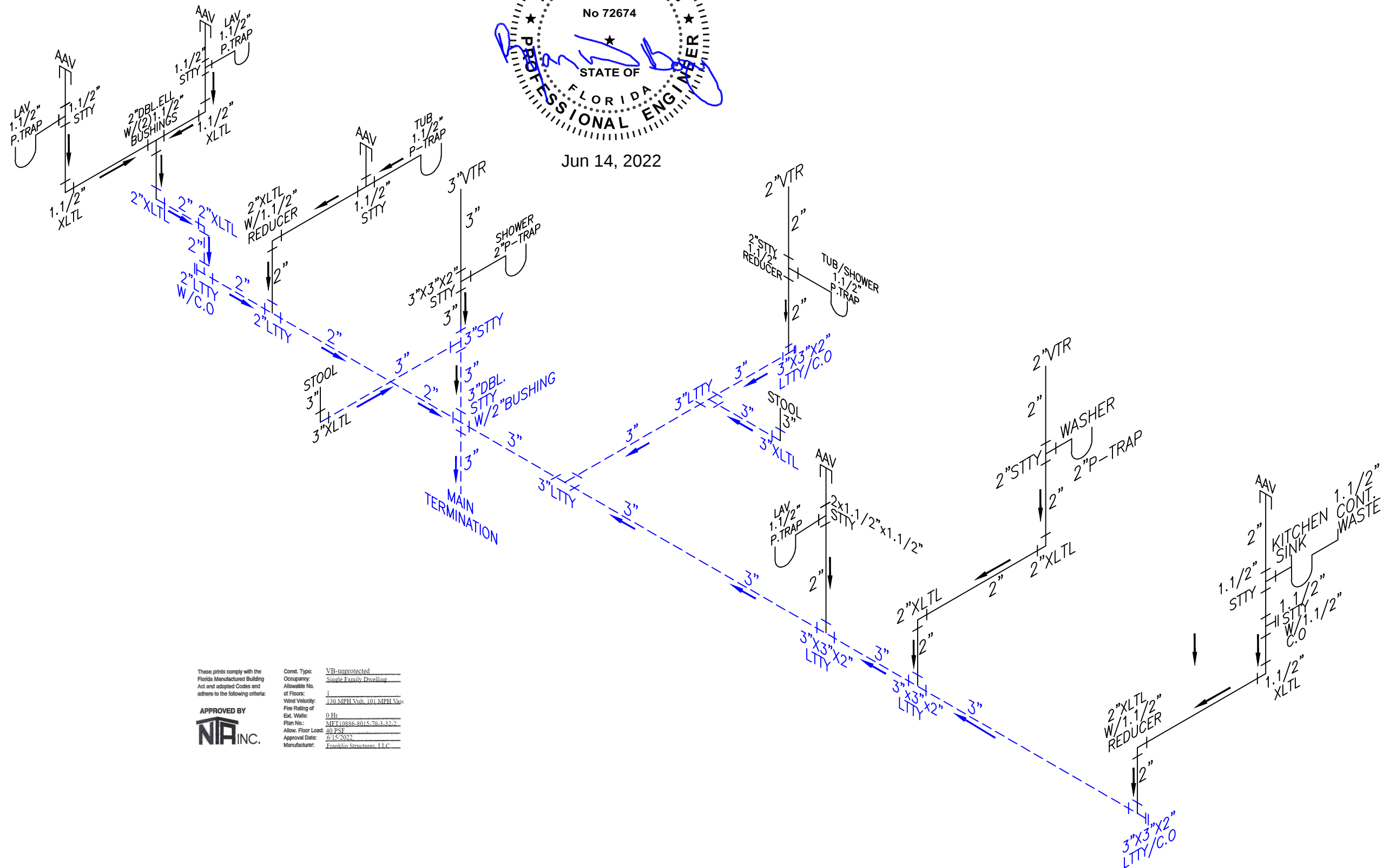


REVISION:		BY:	DATE:

 FRANKLIN STRUCTURES LLC 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653		FLORIDA MODULAR	
BY:	DATE:	TITLE:	
DRAWN: M.W	5-1-22	WATER SCHEMATIC	
GRAPHIC SCALE	0' 1' 2' 3' 4' 5' 	NO: MFT-10886-8015-70-3-32-2	REV: SHEET: 5 of 7



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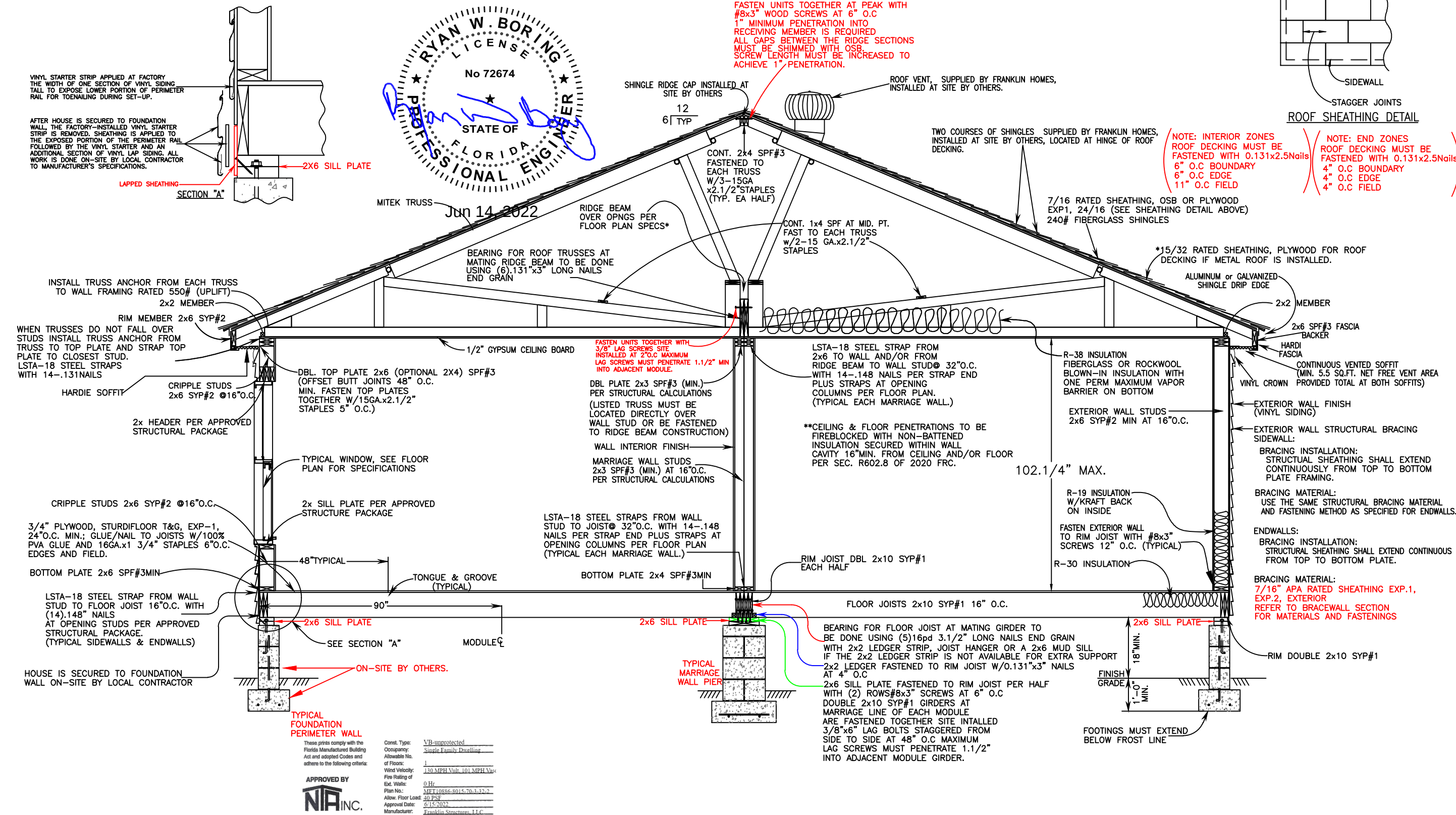
NOTES!!

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
LTTY = 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.

		FRANKLIN STRUCTURES LLC 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653		FLORIDA MODULAR		
DRAWN:		BY:	DATE:	TITLE:		
M.W.		M.W.	6-1-22	DRAIN SCHEMATIC		
GRAPHIC SCALE		0' 1' 2' 3' 4' 5'		NO:	MFT-10886-8015-70-3-32-2	REV:
						SHEET: 6 of 7



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 FRC.	

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	EXTERIOR FINISH MATERIAL
CEILING-1/2" MINIMUM GYPSUM BOARD INSTALLED PER MANUFACTURER'S SPECIFICATIONS. (CLASS-A)	ROOF -FIBERGLASS ROOF SHINGLES INSTALLED ON ROOFS WITH LESS THAN 4/12 ROOF PITCH SHALL HAVE TWO LAYERS OF #15 FELT
WALL -1/2" VC GYPSUM BOARD THROUGH OUT (CLASS-A)	WALL -VINYL LAP SIDING
FLOOR -VINYL IN BATHS, UTILITY RM, KITCHEN & BREAKFAST RM-CARPET ALL OTHER AREAS.	

*FASTEN RIDGE BEAM TO EACH TRUSS W/6-.131"x3" NAILS INTO SIDE GRAIN; FASTEN 2x6 TO EACH TRUSS W/6-.131"x3" NAILS W/MIN. 2 NAILS INTO SIDEGRAIN.	
FRANKLIN STRUCTURES, LLC. 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653	
FLORIDA MODULAR	
BY: TRACIE	DATE: 6/1/22
DRAWN: TRACIE	SCALE: N.T.S.
TITLE: TYPICAL OFF-FRAME CROSS SECTION	
NO: MTF-10886-8015-70-3-32-2	REV: 7 of 7

Franklin Structures, LLC

MFT-10886-8015-70-3-32-2

Width: 30'- 1/2"

Length: 66'

Roof Live Load: 20psf Roof LL

Wind Speeds: 130mph Vult

Wind Exposure: C

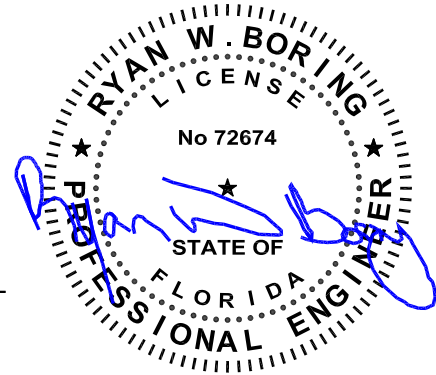
Wall Height: 9'

Max Mean Roof Height: 20'

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: 130 MPH Vult, 101 MPH Vult
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC



Jun 14, 2022

Page	Description
1-4	Design Criteria and Load Cases (C&C page 1)
5	Matewall Headers
6-7	Matewall Columns
8	Sidewall Headers
9-10	Sidewall Columns (King & Jack)
11-12	Uplift Straps
13	Sill Plates and Lateral Only Sill/Header Connection (Sill must also be installed at top of window/door)
14-16	Shearwalls and Diaphragms
17-18	Connections
19	Floor Joist
20-21	Matewall Girders
22-23	Porch Headers, Columns, and Connections

NOTE:

- These calculations are applicable only to the structural elements and loading criteria specifically noted 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.
- Specified design criteria are based solely on information provided by the client and must be verified and approved by the LAHJ.
- Ryan W. Boring, P.E. is not responsible for fabrication or erection.

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

ASCE 7-16 Chapter 30 Part I:

Wind Speed:	135 MPH	Roof Style:	Gable (Gable or Hip)
Wind Exposure:	C	Roof Pitch:	6 /12
Mean Roof Height:	20 FT	Roof Angle:	26.6
Elevation:	0 FT	Max Width:	30.04 ft
Ke:	1.00		
Kd:	0.85		
Kzt:	1		
kt:	0.90		
qh:	35.77 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	0.7	-1.5	Zone 1		Min	31.5	-60.1
		100	0.7	-1.1			100	31.5	-45.8
Zone 2		Min	0.7	-2.5	Zone 2		Min	31.5	-95.9
		100	0.7	-1.4			100	31.5	-56.5
Zone 3		Min	0.7	-3.6	Zone 3		Min	31.5	-135.2
		100	0.7	-1.8			100	31.5	-70.8
OH Z1		Min		-2	OH Z1		Min		-78.0
		100		-1.9			100		-74.4
OH Z2		Min		-3	OH Z2		Min		-113.7
		100		-2			100		-78.0
OH Z3		Min		-4.7	OH Z3		Min		-174.5
		100		-2.4			100		-92.3

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: 130 MPH Vult. 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Walls								
Gcp	Area	Pos	Neg	Pressure	Area	Pos	Neg	
Zone 4		10	1	-1.1	Zone 4	10	42.2	-45.8
		100	0.825	-0.93		100	35.9	-39.5
Zone 5		10	1	-1.4	Zone 5	10	42.2	-56.5
		100	0.825	-1.1		100	35.9	-45.8

Design Pressures

Pressure	Area	Pos	Neg	
Zone 1		Min	18.9	-36.1
		100	18.9	-27.5
Zone 2		Min	18.9	-57.5
		100	18.9	-33.9
Zone 3		Min	18.9	-81.1
		100	18.9	-42.5
OH Z1		Min		-46.8
		100		-44.6
OH Z2		Min		-68.2
		100		-46.8
OH Z3		Min		-104.7
		100		-55.4
Zone 4		10	25.3	-27.5
		100	21.6	-23.7
Zone 5		10	25.3	-33.9
		100	21.6	-27.5

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	13.22	-9.98	-22.43	-20.41	19.59	-13.24	-27.36	-25.57
-Gcpi	26.10	2.89	-9.56	-7.53	32.47	-0.37	-14.48	-12.70
Max	26.10	-9.98	-22.43	-20.41	32.47	-13.24	-27.36	-25.57

Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-22.53	-31.12	-19.67	-22.53	7.87	-16.81	-23.61	-44.71	-25.39	-23.61	15.38	-21.82
-Gcpi	-9.66	-18.24	-6.80	-9.66	20.74	-3.93	-10.73	-31.83	-12.52	-10.73	28.26	-8.94
Max	-22.53	-31.12	-19.67	-22.53	20.74	-16.81	-23.61	-44.71	-25.39	-23.61	28.26	-21.82

	Vertical				Horz			
	End		Int		End		Int	
	WW	LW	WW	LW	Roof	Wall	Roof	Wall
Trans	-13.24	-27.36	-9.98	-22.43	-35.4191	-32.1594	14.12	45.16
Long	-44.71	-25.39	-31.12	-19.67	-35.4191	-	-19.31	37.20

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-7.95	-16.42	-5.99	-13.46	-21.25	-19.30	8.47	27.10	7.47	20.18
Long	-26.82	-15.24	-18.67	-11.80	-43.99	-35.84	8.47	22.32	7.47	14.81

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: 130 MPH Valt. 101 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Design Criteria:

Total Length:	68 ft				
Total Width:	30.04 ft	Top chord DL:	10 psf	Vult:	135 mph
Unit Width:	15.02 ft	Bottom chord DL:	10 psf	Vasd:	105 mph
Pitch:	6 /12	Bottom chord LL:	0 psf	Exposure:	C
Roof Angle:	26.6 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:	20 ft	Framing Rafters?:	N		
Mean Roof Height:	17.76 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:	20 psf

Wind Loading:

	WW	LW	WVOH
Transverse End:	-7.95	-16.42	-21.25
Interior:	-5.99	-13.46	-19.30
Long End:	-26.82	-15.24	-43.99
Interior:	-18.67	-11.80	-35.84

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Occupancy:	<u>Single Family Dwelling</u>
Allowable No. of Floors:	<u>1</u>
Wind Velocity:	<u>130 MPH Vult, 101 MPH Vasd</u>
Fire Rating of Ext. Walls:	<u>0 Hr</u>
Plan No.:	<u>MFT10886-8015-70-3-32-2</u>
Allow. Floor Load:	<u>40 PSF</u>
Approval Date:	<u>6/15/2022</u>
Manufacturer:	<u>Franklin Structures, LLC</u>

Truss Reactions

Gravity Matewall: 552 lbs Uplift: Matewall: 349 lbs
 Sidewall: 667 lbs Sidewall: 211 lbs
 Truss Spacing: 24 in oc. Snow Load: 0 psf

Load Cases for Ranch

Load Case		Roof			Roof and 1 Story			LDF
		Sidewall	Matewall	Endwall	Sidewall	Matewall	Endwall	
1	D	164	150	30	284	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	170	150	40	170	150	40	1.25
5	L	0	0	0	300	300	40	1
6	Wp	0	0	0	0	0	0	1.6
7	Wn	-207	-175	-71	-207	-175	-71	1.6
8	.75(L+Lr)	128	113	30	353	338	60	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)	0	0	0	225	225	30	1.6
12	D+L	164	150	30	585	571	125	1
13	D+Lr	334	300	70	455	421	125	1.25
14	D+S	164	150	30	284	270	85	1.15
15	D+Su	164	150	30	284	270	85	1.15
16	D+.75(L+Lr)	292	263	60	637	608	145	1.25
17	D+.75(L+S)	164	150	30	510	496	115	1.15
18	D+.75(L+Su)	164	150	30	510	496	115	1.15
19	D+.75(L+S+Wp)	164	150	30	510	496	115	1.6
20	.6D+Wn	-207	-175	-53	-36	-12	-20	1.6
Dead Load:		164	150	30	284	270	85	
Dead LC:		D	D	D	D	D	D	
Live Load:		170	150	40	353	338	60	
Live LC:		Lr	Lr	Lr	.75(L+Lr)	.75(L+Lr)	.75(L+Lr)	
Total Load:		334	300	70	637	608	145	
Total LC:		D+Lr	D+Lr	D+Lr	D+.75(L+Lr)	D+.75(L+Lr)	D+.75(L+Lr)	
Uplift Load:		-207	-175	-53	-36	-12	-20	
Uplift LC:		.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	
Design Load:		334	300	70	585	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	

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 Wind Velocity: 130 MPH Valt. 101 MPH Valt.
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 Allow. Floor Load: 40 PSF
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 Manufacturer: Franklin Structures, LLC

Floor Load only

Live	300	300	1
Dead	75	75	0.9

Combined Loading:

Max Bending:

1 D	164	150	30	284	270	85 plf
2 D+Wp	164	150	30	284	270	85 plf
Max down	164	150	30	284	270	85 plf
Lateral	19.48	5	19.48	19.48	5	19.48 psf

Max Axial

1 D+.75(L+Lr)	292	263	60	637	608	145 plf
2 D+.75(L+S)	164	150	30	510	496	115 plf
3 D+.75(L+Su)	164	150	30	510	496	115 plf
4 D+.75(L+S+Wp)	164	150	30	510	496	115 plf
Max down	292	263	60	637	608	145 plf
Lateral	14.61	3.75	14.61	14.61	3.75	14.61 psf

Matewall Headers Supporting Roof
No splices considered in span
Vertical Load
Dead Load: 150 plf D
Live Load: 150 plf Lr
Total Load: 300 plf D+Lr
Uplift Load: -175 plf .6D+Wn

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

Location: Matewall
Supporting: Roof

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

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	SPF	#2	Edge	1	1.1	875	135	425	1400000	510000	1203	169	13.9	21.4	98.9
2	1	1.5	9.25	SYP	#2	Edge	1	1.0	800	175	565	1400000	510000	1000	219	13.9	21.4	98.9
3	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	21.4	98.9
4	1	1.5	11.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3468	285	16.9	31.6	178.0
5	1	1.5	14	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3366	285	21.0	49.0	343.0
6	1	1.5	16	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3306	285	24.0	64.0	512.0
7	1	1.5	18	LVL		Edge	1	0.9	2750	285	750	2000000	1016411	3253	285	27.0	81.0	729.0
8	1	1.5	24	LVL		Edge	1	0.9	2750	285	750	2000000	1016411	3128	285	36.0	144.0	1728.0
9																		
10																		

	Shear	Moment	LL def	TL def
1	143	91	152	147
2	180	83	152	147
3	229	156	172	165
4	279	187	209	201
5	347	230	260	250
6	396	260	297	285
7	446	290	334	321
8	594	379	445	428
9				
10				

Member	Max Span	Reactions (lbs)		Bearing (in)	.131x3"		# nails		# .131x3" nails per header
		Gravity	Uplift		Grav	Uplift	Grav	Uplift	
1 (1) 2x 10 SPF #2	90 in	1200	-660	1.9	69.1	lb	17.37	7.46	18
2 (1) 2x 10 SYP #2	82 in	1100	-600	1.5	88.4	lb	15.92	6.78	16
3 (1) 2x 9.25 LVL	156 in	2000	-1140	1.1			28.95	12.89	29
4 (1) 2x 11.25 LVL	187 in	2400	-1360	1.1			34.74	15.38	35
5 (1) 2x 14 LVL	229 in	2900	-1670	1.1			41.97	18.88	42
6 (1) 2x 16 LVL	260 in	3300	-1900	1.1			47.76	21.48	48
7 (1) 2x 18 LVL	290 in	3700	-2110	1.1			53.55	23.86	54
8 (1) 2x 24 LVL	379 in	4800	-2760	1.1			69.47	31.21	70
9									
10									

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

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Occupancy: Single Family Dwelling
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Matewall Columns

<u>Vertical Load</u>	<u>Lateral Load</u>	<u>Combined Vert and Lat (max Lat)</u>	Wall height:	108 in
NDS Load: 300 plf	D+Lr Lateral only	Vertical: 150 plf	0 Top/Btm Plate (tp):	4.5 in
Total Load: 300 plf	D+Lr Stud area: 27.0 ft^2	Lateral: 5 psf W	LVL: Microlam	
Uplift Load: -175 plf	.6D+Wn Lateral: 5 psf W	<u>Combined Vert and Lat (max Vert)</u>	LVL MOE (E):	2000000 psi
		Vertical: 263 plf 0	E min:	1016411 psi
		Lateral: 3.8 psf .75W	Fb:	2750 psi
	def=.7 C&C	<u>Combined Uplift and Lat</u>	Fv:	285 psi
Cr: 1		Vertical: -175 plf .6D+Wn	Fcperp:	750 psi
Cd: 1.6		Lateral: 3.8 psf W	Vol eff (e):	0.136
Cd grav: 1.25	lateral deflection L/ 120		Cr (LVL):	1.04

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						
									Allowable:	1200	366	379	425	1200000	440000		600
	Bearing length:		1.5	Non braced (between spans)													

# of Studs	1	2	3	4	5	6	7	8	9	10	1	2	3
<u>Properties</u>													
Area in^2	5.3	10.5	15.8	21.0	26.3	31.5	36.8	42.0	47.3	52.5	5.3	10.5	15.8
Sx in^3	3.1	6.1	9.2	12.3	15.3	18.4	21.4	24.5	27.6	30.6	3.1	6.1	9.2
Ix in^4	5.4	10.7	16.1	21.4	26.8	32.2	37.5	42.9	48.2	53.6	5.4	10.7	16.1

Fc compression	77	154	230	307	384	461	538	615	691	768	16	117	338
Fc Perp compression	38	76	115	153	191	229	267	306	344	382			
Tension	217	433	650	866	1083	1300	1516	1733	1950	2166			

Uplift/Lateral	217	433	650	866	1083	1300	1516	1733	1950	2166
Vert/Lateral max Lat	67	252	401	551	704	857	1011	1165	1321	1476
Vert/Lateral Max Vert	67	150	236	323	411	499	588	677	766	855

OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
38	76	115	153	191	229	267	306	344	382	

<u>Max Span</u>	Max Trib	Max Side Opening		
1	38 in	58 in =	4 ft -	10 in
2	76 in	133 in =	11 ft -	1 in
3	115 in	208 in =	17 ft -	3 in
4	153 in	283 in =	23 ft -	6 in
5	191 in	358 in =	29 ft -	9 in
6	229 in	433 in =	36 ft -	1 in
7	267 in	508 in =	42 ft -	4 in
8	306 in	583 in =	48 ft -	7 in
9	344 in	658 in =	54 ft -	10 in
10	382 in	732 in =	61 ft -	0 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: 130 MPH Vult. 101 MPH Vasc.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Matewall Columns at Endwall

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

def=.7 C&C

Vertical

Allowable:	1600	829	868	565	1400000	510000	960
------------	------	-----	-----	-----	---------	--------	-----

Non braced (between spans)		
69	35	23
88	352	792
0.04979	0.192126	0.3996

Properties

Axial Loading

Combined Loading

<u>Deflection Check</u>	L/	2727	5455
		OK	OK
		169	339

Max Side Opening			
26	ft -	9	in
54	ft -	10	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: 130 MPH Vult. 101 MPH Vasc.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
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: 164 plf D
Live Load: 170 plf Lr
Total Load: 334 plf D+Lr
Uplift Load: -207 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																		
10																		

	Shear	Moment	LL def	TL def
1	66	38	50	48
2	92	54	70	67
3	144	79	110	106
4	190	100	144	139
5	83	35	50	48
6	117	49	70	67
7	184	77	110	106
8	242	93	144	139
9				
10				

Member	Max Span	Reactions (lbs)		Bearing (in)	.131x3"		# nails		# .131x3" nails per header
		Gravity	Uplift		Grav	Uplift	Grav	Uplift	
1 (2) 2x 3 SPF #2	38 in	600	-330	0.5	69.1	88.4	4.34	1.87	5
2 (2) 2x 4 SPF #2	53 in	800	-460	0.5			5.79	2.60	6
3 (2) 2x 6 SPF #2	78 in	1100	-680	0.5			7.96	3.84	8
4 (2) 2x 8 SPF #2	99 in	1400	-860	0.5			10.13	4.86	11
5 (2) 2x 3 SYP #2	35 in	500	-310	0.4			3.62	1.75	4
6 (2) 2x 4 SYP #2	49 in	700	-430	0.4			5.07	2.43	6
7 (2) 2x 6 SYP #2	77 in	1100	-670	0.4			7.96	3.79	8
8 (2) 2x 8 SYP #2	93 in	1300	-810	0.4			9.41	4.58	10
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: 130 MPH Valt, 101 MPH Valt
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-S015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
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:	334	plf	D+Lr	Lateral only				Vertical: 164 plf						0	Top/Btm Plate (tp): 4.5 in			
Total Load:	334	plf	D+Lr	Stud area: 27.0 ft^2				Lateral: 27 psf W						Header height: 80 in				
Uplift Load:	-207	plf	.6D+Wn	Zone 5: 31 psf W				<u>Combined Vert and Lat (max Vert)</u>						LVL: Microllam				
				Zone 4: 26 psf W				Vertical: 292 plf 0						LVL MOE (E): 2000000 psi				
				def=.7 C&C				Lateral: 20.3 psf .75W						E min: 1016411 psi				
								<u>Combined Uplift and Lat</u>						Fb: 2750 psi				
Cr:	1					Vertical: -207 plf .6D+Wn						Fv: 285 psi						
Cd:	1.6					Lateral: 20.3 psf W						Fcperp: 750 psi						
Cd grav:	1.25	ateral 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:	729	psi	Fc:	59	psi	CSI:	0.47	CSI:	0.36	Max CSI:	0.47	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>															
Moment at Center	35	70	105	140	176	42	83	125	167	208					
Moment at Header	47	94	141	188	235	56	111	167	223	279					
Shear	79	159	238	318	397	94	188	283	377	471					
<u>Combined Loading</u>															
Max Lat	364	849	1327	1805	2281	364	849	1327	1805	2281					
Max Vert	221	492	761	1029	1297	221	492	761	1029	1297					
<u>Deflection Check</u>															
L/	203	203	203	203	203	171	171	171	171	171					
	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK					
Max Span	35	70	105	140	176	42	83	125	167	208					

<u>Max Span</u>																			
1											End Zone				Interior Zone				
2											54 in =	4	ft -	6 in	67 in =	5	ft -	7 in	
3											124 in =	10	ft -	4 in	150 in =	12	ft -	6 in	
4											194 in =	16	ft -	2 in	233 in =	19	ft -	5 in	
5											264 in =	22	ft -	0 in	317 in =	26	ft -	5 in	
											335 in =	27	ft -	11 in	400 in =	33	ft -	4 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
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 130 MPH Valt 101 MPH Valt
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Sidewall Studs (Jack)

Vertical Load

NDS Load: 334 plf

Total Load: 334 plf

Uplift Load: -207 plf

D+Lr

D+Lr

.6D+Wn

Location: Sidewall

Supporting: Roof

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
Properties										
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

Axial Loading										
Fc compression	223	446	669	893	1116	1339	1562	1785	2008	2231
Fc Perp compression 1.5 in	46	91	137	182	228	274	319	365	411	456
Fc Perp compression 3 in	91	182	274	365	456	547	639	730	821	912
Fc Perp compression 4.5 in	137	274	411	547	684	821	958	1095	1232	1369
Tension	418	837	1255	1673	2092	2510	2929	3347	3765	4184

Trib taken by King stud: 0 in

Increase of span: 0

Max Span	Double Headers	Triple Headers
1	176 in = 14 ft - 7 in	267 in = 22 ft - 3 in
2	352 in = 29 ft - 3 in	535 in = 44 ft - 7 in
3	529 in = 44 ft - 1 in	803 in = 66 ft - 11 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:

APPROVED BY

NIA INC.

Const. Type: VB-unprotected

Occupancy: Single Family Dwelling

Allowable No. of Floors: 1

Wind Velocity: 130 MPH Valt, 101 MPH Valt

Fire Rating of Ext. Walls: 0 Hr

Plan No.: MFT10886-8015-70-3-32-2

Allow. Floor Load: 40 PSF

Approval Date: 6/15/2022

Manufacturer: Franklin Structures, LLC

Page 10 of 23

Uplift Straps: Sidewall

Uplift: -207 plf

Stud Spacing: 16 in

Strapping

Strap All: 1110 lbs LSTA18

fasteners: 14 .148x 2.5"

Strap Spacing: 5.37 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	112	128
2	240	256
3	370	386
4	498	514
5	628	644
6	756	772
7	886	902
8	1014	1030
	total span	

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: 130 MPH Valt. 101 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10686-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

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: 6.28 " oc
15ga: 4.76 " oc

fasteners into Studs:

.131 Nail: 2.5 lb Use 3
15ga: 3.4 lb Use 4

Uplift Straps: Matewall

Uplift: -175 plf

Stud Spacing: 16 in

Strapping

Strap All: 1110 lbs LSTA18

fasteners: 14 .148x 2.5"

Strap Spacing: 6.36 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	136	152
2	288	304
3	440	456
4	594	610
5	746	762
6	898	914
7	1052	1068
8	1204	1220
	total span	

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: 130 MPH Valt. 101 MPH Valt.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10686-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

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: 7.43 " oc
 15ga: 5.64 " oc

fasteners into Studs:
 .131 Nail: 2.2 lb Use 3
 15ga: 2.8 lb Use 3

Sill Plates

Lateral Load

Lateral only

Wind: 128 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	6.3	15.6			
2	2	1.5	5	SPF	#2	Edge	1	1.4	875	135	425	1400000	510000	1960	216	15.0	12.5	31.3			
3	3	1.5	5	SPF	#2	Edge	1	1.4	875	135	425	1400000	510000	2254	216	22.5	18.8	46.9			
4	1	1.5	5	SYP	#2	Edge	1	1.0	1000	175	565	1400000	510000	1600	280	7.5	6.3	15.6			
5	2	1.5	5	SYP	#2	Edge	1	1.0	1000	175	565	1400000	510000	1600	280	15.0	12.5	31.3			
6	3	1.5	5	SYP	#2	Edge	1	1.0	1000	175	565	1400000	510000	1840	280	22.5	18.8	46.9			
7																					
8																					
9																					
10																					
									Note: ripped lumber must be reggraded												

Note: ripped lumber must be regraded

	lu	le	Fbe	Cl	Shear	Moment	Def
1	84.5	152.8	1803	0.78	212	85	109
2	109.9	194.1	1419	0.66	413	110	138
3	128.0	223.6	1232	0.52	615	128	158
4	80.8	146.7	1878	0.87	272	81	109
5	107.5	190.2	1448	0.77	533	107	138
6	126.8	221.7	1242	0.62	795	127	158
7							
8							
9							
10							

Sill and header lateral connection:

Member	Max Span	Reactions (lbs)	Span (ft)	Load @ Ends (lbs)	Nail Zeg(lb)	0.131 Nails	15ga Zeg(lb)	15gax2.5" Staples
1 (1) 2x 5 SPF #2	84 in	500	2	128.48	88	2	48	3
2 (2) 2x 5 SPF #2	109 in	600	3	192.72		3		5
3 (3) 2x 5 SPF #2	127 in	700	4	256.97		3		6
4 (1) 2x 5 SYP #2	80 in	500	5	321.21		4		7
5 (2) 2x 5 SYP #2	107 in	600	6	385.45		5		9
6 (3) 2x 5 SYP #2	126 in	700	7	449.69		6		10
7			8	513.93		6		11
8			9	578.17		7		13
9			10	642.41		8		14
10			11	706.65		8		15
			12	770.90		9		17
			13	835.14		10		18
			14	899.38		11		19

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: 130 MPH Valt 101 MPH Valt
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Wind Pressures for Low-rise buildings or buildings with h<60ft
ASCE 7-16 Chapter 30 Part I:

Wind Speed, Vult:	130 MPH	Roof Style:	Gable
Wind Exposure:	C	Roof Pitch:	6 /12
Mean Roof Height:	20 FT	Roof Angle:	26.6
Elevation:	0 FT	Width	30.04 ft
Ke:	1.00	2a:	6 ft
Kd:	0.85	Wall Height:	9 ft
Kzt:	1	Heel Ht:	6 in
kt:	0.90	Roof Ht:	7.51 ft
qh:	33.17 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	12.3	-9.3	-20.8	-18.9	18.2	-12.3	-25.4	-23.7
-Gcpi	24.2	2.7	-8.9	-7.0	30.1	-0.3	-13.4	-11.8
Max	24.2	-9.3	-20.8	-18.9	30.1	-12.3	-25.4	-23.7

Longitudinal

	1	2	3	4	5	6 1e	2e	3e	4e	5e	6e	
+GCpi	-20.9	-28.9	-18.2	-20.9	7.3	-15.6	-21.9	-41.5	-23.5	-21.9	14.3	-20.2
-Gcpi	-9.0	-16.9	-6.3	-9.0	19.2	-3.6	-9.9	-29.5	-11.6	-9.9	26.2	-8.3
Max	-20.9	-28.9	-18.2	-20.9	19.2	-15.6	-21.9	-41.5	-23.5	-21.9	26.2	-20.2

	Vertical				Horz							
	End		Int		Overhang		End		Int			
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall		
Trans	-12.3	-25.4	-9.3		-20.8	-32.8	-29.8	13.1	41.9	11.5	31.2	
Long	-41.5	-23.5	-28.9	-18.2		-32.8		-17.9	34.5	-10.6	22.9	

Design Loading

	Vertical							Horz			
	End		Int		Overhang			End		Int	
	WW	LW	WW	LW	End	Int		Roof	Wall	Roof	Wall
Trans	-7.4	-15.2	-5.6		-12.5	-19.7	-17.9	7.9	25.1	6.9	18.7
Long	-24.9	-14.1	-17.3	-10.9	-40.8	-33.2		7.9	20.7	6.9	13.7

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APPROVED BY
NIA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 130 MPH Vult, 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Shearwalls:

Left Endwall:

End Zone: Yes
Trib: 33 ft
End Roof: 354 lb
End Wall: 754 lb
Int Roof: 1404 lb
Int Wall: 2526 lb
Total force: 5038 lb
Sheathing Thickness: 7/16 in
Fastener: 15ga staple
Wall Length: 30.04 ft
FHS Length: 22.38 ft
Wall Height: 9 ft
Tallest Opening: 5h/6
r: 0.78
Co: 0.72
Perf or Segmented: P
Blocked: YES
PLF required: 311.37
Framing: SYP
Required Spacing: 4 " OC
Tiedown: 2802.3 lb
Strap for: 2519 lb

Right Endwall:

End Zone: Yes
Trib: 33 ft
End Roof: 354 lb
End Wall: 754 lb
Int Roof: 1404 lb
Int Wall: 2526 lb
Total force: 5038 lb
Sheathing Thickness: 7/16 in
Fastener: .131 nail
Wall Length: 15.02 ft
FHS Length: 6.77 ft
Wall Height: 9 ft
Tallest Opening: 5h/6
r: 0.50
Co: 0.55
Perf or Segmented: S
Blocked: YES
PLF required: 744.11
Framing: SYP
Required Spacing: 2 " OC
Tiedown: 6697.0 lb
Strap for: 3023 lb

These prints comply with the
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Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 130 MPH Valt. 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Top Sidewall:

End Zone: yes
Trib: 15.02 ft
End Wall: 980 lb
Int Wall: 1731 lb
Total force: 2711 lb
Sheathing Thickness: 7/16 in
Fastener: 15ga staple
Wall Length: 66.00 ft
FHS Length: 39.81 ft
Wall Height: 9 ft
Tallest Opening: 5h/6
r: 0.65
Co: 0.63
Perf or Segmented: P
Blocked: YES
PLF required: 108.62
Framing: SPF
Required Spacing: 6 " OC
Tiedown: 977.6 lb

Bottom Sidewall:

End Zone: Yes
Trib: 15.02 ft
End Wall: 980 lb
Int Wall: 1731 lb
Total force: 2711 lb
Sheathing Thickness: 7/16 in
Fastener: 15ga staple
Wall Length: 59.00 ft
FHS Length: 35.71 ft
Wall Height: 9 ft
Tallest Opening: 5h/6
r: 0.65
Co: 0.63
Perf or Segmented: P
Blocked: YES
PLF required: 120.88
Framing: SPF
Required Spacing: 6 " OC
Tiedown: 1087.9 lb

Sidewall interconnection: 6 "oc .131 Nails
Capacity: 130 lbs per nail
Total Capacity: 2340 lbs

Summary:	Fastener	Edge Spacing	Tiedown Force	Perf/Segment	Corner Connection**
Left Endwall	15ga staple	4 "OC	2802 lb	P	
Right Endwall	.131 nail	2 "OC	6697 lb	S	
Top Sidewall	15ga staple	6 "OC	978 lb	P	YES
Bottom Sidewall	15ga staple	6 "OC	1088 lb	P	YES

** 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.

Diaphragm:

Max Force:	5038.3 lbs
Load:	157.2 plf
Sheathing:	7/16 in
Fastener:	15ga staple
Framing:	SPF
Unblocked Capacity:	176.3 plf
Blocked:	200.9 plf
Blocking distance:	0.0 ft

0 ft blocked each end with 15ga staple @ 6"OC edge and field

Notes:

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

Lateral Foundation Loads:

Endwalls:	15980 lb
Sidewalls:	8298 lb

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:	130 MPH Vult. 101 MPH Vag.
Fire Rating of Ext. Walls:	0 Hr.
Plan No.:	MFT10886-8014-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

Connections

Truss to exterior wall uplift:

Uplift Force: 211 lb
H2.5A: 535 lb
MTS18: 1030 lb

Truss to exterior wall Lateral:

End: 33.9 psf
Int: 27.5 psf
Height: 9 ft
Spacing: 16 in oc
Load:
End: 203.4 lb
Int: 164.8 lb
.131 nail: 114.84 lb
.131x3"Nails End: 1.8
.131xx3" Nails Int: 1.4

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: 130 MPH Vdir, 101 MPH Vdir
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Truss king post to Header:

Uplift: 349 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 349 uplift

Stud to Plate:

End: 30.64 psf (reduced for stud area)
Int: 25.83 psf
Height: 9 ft
Spacing: 16 in oc
Load:
End: 183.8 lb
Int: 155.0 lb
.131 nail: 88.44 lb
Nails End: 2.1
Nails Int: 1.8

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

Plate to floor and plate interconnection (top plate):

End: 30.6 psf
 Int: 25.8 psf
 Height: 9 ft
 Load: 137.8672 plf
 .131 Nailx3": 108 lb
 Spacing of .131 nail: 9.4 " OC int and end zones

15gax2.5" staple: 72 lb
 Spacing of 15ga: 6.27 " OC int and end zones

Sheathing Suction Connections (wall and roof)

	End	Int	
Wall:	-30.6	-27.5	psf
Roof:	-81.1	-36.1	psf
.131x2.5:	66	66	lbs
15gax2.5" staple:	56.8	56.8	lbs

Wall

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

Roof

Member spacing:	24	24	" oc
Nail:	4.9	11.0	" oc
Staple:	4.2	9.5	" oc

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>130 MPH Vult, 101 MPH Vult</u>
Fire Rating of Ext. Walls:	<u>0 Hr</u>
Plan No.:	<u>MTL0886-8015-70-3-52-2</u>
Allow. Floor Load:	<u>40 PSF</u>
Approval Date:	<u>6/15/2022</u>
Manufacturer:	<u>Franklin Structures, LLC</u>

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:	418 lb	Compare to truss print,
Shear:	181 lb	Must be higher then truss.

Tension:

CS 22: 845 lb

Shear:

Rail to king post toed
 .131x3" nail: 89.71875 lb
 #: 2.0 Use 2
 Rail to rail:
 .131x3" nail: 103.125 lbs
 #: 1.8 Use 2 per bay

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	1	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1250	175	10.9	13.1	47.6
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

	Shear	Moment	LL def	TL def
1	603	180	197	217
2	472	154	154	170
3				
4				
5				
6				
7				
8				
9				
10				

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

Max Span	Reactions (lbs)		Bearing (in)
	Gravity	Uplift	
180 in	500	0	0.6
153 in	500	0	0.6

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: 130 MPH Vult, 101 MPH Vasc
 Fire Rating of Ext. Walls: 0 Hr.
 Plan No.: MET10886-8014-70-3-32-2
 Allow. Floor Load: 40 PSF
 Approval Date: 6/15/2022
 Manufacturer: Franklin Structures, LLC

Matewall Headers Supporting Roof & 1 Floor

Location: Matewall
Supporting: Roof & 1 Floor

Vertical Load

Dead Load: 270 plf D
Live Load: 338 plf .75(L+Lr)
Total Load: 571 plf D+L
Uplift Load: -12 plf .6D+Wn

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

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

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																		
5																		
6																		
7																		
8																		
9																		
10																		

	Shear	Moment	LL def	TL def
1	87	61	106	109
2	121	75	122	124
3	155	87	134	137
4				
5				
6				
7				
8				
9				
10				

Member
1 (1) 2x 10 SYP #1
2 (1.5) 2x 10 SYP #1
3 (2) 2x 10 SYP #1
4
5
6
7
8
9
10

Max Span	Reactions (lbs)		Bearing (in)
	Gravity	Uplift	
61 in	1500	-40	1.8
75 in	1800	-40	1.2
86 in	2100	-50	0.9

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: 130 MPH Valt. 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8014-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 9/15/2022
Manufacturer: Franklin Structures, LLC

Matewall Girders Supporting Floor Load Only

Location: Matewall
Supporting: Roof & 1 Floor

Vertical Load

Dead Load: 75 plf D
Live Load: 301 plf L
Total Load: 376 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																		
5																		
6																		
7																		
8																		
9																		
10																		

	Shear	Moment	LL def	TL def
1	122	76	110	122
2	173	93	126	139
3	225	107	139	153
4				
5				
6				
7				
8				
9				
10				

Member
1 (1) 2x 10 SYP #1
2 (1.5) 2x 10 SYP #1
3 (2) 2x 10 SYP #1
4
5
6
7
8
9
10

Max Span	Reactions (lbs)		Bearing (in)
	Gravity	Uplift	
75 in	1200	0	1.5
92 in	1500	0	1.0
107 in	1700	0	0.8

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: 130 MPH Valt. 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8014-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 9/15/2022
Manufacturer: Franklin Structures, LLC

Porch Headers Sidewall and Matewall

Location: Sidewall
Supporting: Roof

Vertical Load

Dead Load: 164 plf D
Live Load: 170 plf Lr
Total Load: 334 plf D+Lr
Uplift Load: -178 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*2ft=855lb)

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	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	10.9	13.1	47.6
2	1	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	10.9	13.1	47.6
3	1	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	10.9	13.1	47.6
4	2	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	21.8	26.3	95.3
5	2	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	21.8	26.3	95.3
6	2	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	21.8	26.3	95.3
7																		
8																		
9																		
10																		

	Shear	Moment	LL def	TL def
1	128	77	120	116
2	102	70	115	111
3	163	118	129	125
4	242	109	151	146
5	190	100	144	139
6	311	167	163	157
7				
8				
9				
10				

Mateline Connection:
Load: 552.0 lb
0.131" nails EG: 88.44 lb
nails: 7

Connect porch truss to mateline header
with (7) 0.131"x3" nails endgrain
or per manual whichever is worse

Connections:
Connect truss to header with LTS18 strap: capacity 755lbs.
Max Truss reaction for header @24" is 356lbs OK

Header to Column Corner:
RTC-44 Bracket: capacity 1980lbs.
Max reaction for header @ 7ft: 623lb OK

Column to Floor Corner:
BC-40 Bracket: 510lbs
LSTA18 Strap: 1115lbs
Total: 1625lbs
Max reaction for header @ 7ft: 623lb OK

Member	Max Span	Reactions (lbs)		Bearing
		Gravity	Uplift	(in)
1 (1) 2x 8 SYP #1	76 in	1100	-570	1.3
2 (1) 2x 8 SPF #2	70 in	1000	-520	1.8
3 (1) 2x 7.25 LVL	117 in	1700	-870	1.0
4 (2) 2x 8 SYP #1	108 in	1600	-810	0.7
5 (2) 2x 8 SPF #2	99 in	1400	-740	0.9
6 (2) 2x 7.25 LVL	156 in	2200	-1160	0.5
7				
8				
9				
10				

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: 130 MPH Valt. 101 MPH Vag.
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Porch Column Sidewall and Matewall

Supporting: Roof

<u>Vertical Load</u>				<u>Lateral Load</u>				<u>Combined Vert and Lat (max Lat)</u>				Wall height: 108 in					
NDS Load:	334 plf	D+Lr		Lateral only				Vertical: 150 plf				0 Top/Btm Plate (tp): 0 in					
Total Load:	334 plf	D+Lr		Stud area: 27.0 ft^2				Lateral: 5 psf W				LVL: Microllam					
Uplift Load:	-178 plf	.6D+Wn		Lateral: 5 psf W				<u>Combined Vert and Lat (max Vert)</u>				LVL MOE (E): 2000000 psi					
				def=.7 C&C				Vertical: 334 plf 0				E min: 1016411 psi					
								Lateral: 3.8 psf .75W				Fb: 2750 psi					
								<u>Combined Uplift and Lat</u>				Fv: 285 psi					
								Vertical: -178 plf .6D+Wn				Fcperp: 750 psi					
								Lateral: 3.8 psf W				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	3.5	3.5	SYP	#2	0.8	30.9	1.0	1.00	1100	1450	1450	565	1400000	510000	440	675
									Cp	0.23	0.18						
Header	1.5	inches							Allowable:	1760	416	422	565	1400000	510000		1080

# of Studs	1
<u>Properties</u>	
Area in^2	12.3
Sx in^3	7.1
Ix in^4	12.5

<u>Axial Loading</u>	
Fc compression	183
Fc Perp compression	106
Tension	892
Fcperp	
<u>Combined Loading</u>	
Uplift/Lateral	892
Vert/Lateral max Lat	398
Vert/Lateral Max Vert	180

<u>Deflection Check</u>	L/	1921
		OK
		106

<u>Max Span</u>	Max Trib
1	106 in

Max Side Opening	
209 in =	17 ft - 5 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


Const. Type: VB-unprotected
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 130 MPH Vult. 101 MPH Vag.
 Fire Rating of Ext. Walls: 0 Hr.
 Plan No.: MET10886-8014-70-3-32-2
 Allow. Floor Load: 40 PSE
 Approval Date: 6/15/2022
 Manufacturer: Franklin Structures, LLC

FLORIDA BUILDING CODE, ENERGY CONSERVATION	
Residential Building Thermal Envelope Approach	
R-Value Computation Method	
FORM R402—2020	Florida Climate Zone : 2
	BUILDER:
PROJECT NAME AND ADDRESS:	PERMITTING OFFICE:
MFT-10886-8015-70-3-32-2 sw coyote cir FORT WHITE FL, 32038	JURISDICTION NUMBER:
OWNER: DEWEEES	PERMIT NUMBER:
PERMIT TYPE: Residential	NUMBER OF UNITS: 2
WORST CASE?	CONDITIONED FLOOR AREA: 1983

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 U-FACTOR	GLAZED FENESTRATIONS SHGC ³	CEILING R-VALUE	WOOD FRAME WALL R-VALUE ⁵	MASS WALL R-VALUE ^{5,6}	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL 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		30			

- R-Value Calculation Method - [PASS / FAIL]
- For SI: 1 foot = 304.8 mm; NR = No requirement.
1. (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. (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. (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. (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. (5) R-values are for insulation material only as applied in accordance with manufacturer's installation instructions.
 6. (6) The second R-value applies when more than half the insulation is on the interior of the mass wall.
 7. (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.
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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: 130 MPH Vult, 101 MPH Vavg
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

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: 130 MPH V_{ult}, 101 MPH V_{ap}
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT 0886-5015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
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: <u>ON SITE</u>
Air handling unit	Factory Sealed	Factory Sealed? <u>Y/N</u>
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 ? <u>N</u>
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? <u>Y</u>
Duct testing	Test not required if all ducts and AHU are within the building thermal envelope and for additions or alterations where ducts extended from existing heating and cooling system through unconditioned space are < 40 linear ft.	Test report required? <u>N</u>
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) 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) 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) 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) 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) For electric tankless, min. UEF = 0.92. For natural gas tankless, min. UEF = 0.81.
- (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 per Table R402.4.1.1. Recessed lighting IC-rated as having ≤ 2.0 cfm tested to ASTM E283. Windows and doors: 0.3 cfm/sq.ft (swinging doors: 0.5 cfm/sf) when tested 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 or cooling system.	X
Air distribution system	R403.3.2 R403.3.4	Ducts shall be tested as per Section R403.3.2 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. Air handling units are not allowed in attics.	ON SITE
Water heaters	R403.5	Comply with efficiencies in Table C404.2. Hot water pipes insulated to $\geq R-3$ to kitchen outlets, other cases. Circulating systems to have an automatic or accessible manual OFF switch. Heat trap required for vertical pipe risers.	X
Cooling/heating equipment	R403.7	Sizing calculation performed & attached. Special occasion cooling or heating capacity requires separate system or variable capacity system.	X
Swimming pools & spas	R403.10	Spas and heated pools must have vapor-retardant covers or a liquid cover or other means proven to reduce heat loss except if 70% of heat from site-recovered energy. Off/timer switch required. Gas heaters minimum thermal efficiency is 82%. Heat pump pool heaters minimum COP is 4.0.	NA
Lighting equipment	R404.1	Not less than 90% of the lamps in permanently installed luminaires shall have an efficacy of at least 45 lumens-per-watt or shall utilize lamps with an efficacy of not less than 65 lumens-per-watt.	ON SITE
I hereby certify that the plans and specifications covered by this form are in compliance with the Florida Building Code, Energy Conservation. PREPARED BY: <u>Tracie Terry</u> Date <u>2/25/21</u> I hereby certify that this building is in compliance with the Florida Building Code, Energy Conservation. OWNER/AGENT: _____ Date: _____		Review of plans and specifications covered by this form indicate compliance with the Florida Building Code, Energy Conservation. Before construction is complete, this building will be inspected for compliance in accordance with Section 553.908, F.S. CODE OFFICIAL: _____ Date: _____	

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: 130 MPH Vult. 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-S015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

FL MODULAR

WINDOWS ARE WITH GRIDS
U.VALUE- 0.34
SHGC-0.21
U.VALUE- 0.32
SHGC-0.33

INSULATION VALUES
FLOOR R-30
WALLS R-19
ROOF R-38

DOORS

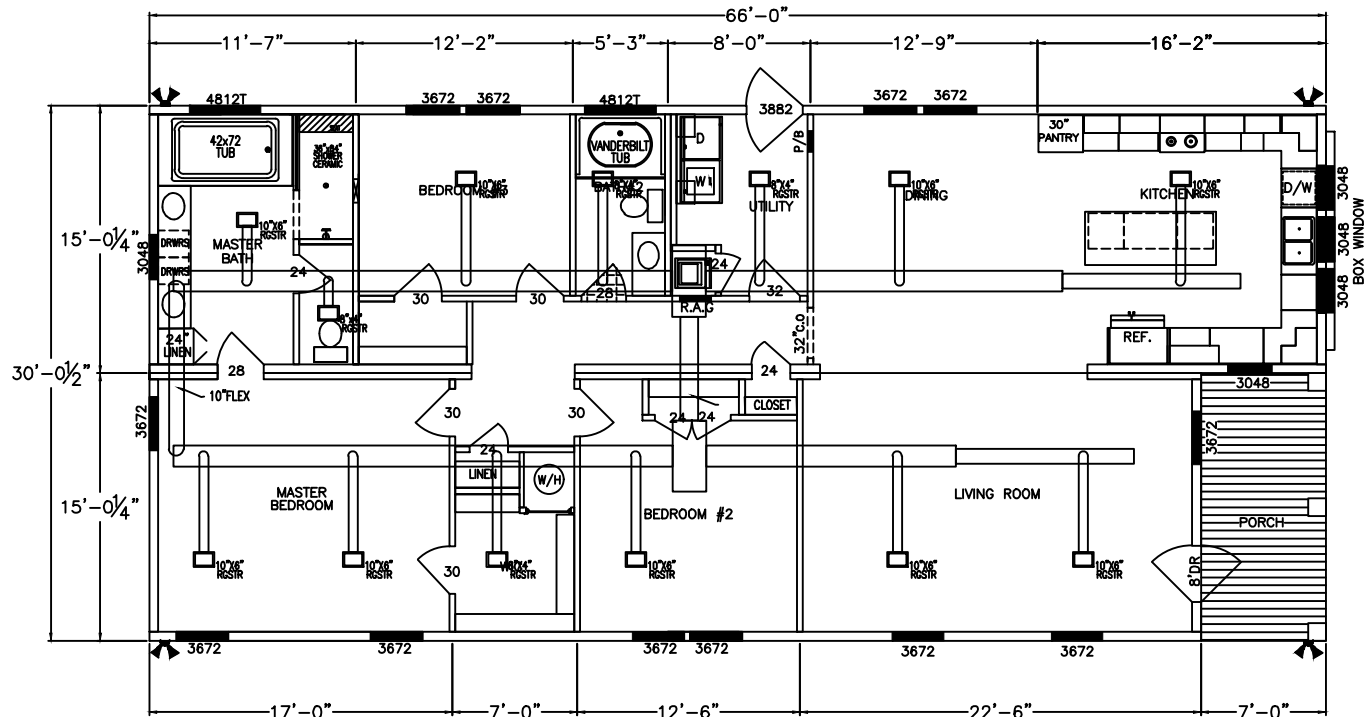
38"x80" STEEL DOOR	0.17	0.01
38"x80" 1/2 ATRIUM	0.43	0.30
38"x80" STEEL DOOR	0.34	0.19

6" SIDE WALLS
9'-0" CEILINGS
MODULAR HOME
UP-FLOW HEAT DUCT

PHYSICAL ADDRESS

sw coyote cir
FORT WHITE FL, 32038
COLUMBIA COUNTY

6/12 HINDGED ROOF 9; CEILING HEIGHT



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

APPROVED BY
NIA INC.

Consol. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 130 MPH Vult. 101 MPH Vap.
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: NET10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

			BY:	DATE:		FRANKLIN STRUCTURES, LLC. RUSSELLVILLE, ALABAMA			
DRAWN:						TITLE:	NO:	REV:	SHT:
CHKD:						UPFLOW HEAT DUCT	FP-8015-70-3-32-2		
SCALE:			N.T.S.						



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: 130 MPH Vult, 101 MPH Vavg
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT-10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Job: MFT-10886-8015-70-3-32-2
Date: 6/7/22
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN STRUCTURES, MFT-10886-8015-70-3-32-2

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	7.9 kW
Heating output	26807 Btuh
Temperature rise	25 °F
Actual air flow	960 cfm
Air flow factor	0.038 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Generic
Trade	
Cond	SEER 14.0
Coil	
AHRI ref	
Efficiency	12.2 EER, 14 SEER
Sensible cooling	22590 Btuh
Latent cooling	9682 Btuh
Total cooling	32272 Btuh
Actual air flow	960 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.74

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
BA1	176	2759	1503	106	67
T	28	85	75	3	3
B3	157	1991	2367	76	106
BA2	61	692	493	26	22
HALL	105	0	0	0	0
UTL	88	1295	833	50	37
D/R KIT	431	6313	4835	241	217
B1	255	4031	3987	154	179
WIC	55	728	383	28	17
C/L	23	0	0	0	0
B2	188	2176	2878	83	129
L/R	338	5037	4084	193	183

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



Right-Suite® Universal 2022 22.0.01 RSU02009

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Page 1

...S:\Franklin\MFT-10886 8015-70-3-32UFL-FL-MOD.rup Calc = MJ8 Front Door faces: W

Entire House	1903	25108	21437	960	960
Other equip loads		1699	842		
Equip. @ 1.01 RSM			22591		
Latent cooling			7960		
TOTALS	1903	26807	30550	960	960

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: 130 MPH Vult, 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

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



wrightsoft[®]
A Mittek® / Berkshire Hathaway Company

Right-Suite® Universal 2022 22.0.01 RSU02009

...S:\Franklin\MFT-10886 8015-70-3-32UFL-FL-MOD.rup Calc = MJ8 Front Door faces: W

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Page 2

Project Information

For: FRANKLIN STRUCTURES, MFT-10886-8015-70-3-32-2

Notes:

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: 130 MPH V_{dir}, 101 MPH V_{iso}
 Fire Rating of Ext. Walls: 0 Hr
 Plan No.: MFT-10886-8015-70-3-32-2
 Allow. Floor Load: 40 PSF
 Approval Date: 6/15/2022
 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

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

Heating Summary

Structure	19486 Btuh
Ducts	5622 Btuh
Central vent (36 cfm)	1699 Btuh
Outside air	
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	26807 Btuh

Sensible Cooling Equipment Load Sizing

Structure	16221 Btuh
Ducts	5216 Btuh
Central vent (36 cfm)	842 Btuh
Outside air	
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	1.01
Equipment sensible load	22591 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

Latent Cooling Equipment Load Sizing

Structure	4012 Btuh
Ducts	2062 Btuh
Central vent (36 cfm)	1886 Btuh
Outside air	
Equipment latent load	7960 Btuh

	Heating	Cooling
Area (ft ²)	1903	1903
Volume (ft ³)	17128	17128
Air changes/hour	0.45	0.20
Equiv. AVF (cfm)	128	57

Equipment Total Load (Sen+Lat)	30550 Btuh
Req. total capacity at 0.70 SHR	2.7 ton

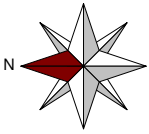
Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	
Efficiency	100 AFUE
Heating input	7.9 kW
Heating output	26807 Btuh
Temperature rise	25 °F
Actual air flow	960 cfm
Air flow factor	0.038 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

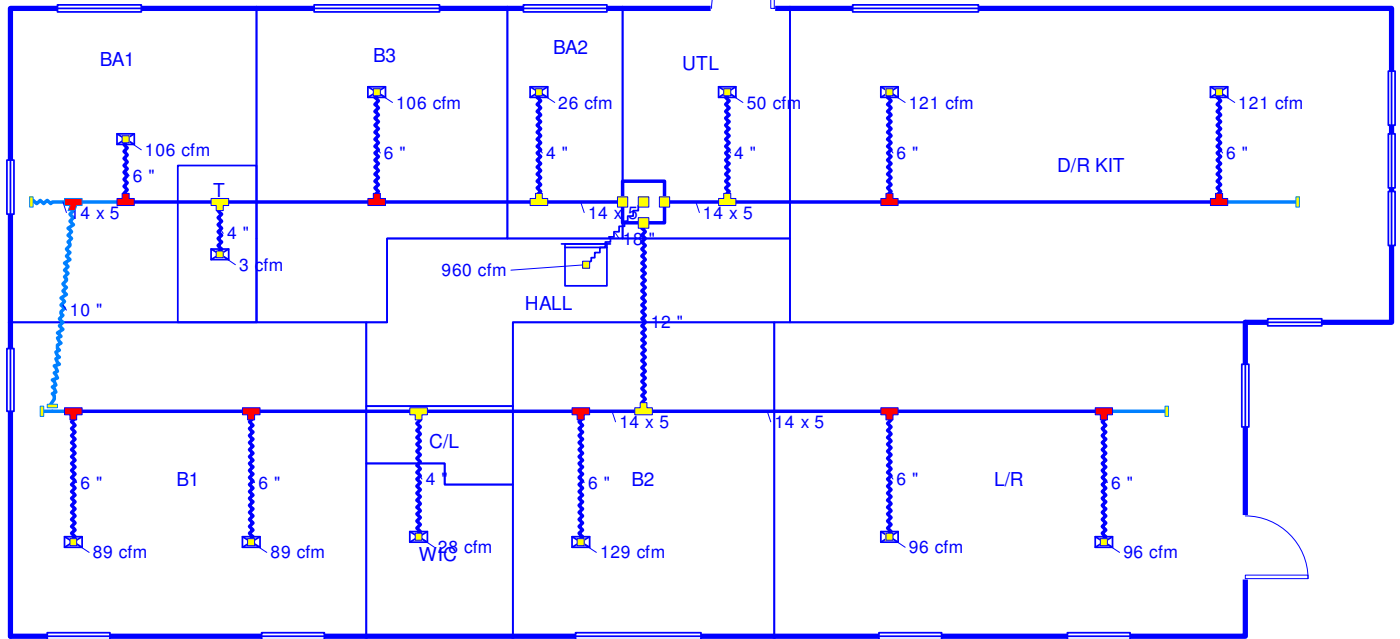
Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER 14.0
Coil	
AHRI ref	
Efficiency	12.2 EER, 14 SEER
Sensible cooling	22590 Btuh
Latent cooling	9682 Btuh
Total cooling	32272 Btuh
Actual air flow	960 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.74

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: 130 MPH Valt, 101 MPH Valt
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

Job #: MFT-10886-8015-70-3-32
Performed by AMS of Indiana, Inc. for:
FRANKLIN STRUCTURES

Scale: 1 : 110
Page 1
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MOD....

Project Information

For: FRANKLIN STRUCTURES, MFT-10886-8015-70-3-32-2

	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	0.190 / 0.050 in H ₂ O	0.190 / 0.050 in H ₂ O
Lowest friction rate	0.078 in/100ft	0.078 in/100ft
Actual air flow	960 cfm	960 cfm
Total effective length (TEL)	307 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
B1	c 1993	77	89	0.080	6.0	0x0	VIFx	42.5	195.0	st4
B1-A	c 1993	77	89	0.079	6.0	0x0	VIFx	34.0	205.0	st4
B2	c 2878	83	129	0.078	6.0	0x0	VIFx	18.3	225.0	st4
B3	c 2367	76	106	0.107	6.0	0x0	VIFx	17.0	160.0	st3
BA1	h 2759	106	67	0.114	6.0	0x0	VIFx	26.8	140.0	st3
BA2	h 692	26	22	0.109	4.0	0x0	VIFx	9.3	165.0	st3
D/R KIT	h 3157	121	108	0.122	6.0	0x0	VIFx	16.0	140.0	st1
D/R KIT-A	h 3157	121	108	0.117	6.0	0x0	VIFx	31.8	130.0	st1
L/R	h 2518	96	91	0.082	6.0	0x0	VIFx	37.3	195.0	st5
L/R-A	h 2518	96	91	0.082	6.0	0x0	VIFx	26.8	205.0	st5
T	c 75	3	3	0.111	4.0	0x0	VIFx	21.8	150.0	st3
UTL	h 1295	50	37	0.120	4.0	0x0	VIFx	8.3	150.0	st1
WIC	h 728	28	17	0.079	4.0	0x0	VIFx	25.8	215.0	st4

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st3	Peak AVF	211	199	0.107	435	7.6	5 x 14	ShtMetl	st2 st2
st1	Peak AVF	291	254	0.117	599	8.4	5 x 14	ShtMetl	
st4	Peak AVF	265	325	0.078	668	9.5	5 x 14	ShtMetl	
st5	Peak AVF	193	183	0.082	396	7.7	5 x 14	ShtMetl	
st2	Peak AVF	458	508	0.078	646	12.0	0 x 0	VinIFlx	

Bold/italic values have been manually overridden

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	0x 0	960	960	64.1	0.078	543	18.0	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: 130 MPH Vult. 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC





Comd. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 130 MPH Vult. 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr.
Plan No.: MFT10866-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

PRODUCT APPROVAL SPECIFICATION SHEET

Manufacturer: Franklin Structures, LLC.

Plan #: MFT10866-8015-70-3-32-2

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	15362 R3
Sliding	Jeld-Wen	Sliding Glass Door	11109 R9
Swinging	Dunbarton	ATRUIM Frame	9231 R7
9231.1, 15362.1, 15362.3,15362.9, 15362.12,			
Sliding	VIWINCO	Sliding Glass Door	15590 R10
Sliding	MI	Sliding Glass Door	21638
WINDOWS			
Single Hung	KINRO	WINDOWS	993.2 R18
Picture Window	MI	WINDOWS	21639
Single Hung	MI	WINDOWS	21637
Single Hung	VIWINCO	WINDOWS	15576 R9
ROOFING PRODUCTS			
Metal roof	Roof Mart LLC	26 GA PBR ROOF PANEL(12718.1)	12718-R3
Underlayments	FTSYNTHETICS INC	METAL ROOFING UNERLAYMENT	20853-R4
Asphalt Shingles	Owens Corning	Classic 3-Tab	10674-R16
Underlayments	Owens Corning	Oakridge	17420.1-R6
Asphalt Shingles	Tamko Shingles	Classic 3-Tab	18355-R8
PANEL WALL			
Siding	CEMPLANK LAP SIDING		13192 R6
Siding	ROYAL BUILDING PRODUCTS(D45DLSTD)		21069 R3
Siding	ELM GROVE PVC SIDING		19130.1R7
Soffits	LP SMART SOFFIT		9103-R6
Soffits	HARDIESOFFIT		13265 R6
STRUCTURAL COMPONENTS			
Wood Connector / Anchor	Simpson	HDU11-SDS2.5	10441 R6
Wood Connector / Anchor	Simpson	HD3B	11496 R6
Wood Connector / Anchor	Simpson	HDQ8	10441-R6
Wood Connector / Anchor	Simpson	CMSTC16	10852/13872 R4
Wood Connector / Anchor	Simpson	LSTA18	10456.15
Wood Connector / Anchor	Simpson	STHD14	10441.12
Truss Plates	MiTek	MT18 & MT20	2197 R9
Engineered Lumber	Weyerhaeuser	Microllam LVL	6257 R13
Engineered Lumber	Versa-lam	Microllam LVL	1644-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.

Robert K Gann

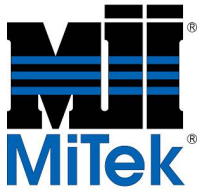
Manufacturer's Authorized Agent Signature

Robert k Gann

Printed Name

5/17/2022

Date



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

RE: MH7281R24-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: N/A Wind Speed: 140 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	I45895620	A1	4/29/21
2	I45895621	A1P	4/29/21

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



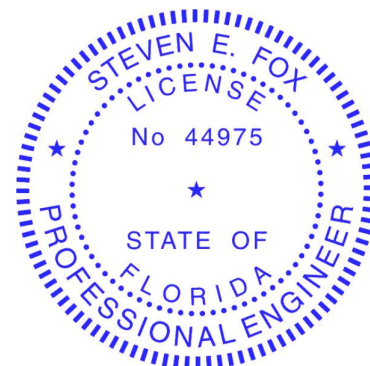
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Wind Velocity: 130 MPH Vult. 101 MPH Vag.
Fire Rating of Ext. Walls: 0 Hr.
Plan No: MET10886-S014-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

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:

April 29, 2021

Fox, Steve

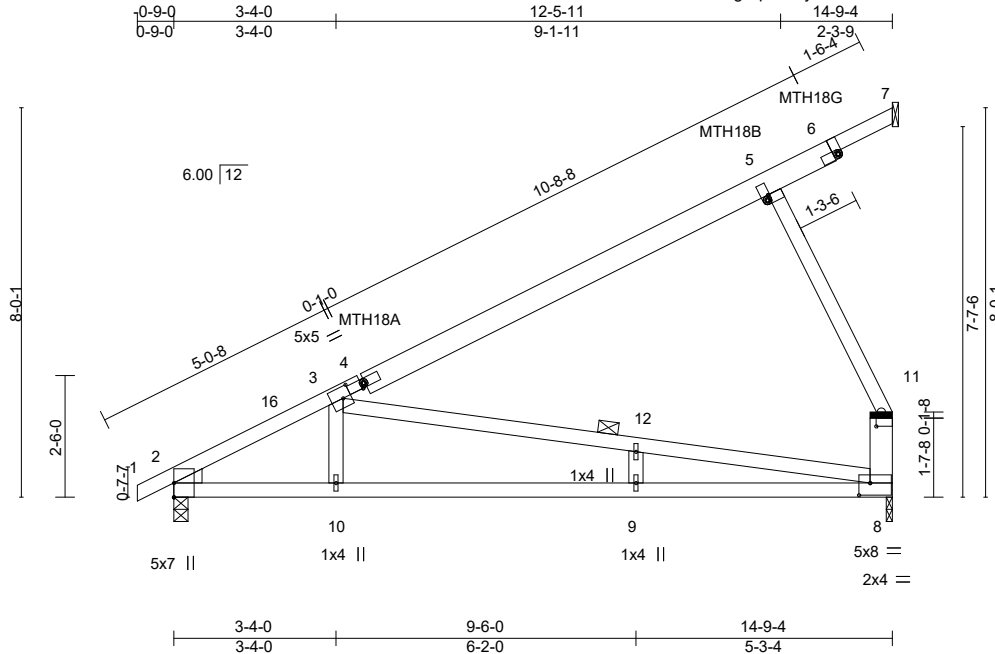
1 of 1

Job	Truss	Truss Type	Qty	Ply	
MH7281R24-FL20	A1	HINGED MONO	1	1	145895620

Franklin Structures, LLC.,

Russellville, AL - 35653,

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Apr 29 13:21:29 2021 Page 1
ID:BRaPv9Nif1RAr?agFqchTAYUDZv-mFliJDVNDuRs0cDSbK1px3dvVko2giNXR81TZRzLrVK



Scale = 1:47.4

Plate Offsets (X,Y)-- [3:0-2-0,0-2-12], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [6:0-2-7,15-4-6], [8:0-2-12,0-3-0], [8:0-1-8,1-2-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	-0.31 9 >557 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.58 9-10 >299 180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.02 8 n/a n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR				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 5-4-4 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-5-6 oc bracing.
WEBS 2x4 SPF Stud *Except* 8-11: 2x6 SPF No.2, 3-8: 2x4 SPF No.2	WEBS 1 Row at midpt 3-8
WEDGE Left: 2x4 SPF No.2	

REACTIONS. (size) 2=0-3-8, 8=0-1-8, 7=Mechanical
Max Horz 2=383(LC 10), 7=77(LC 10)
Max Uplift 2=-211(LC 10), 8=-349(LC 10)
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 2-16=-1080/242, 3-16=-1016/255, 3-4=-336/0, 4-5=-343/46, 8-11=-299/346
BOT CHORD 2-10=-587/874, 9-10=-578/878, 8-9=-578/878
WEBS 3-10=0/333, 3-12=-742/421, 8-12=-749/413, 5-11=-332/384

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
11=332/384/166/0

NOTES-

- 1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; 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 14-8-8 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) 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 211 lb uplift at joint 2 and 349 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: 130 MPH Vult, 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MET10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
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:

April 29,2021

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

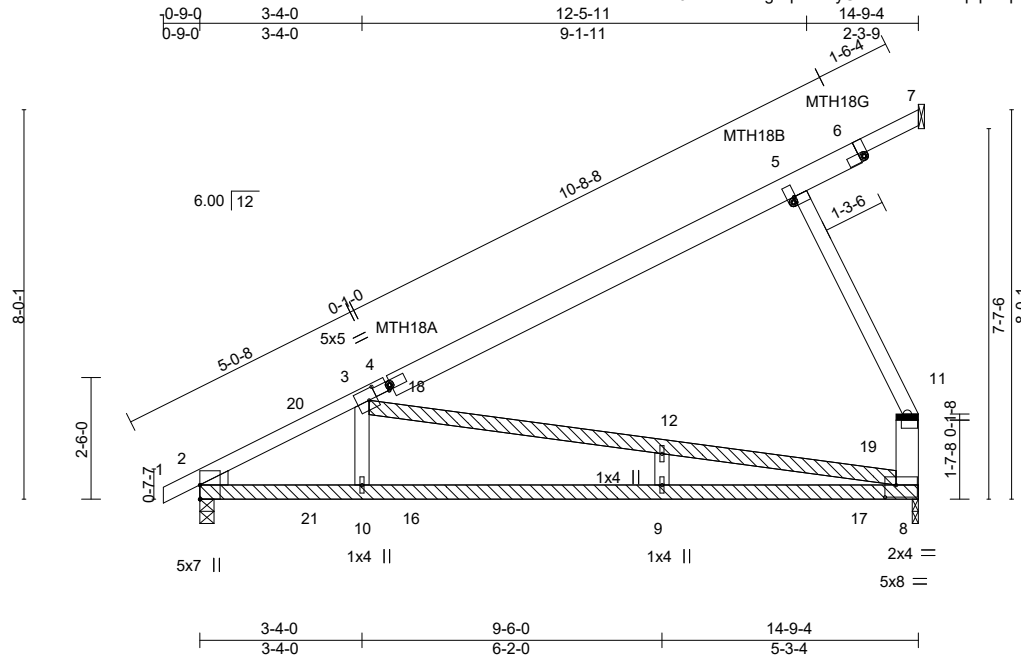
Job	Truss	Truss Type	Qty	Ply	
MH7281R24-FL20	A1P	HINGED MONO	1	1	145895621

Franklin Structures, LLC.,

Russellville, AL - 35653,

ID:BRaPv9Nif1RAr?agFqcHTAyUDZv-PTMXY4qFphNpI0xhJa1hfILf9G9YMrIYRTWbhzLrWC

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Apr 29 13:20:33 2021 Page 1



Scale = 1:47.4

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

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.48	Vert(LL) 0.52	9-10	>334	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.25	BC 0.75	Vert(CT) 0.42	9-10	>412	180	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.81	Horz(CT) -0.03	8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MR						
							Weight: 98 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 5-7-3 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 5-2-6 oc bracing.
WEBS 2x4 SPF Stud *Except* 8-11: 2x6 SPF No.2, 3-8: 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	
LBR SCAB 2-8 2x4 SPF No.2 one side 3-8 2x4 SPF No.2 one side	
WEDGE Left: 2x4 SPF No.2	

REACTIONS. (size) 2=0-3-8, 8=0-1-8, 7=Mechanical
Max Horz 2=383(LC 10), 7=77(LC 10)
Max Uplift 2=-260(LC 7), 8=-356(LC 7)
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 2-20=-1043/1588, 3-20=-976/1601, 3-4=-327/0, 4-5=-341/46, 8-11=-299/346
BOT CHORD 2-21=-1756/841, 10-21=-1756/841, 10-16=-1750/841, 9-16=-1750/841, 9-17=-1750/841, 8-17=-1750/841
WEBS 3-10=-574/288, 3-18=-705/1594, 12-18=-705/1594, 12-19=-712/1628, 8-19=-712/1628, 5-11=-332/384

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
11=332/384/166/0

- 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 4-1-0; starting at 12-6-8 from end at joint 2, nail 1 row(s) at 7" o.c. for 2-0-0.
 - Attached 10-11-10 scab 3 to 8, front face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c..
 - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; 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 14-8-8 zone; end vertical left exposed; 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.

Continued on page 2

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

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: 130 MPH Valt, 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MET10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
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:

April 29,2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
MH7281R24-FL20	A1P	HINGED MONO	1	1	I45895621
					Job Reference (optional)

Franklin Structures, LLC., Russelville, AL - 35653, 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Apr 29 13:20:34 2021 Page 2
ID:BRaPv9Nif1RAr?agFqchTAyUDZv-tfwvmQrta?Vgw9WttHYwCSrWPZcOHp4Rn5C377zLrWB

NOTES-

- 10) * 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.
- 11) Refer to girder(s) for truss to truss connections.
- 12) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 260 lb uplift at joint 2 and 356 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: 130 MPH Vult. 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

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

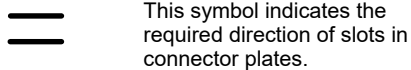
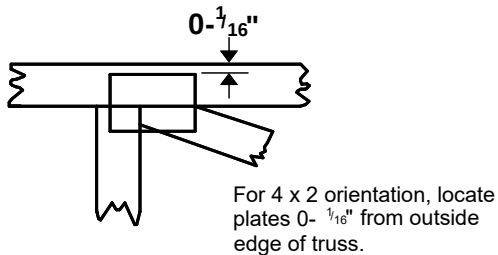
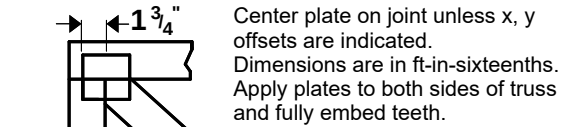
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

Symbols

PLATE LOCATION AND ORIENTATION



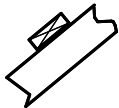
* Plate location details available in MiTek 20/20 software or upon request.

PLATE SIZE

4 x 4

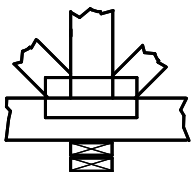
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

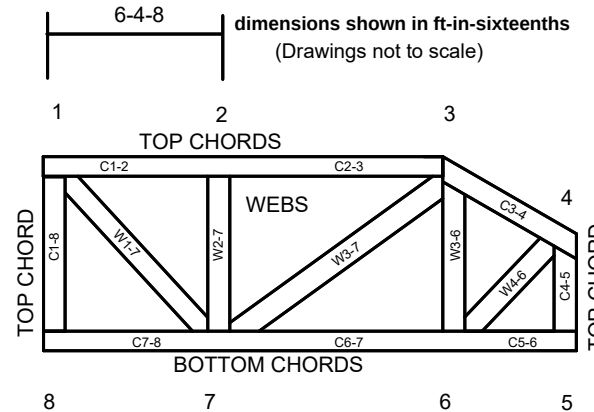


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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-1397, ESR-2362, ESR-1397, ESR-3282

These prints comply with the Florida Manufactured Building Code and adopted Codes and Ordinances in the following criteria:	Const. Type: VB-unprotected
	Occupancy: Single Family Dwelling
	Allowable No. of Floors: 1
	Wind Velocity: 130 MPH Vel. 101 MPH Vel.
	Fire Rating of Ext. Walls: 0 Hr
	Plan No.: MET10886-8015-70-3-32-2
	Allow. Floor Load: 40 PSF
	Approval Date: 6/15/2022
	Manufacturer: Franklin Structures, LLC

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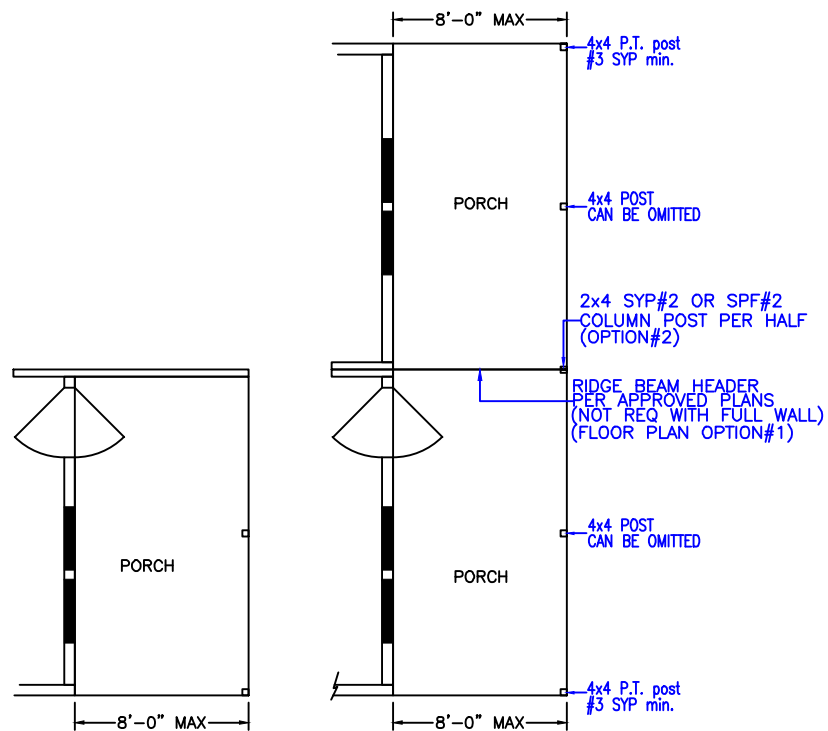


MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

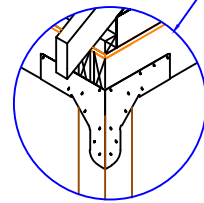
Failure to Follow Could Cause Property Damage or Personal Injury

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.

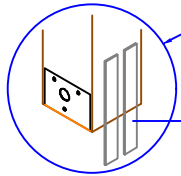


TYPICAL PLAN DETAIL
OPTION#1

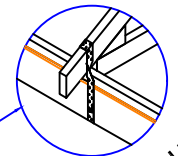
TYPICAL PLAN DETAIL
OPTION#2



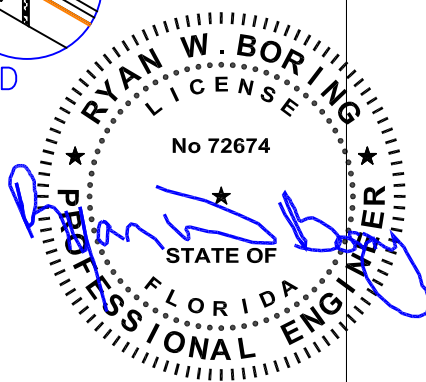
SIMPSON RTC44 CORNER BRACKET
FASTENED W/ (29).162 X 3.1/2" NAILS
(TYPICAL AT ALL CORNERS)



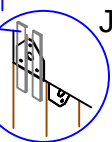
SIMPSON BC40 BRACKET
FASTENED W/ (10).162 X 3.1/2" NAILS
(2) SIMPSON LSTA-18 STRAP FROM
PORCH POST TO RIM JOIST
FASTENED W/ (14).162 X 3.1/2" NAILS



SIMPSON LTS18 BRACKET FASTENED
W/ (12).162 X 3.1/2" NAILS



Jun 14, 2022



(2) SIMPSON LSTA-18 STRAP FROM
PORCH POST TO 7.1/4" L.V.L
FASTENED W/ (14).162 X 3.1/2" NAILS

SIMPSON BC4 BRACKET
FASTENED W/ (12).162 X 3.1/2" NAILS

All exposed fasteners must
be corrosion resistant.

NOTES:

1. Ceiling material in porch area to be vinyl soffit.
2. Ref. sidewall section for sidewall construction.
3. Ref. floor section for floor construction.

RIDGE BEAM HEADER
PER APPROVED PLANS
(NOT REQ WITH FULL WALL)
(FLOOR PLAN OPTION#1)
FASTEN TRUSS TO HEADER W/
MIN.(5)0.131"x3" NAILS OR
LVS26 HANGER

Std. Endwall construction

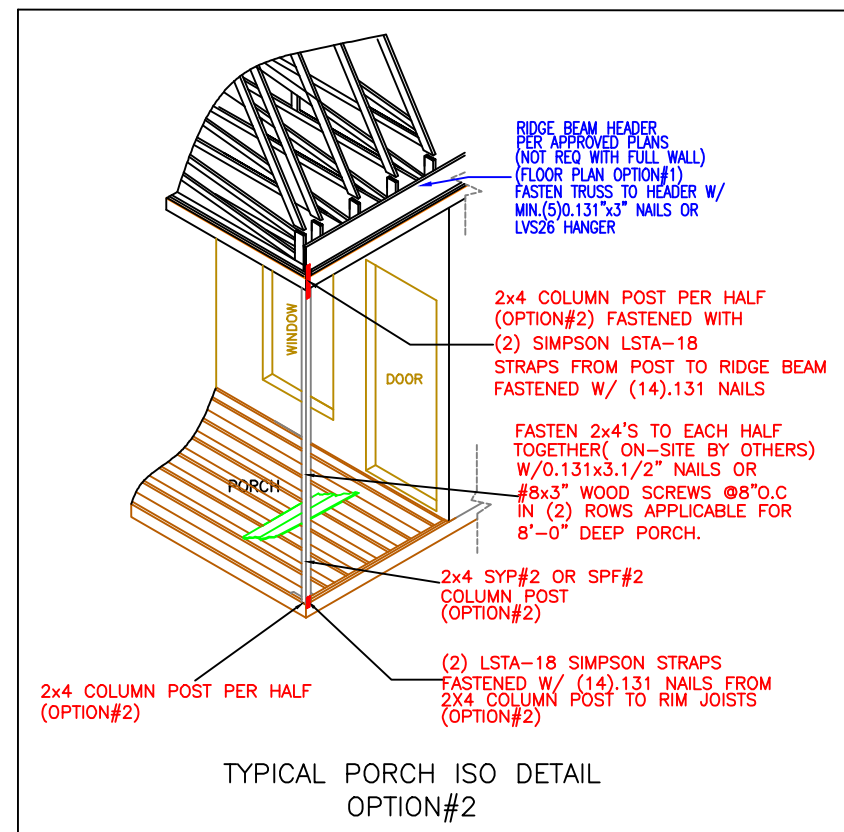
2x4 COLUMN POST PER HALF
(OPTION#2) FASTENED TO
7.1/4"L.V.L W/ (4).131 NAILS
AND W/(2) SIMPSON LSTA-18
STRAPS FROM POST TO RIDGE BEAM
FASTENED W/ (14).131 NAILS

NOT SHOWN THRU TO SEE FLOOR JOIST
5/4 P.T. decking on
P.T. joists, Fasten board
to each joist with (2)
.120x3" nails.

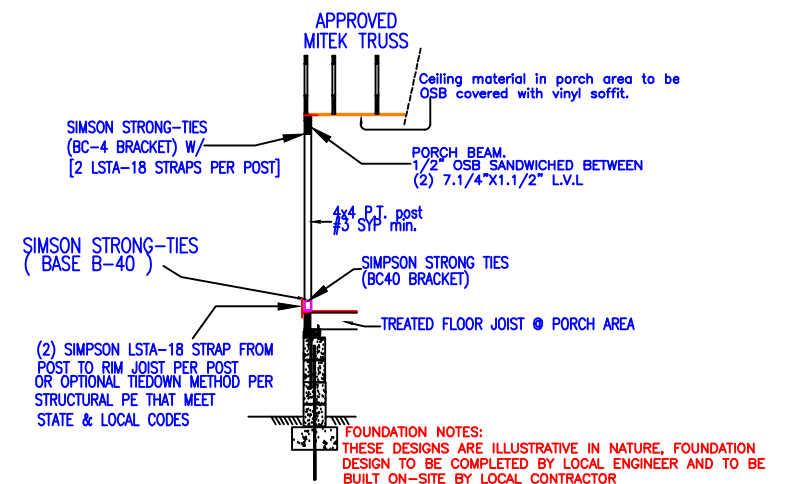
4x4 P.T. POST
#3 SYP min.
(OPTION#1)

SIMPSON BC40 BRACKET
FASTENED W/ (10) .162 X 3.1/2" NAILS
AT EACH POST

(2) SIMPSON LSTA-18 STRAP FROM
PORCH POST TO RIM JOIST PER POST
OR OPTIONAL TIEDOWN METHOD PER STRUCTURAL
PE THAT MEET STATE & LOCAL CODES



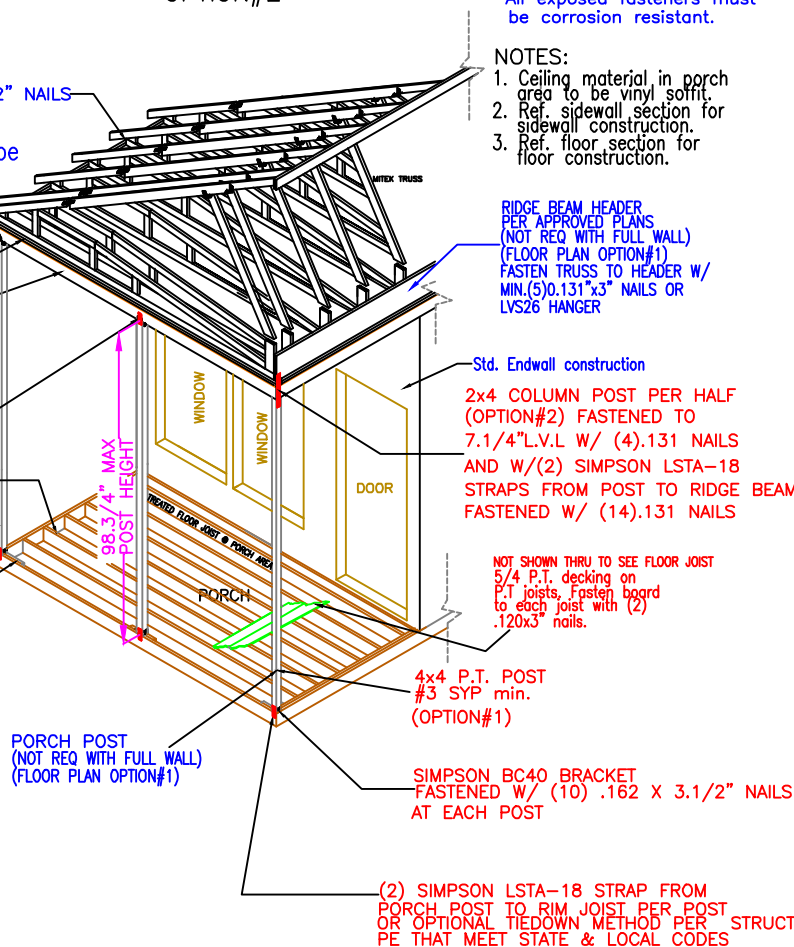
TYPICAL PORCH ISO DETAIL
OPTION#2



TYPICAL POST CROSSSECTION DETAIL

FOUNDATION NOTES:
PORCH SUPPORT SYSTEM & CONNECTIONS
ON SITE BY LOCAL ENGINEER.

TYPICAL PORCH ISO DETAIL
OPTION#1



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: 130 MPH Vult. 101 MPH Vasd.
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

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

APPLICABLE TO:
2012 & 2015 IRC
5PSF MAX. GROUND SNOW LOAD
180" MAX. UNIT WIDTH
WIND SPEED:
130MPH Vasd.
167MPH Vult.
EXPOSURE "C"
20' MAX MEAN ROOF HEIGHT.



FRANKLIN STRUCTURES, LLC.
10655 HWY. 43 SOUTH
RUSSELLVILLE, ALABAMA 35653
Phone:(256)332-4510
Fax:(256)331-2206

MODULAR



BY:	DATE:	TITLE:	TYPICAL PORCH DETAIL	
DRAWN: STAFF	3-19-20			
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO: MTF-10886-8015-70-3-32-2	REV:	SHEET: