

Notes:

1. These plans comply with the 8th Edition (2023) Florida Residential Building Code W/ **2024 SUPPLEMENT 1**, 8TH EDITION (2024) FLORIDA ENERGY CONSERVATION CODE, and 2020 National Electrical Code.
2. 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 w/compliance to 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.

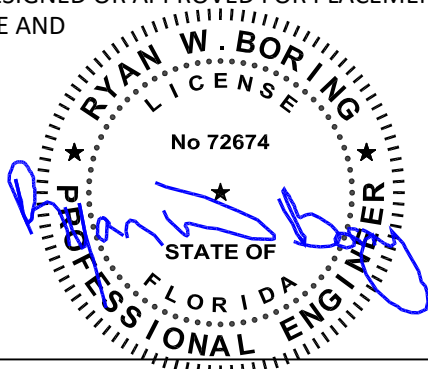
SPECIAL CONDITIONS & REQUIREMENTS:

1. Engineer seal applies ONLY to FACTORY MANUFACTURED portion of the building. Seal does not apply to site installed elements or portions built on site such as, but not limited to; foundation, bracing tie down to foundation, exterior steps, or other site works. Site work must be designed BY OTHERS for site conditions, under local jurisdiction.
2. THIS BUILDING HAS NOT BEEN DESIGNED OR APPROVED FOR PLACEMENT IN HIGH HURRICANE ZONES (HVHZ) (I.E DADE AND BROWARD COUNTIES)

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
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult
Fire Rating of Ext. Walls: 0
Plan No.: MFT-15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes



Document Description:

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HVAC CALCULATIONS (WF	 8 Pages
FLORIDA PRODUCT APPR	 1 Page
TRUSS PRINTS.....	 4 Pages
ENERGY FORMS.....	 3 Pages



Notes:

7. Vult wind speed = EXPOSURE-C AT (Vult=160 & Vasd = 124MPH)
8. RISK CATEGORY = II
9. Building Mean Roof Height = 20ft
10. Roof live load = 20 psf
11. Floor live load = 40 psf
12. Seismic Zone = A, B or C
13. Building Category = Type 5B, Unprotected, Wood Construction.
14. Use Group = Single Family Dwelling
15. Roof Interior (Zone 1) = +26.5/-65.7 psf
16. Roof Exterior (Zone 2) = +26.5/-86.8 psf
17. Roof Corner (Zone 3) = +26.5/-113.9 psf
18. Wall Interior (Zone 4) = +35.6/-38.6 psf
19. Wall Exterior (Zone 5) = +35.6/-47.6 psf
20. Roof Overhang (Zone 1) = -80.8 psf
21. Roof Overhang (Zone 2) = -110.9 psf
22. Roof Overhang (Zone 3) = -147.1 psf
23. Site address per FRC R319.1
24. 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 2023 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) ALL GAS LINES ARE TO BE DESIGNED AND INSTALLED ON-SITE. THEY ARE THE RESPONSIBILITY OF THE LOCAL CONTRACTOR AND ARE SUBJECT TO LOCAL CODES.
- 10) ANY SITE FLASHING OR SHINGLES INSTALLED AT SITE REFER TO ARMA PUBLICATION "RESIDENTIAL ASPHALT ROOFING MANUAL", IN GUIDE LINES WITH FBC CODE
- 11) ALL FOUNDATION WORK WILL BE COMPLETED ON SITE. IS THE RESPONSIBILITY OF THE LOCAL CONTRACTOR AND IS SUBJECT TO LOCAL JURISDICTION.
- 12) MANDATORY BLOWER DOOR TEST MUST BE COMPLETED PER FLORIDA ENERGY CODE
- 13) MAIN DISCONNECT WILL BE INSTALLED ON-SITE AND SUBJECT TO LOCAL CODES
- 14) FIRE PLACE UNIT AND CHIMNEY PIPE (IF APPLICABLE) AND SUBJECT TO LOCAL CODES
- 15) HVAC EQUIPMENT AND RETURN (IF APPLICABLE) SUBJECT TO LOCAL CODES
- 16) ANY WINDBORNE DEBRIS PROTECTION TO BE PROVIDED ON-SITE BY OTHERS AND SUBJECT TO LOCAL CODES a.) Wood structural panels to be provided for all glazed openings per R301.2.1.2
- 17) INSTALLATION OF THE METAL ROOF(IF APPLICABLE)
- 18) ANY RADON CONTROL (IF APPLICABLE) TO BE PROVIDED ON-SITE BY OTHERS AND SUBJECT TO LOCAL CODES

This building has not been designed or approved for placement in High Velocity Hurricane Zones (HVHZ) i.e. Dade and Broward Counties

Florida Plan Number: Model MFT-15372-624-84-4-32

PHYSICAL ADDRESS

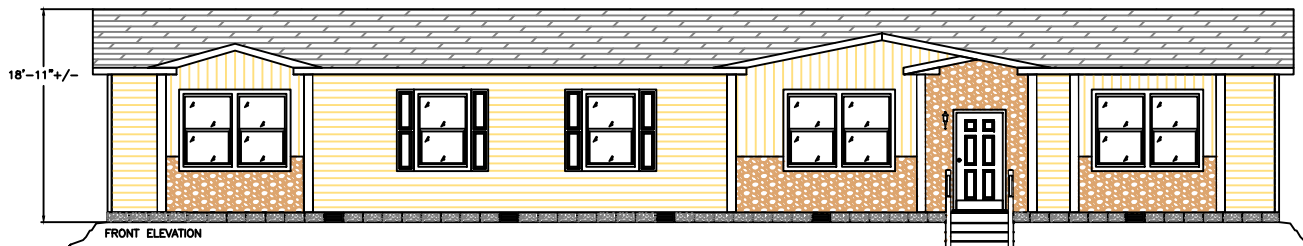
NW MICKLER GIN
LAKE CITY, FL 32055
COLUMBIA COUNTY

		FRANKLIN HOMES, INC. 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653	FLORIDA MODULAR	
DRAWN: IRH	BY:	DATE: 01/19/25	TITLE: MODULAR INDEX	
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO: MFT-15372-624-84-4-32	REV:	SHEET: 1 of 7

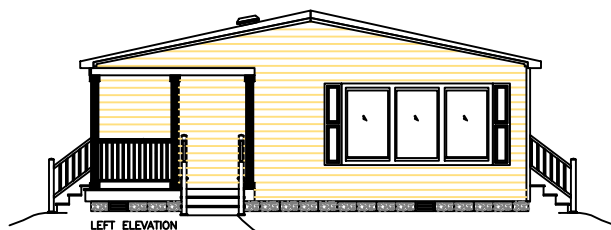
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Florida Manufactured Building
Act and adopted Codes and
adhere to the following criteria:

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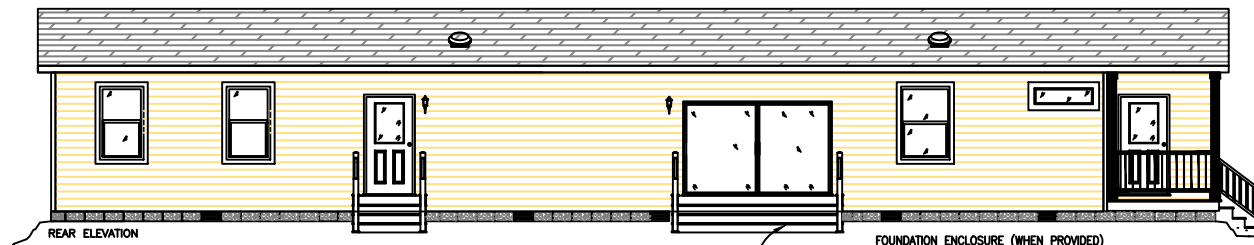
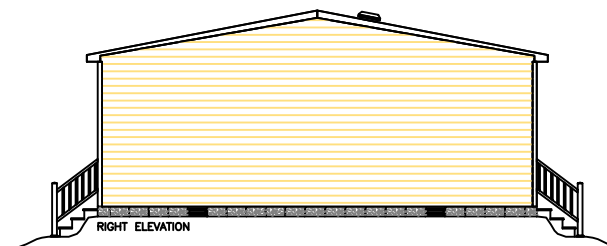
Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH V-B
Fire Rating of Ext. Walls: 0
Plan No.: MFT-15732-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes



HANDICAP RAMP(S), STAIRS(S), AND HANDRAILS
ARE SITE INSTALLED, DESIGNED BY OTHERS,
AND SUBJECT TO LOCAL JURISDICTION.



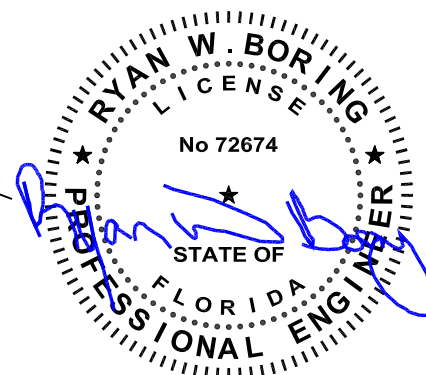
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ARE SITE INSTALLED, DESIGNED BY OTHERS,
AND SUBJECT TO LOCAL JURISDICTION.

FOUNDATION ENCLOSURE (WHEN PROVIDED)
MUST HAVE 1 SQUARE FOOT NET VENT
AREA PER 150FT OF THE FLOOR AREA
AND AN 18"x24" MINIMUM CRAWL SPACE
ACCESS, SITE INSTALLED BY OTHERS.
SUBJECT TO LOCAL JURISDICTION.

ACCESS, SITE INSTALLED BY OTHERS.



Feb 13, 2025

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

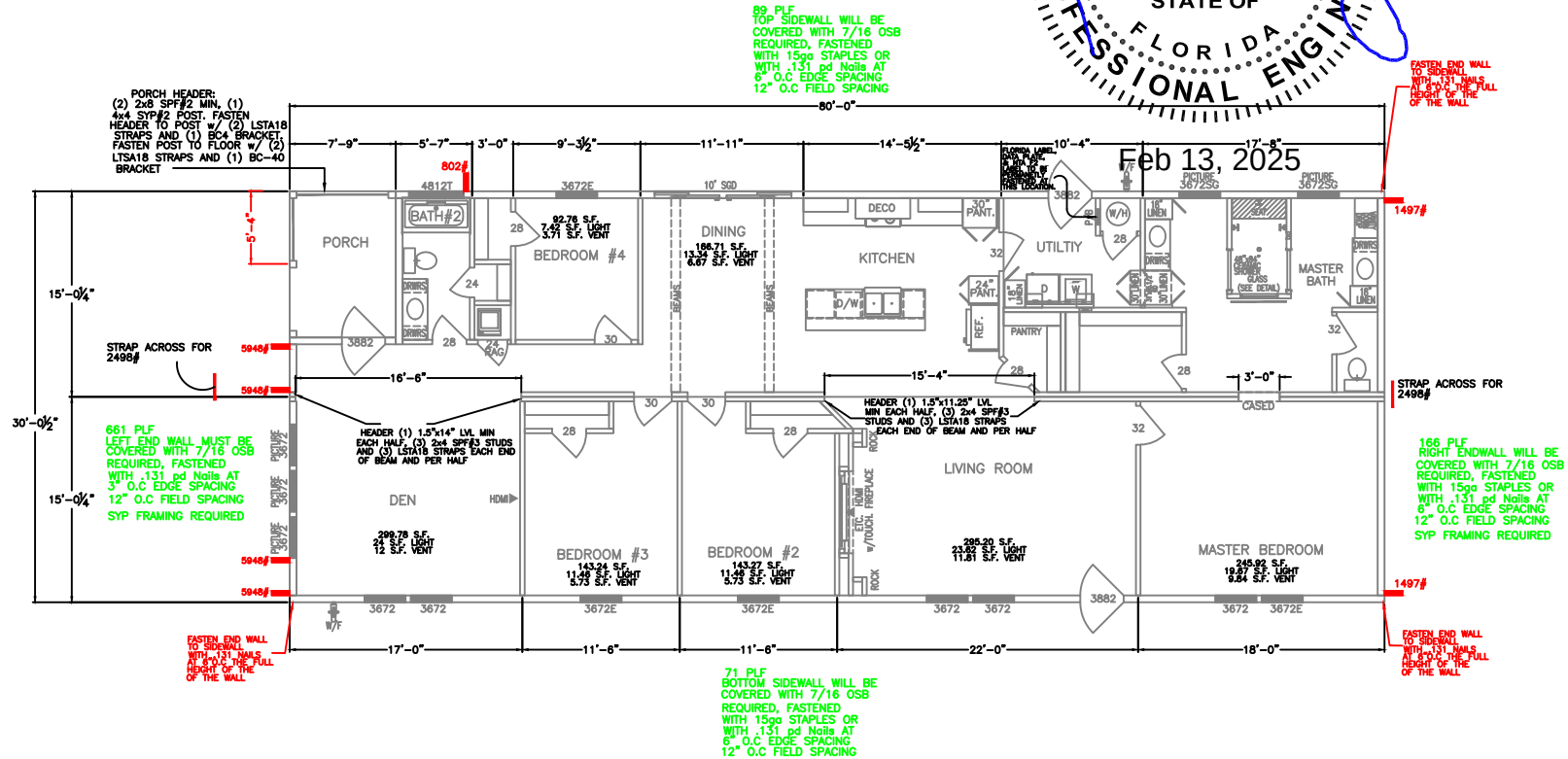
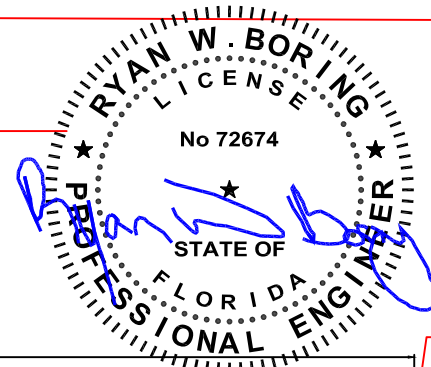
- EXTERIOR COVERING IS VINYL LAP SIDING WITH VINYL APPURTENANCES STANDARD. OTHER EXTERIOR COVERINGS SHALL CONFORM TO INTERNATIONAL BUILDING CODE. EXTERIOR COVERINGS FOR FRONT AND REAR ELEVATIONS ARE SUPPLIED BY FRANKLIN HOMES AND INSTALLED ON-SITE BY LOCAL CONTRACTOR.
- ROOF COVERING IS 240# FIBERGLASS SHINGLES. SHINGLES FOR RIDGE ARE SUPPLIED BY FRANKLIN HOMES, INSTALLED ON-SITE BY LOCAL CONTRACTOR.
- WINDOWS ARE VINYL CLAD THERMOPANE.
- MINIMUM ATTIC VENTILATION VIA CONTINUOUS VENTILATED SOFFIT & WHIRLY BIRD VENTS IS 8.00 SQ.FT PER 2400 SQ.FT. OF HOME DIVIDED BY 300 SQ.FT. OF CONTINUOUS VENTILATION
- CRAWL SPACE VENTILATION SHALL CONFORM TO REQUIREMENTS OF 1/150 { BY OTHERS }
- FOUNDATIONS INSTALLED BY LOCAL CONTRACTOR PER LOCAL CODE REQUIREMENTS.
- SHUTTERS SHOWN ARE NON-STRUCTURAL (AVAILABLE AS OPTION).

REVISION:	BY:	DATE:

		FRANKLIN HOMES, LLC. 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653		TYPICAL MODULAR		
DRAWN:	JW	DATE:	01/19/25	TITLE:	ELEVATIONS	
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO:	MFT-15732-624-84-4-32	REV:		SHEET: 2 of 7

TIE-DOWNS LOCATIONS
ON-SITE BY OTHERS

89061BS TOTAL LATERAL LOAD THIS DIRECTION

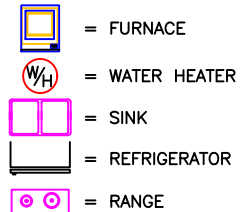


END ZONE
NOTE:
ROOF DECKING MUST BE
FASTENED WITH 0.131x2.5Nails
3" O.C BOUNDARY
3" O.C EDGE
3" O.C FIELD

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

APPROVED BY
NIA INC.

Const. Type: VB
Occupancy: Single Family Dwellings
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: NIA-12372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/19/2025
Manufacturer: Franklin Homes



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

WINDOW SCHEDULE	DOOR SCHEDULE	U.Values	SHGC
3048 VINYL THERMOPANE	24"X80" HOLLOW CORE	N/A	N/A
3672 VINYL THERMOPANE	28"X80" HOLLOW CORE	N/A	N/A
3672 VINYL THERMOPANE (E)*	30"X80" HOLLOW CORE	N/A	N/A
3672 VINYL THERMOPANE (S.G.)	32"X80" HOLLOW CORE	N/A	N/A
U-Values=0.34	32"X80" HOLLOW CORE	N/A	N/A
SHGC=0.22	40"X80" BARN DOOR	N/A	N/A
4812 VINYL THERMOPANE (T)	1-LITE 2 PANEL (3882)	0.34	0.19
U-Values=0.33	10' SGD	0.28	0.16
SHGC=0.32			
(E) = EGRESS WINDOW			
(S.G.) = SAFETY GLAZED			
(T) = TRANSOM			

NOTES!!
1. ATTIC ACCESS (22"X36"MINIMUM)
2. ALL GLAZING TO BE THERMOPANE.
3. APA RATED SHEATHING FASTENED PER APA GUIDELINES TO ACHIEVE REQUIRED PLF's.
4. REFER TO ATTACHED CALCULATIONS FOR BRACEWALLS AND STRUCTURAL REQUIREMENTS.
5. 3" PVC PIPE VENTED THROUGH ROOF AND TERMINATED BELOW FLOOR JOIST FOR PASSIVE RADON CONTROL PER APPENDIX-F
9'-0" SIDEWALLS

		FRANKLIN HOMES, LLC. 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653		FLORIDA MODULAR		
DRAWN:	JW	DATE:	01/19/25	TITLE: FLOORPLAN		
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO:	MFT-15732-624-84-4-32	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&9A	FURNACE	NOTE 2		
10	DRYER	30 AMP/GFI	1	10-3 W/G
11	RANGE	40 AMP/GFI	2	8-3 W/G
11A	GAS RANGE TIMER	15 AMP/AFI/GFI	1	12-2 W/G
12**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
13**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
14	COOKTOP	40 AMP	2	8-3 W/G
14A	GAS COOKTOP IGNITER	15 AMP/AFI/GFI	1	12-2 W/G
15	DBL.OVEN OR OVEN MICROWAVE	40 AMP	2	8-3 W/G
16	DISHWASHER	NOTE 3/AFI/GFI		
17	OPT. WHIRLPOOL	20 AMP/AFI/GFI	1	12-2 W/G
18	RANGE VENT	20 AMP/AFI	1	12-2 W/G
19	MICROWAVE	20 AMP/AFI	1	12-2 W/G
20	BATH RECEPTACLES	20 AMP/AFI/GFI	1	12-2 W/G
21	PORTABLE APPLIANCE	20 AMP/AFI/GFI	1	12-2 W/G

CIR#	DESCRIPTION	BREAKER	POLES	WIRE
22	UTILITY CIRCUIT	20 AMP/AFI/GFI	1	12-2 W/G
23	ON DEMAND EXTERIOR GAS W/H	20 AMP/AFI/GFI	1	12-2 W/G
24	SMOKE DETECTORS	15 AMP/AFI	1	14-2 W/G
25	1ST STORY BAR CIRCUIT	20 AMP/AFI/GFI	1	12-2 W/G
26	2ND STORY BAR CIRCUIT	20 AMP/AFI/GFI	1	12-2 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**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
44**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
45**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
46**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
47**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
48**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
49**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
50**	AC DISCONNECT	25 AMP/AFI	1	10-2 W/G
51	ELECTRIC FIRE PLACE	20 AMP/AFI	1	12-2 W/G
60	REFRIGERATOR CIRCUIT	20 AMP/AFI	1	12-2 W/G
61	1ST STORY MINI FRIDGE CIRCUIT	20 AMP/AFI	1	12-2 W/G
62	1ST STORY ICE MACHINE CIRCUIT	20 AMP/AFI	1	12-2 W/G
63	2ND STORY MINI FRIDGE CIRCUIT	20 AMP/AFI	1	12-2 W/G
64	2ND STORY ICE MACHINE CIRCUIT	20 AMP/AFI	1	12-2 W/G

THIS HOME IS BUILT FOR THE 2020 N.E.C.!!

***ALL RECEPTACLES MUST BE LISTED AS TAMPER RESISTANT**

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

NOTE: ALL CIRCUITS MAY NOT BE USED, SEE APPROVAL DRAWINGS FOR SPECIFIC CIRCUITS GFI REQUIRED WITH I

SYMBOLS:		
S	- SWITCH	☐ - LIGHT VENT FAN
●	- 15 AMP RECEPTACLE	☼ - C/L=CAN LIGHT
●	- 20 AMP RECEPTACLE	☼ - 2' FLUORESCENT
●	- 30 AMP RECEPTACLE	☼ - 4' FLUORESCENT
●	- 40 AMP RECEPTACLE	☼ - OPT. CEILING FAN W/LIGHT
●	- 15 AMP RECEPTACLES LOCATED ABOVE CABINETS FOR OPT. LIGHTS	☼ - COMBO SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR ALARM
☼	- LIGHT FIXTURE	
☼	- LAVLIGHT&PORCH LIGHT	
☼	- SMOKE DETECTOR	
S.D.		
☼	- TELEPHONE	
☼	- TV	
☼	- THERMOSTAT	
GFI*	- MASTER GFI	
P/B	- PANEL BOX	
W/P	- WATERPROOF	

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

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Const. Type: V/B
Occupancy: Single Family Dwelling
Alternate No. of Floors: 1
Wind Velocity: 160 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: MFT-15732-624-84-4-30
Allow. Floor Load: 20
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2340 SQ.FT. @ 3 WATTS/SQ.FT. = 7020 W
SMALL APPLIANCES, 3 @ 1500 W = 4500 W
GAS WATER HEATER = 4500 W
WASHER = 1500 W
DRYER = 5000 W
RANGE = 13000 W
DISHWASHER = 1200 W
MICROWAVE = 1200 W
AC DISCONNECT = 7200 W
43920 W

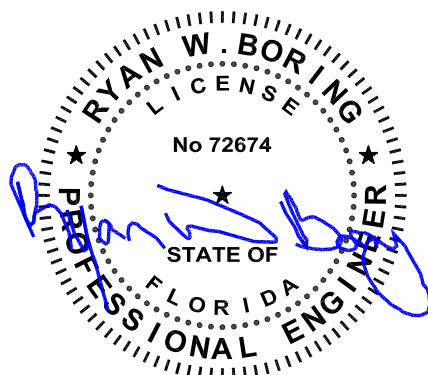
FIRST 10000 W @ 100% = 10000 W
REMAINDER @ 40% (33920)(.4) = 13568 W
FURNACE (HVAC) = 20000 W
43568 W

CALCULATED LOAD FOR SERVICE SIZE
45512 WATTS / 240 VOLTS = 189 AMPERES
200 AMP SERVICE STANDARD

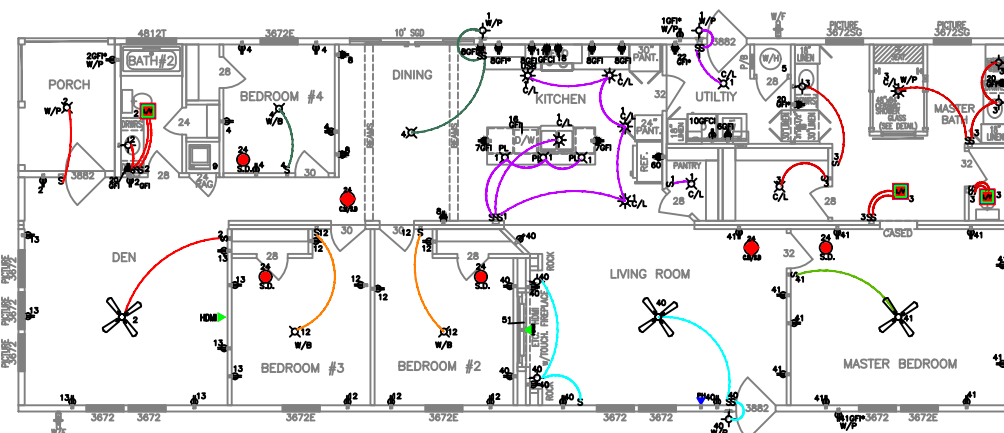
NOTE:
THE REFERENCED ELECTRICAL LOAD AND LAYOUT DO NOT INCLUDE ANY ELECTRICAL REQUIREMENTS OR LOADS FOR THE ELEVATOR, THIS WILL BE AN ON-SITE ITEM AND IT IS SUBJECT TO LOCAL JURISDICTION.

* 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



Feb 13, 2025



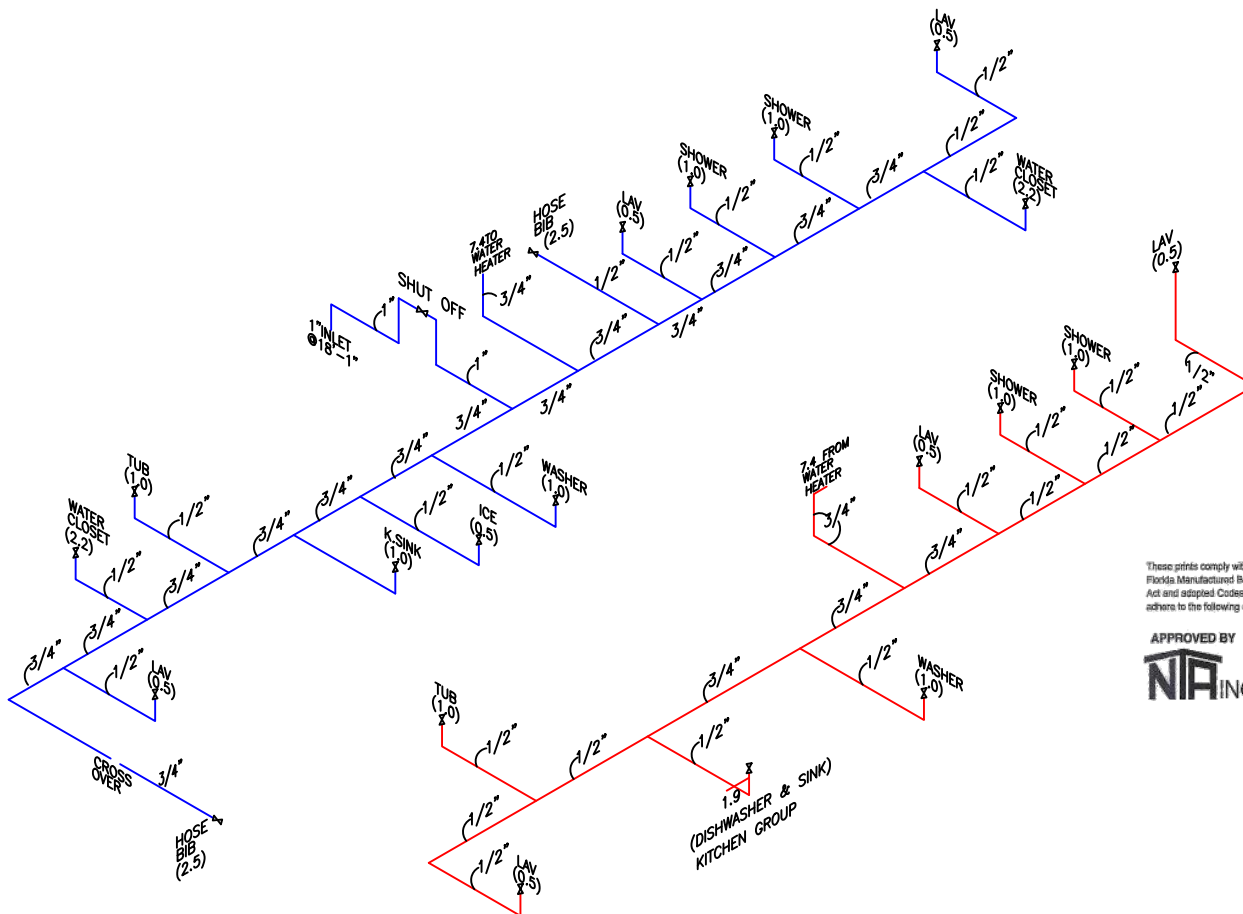
5. CIRCUIT NUMBERS SHOWN HERE ARE USED FOR IDENTIFICATION OF CIRCUITS SHOWN ON ELECTRICAL DIAGRAM SUBMITTED FOR APPROVALS. CIRCUIT IDENTIFICATION IN THE DISTRIBUTION PANEL BOXES WILL BE ACCOMPLISHED BY DESCRIBING EACH CIRCUIT (EG. WATER HEATER, LIGHTING, ETC.). IT IS PREFERRED THAT CIRCUIT NUMBERS ON 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, RECREATION ROOMS, CLOSET, HALLWAYS, KITCHEN, LAUNDRY OR SIMILAR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER DEVICE OF THE COMBINATION TYPE.

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) 10KW; 60 AMP; 2 POLE; 4-4-6
b) 15KW; 60 AMP; 2 POLE; 4-4-6 and 30 AMP; 2 POLE; 10-2 W/G
c) 20KW; (2) 60 AMP; 2 POLE; 4-4-6
d) 23KW; (2) 60 AMP; 2 POLE; 4-4-6
*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

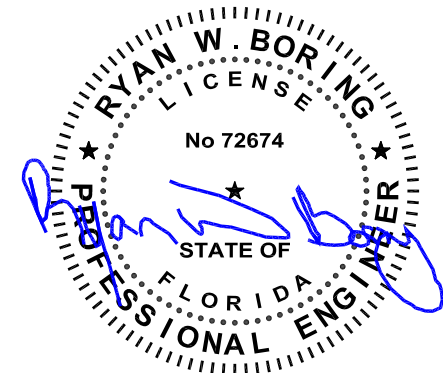
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DRAWN BY:	DATE:	TITLE:	
01/19/25		ELECTRICAL	
GRAPHIC SCALE	NO:	REV:	SHEET:
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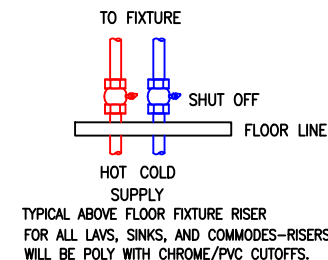
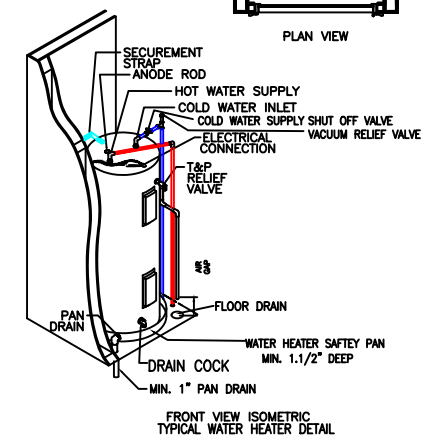
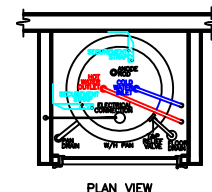
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Approval Date: 2/14/2025
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Feb 13, 2025



HOT WATER PIPE INSULATION WITH A MINIMUM THERMAL RESISTANCE OF R-3 SHALL APPLIED TO THE FOLLOWING PER SECTION:
N1103.5.3 OF THE 2018 IECC
R403.5.3 OF THE 2023 FBC-R
• PIPING 3/4" OR LARGER IN NOMINAL DIAMETER
• PIPING LOCATED OUTSIDE OF THE CONDITIONED SPACE
• PIPING SERVING MORE THAN ONE DWELLING UNIT
• PIPING FROM THE WATER MAIN TO A DISTRIBUTION MANIFOLD
• PIPING LOCATED UNDER FLOOR SLAB
• BURIED PIPING
• SUPPLY AND RETURN PIPING IN RECIRCULATION SYSTEMS OTHER THAN DEMAND RECIRCULATION SYSTEMS

TOTAL FIXTURE UNITS ON COLD WATER SUPPLY: 16.4
TOTAL FIXTURE UNITS ON HOT WATER SUPPLY: 7.4
TOTAL FIXTURE UNITS (INLET): 23.8
MAXIMUM FIXTURE UNITS PER TABLE P2903.6
FOR 50-60 PSI AND 80' COLUMN MAXIMUM ALLOWABLE LENGTH PER 2023 FBC-R (APPENDIX P) TABLE AP201.1
1/2"=2.5
3/4"=9.5
1"=32

- NOTES!!
- 50 GAL. ELECTRIC WATER HEATER
 - 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.
 - ALL WATER LINES ARE MADE USING (CROSSLINKED POLYETHYLENE) PEX WITH INSERT FITTING
 - WATER HAMMER ARRESTORS TO BE INSTALLED WHERE QUICK CLOSING VALVES ARE UTILIZED. ARRESTORS SHALL CONFORM TO ASSE 1010.

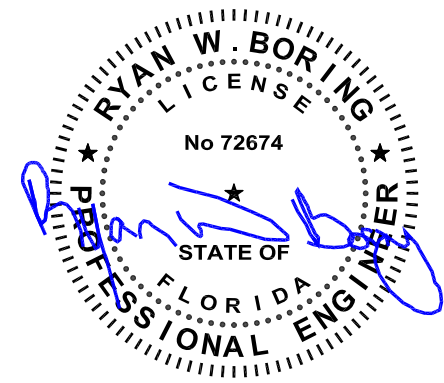


FRANKLIN HOMES, LLC.
10655 HWY. 43 SOUTH
RUSSELLVILLE, ALABAMA 35653

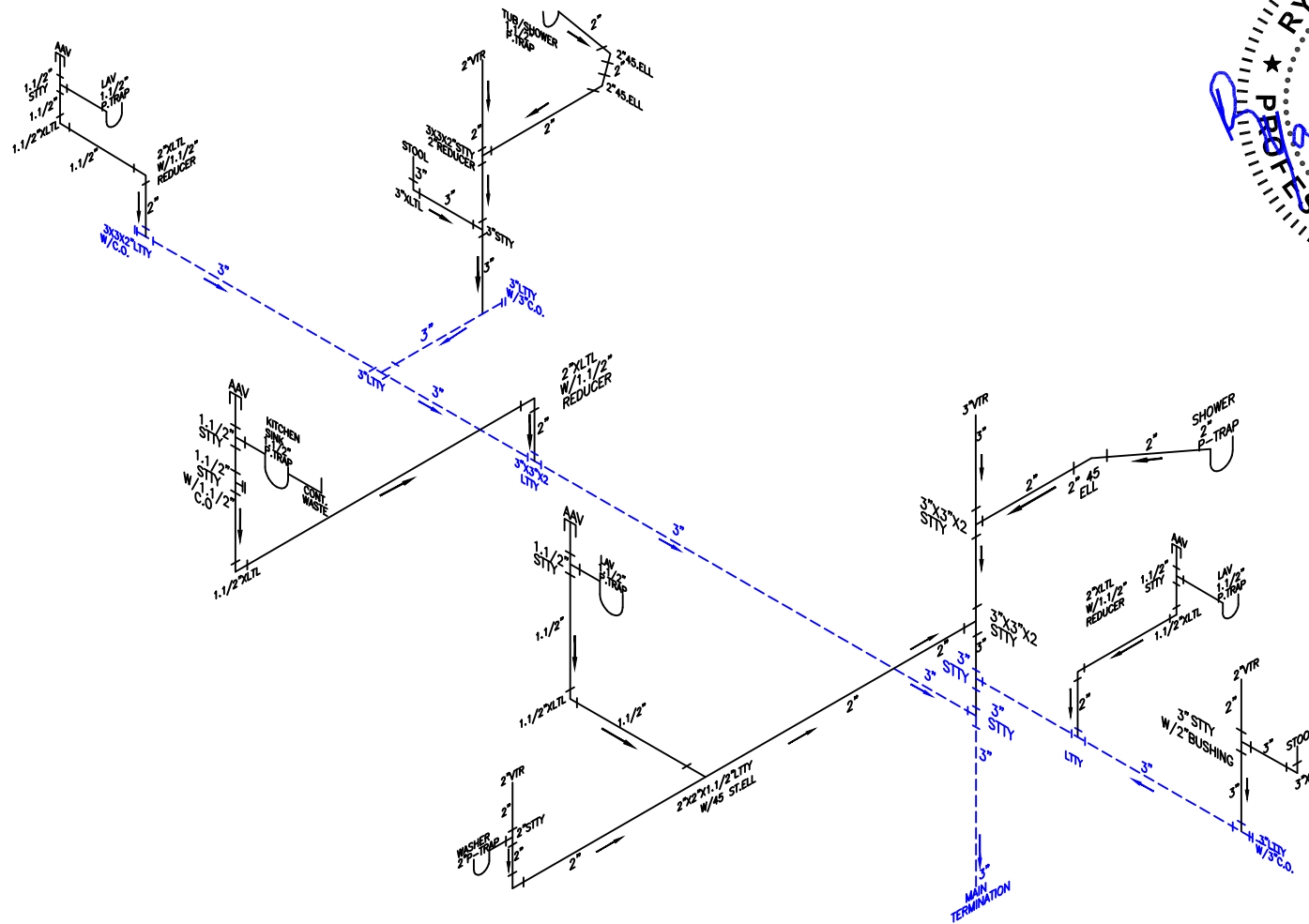
FLORIDA
MODULAR



BY:	DATE:	TITLE:
DRAWN: RH	01/19/25	WATER SCHEMATIC
NTS	NO: MFT-15732-624-84-4-32	REV: SHEET: 5 of 7



Feb 13, 2025



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
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 150 MPH V₉₀
Fire Rating of Ext. Walls: 0
Plan No.: MFC15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

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 TEE 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 HOMES LLC 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653		FLORIDA MODULAR		
DRAWN:	BY:	DATE:	TITLE:			
RH		01/19/25	DRAIN SCHEMATIC			
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO:	REV:		SHEET:	
		MFT-15732-624-84-4-32-1		6 of 7		

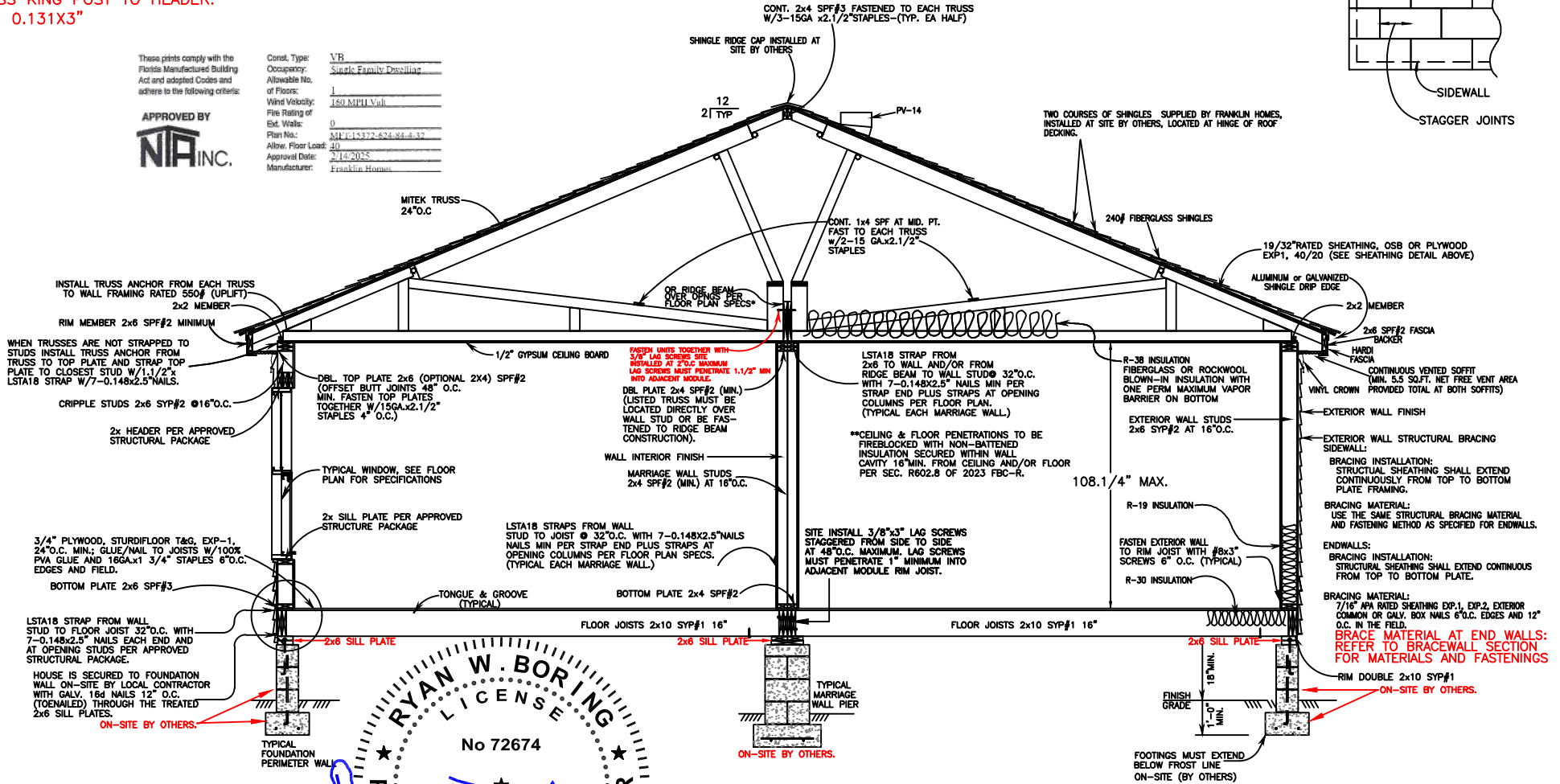
TRUSS TO EXTERIOR WALL LATERAL:
(4) 0.131"x3" NAILS 24" O.C.

TRUSS KING POST TO HEADER:
(9) 0.131X3"

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
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult.
Fire Rating of End Walls: 0
Plan No.: MFT-15372-624-84-4-32
Allow. Floor Load: 30
Approval Date: 2/14/2025
Manufacturer: Franklin Homes



These drawings have been prepared and reviewed in accordance with all applicable codes. This drawing set is not intended to be all inclusive, nor does this set detail every code required aspect of this building. Compliance with all applicable codes per local authority having jurisdiction whether detailed in this set or not must be met.

Engineering seal applies ONLY to FACTORY MANUFACTURED portions of the building. Seal does not apply to site installed elements or portions built on site such as, but not limited to: foundation, bracing tie down to foundation, exterior steps, or other site works. Site work must be designed BY OTHERS for site conditions, under local jurisdiction.

RIDGE BEAM CONSTRUCTION

- 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 2023 FBC-R.

GENERAL CROSS SECTION NOTES

1. UNLESS OTHERWISE SPECIFIED, ALL STEEL MUST COMPLY WITH ASTM A36, YIELD STRENGTH = 36 KSI.
2. LAG SCREWS MUST COMPLY WITH ASTM A307.
3. SEE FOUNDATION PLAN FOR PIER AND TIE DOWN STRAPPING LOCATIONS, ORIENTATIONS, AND SPECIFICATIONS.
4. ALL GRADE LUMBER IS MINIMUM SPECS.

INTERIOR FINISH MATERIAL

CEILING - 1/2" MINIMUM GYPSUM BOARD INSTALLED PER MANUFACTURER'S SPECIFICATIONS. (CLASS-A)
WALL - 1/2" VC GYPSUM BOARD THROUGH OUT (CLASS-A)
FLOOR - VINYL IN BATHS, UTILITY RM, KITCHEN & BREAKFAST RM-CARPET ALL OTHER AREAS.

EXTERIOR FINISH MATERIAL

ROOF - FIBERGLASS ROOF SHINGLES INSTALLED ON ROOFS WITH LESS THAN 4/12 ROOF PITCH SHALL HAVE TWO LAYERS OF #15 FELT.
WALL - VINYL LAP OR HARDI CEMPLANK SIDING

		FRANKLIN HOMES, LLC. 10655 HWY. 43 SOUTH RUSSELLVILLE, ALABAMA 35653			
BY:	DATE:	TITLE:			
DRAWN:	1/15/25	TYPICAL OFF-FRAME CROSS SECTION			
SCALE:	N.T.S.	NO:	MFT-15372-624-84-4-32	REV:	SHEET: 7 OF 7

Franklin Structures, LLC

MFT-15372-624-84-4-32 (18087)

Width: 30' - 1/2"

Length: 80'

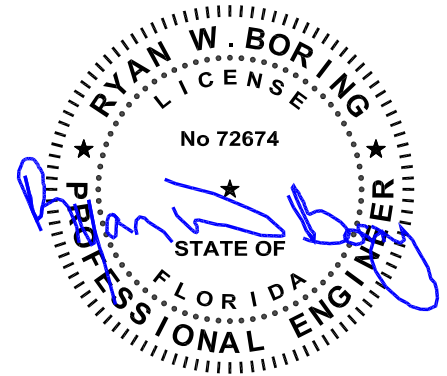
Roof Live Load: 20psf Roof LL

Wind Speeds: 160mph Vult

Wind Exposure: C

Wall Height: 9'

Max Mean Roof Height: 20'



Feb 13, 2025

Page	Description
1-4	Design Criteria and Load Cases (C&C page 1)
5	Matewall Headers
6	Matewall Columns
7	Sidewall Headers
8-9	Sidewall Columns (King & Jack)
10-11	Uplift Straps
12	Sill Plates and Lateral Only Sill/Header Connection (Sill must also be installed at top of window/door)
13-15	Shearwalls and Diaphragms
16-17	Connections
18-20	Floor Joists and Girders
21-22	Porch

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.

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
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult
Fire Rating of Ext. Walls: 0
Plan No.: MFT-15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

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

ASCE 7-22:

Wind Speed:	160 MPH	Roof Style:	Gable (Gable or Hip)
Wind Exposure:	C	Roof Pitch:	2 /12
Mean Roof Height:	20 FT	Roof Angle:	9.5
Elevation:	0 FT	Max Width:	30.04 ft
Ke:	1.00		
Kd:	0.85		
Kzt:	1		
kt:	0.90		
qh:	50.24 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	-2	Zone 1	Min	44.2	-109.5
		100	0.7	-1			100	44.2
Zone 2		Min	0.7	-2.7	Zone 2	Min	44.2	-144.7
		100	0.7	-1.4			100	44.2
Zone 3		Min	0.7	-3.6	Zone 3	Min	44.2	-189.9
		100	0.7	-1.8			100	44.2
OH Z1		Min		-2.5	OH Z1	Min		-134.6
		100		-1.5			100	
OH Z2		Min		-3.5	OH Z2	Min		-184.9
		100		-2.4			100	
OH Z3		Min		-4.7	OH Z3	Min		-245.2
		100		-2.3			100	

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
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH V_{ult}
Fire Rating of Ext. Walls: 0
Plan No.: MFC-15372-674-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Walls

Gcp	Area	Pos	Neg	Pressure	Area	Pos	Neg	
Zone 4		10	1	-1.1	Zone 4	10	59.3	-64.3
		100	0.825	-0.93		100	50.5	-55.5
Zone 5		10	1	-1.4	Zone 5	10	59.3	-79.4
		100	0.825	-1.1		100	50.5	-64.3

Design Pressures

Pressure	Area	Pos	Neg	
Zone 1		Min	26.5	-65.7
		100	26.5	-35.6
Zone 2		Min	26.5	-86.8
		100	26.5	-47.6
Zone 3		Min	26.5	-113.9
		100	26.5	-59.7
OH Z1		Min		-80.8
		100		-50.6
OH Z2		Min		-110.9
		100		-77.8
OH Z3		Min		-147.1
		100		-74.8
Zone 4		10	35.6	-38.6
		100	30.3	-33.3
Zone 5		10	35.6	-47.6
		100	30.3	-38.6

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	13.00	-43.71	-29.28	-25.71	24.44	-62.80	-38.06	-33.79
-Gcpi	31.08	-25.62	-11.19	-7.62	42.53	-44.71	-19.98	-15.70
Max	31.08	-43.71	-29.28	-25.71	42.53	-62.80	-38.06	-33.79

Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-31.65	-43.71	-27.63	-31.65	11.05	-23.61	-33.16	-62.80	-35.67	-33.16	21.60	-30.65
-Gcpi	-13.56	-25.62	-9.55	-13.56	29.14	-5.53	-15.07	-44.71	-17.58	-15.07	39.69	-12.56
Max	-31.65	-43.71	-27.63	-31.65	29.14	-23.61	-33.16	-62.80	-35.67	-33.16	39.69	-30.65

	Vertical				Horz			
	End		Int		End		Int	
	WW	LW	WW	LW	Roof	Wall	Roof	Wall
Trans	-62.80	-38.06	-43.71	-29.28	-93.94892	-74.85769	-24.74	58.23
Long	-62.80	-35.67	-43.71	-27.63	-93.94892	-	-27.13	52.25

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-37.68	-22.84	-26.23	-17.57	-56.37	-44.91	-14.84	34.94	-8.66	23.22
Long	-37.68	-21.40	-26.23	-16.58	-61.80	-50.34	-14.84	31.35	-8.66	20.80

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



Const. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 160 MPH Valt
 Fire Rating of Ext. Walls: 0
 Plan No.: MFL-15177-624-86-4-32
 Allow. Floor Load: 40
 Approval Date: 2/14/2025
 Manufacturer: Franklin Homes

Design Criteria:

Total Length:	80.00 ft	Top chord DL:	10 psf	Vult:	160 mph
Total Width:	30.04 ft	Bottom chord DL:	10 psf	Vasd:	124 mph
Unit Width:	15.02 ft	Bottom chord LL:	0 psf	Exposure:	C
Pitch:	2 /12	Stories:	1	Internal Press:	0.18
Roof Angle:	9.5 deg	Floor Live Load:	40 psf	End zone, 2a:	6.00833333 ft
Wall height:	9 ft	Floor Dead Load:	10 psf		
Overhang:	12 in	Wall Dead Load:	5 psf		
Blocking Height:	36 in	Ceiling R value:	35		
Eave Height:	10.00 ft	Framing Rafters?:	no		
Min Mean Roof ht:	20 ft	Truss Spacing:	24 in oc		
Mean Roof Height:	14.25 ft				
Snow Loading:		Wind Loading:			
Ground Snow Load:	0 psf	WW	LW	WVOH	
Snow Thermal factor:	1.1	Transverse End:	-37.68	-22.84	-56.37
Snow exposure factor:	1	Interior:	-26.23	-17.57	-44.91
Snow importance Factor:	1	Long End:	-37.68	-21.40	-61.80
Flat Roof Snow, Pf:	0 psf	Interior:	-26.23	-16.58	-50.34
Sloped Roof Snow Ps:	0 psf				
Unbalanced Roof Load:	0.00 psf				
Minimum Roof Lr:	20 psf				

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

APPROVED BY


Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Valt
Fire Rating of Ext. Walls: 0
Plan No.: MFC 15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes



Truss Reactions

Gravity Matewall: 577 lbs Uplift: Matewall: 460 lbs
 Sidewall: 647 lbs Sidewall: 539 lbs
Truss Spacing: 24 in oc.

Load Cases for Ranch		Roof			Roof and 1 Story			LDF
Load Case		Sidewall	Matewall	Endwall	Sidewall	Matewall	Endwall	
1	D	160	150	30	280	270	85	0.9
2	S	0	0	0	0	0	0	1.15
3	Su	0	0	0	0	0	0	1.15
4	Lr	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	-366	-320	-99	-366	-320	-99	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	160	150	30	581	571	125	1
13	D+Lr	330	300	70	451	421	125	1.25
14	D+S	160	150	30	280	270	85	1.15
15	D+Su	160	150	30	280	270	85	1.15
16	D+.75(L+Lr)	288	263	60	633	608	145	1.25
17	D+.75(L+S)	160	150	30	506	496	115	1.15
18	D+.75(L+Su)	160	150	30	506	496	115	1.15
19	D+.75(L+S+Wp)	160	150	30	506	496	115	1.6
20	.6D+Wn	-270	-230	-81	-197	-158	-48	1.6
Dead Load:		160	150	30	280	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:		330	300	70	633	608	145	
Total LC:		D+Lr	D+Lr	D+Lr	D+.75(L+Lr)	D+.75(L+Lr)	D+.75(L+Lr)	
Uplift Load:		-270	-230	-81	-197	-158	-48	
Uplift LC:		.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	
Design Load:		330	300	70	581	571	125	
Design LC:		D+Lr	D+Lr	D+Lr	D+L	D+L	D+L	
Design LDF:		1.25	1.25	1.25	1	1	1	

Floor Load only

Live	300	300	1
Dead	75	75	0.9

Combined Loading:

Max Bending:

1 D	160	150	30	280	270	85 plf
2 D+Wp	160	150	30	280	270	85 plf
Max down	160	150	30	280	270	85 plf
Lateral	25.52	5	25.52	25.52	5	25.52 psf

Max Axial

1 D+.75(L+Lr)	288	263	60	633	608	145 plf
2 D+.75(L+S)	160	150	30	506	496	115 plf
3 D+.75(L+Su)	160	150	30	506	496	115 plf
4 D+.75(L+S+Wp)	160	150	30	506	496	115 plf
Max down	288	263	60	633	608	145 plf
Lateral	19.14	3.75	19.14	19.14	3.75	19.14 psf

Vertical Load

Dead Load:	150 plf	D
Live Load:	150 plf	Lr
Total Load:	300 plf	D+Lr
Uplift Load:	-230 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
ne 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	5.5	SPF	#2	Edge	1	1.3	875	135	425	1400000	510000	1422	169	8.3	7.6	20.8

	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	85	59	91	87
9				
10				

Member	Max Span	Reactions (lbs)		Bearing
		Gravity	Uplift	(in)
1 (1) 2x 10 SPF #2	90 in	1200	-870	1.9
2 (1) 2x 10 SYP #2	82 in	1100	-790	1.5
3 (1) 2x 9.25 LVL	156 in	2000	-1500	1.1
4 (1) 2x 11.25 LVL	187 in	2400	-1800	1.1
5 (1) 2x 14 LVL	229 in	2900	-2200	1.1
6 (1) 2x 16 LVL	260 in	3300	-2500	1.1
7 (1) 2x 18 LVL	290 in	3700	-2780	1.1
8 (1) 2x 6 SPF #2	58 in	800	-560	1.9
9				
10				

			# can be based off span or header		
.131x3"			# nails		# .131x3" nails per header
Grav	69.1	lb	Grav	Uplift	
uplift	88.4	lb	17.37	9.84	18
			15.92	8.93	16
			28.95	16.96	29
			34.74	20.35	35
			41.97	24.88	42
			47.76	28.27	48
			53.55	31.43	54
			11.58	6.33	12

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



Const. Type:	VR
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH V_{ult}
Fire Rating of Ext. Walls:	0
Plan No.:	MP1-15377-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes

Matewall Columns

Vertical Load

NDS Load: 300 plf
Total Load: 300 plf
Uplift Load: -230 plf

Cr: 1
Cd: 1.6
Cd grav: 1.25

Lateral Load

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

def=.7 C&C

ateral deflection L/ 120

Combined Vert and Lat (max Lat)

Vertical: 150 plf
Lateral: 5 psf W

Combined Vert and Lat (max Vert)

Vertical: 263 plf 0
Lateral: 3.8 psf .75W

Combined Uplift and Lat

Vertical: -230 plf .6D+Wn
Lateral: 3.8 psf W

Location: Matewall
Supporting: Roof

Wall height: 108 in
0 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

Vertical	Spacing	B	D	Species	Grade	c	le/D	Cfb	CfC	Fb	Fc (grav)	Fc (comb)	Fcperp	E	Emin	FcE	Ft
1	16	1.5	3.5	SPF	#3	0.8	29.6	1.5	1.15	500	650	650	425	1200000	440000	414	250
										Cp	0.39	0.32					
										Allowable:	1200	366	379	425	1200000	440000	600
															Non braced (between spans)		
															69	35	23
															76	304	684
															0.07991	0.299583	0.5756
# of Studs	Properties																
Area	in^2																
Sx	in^3																
Ix	in^4																

Axial Loading																	
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		164	329	493	657	822	986	1150	1315	1479	1643						

Combined Loading																	
Uplift/Lateral		164	329	493	657	822	986	1150	1315	1479	1643						
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						

Deflection Check	L/	802	1604	2406	3208	4009	4811	5613	6415	7217	8019						
	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK						
	38	76	115	153	191	229	267	306	344	382							

Max Span	Max Trib	Max Side Opening	Max Center opening (total distance of both spans)
1	38 in	58 in = 4 ft - 10 in	22 in = 1 ft - 10 in
2	76 in	133 in = 11 ft - 1 in	110 in = 9 ft - 1 in
3	115 in	208 in = 17 ft - 3 in	165 in = 13 ft - 9 in
4	153 in	283 in = 23 ft - 6 in	220 in = 18 ft - 3 in
5	191 in	358 in = 29 ft - 9 in	275 in = 22 ft - 11 in
6	229 in	433 in = 36 ft - 1 in	330 in = 27 ft - 6 in
7	267 in	508 in = 42 ft - 4 in	385 in = 32 ft - 1 in
8	306 in	583 in = 48 ft - 7 in	440 in = 36 ft - 7 in
9	344 in	658 in = 54 ft - 10 in	495 in = 41 ft - 3 in
10	382 in	732 in = 61 ft - 0 in	550 in = 45 ft - 10 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

Occupancy: Single Family Dwelling

Allowable No. of Floors: 1

Wind Velocity: 160 MPH Vel

Fire Rating of Ext. Walls: 0

Plan No.: MF-15372-624-S4-d-32

Allow. Floor Load: 40

Approval Date: 2/14/2025

Manufacturer: Franklin Homes

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

Location: Sidewall
 Supporting: Roof

Vertical Load

Dead Load: 160 plf D
 Live Load: 170 plf Lr
 Total Load: 330 plf D+Lr
 Uplift Load: -270 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	9.25	SPF	#2	Edge	1	1.1	875	135	425	1400000	510000	1203	169	27.8	42.8	197.9
6	2	1.5	2.5	SYP	#2	Edge	1	1.0	1100	175	565	1400000	510000	1375	219	7.5	3.1	3.9
7	2	1.5	3.5	SYP	#2	Edge	1	1.0	1100	175	565	1400000	510000	1375	219	10.5	6.1	10.7
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	2	1.5	9.25	SYP	#2	Edge	1	1.0	800	175	565	1400000	510000	1000	219	27.8	42.8	197.9

	Shear	Moment	LL def	TL def
1	66	39	50	48
2	93	54	70	67
3	146	79	110	106
4	192	100	144	140
5	245	122	184	178
6	84	35	50	48
7	118	49	70	67
8	245	94	144	140
9	312	111	184	178

10

Member	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (2) 2x 3 SPF #2	38 in	600	-430	0.5
2 (2) 2x 4 SPF #2	54 in	800	-610	0.5
3 (2) 2x 6 SPF #2	79 in	1100	-890	0.5
4 (2) 2x 8 SPF #2	100 in	1400	-1130	0.5
5 (2) 2x 10 SPF #2	122 in	1700	-1370	0.5
6 (2) 2x 3 SYP #2	35 in	500	-400	0.4
7 (2) 2x 4 SYP #2	49 in	700	-560	0.4
8 (2) 2x 8 SYP #2	93 in	1300	-1050	0.4
9 (2) 2x 10 SYP #2	111 in	1600	-1250	0.4

10

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

.131x3"			# nails	
Grav	69.1	lb	Grav	Uplift
uplift	88.4	lb	4.34	2.43
			5.79	3.45
			7.96	5.03
			10.13	6.39
			12.30	7.75
			3.62	2.26
			5.07	3.17
			9.41	5.94

5
6
8
11
13
4
6
10

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



Const. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 160 MPH Valt
 Fire Rating of Ext. Walls: 0
 Plan No.: MFB-15372-624-86-4-32
 Allow. Floor Load: 40
 Approval Date: 2/14/2025
 Manufacturer: Franklin Homes

Sidewall Studs (King)

Single King Stud

Page 8 of 22

Sidewall Studs (Jack)

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:	330	plf	D+Lr	Lateral only				Vertical:	160	plf	0	Top/Btm Plate (tp):	4.5	in	
Total Load:	330	plf	D+Lr	Stud area:	27.0	ft^2		Lateral:	22	psf	W	LVL: Microllam			
Uplift Load:	-270	plf	.6D+Wn	Lateral:	26	psf	W	<u>Combined Vert and Lat (max Vert)</u>				LVL MOE (E):	2000000	psi	
								Vertical:	288	plf	0	E min:	1016411	psi	
								Lateral:	16.2	psf	.75W	Fb:	2750	psi	
								<u>Combined Uplift and Lat</u>				Fv:	285	psi	
								Vertical:	-270	plf	.6D+Wn	Fcperp:	750	psi	
								Lateral:	16.2	psf	W	Vol eff (e):	0.136		
												Cr (LVL):	1.04		

Cr: 1
Cd: 1.6
Cd grav: 1.25
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
Header width: 1.5 in
3 in
4.5 in
lateral deflection L/ 120
def=.7 C&C

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

# of Studs	1	2	3	4	5	6	7	8	9	10
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	226	452	677	903	1129	1355	1581	1807	2032	2258
Fc Perp compression 1.5 in	46	92	139	185	231	277	323	369	416	462
Fc Perp compression 3 in	92	185	277	369	462	554	646	739	831	923
Fc Perp compression 4.5 in	139	277	416	554	693	831	970	1108	1247	1385
Tension	321	641	962	1282	1603	1924	2244	2565	2885	3206

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

Max Span

	Double Headers			Triple Headers		
1	178 in =	14 ft -	10 in	271 in =	22 ft -	6 in
2	357 in =	29 ft -	9 in	542 in =	45 ft -	1 in
3	536 in =	44 ft -	7 in	813 in =	67 ft -	9 in

Note: ripped lumber must be regraded

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



Const. Type: VR
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: MF-15372-624-84-d-37
Allow. Floor Load: 40
Approval Date: 5/14/2025
Manufacturer: Franklin Homes

Uplift Straps: Sidewall

Uplift: -270 plf

Stud Spacing: 16 in

Strapping

Strap All: 921.3 lbs LSTA18

fasteners: 14 .148x 2.5" or .131x 2.5"

Strap Spacing: 3.42 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	66	82
2	148	164
3	230	246
4	312	328
5	394	410
6	476	492
7	558	574
8	640	656
	total span	

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

APPROVED BY


Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vail
Fire Rating of Ext. Walls:	0
Plan No.:	MF-C-15372-624-84-d-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes

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:	4.81 " oc
15ga:	3.65 " oc

fasteners into Studs:

.131 Nail:	3.3 lb
15ga:	4.4 lb

Uplift Straps: Matewall

Uplift: -230 plf

Stud Spacing: 16 in

Strapping

Strap All: 921.3 lbs LSTA18

fasteners: 14 .148x 2.5" or .131x 2.5"

Strap Spacing: 4.01 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	80	96
2	176	192
3	272	288
4	368	384
5	464	480
6	560	576
7	656	672
8	752	768
	total span	

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



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vail
Fire Rating of Ext. Walls:	0
Plan No.:	MFC 15372-624-84-d-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes

If sheathing is being used for uplift NOT at openings:

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

Spacing from OSB to rail:

.131 Nail:	5.63 " oc
15ga:	4.28 " oc

fasteners into Studs:

.131 Nail:	2.8 lb
15ga:	3.7 lb

Sill Plates

<u>Lateral Load</u> Lateral only Wind: 180 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	1	1.5	5	LVL	LVL	Edge	1	1.1	2750	285	750	2000000	1016411	4956	285	7.5	6.3	15.6
8	2	1.5	5	LVL	LVL	Edge	1	1.1	2750	285	750	2000000	1016411	4956	285	15.0	12.5	31.3
9	3	1.5	5	LVL	LVL	Edge	1	1.1	2750	285	750	2000000	1016411	5155	285	22.5	18.8	46.9
10	Note: ripped lumber must be regraded																	

	lu	le	Fbe	Cl	Shear	Moment	Def
1	73.7	135.1	2039	0.83	154	74	98
2	96.9	172.9	1593	0.72	297	97	123
3	113.5	199.9	1377	0.57	441	113	141
4	69.4	128.2	2149	0.91	196	69	98
5	93.8	167.9	1640	0.83	382	94	123
6	112.0	197.6	1394	0.68	569	112	141
7	98.5	175.5	3127	0.59	200	98	110
8	125.9	220.2	2493	0.48	389	126	139
9	145.1	251.4	2183	0.41	579	145	159

Sill and header lateral connection:

			Span	Load @	Nail	0.131	15ga	15gax2.5"
			(ft)	Ends (lbs)	Zeg(lb)	Nails	Zeg(lb)	Staples
			2	180.47	88	3	48	4
			3	270.71		4		6
			4	360.95		5		8
			5	451.19		6		10
			6	541.42		7		12
			7	631.66		8		14
			8	721.90		9		16
			9	812.14		10		17
			10	902.37		11		19
			11	992.61		12		21
			12	1082.85		13		23
			13	1173.09		14		25
			14	1263.32		15		27
Member	Max Span	Reactions (lbs)						
		Gravity						
1 (1) 2x 5 SPF #2	73 in	600						
2 (2) 2x 5 SPF #2	96 in	800						
3 (3) 2x 5 SPF #2	113 in	900						
4 (1) 2x 5 SYP #2	69 in	600						
5 (2) 2x 5 SYP #2	93 in	700						
6 (3) 2x 5 SYP #2	112 in	900						
7 (1) 2x 5 LVL LVL	98 in	800						
8 (2) 2x 5 LVL LVL	125 in	1000						
9 (3) 2x 5 LVL LVL	145 in	1100						

Wind Pressures for Low-rise buildings or buildings with h<60ft
ASCE 7-22 Chapter 30 Part I:

Wind Speed, Vult:	160 MPH	Roof Style:	Gable
Wind Exposure:	C	Roof Pitch:	2 /12
Mean Roof Height:	20 FT	Roof Angle:	9.5
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:	2.50 ft
qh:	50.24 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	13.0	-43.7	-29.3	-25.7	24.4	-62.8	-38.1	-33.8
-Gcpi	31.1	-25.6	-11.2	-7.6	42.5	-44.7	-20.0	-15.7
Max	31.1	-43.7	-29.3	-25.7	42.5	-62.8	-38.1	-33.8

Longitudinal

	1	2	3	4	5	6 1e	2e	3e	4e	5e	6e
+GCpi	-31.7	-43.7	-27.6	-31.7	11.1	-23.6	-33.2	-62.8	-35.7	-33.2	21.6 -30.6
-Gcpi	-13.6	-25.6	-9.5	-13.6	29.1	-5.5	-15.1	-44.7	-17.6	-15.1	39.7 -12.6
Max	-31.7	-43.7	-27.6	-31.7	29.1	-23.6	-33.2	-62.8	-35.7	-33.2	39.7 -30.6

	Vertical				Horz			
	End		Int		End		Int	
	WW		WW		Roof		Wall	
Trans	-62.8	-38.1	-43.7	-29.3	-93.9	-74.9	-24.7	58.2
Long	-62.8	-35.7	-43.7	-27.6	-93.9	-	-27.1	52.2

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW		WW		End		Roof		Wall	
Trans	-37.7	-22.8	-26.2	-17.6	-56.4	-44.9	0.0	34.9	0.0	23.2
Long	-37.7	-21.4	-26.2	-16.6	-61.8	-50.3	0.0	31.3	0.0	20.8

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

APPROVED BY



Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Valt
Fire Rating of Ext. Walls: 0
Plan No.: MF 15372-624-84-d-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Shearwalls:

Left Endwall:

End Zone: Yes
Trib: 40 ft
End Roof: 0 lb
End Wall: 1048 lb
Int Roof: 0 lb
Int Wall: 3948 lb
Total force: 4996 lb
Sheathing Thickness: 7/16 in
Fastener: .131 nail
Wall Length: 19.35 ft
FHS Length: 7.56 ft
Wall Height: 9 ft
Tallest Opening: 2h/3
r: 0.49
Co: 0.62
Perf or Segmented: S
Blocked: YES
PLF required: 660.87
Framing: SYP
Required Spacing: 3 " OC
Tiedown: 5947.8 lb
Strap for: 2498 lb

Right Endwall:

End Zone: Yes
Trib: 40 ft
End Roof: 0 lb
End Wall: 1048 lb
Int Roof: 0 lb
Int Wall: 3948 lb
Total force: 4996 lb
Sheathing Thickness: 7/16 in
Fastener: 15ga staple
Wall Length: 30.04 ft
FHS Length: 30.04 ft
Wall Height: 9 ft
Tallest Opening: h/3
r: 1.00
Co: 1.00
Perf or Segmented: P
Blocked: YES
PLF required: 166.29
Framing: SYP
Required Spacing: 6 " OC
Tiedown: 1496.6 lb
Strap for: 2498 lb

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



Const. Type: VR
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: MFC15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Top Sidewall:

End Zone: Yes
Trib: 15.02 ft
End Wall: 1153 lb
Int Wall: 1414 lb
Total force: 2567 lb
Sheathing Thickness: 7/16 in
Fastener: 15ga staple
Wall Length: 72.25 ft
FHS Length: 45.09 ft
Wall Height: 9 ft
Tallest Opening: 5h/6
r: 0.67
Co: 0.64
Perf or Segmented: P
Blocked: YES
PLF required: 89.04
Framing: SPF
Required Spacing: 6 " OC
Tiedown: 801.4 lb

Bottom Sidewall:

End Zone: Yes
Trib: 15.02 ft
End Wall: 1153 lb
Int Wall: 1414 lb
Total force: 2567 lb
Sheathing Thickness: 7/16 in
Fastener: 15ga staple
Wall Length: 72.25 ft
FHS Length: 51.63 ft
Wall Height: 9 ft
Tallest Opening: 5h/6
r: 0.75
Co: 0.70
Perf or Segmented: P
Blocked: YES
PLF required: 71.01
Framing: SPF
Required Spacing: 6 " OC
Tiedown: 639.1 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	.131 nail	3 "OC	5948 lb	S	
Right Endwall	15ga staple	6 "OC	1497 lb	P	
Top Sidewall	15ga staple	6 "OC	801 lb	P	YES
Bottom Sidewall	15ga staple	6 "OC	639 lb	P	YES

0.131"x2" nails may be used in place of the 15ga staples in a 1:1 substitution

** 6 "oc .131 nails from sidewall to endwall where both walls have tiedown at the corner, then the sidewall is transferec

Diaphragm:

Max Force: 4995.6 lbs
Load: 166.3 plf
Sheathing: 7/16 in
Fastener: .131 Nail
Framing: SPF
Unblocked Capacity: 294.4 plf
Blocked: 200.9 plf
Blocking distance: 0.0 ft

0 ft blocked each end with .131 Nail @ 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: 18983 lb
Sidewalls: 8906 lb

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



Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: MH-15372-624-84-d-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Connections

Truss to exterior wall uplift:

Uplift Force: 539 lb
H2.5A: 540 lb
MTS18: 1030 lb

Truss to exterior wall Lateral:

End: 47.6 psf
Int: 38.6 psf
Height: 9 ft
Spacing: 24 in oc
Load:
End: 428.6 lb
Int: 347.3 lb
.131 nail: 114.84 lb
.131x3"Nails End: 3.7
.131x3" Nails Int: 3.0

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



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult
Fire Rating of Ext. Walls:	0
Plan No.:	MFJ-15372-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes

Truss king post to Header:

Uplift: 460 lb
Gravity: 577 lb
.131 nail EG: 88.44 lb
.131 nail EG LL: 69.09 lb

.131x3": 8.4 Nails

Or hanger rated for 577lb grav and 460lb uplift

Stud to Plate:

End: 43.03 psf (reduced for stud area)
Int: 36.29 psf
Height: 9 ft
Spacing: 16 in oc
Load:
End: 258.2 lb
Int: 217.7 lb
.131 nail: 88.44 lb
Nails End: 2.9
Nails Int: 2.5

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

Plate to floor and plate interconnection (top plate):

End: 43.0 psf
 Int: 36.3 psf
 Height: 9 ft
 Load: 193.6571 plf
 .131 Nailx3": 108 lb
 Spacing of .131 nail: 6.7 " OC int and end zones

 15gax2.5" staple: 72 lb
 Spacing of 15ga: 4.46 " OC int and end zones

Sheathing Suction Connections (wall and roof)

	End	Int	
Wall:	-43.0	-38.6	psf
Roof:	-113.9	-65.7	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:	11.9	12.0	" oc

Roof

Member spacing:	24	24	" oc
Nail:	3.5	6.0	" oc
Staple:	3.0	5.2	" oc

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

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



Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	150 MPH Vel.
Fire Rating of Ext. Walls:	0
Plan No.:	MF-1-15372-624-S4-A-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes

Floor Joist Calculation at 16"oc

Location: Sidewall
Supporting: Roof

Vertical Load

Dead Load: 13.3 plf D
Live Load: 53.2 plf L
Total Load: 66.5 plf D+L
Uplift Load: 0 plf

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	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	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (1) 2x 10 SYP #1	180 in	500	0	0.6
2 (1) 2x 8 SYP #1	153 in	500	0	0.6
3				
4				
5				
6				
7				
8				
9				
10				

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



Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: MF15372-626-84-4-37
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

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: -158 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

	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	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (1) 2x 10 SYP #1	61 in	1500	-410	1.8
2 (1.5) 2x 10 SYP #1	75 in	1800	-500	1.2
3 (2) 2x 10 SYP #1	86 in	2100	-570	0.9
4				
5				
6				
7				
8				
9				
10				

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

APPROVED BY
NIA INC.

Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: MF15372-626-86-4-37
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

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	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (1) 2x 10 SYP #1	75 in	1200	0	1.5
2 (1.5) 2x 10 SYP #1	92 in	1500	0	1.0
3 (2) 2x 10 SYP #1	107 in	1700	0	0.8
4				
5				
6				
7				
8				
9				
10				

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

APPROVED BY
NIA INC.

Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: MF15372-626-84-4-37
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Porch Headers

Vertical Load

Dead Load: 160 plf D
Live Load: 170 plf Lr
Total Load: 330 plf D+Lr
Uplift Load: -416 plf .6D+Wn

Location: Sidewall
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

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

Since deflection doesn't govern the LDF between uplift and gravity (1.6 vs 1.25) allow a maximum uplift per truss of (330*1.6/1.25*2ft=844lb)

Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	2	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	21.8	95.3
2	2	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	21.8	95.3
3	1	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	10.9	47.6
4	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	98.9
5	2	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	21.8	95.3
6	2	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	27.8	197.9
7	1	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	10.9	47.6
8	1	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	10.9	47.6
9																	
10																	

	Shear	Moment	LL def	TL def
1	245	109	151	146
2	192	100	144	140
3	165	119	129	125
4	210	149	165	159
5	315	168	163	157
6	401	210	207	201
7	130	77	120	116
8	103	71	115	111
9				
10				

Connections:
Connect truss to header with LTS12 strap: capacity 515lbs.
Max Truss reaction for header @24" is 832==> (2) LTS OK

Header to Column:
BC4 Bracket: capacity 605lbs.
(2) LSTA18 Straps: 2220lbs
Total: 2825lbs
Max reaction for header @ 7.75ft: 1612lb OK

Member	Max Span	Reactions (lbs)		Bearing (in)
		Gravity	Uplift	
1 (2) 2x 8 SYP #1	109 in	1600	-1890	1.0
2 (2) 2x 8 SPF #2	100 in	1400	-1740	1.3
3 (1) 2x 7.25 LVL	118 in	1700	-2050	1.5
4 (1) 2x 9.25 LVL	148 in	2100	-2570	1.5
5 (2) 2x 7.25 LVL	157 in	2200	-2730	0.8
6 (2) 2x 9.25 LVL	200 in	2800	-3470	0.8
7 (1) 2x 8 SYP #1	77 in	1100	-1340	1.9
8 (1) 2x 8 SPF #2	70 in	1000	-1220	2.6
9				
10				

Column to Floor:
BC-40 Bracket: 510lbs
(2) LSTA18 Straps: 2220lbs
Total: 2730lbs
Max reaction for header @ 7.75ft: 1612lb OK

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

Occupancy: Single Family Dwelling

Allowable No. of Floors: 1

Wind Velocity: 160 MPH Vel.

Fire Rating of Ext. Walls: 0

Plan No.: MFB-15177-624-86-4-32

Allow. Floor Load: 40

Approval Date: 2/14/2025

Manufacturer: Franklin Homes

Location: Matewall
Supporting: Roof

Max Side Opening 211 in = 17 ft - 6 in	Max Center opening 155 in = 12 ft - 11 in
--	---

Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vah
Fire Rating of Ext. Walls:	0
Plan No.:	MF-15372-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes

Project Information

For: FRANKLIN STRUCTURES, MFT-15372-18087-624-84-4-32UFL

Cooling Equipment

Design Conditions

Outdoor design DB:	97.9°F	Sensible gain:	29246	Btuh	Entering coil DB:	76.4°F
Outdoor design WB:	79.1°F	Latent gain:	8463	Btuh	Entering coil WB:	63.8°F
Indoor design DB:	75.0°F	Total gain:	37708	Btuh		
Indoor RH:	50%	Estimated airflow:	1226	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split AC				
Manufacturer:	Generic	Model:	SEER2 14.3		
Actual airflow:	1226	cfm			
Sensible capacity:	30094	Btuh	103% of load		
Latent capacity:	12897	Btuh	152% of load		
Total capacity:	42991	Btuh	114% of load	SHR:	70%

Heating Equipment

Design Conditions

Outdoor design DB:	23.3°F	Heat loss:	35081	Btuh	Entering coil DB:	67.1°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Elec furnace				
Manufacturer:	Generic	Model:	AFUE 100		
Actual airflow:	1226	cfm			
Output capacity:	35081	Btuh	100% of load	Temp. rise:	0 °F

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

APPROVED BY


Const. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 160 MPH V₅₀
 Fire Rating of Ext. Walls: 0
 Plan No.: MFT-15372-624-84-4-32
 Allow. Floor Load: 40
 Approval Date: 2/14/2025
 Manufacturer: Franklin Homes

Meets all requirements of ACCA Manual 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
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH V_h
Fire Rating of Ext. Walls: 0
Plan No.: MFT-15372-18087-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Job: MFT-15372-18087-624-84-4-32
Date: 2/3/25
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN STRUCTURES, MFT-15372-18087-624-84-4-32UFL

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	23	98	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	47	23	Fireplaces	1 (Average)
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	19	56		

HEATING EQUIPMENT

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	
Efficiency	100 AFUE
Heating input	10.3 kW
Heating output	35081 Btuh
Temperature rise	26 °F
Actual air flow	1226 cfm
Air flow factor	0.039 cfm/Btuh
Static pressure	0.30 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Generic
Trade	
Cond	SEER2 14.3
Coil	
AHRI ref	
Efficiency	12.2 EER2, 14.3 SEER2
Sensible cooling	30094 Btuh
Latent cooling	12897 Btuh
Total cooling	42991 Btuh
Actual air flow	1226 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.30 in H2O
Load sensible heat ratio	0.78

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
BA2	74	1660	853	65	38
F	10	0	0	0	0
B4	123	1759	1693	69	76
D/R-KIT-L/R	722	8153	8019	319	359
U	90	1525	878	60	39
BA1	226	3521	2757	138	123
T	21	538	230	21	10
DEN	328	6437	4998	252	224
HALL	35	0	0	0	0
B3	172	1796	1981	70	89
B2	172	1755	1946	69	87
B1	274	4143	4030	162	180
PTY	30	0	0	0	0
CL1	53	0	0	0	0

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



Right-Suite® Universal 2025 25.0.01 RSU56435

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Page 1

...anklin18000\MFT-15372-18087-624-84-4-32UFL.rup Calc = MJ8 Front Door faces: N

Entire House	2330	31287	27385	1226	1226
Other equip loads		3794	1861		
Equip. @ 1.03 RSM			30094		
Latent cooling			8463		
TOTALS	2330	35081	38557	1226	1226

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



Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH V_h
Fire Rating of Ext. Walls: 0
Plan No.: MFT-15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

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



Right-Suite® Universal 2025 25.0.01 RSU56435

...anklin18000\MFT-15372-18087-624-84-4-32UFL.rup Calc = MJ8 Front Door faces: N

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Page 2

Project Information

For: FRANKLIN STRUCTURES, MFT-15372-18087-624-84-4-32UFL

Design Conditions

Location:

Gainesville, FL, US
Elevation: 123 ft
Latitude: 30°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

23
-
-
15.0

Cooling

98
18 (M)
79
7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
47
30
18.7

Cooling

75
23
50
56.1

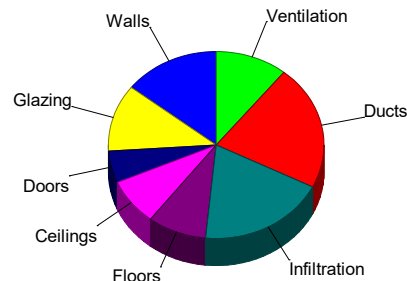
Infiltration:

Method
Construction quality
Fireplaces

Simplified
Average
1 (Average)

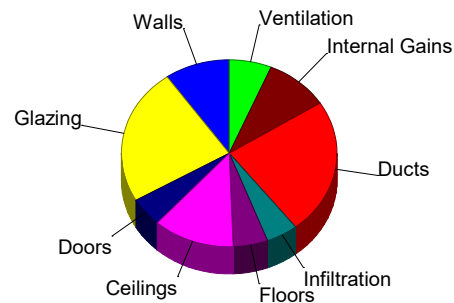
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	3.2	5065	14.4
Glazing	15.9	4065	11.6
Doors	14.4	1925	5.5
Ceilings	1.2	2829	8.1
Floors	1.3	3105	8.9
Infiltration	3.4	6731	19.2
Ducts		7567	21.6
Piping		0	0
Humidification		0	0
Ventilation		3794	10.8
Adjustments		0	
Total		35081	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.8	2858	9.8
Glazing	27.0	6901	23.6
Doors	10.9	1461	5.0
Ceilings	1.5	3571	12.2
Floors	0.7	1523	5.2
Infiltration	0.7	1400	4.8
Ducts		6861	23.5
Ventilation		1861	6.4
Internal gains		2810	9.6
Blower		0	0
Adjustments		0	
Total		29246	100.0



Latent Cooling Load = 8463 Btuh

Overall U-value = 0.057 Btuh/ft²-°F, Window / Floor Area = 11.0 %

Data entries checked.

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

APPROVED BY

Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 140 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: MFT-15372-624-84-4-37
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Project Information

For: FRANKLIN STRUCTURES, MFT-15372-18087-624-84-4-32UFL

Design Conditions

Location:		Indoor:		Heating	Cooling
Gainesville, FL, US		Indoor temperature (°F)		70	75
Elevation: 123 ft		Design TD (°F)		47	23
Latitude: 30°N		Relative humidity (%)		30	50
		Moisture difference (gr/lb)		18.7	56.1
Outdoor:	Heating	Cooling	Infiltration:		
Dry bulb (°F)	23	98	Method	Simplified	
Daily range (°F)	-	18 (M)	Construction quality	Average	
Wet bulb (°F)	-	79	Fireplaces	1 (Average)	
Wind speed (mph)	15.0	7.5			

Construction descriptions

	Or	Area ft²	U-value Btuh/ft²·°F	Insul R ft²·°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls 12E-0sw: Frm wall, vnl ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud	n	218	0.068	19.0	3.18	693	1.79	391
	e	550	0.068	19.0	3.18	1747	1.79	985
	s	272	0.068	19.0	3.18	865	1.79	488
	w	554	0.068	19.0	3.18	1761	1.79	993
	all	1595	0.068	19.0	3.18	5065	1.79	2858

Partitions (none)

Windows

2 glazing, clr outr, air gas, wd frm mat, clr innr, 1/4" gap, 1/8" thk; 2 glazing, clr outr, air gas, wd frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht	n	54	0.340	0	15.9	857	12.2	656
	e	58	0.340	0	15.9	921	27.9	1620
	w	144	0.340	0	15.9	2286	27.9	4023
	all	256	0.340	0	15.9	4065	24.6	6300

Doors

Door, wd sc type	e	70	0.280	0	13.1	915	9.93	695
	e	42	0.340	0	15.9	667	12.1	506
	w	22	0.340	0	15.9	343	12.1	260
	all	134	0.340	0	14.4	1925	10.9	1461

Ceilings

16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		2330	0.026	38.0	1.21	2829	1.53	3571
---	--	------	-------	------	------	------	------	------

Floors

19A-30cscp: Flr floor, frm flr, 8" thkns, carpet flr fnsh, r-30 cav ins, tight crwl ovr		2330	0.034	30.0	1.33	3105	0.65	1523
---	--	------	-------	------	------	------	------	------

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

APPROVED BY


Const. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 150 MPH Vel.
 Fire Rating of Bld. Walls: 0
 Plan No.: MFT-15372-624-84-d-32
 Allow. Floor Load: 40
 Approval Date: 2/14/2025
 Manufacturer: Franklin Homes

Project Information

For: FRANKLIN STRUCTURES, MFT-15372-18087-624-84-4-32UFL

Notes:

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

APPROVED BY


Cond. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 160 MPH V₅₀
 Fire Rating of Ext. Walls: 0
 Floor No.: MFT-15372-624-84-4-32
 Allow. Floor Load: 40
 Approval Date: 2/14/2025
 Manufacturer: Franklin Homes

Design Information

Weather: Gainesville, FL, US

Winter Design Conditions

Outside db 23 °F
 Inside db 70 °F
 Design TD 47 °F

Ventilation Method MJ8

Heating Summary

Structure 23720 Btuh
 Ducts (R-8.0) 7567 Btuh
 Central vent (74 cfm) 3794 Btuh
 Outside air Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 35081 Btuh

Infiltration

Method Simplified
 Construction quality Average
 Fireplaces 1 (Average)

	Heating	Cooling
Area (ft²)	2330	2330
Volume (ft³)	20929	20929
Air changes/hour	0.38	0.16
Equiv. AVF (cfm)	132	56

Heating Equipment Summary

Make Generic
 Trade
 Model AFUE 100
 AHRI ref

Efficiency 100 AFUE
 Heating input 10.3 kW
 Heating output 35081 Btuh
 Temperature rise 26 °F
 Actual air flow 1226 cfm
 Air flow factor 0.039 cfm/Btuh
 Static pressure 0.30 in H2O
 Space thermostat

Summer Design Conditions

Outside db 98 °F
 Inside db 75 °F
 Design TD 23 °F
 Daily range M
 Relative humidity 50 %
 Moisture difference 56 gr/lb

Sensible Cooling Equipment Load Sizing

Structure 20524 Btuh
 Ducts (R-8.0) 6861 Btuh
 Central vent (74 cfm) 1861 Btuh
 Outside air Blower 0 Btuh
 Use manufacturer's data n
 Rate/swing multiplier 1.03
 Equipment sensible load 30094 Btuh

Latent Cooling Equipment Load Sizing

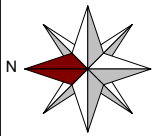
Structure 3519 Btuh
 Ducts 2127 Btuh
 Central vent (74 cfm) 2817 Btuh
 Outside air Equipment latent load 8463 Btuh

Equipment Total Load (Sen+Lat) 38557 Btuh
 Req. total capacity at 0.70 SHR 3.6 ton

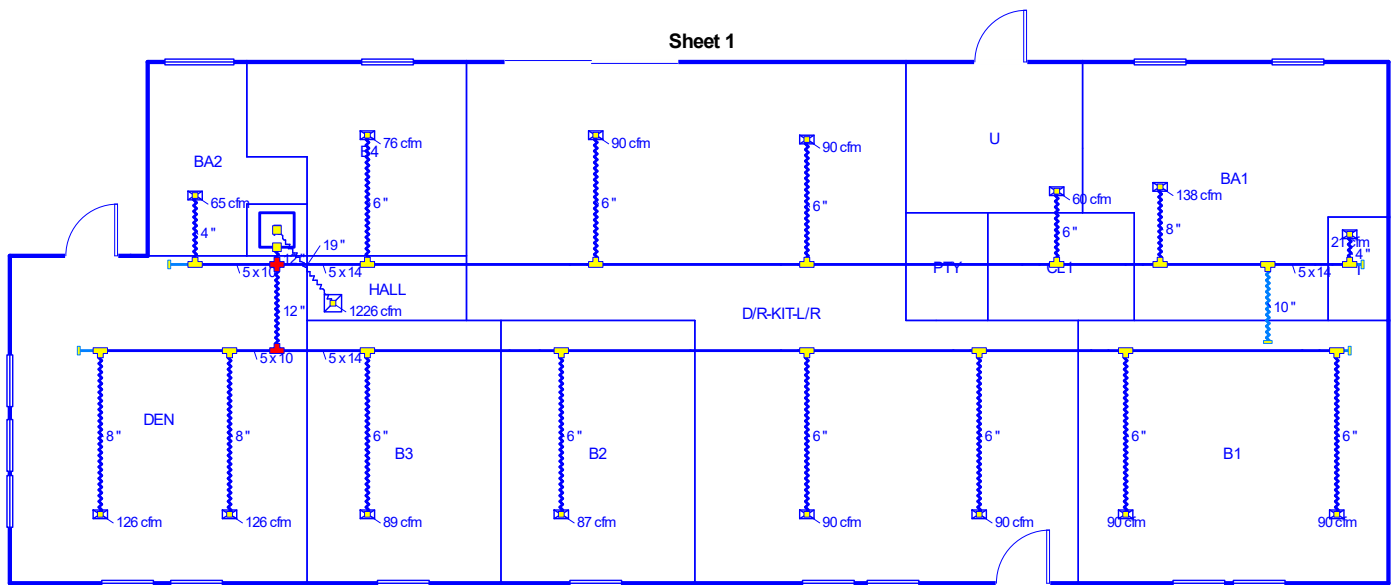
Cooling Equipment Summary

Make Generic
 Trade
 Cond SEER2 14.3
 Coil
 AHRI ref
 Efficiency 12.2 EER2, 14.3 SEER2
 Sensible cooling 30094 Btuh
 Latent cooling 12897 Btuh
 Total cooling 42991 Btuh
 Actual air flow 1226 cfm
 Air flow factor 0.045 cfm/Btuh
 Static pressure 0.30 in H2O
 Load sensible heat ratio 0.78

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
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vel.
Fire Rating of Ext. Walls: 0
Plan No.: MFT-15372-624-84-4-32
Allow. Floor Load: 30
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Job #: MFT-15372-18087-624-84-4-32UFL
Performed by AMS of Indiana, Inc. for:
FRANKLIN STRUCTURES

Scale: 1 : 134
Page 1
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Project Information

For: FRANKLIN STRUCTURES, MFT-15372-18087-624-84-4-32UFL

	Heating	Cooling
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.30 in H2O	0.30 in H2O
Supply / return available pressure	0.256 / 0.044 in H2O	0.256 / 0.044 in H2O
Lowest friction rate	0.068 in/100ft	0.068 in/100ft
Actual air flow	1226 cfm	1226 cfm
Total effective length (TEL)	442 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 2015	81	90	0.068	6.0	0x0	VIFx	64.8	310.0	st8
B1-A	c 2015	81	90	0.068	6.0	0x0	VIFx	77.0	300.0	st8
B2	c 1946	69	87	0.070	6.0	0x0	VIFx	32.0	335.0	st8
B3	c 1981	70	89	0.070	6.0	0x0	VIFx	20.8	345.0	st8
B4	c 1693	69	76	0.093	6.0	0x0	VIFx	13.8	260.0	st3
BA1	h 3521	138	123	0.088	8.0	0x0	VIFx	56.8	235.0	st3
BA2	h 1660	65	38	0.114	4.0	0x0	VIFx	9.8	215.0	st2
D/R-KIT-L/R	c 2005	80	90	0.089	6.0	0x0	VIFx	27.0	260.0	st3
D/R-KIT-L/R-A	c 2005	80	90	0.068	6.0	0x0	VIFx	56.2	320.0	st8
D/R-KIT-L/R-B	c 2005	80	90	0.068	6.0	0x0	VIFx	46.2	330.0	st8
D/R-KIT-L/R-C	c 2005	80	90	0.088	6.0	0x0	VIFx	39.0	250.0	st3
DEN	h 3219	126	112	0.078	8.0	0x0	VIFx	18.2	310.0	st7
DEN-A	h 3218	126	112	0.078	8.0	0x0	VIFx	25.8	300.0	st7
T	h 538	21	10	0.090	4.0	0x0	VIFx	65.0	220.0	st4
U	h 1525	60	39	0.087	6.0	0x0	VIFx	50.5	245.0	st3

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



Const. Type: VB
 Occupancy: Single Family Dwelling
 Allowable No. of Floors: 1
 Wind Velocity: 160 MPH Vel.
 Fire Rating of Ext. Walls: 0
 Plan No.: MFT-15372-624-84-4-32
 Allow. Floor Load: 40
 Approval Date: 2/14/2025
 Manufacturer: Franklin Homes

Bold/italic values have been manually overridden

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st2	Peak AVF	65	38	0.114	187	6.0	10 x 5	ShtMetl	st1
st8	Peak AVF	461	536	0.068	1102	10.0	14 x 5	ShtMetl	st6
st3	Peak AVF	447	428	0.087	920	10.0	14 x 5	ShtMetl	st1
st4	Peak AVF	21	10	0.090	43	10.0	14 x 5	ShtMetl	st3
st7	Peak AVF	252	224	0.078	726	8.0	10 x 5	ShtMetl	st6
st6	Peak AVF	713	759	0.068	967	12.0	0 x 0	VinIFlx	st1
st1	Peak AVF	1226	1226	0.068	1561	12.0	0 x 0	VinIFlx	

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	1226	1226	65.4	0.068	622	19.0	0x 0		VIFx	

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

APPROVED BY
NIA INC.

Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH V_h
Fire Rating of Ext. Walls: 0
Plan No.: MUF-15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Bold/italic values have been manually overridden



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A MITek® / Berkshire Hathaway Company

Right-Suite® Universal 2025 25.0.01 RSU56435

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Page 2



PRODUCT APPROVAL SPECIFICATION SHEET

Manufacturer: Franklin Structures, LLC. **Plan #:** MFT-15372-624-84-4-32
UPDATED 2/7/2024 RKG CC/QAM

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-R4
Swinging	Dunbarton	Atrium Frame	15362.1-R4
9231.1, 15362.1, 15362.3, 15362.9, 15362.12,			
Sliding	Lippert	10' Sliding Glass Door	44539-R1
WINDOWS			
Single Hung	Kinro	Windows	993 R-20
ROOFING PRODUCTS			
Metal Roof	CENTRAL STATES	26 GA PBR ROOF PANEL	14026-R6
Underlayments	Epilay	ROOFING UNERLAYMENT	16850-R8
Asphalt Shingles	Owens Corning	Oakridge	10674-R20
PANEL WALL			
Siding		Hardie Lap	13192-R8
Siding		Hardie Panel	13223-R8
Siding		Royal Vinyl	15935-R7
Soffits		LP Smart Soffit	9103-R8
Soffits		Hardie Soffit	13265-R7
STRUCTURAL COMPONENTS			
Wood Connector / Anchor	Simpson	HDU11-SDS2.5	10441.4-R9
Wood Connector / Anchor	Simpson	H2.5T	10446.16-R7
Wood Connector / Anchor	Simpson	HD3B	11496.3-R8
Wood Connector / Anchor	Simpson	HDQ8	10441.3-R9
Wood Connector / Anchor	Simpson	CMSTC16	13872.1-R5
Wood Connector / Anchor	Simpson	LSTA18	10456.15-R8
Wood Connector / Anchor	Simpson	STHD14	10441.12-R9
Truss Plates	MiTek	MT18 & MT20	2197-R12
Engineered Lumber	Trusjoist	LVL	
Engineered Lumber	Versa-lam	LVL	1644-R11

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.

Robin Hardin

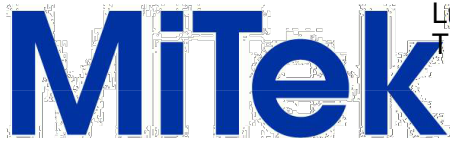
Manufacturer's Authorized Agent Signature

Robin Hardin

Printed Name

1/7/2025

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: MH8024R26 -

MiTek, 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: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: N/A Wind Speed: 167 mph
Roof Load: 40.0 psf Floor Load: N/A psf

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

No.	Seal#	Truss Name	Date
1	I62570345	8024-C	12/14/23
2	I62570346	8024-CP	12/14/23

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



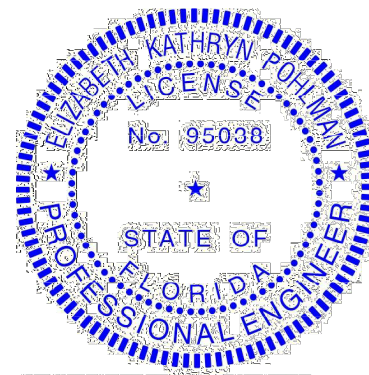
Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vel.
Fire Rating of Ext. Walls:	0
Plan No.:	MH-12372-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes

This item has been electronically signed and sealed by Pohlman, Elizabeth, 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: Pohlman, Elizabeth
My license renewal date for the state of Florida is February 28, 2025.

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



Elizabeth Kathryn Pohlman PE No. 95038
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Road
Chesterfield, MO 63017
Date:

December 14, 2023

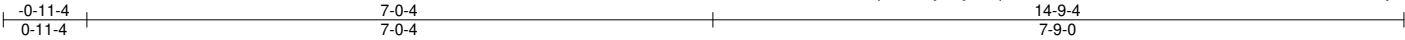
Pohlman, Elizabeth

1 of 1

Job	Truss	Truss Type	Qty	Ply	
MH8024R26	8024-C	MONO TRUSS	1	1	
Job Reference (optional)					I62570345

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Thu Dec 14 14:50:17 2023 Page 1
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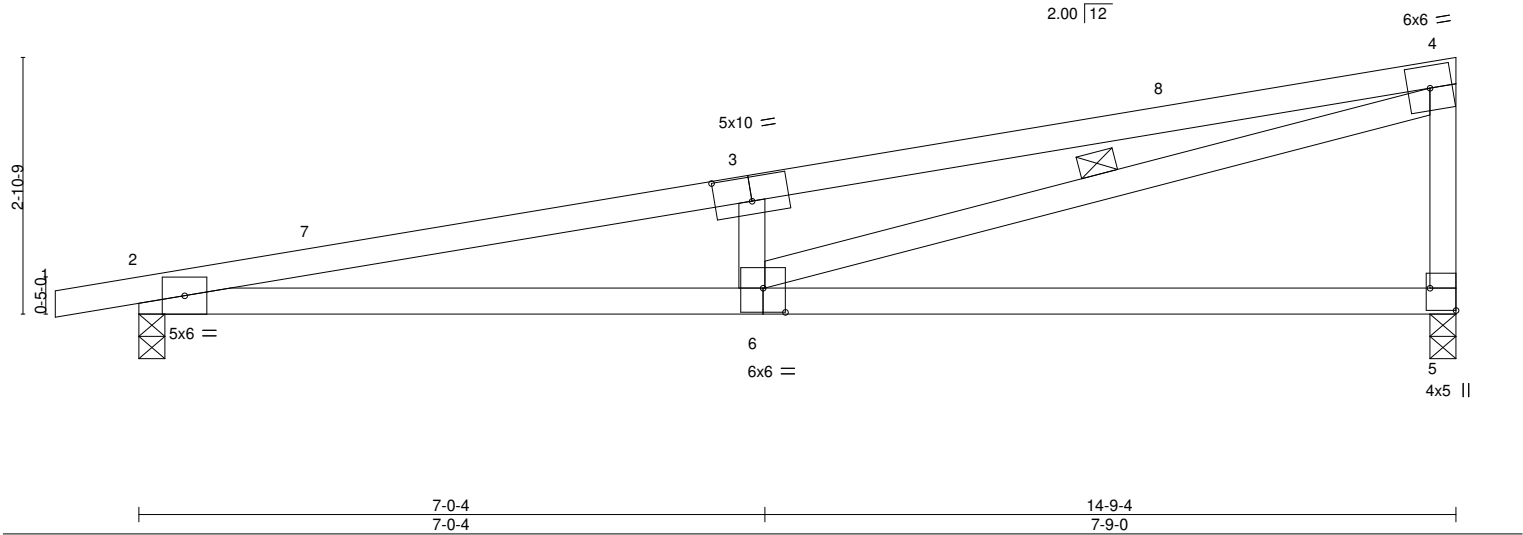


Plate Offsets (X,Y)--		[3:0-5-0,0-3-4], [5:Edge,0-3-8], [6:0-3-0,0-3-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.97
TCDL 10.0	Lumber DOL	1.25	BC 0.62
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.52
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.28 2-6 >611 240
			Vert(CT) -0.28 5-6 >629 180
			Horz(CT) -0.02 5 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 48 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 4-2-6 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 4-6

REACTIONS.	(size) 2=0-3-8, 5=0-3-8
	Max Horz 2=222(LC 6)
	Max Uplift 2=539(LC 6), 5=460(LC 10)
	Max Grav 2=647(LC 1), 5=577(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1955/1633, 3-4=-1907/1687, 4-5=-508/698
BOT CHORD	2-6=-1813/1939
WEBS	3-6=-451/665, 4-6=-1723/1902

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C 14-7-8 to 14-7-8 zone;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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=539, 5=460.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:	Const. Type: VB
	Occupancy: Single Family Dwelling
	Allowable No. of Floors: 1
	Wind Velocity: 160 MPH Vel
	Fire Rating of Ext. Wall: 0
	Plan No: MFC15372-628-84-A-32
	Allow. Floor Load: 40
	Approval Date: 2/14/2025
	Manufacturer: Franklin Homes



This item has been electronically signed and sealed by Pohlman, Elizabeth, 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.

Elizabeth Kathryn Pohlman, PE No. 95038
MiTek Inc. DBA MiTek USA, PE Cert 6634
16023 Swingley Ridge Road
Chesterfield, MO 63017
Date:

December 14, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)



16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
MH8024R26	8024-CP	MONO TRUSS	1	1	162570346
Job Reference (optional)					

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

8.730 s Nov 13 2023 MiTek Industries, Inc. Thu Dec 14 14:50:18 2023 Page 1
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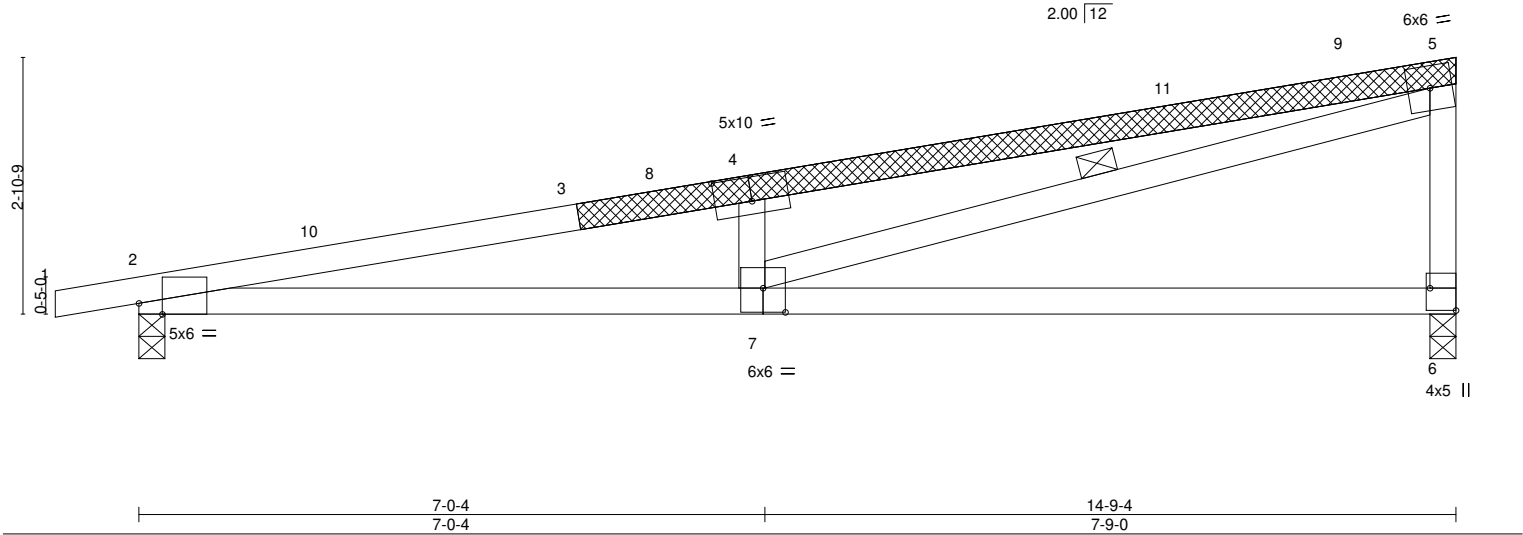


Plate Offsets (X,Y)--		[2:0-3-2,Edge], [4:0-5-0,0-3-4], [6:Edge,0-3-8], [7:0-3-0,0-3-4]	
LOADING (psf)	SPACING-	2-0-0	CS.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.81
TCDL 10.0	Lumber DOL	1.25	BC 0.62
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.43 6-7 >408 240
			Vert(CT) 0.33 6-7 >521 180
			Horz(CT) -0.03 6 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 70 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-13 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 2-8-11 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 5-7
OTHERS 2x4 SPF No.2	
LBR SCAB 3-5 2x4 SPF No.2 both sides	

REACTIONS.	(size) 2=0-3-8, 6=0-3-8
	Max Horz 2=222(LC 6)
	Max Uplift 2=832(LC 6), 6=753(LC 6)
	Max Grav 2=647(LC 1), 6=577(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-1913/2817, 4-5=-1862/2863, 5-6=-500/898
BOT CHORD	2-7=-2968/1846
WEBS	4-7=-469/624, 5-7=-2941/1834

- NOTES-**
- 1) Attached 10-0-0 scab 3 to 5, both face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 5-9-7 from end at joint 3, nail 1 row(s) at 7" o.c. for 4-0-8.
 - 2) Wind: ASCE 7-22; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpl=0.18; MWFRS (envelope) gable end zone and C-C 14-7-8 to 14-7-8 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=832, 6=753.

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:	Const. Type: <u>VR</u>
	Occupancy: <u>Single Family Dwellings</u>
	Allowable No. of Floors: <u>1</u>
	Wind Velocity: <u>160 MPH Vel.</u>
	Fire Rating of Ext. Walls: <u>0</u>
	Plan No.: <u>MFC15372-624-84-4-37</u>
	Allow. Floor Load: <u>40</u>
	Approval Date: <u>2/14/2025</u>
	Manufacturer: <u>Franklin Homes</u>



This item has been electronically signed and sealed by Pohlman, Elizabeth, 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.

Elizabeth Kathryn Pohlman, PE No. 95638
MiTek Inc. DBA MiTek USA, PE Cert 6634
16023 Swingley Ridge Road
Chesterfield, MO 63017
Date: _____

December 14, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

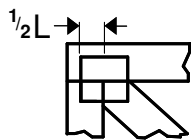
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)



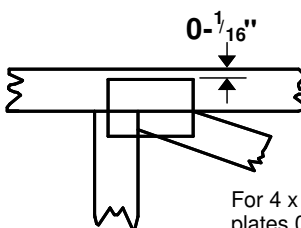
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

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

PLATE SIZE

4 x 4

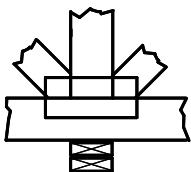
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

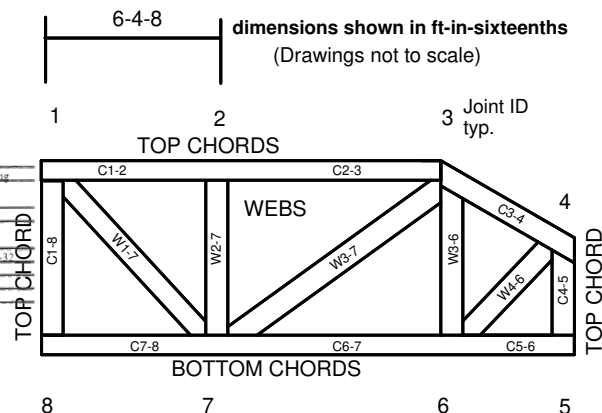


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

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.

FLORIDA BUILDING CODE, ENERGY CONSERVATION	
Residential Building Thermal Envelope Approach	
R-Value Computation Method	
FORM R402—2023	Florida Climate Zone: 2

	BUILDER: FRANKLIN HOMES LLC
PROJECT NAMEAND ADDRESS: MFT-15372-624-84-4-32 (18087)	PERMITTING OFFICE:
NW MICKLER GIN, LAKE CITY, FL 32055	JURISDICTION NUMBER:
OWNER: Clayton Homes of Lake City-Powell	PERMIT NUMBER:
PERMIT TYPE: RESIDENTIAL	NUMBER OF UNITS:2
WORST CASE?	CONDITIONED FLOOR AREA: 2295

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 COMPONENT¹										
REQUIREMENTS	FENESTRATIONU-FACTOR², 3, 4	SKYLIGHT²U-FACTOR	GLAZEDFENESTRATIONSHGC², 3	CEILINGR-VALUE	WOODFRAMEWALL R-VALUE⁵	MASS WALLR-VALUE⁵, 6	FLOORR-VALUE	BASEMENTWALL R-VALUE	SLAB⁷ R-VALUE &DEPTH	CRAWLSPACEWALL R-VALUE
CLIMATE ZONE 1	NR	0.75	0.25	30	13	3/4	13	0	0	0
CLIMATE ZONE 2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
VALUE	AVG	AVG	AVG	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST
INSTALLED:	.34		.22 for GRID/ .23 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:



Const. Type: V/B
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Vult
Fire Rating of Ext. Walls: 0
Plan No.: MFT-15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

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 system¹	Not allowed in attic	Location: ON SITE
Air handling unit	Factory Sealed	Factory Sealed? Y/N
Duct R-value	= R-8 (Ducts in unconditioned attics, Diameter ≥ 3 in.)	R-Value (In unc. attic) =
	= R-6 (Ducts in unconditioned non attics, Diam. ≥ 3 in.)	R-Value (In unc. non attics) =
	= R-6 (Ducts in unconditioned attics, Diameter < 3 in.)	R-Value (Small ducts in attic) =
	= R-4.2 (Ducts in unconditioned not attics, Diam. < 3 in.)	R-Value (Small ducts in unc) =
	All ducts are in conditioned space (No minimum)	All in conditioned space ? Y/N
Air leakage/Duct test	Air handler installed: Total leakage = 4 cfm/100 s.f.	ON SITE
	Air handler not installed: Total leakage = 3 cfm/100 s.f.	Total leakage = _____ cfm/100 s.f.
		Air handler installed? Y/N
Duct testing	Test not required if all ducts and AHU are within the building thermal envelope andfor additions or alterations where ducts extended from existing heating andcooling system through unconditioned space are < 40 linear ft.	Test report required? N
Air conditioning systems:	Minimum federal standard required by NAECA²:	ON SITE
Central system ≤ 65,000 Btu/h	SEER2 14.3	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 NAECA²:	
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 NAECA²:	Capacity =
Electric³, ⁶	UEF 40 gal. 0.923; 50 gal.: 0.921; 60 gal.: 2.051	UEF (Min) =
Gas fired⁴, ⁶	UEF 40 gal. 0.580; 50 gal.: 0.563; 60 gal.: 0.766	UEF (Min) =
Other (describe)⁵, ⁶:		Type = Effic. (min) =

Equipment Efficiency—[PASS / FAIL]

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

MANDATORY REQUIREMENTS			
Component	Section	Summary of Requirements	Check
Air leakage	R402.4	To be caulked, gasketed, weatherstripped or otherwise sealed perTable R402.4.1.1. Recessed lighting IC-rated as having ≤ 2.0 cfmtested to ASTM E283.Windows and doors: 0.3 cfm/sq.ft (swinging doors: 0.5 cfm/sf) whentested to NFRC 400 or AAMA/WDMA/CSA 101/I.S. 2/A440.Fireplaces: Tight-fitting flue dampers & outdoor combustion air	X
Programmable thermostat	R403.1.2	A programmable thermostat is required for the primary heating orcooling system.	X
Air distribution system	R403.3.2R403.3.4	Ducts shall be tested as per Section R403.3.2 by either individualsas defined in Section 553.993(5) or (7), Florida Statutes, orindividuals licensed as set forth in Section 489.105(3) (f), (g) or (i),Florida Statutes. Air handling units are not allowed in attics.	ON SITE
Water heaters	R403.5	Comply with efficiencies in Table C404.2. Hot water pipes insulatedto ≥ R-3 to kitchen outlets, other cases. Circulating systems to havean automatic or accessible manual OFF switch. Heat trap requiredfor vertical pipe risers.	X
Cooling/heating equipment	R403.7	Sizing calculation performed & attached. Special occasion coolingor heating capacity requires separate system or variable capacitysystem.	X
Swimming pools & spas	R403.10	Spas and heated pools must have vapor-retardant covers or aliquid cover or other means proven to reduce heat loss except if70% of heat from site-recovered energy. Off/timer switch required.Gas heaters minimum thermal efficiency is 82%. Heat pump poolheaters minimum COP is 4.0.	NA
Lighting equipment	R404.1	Not less than 90% of the lamps in permanently installed luminairesshall have an efficacy of at least 45 lumens-per-watt or shall utilizelamps with an efficacy of not less than 65 lumens-per-watt.	ON SITE
I hereby certify that the plans and specifications covered by this form arein compliance with the Florida Building Code, Energy Conservation.PREPARED BY: Jordan Wallace Date 02/03/2025_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 indicatecompliance with the Florida Building Code, Energy Conservation. Beforeconstruction is complete, this building will be inspected for compliance inaccordance with Section 553.908, F.S.CODE OFFICIAL: Date:	

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

APPROVED BY
NIA INC.

Const. Type: V/R
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH V-wh
Fire Rating of Ext. Walls: 0
Plan No.: MFC15372-624-84-0-37
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes