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 Chapter633 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 NTA 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

RYAN W. BORING LICENSE No 72674 STATE OF FLORIDA PROFESSIONAL ENGINEER

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 laod = 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

DATE 2/14/2025 CERT. NO SMP-056
PLAN NUMBER MFT-15372-624-84-4-32
APPROVED BY Michael Faller
(signature)

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

Document Description: — Sheet Number:

Feb 13, 2025

INDEX TO ADDENDUMS

PHYSICAL ADDRESS
NW MICKLER GIN
LAKE CITY, FL 32055
COLUMBIA COUNTY

FRANKLIN HOMES, INC.
10655 HWY. 43 SOUTH
RUSSELLVILLE, ALABAMA 35653
FLORIDA MODULAR

	BY:	DATE:
DRAWN:	RH	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

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

APPROVED BY NTA INC.

Const. Type:	VB
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Allow. Floor Load:	40
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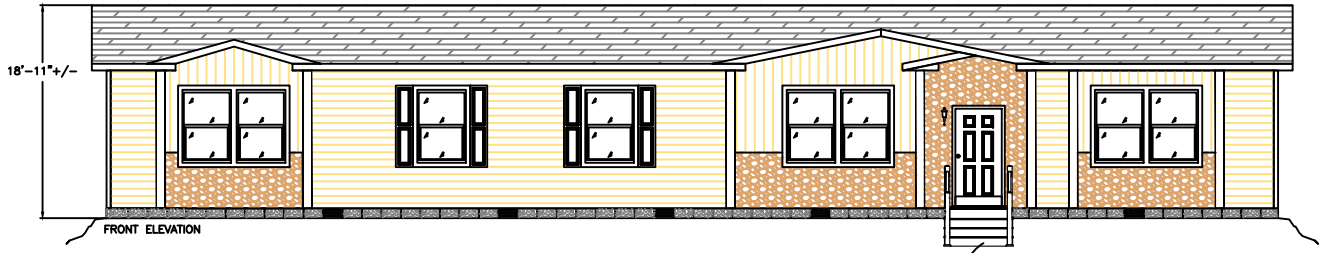
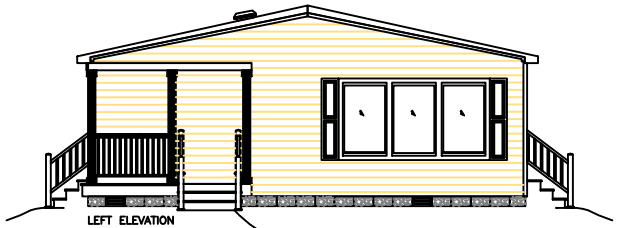


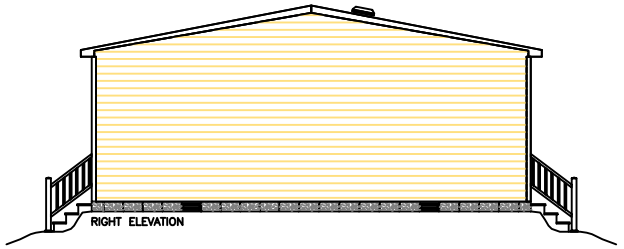
FRONT ELEVATION

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

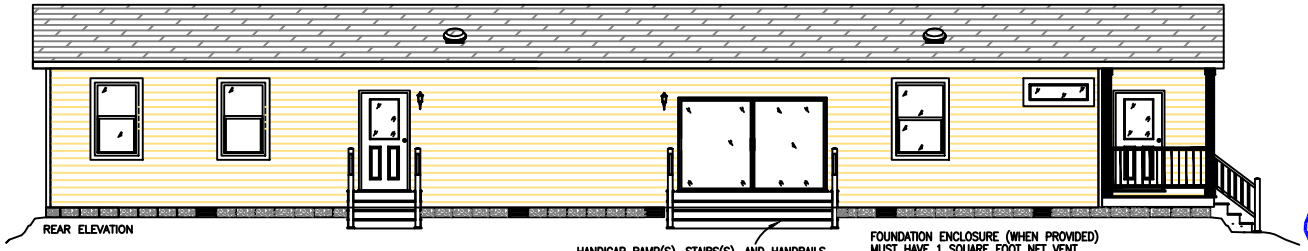


LEFT ELEVATION

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



RIGHT ELEVATION



REAR ELEVATION

HANDICAP RAMP(S), STAIRS(S), AND HANDRAILS 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.

RYAN W. BORING LICENSE No 72674 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

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

REVISION:	BY:	DATE:

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

TYPICAL MODULAR

	BY:	DATE:
DRAWN:	JW	01/19/25

GRAPHIC SCALE 0 1' 2' 3' 4' 5'

TITLE: ELEVATIONS

NO: MFT-15732-624-84-4-32

REV:

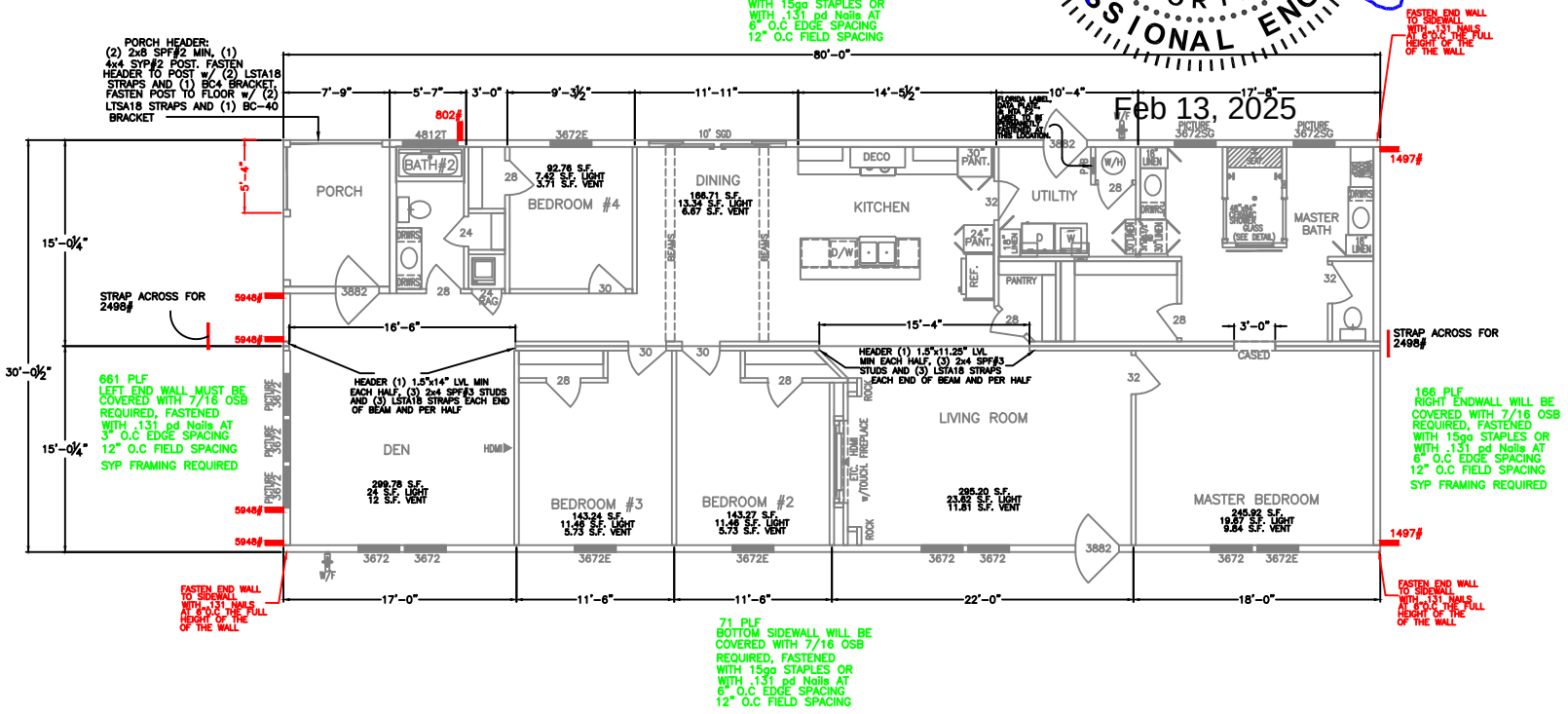
SHEET: 2 of 7

TIE-DOWNS LOCATIONS
ON-SITE BY OTHERS

8906lbS TOTAL LATERAL LOAD THIS DIRECTION

RYAN W. BORING
LICENSE
No 72674
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Feb 13, 2025



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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APPROVED BY NTA INC.

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Occupancy:	Single Family Dwelling
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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

= FURNACE
= WATER HEATER
= SINK
= REFRIGERATOR
= RANGE

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)			
U-Values=0.33	1-LITE 2 PANEL (3882)	0.34	0.19
SHGC=0.32	10' SGD	0.28	0.16
(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

	BY:	DATE:
DRAWN:	JW	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		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.

SYMBOLS:
- S – SWITCH
- – 15 AMP RECEPTACLE
- – 20 AMP RECEPTACLE
- – 30 AMP RECEPTACLE
- – 40 AMP RECEPTACLE
- – 15 AMP RECEPTACLES LOCATED ABOVE CABINETS FOR OPT. LIGTS
- – LIGHT FIXTURE
- – LAVLIGHT&PORCH LIGHT
- S.D. – SMOKE DETECTOR
- – LIGHT\VENT FAN
- – C/L=CAN LIGHT
- PH – TELEPHONE
- TV – TELEVISION
- T – THERMOSTAT
- GFI* – MASTER GFI
- P/B – PANEL BOX
- W/P – WATERPROOF
- – FLOOD LIGHT
- – 2' FLUORESCENT
- – 4' FLUORESCENT
- – OPT.CEILING FAN W/LIGHT
- C.M/S.D – COMBO SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR ALARM

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

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Manufacturer:	Franklin Homes

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

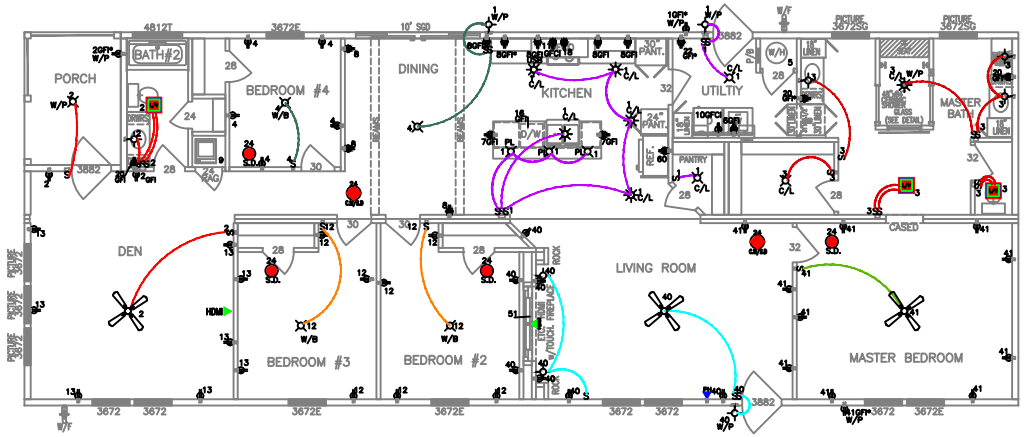
CALCULATED LOAD FOR SERVICE SIZE
45512 WATTS / 240 VOLTS = 189 AMPERES
200 AMP SERVICE STANDARD

* TYPE 1 OR 2 SURGE PROTECTION DEVICE FOR SERVICE SUPPLY TO BE INSTALLED ON-SITE PER 2020 NEC 230.67 SUBJECT TO LJHA!

* OUTDOOR EMERGENCY DISCONNECT INSTALLED ON-SITE BY OTHERS PER 2020 NEC 230.85 SUBJECT TO LJHA!

RYAN W. BORING LICENSE No 72674 STATE OF FLORIDA PROFESSIONAL ENGINEER

Feb 13, 2025



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

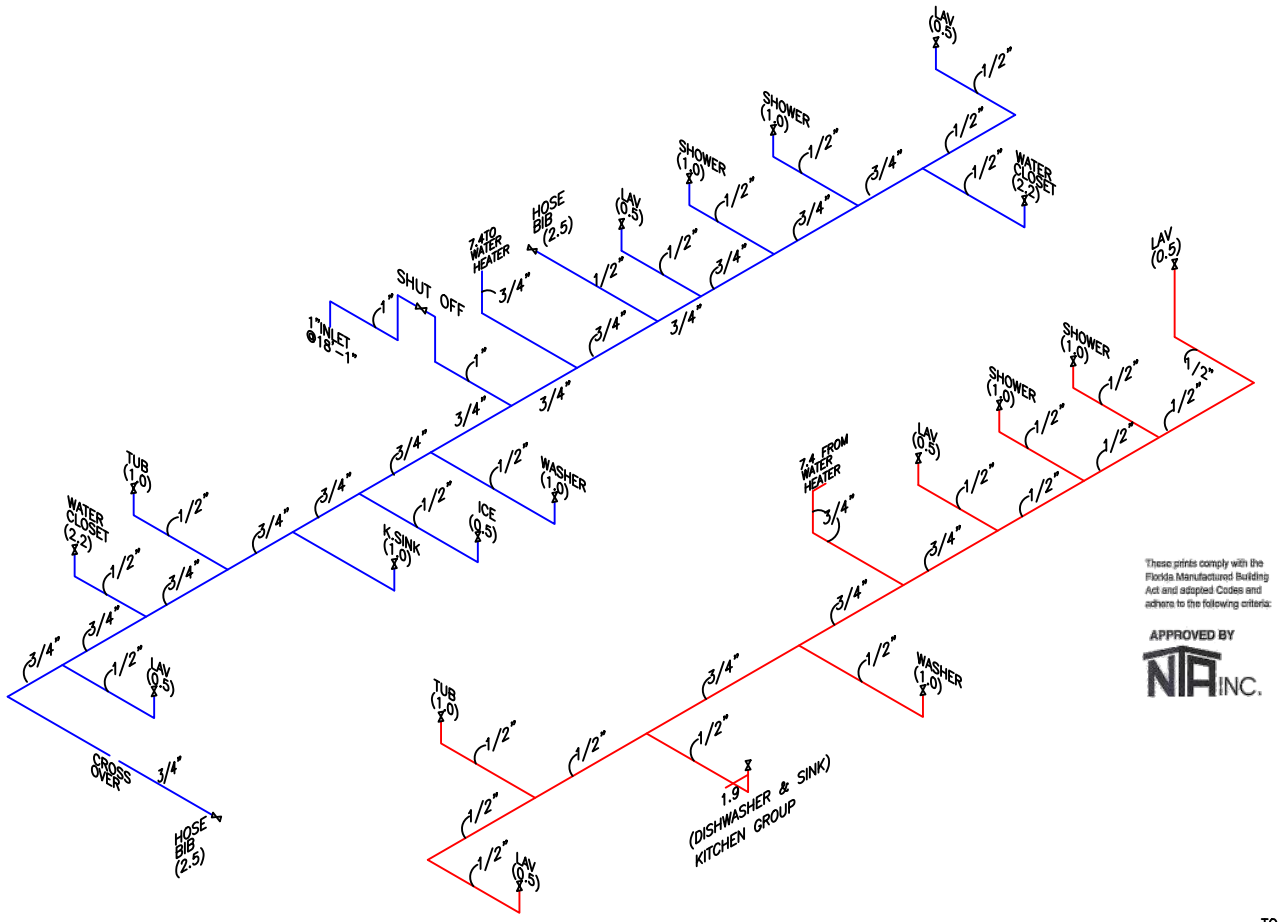
NOTES!!
*1.a)20 AMP; 2 POLE; 12-2 w/G or
b)25 AMP; 2 POLE; 10-2 w/G or
c)30 AMP; 2 POLE; 10-2 w/G
2.a)10KW: 60 AMP; 2 POLE; 4-4-6
b)15KW: 60 AMP; 2 POLE; 4-4-6 and 30 AMP; 2 POLE; 10-2 W/G
c)20KW; (2) 60 AMP; 2 POLE; 4-4-6
d)23KW; (2) 60 AMP; 2 POLE; 4-4-6
*3.a)15 AMP; 1 POLE; 14-2 w/G or
b)20 AMP; 1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

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

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

FLORIDA MODULAR

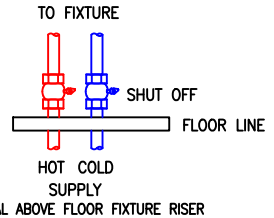
BY:	DATE:	TITLE:
DRAWN:	01/19/25	ELECTRICAL
GRAPHIC SCALE 0 1' 2' 3' 4' 5'	NO: MFT-15732-624-84-4-32	REV: / SHEET: 4 of 7



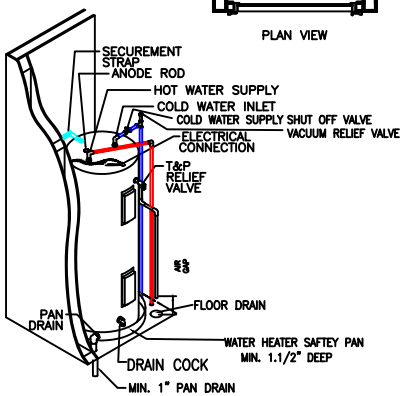
HOT WATER PIPE INSULATION WITH A MINIMUM THERMAL RESISTANCE OF R-3 SHALL APPLIED TO THE FOLLOWING PER SECTION: N1103.5.3 OF THE 2018 IECC R403.5.3 OF THE 2023 FBC-R

* 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 HEATER TO A DISTRIBUTION MANIFOLD
* PIPING LOCATED UNDER FLOOR SLAB
* BURIED PIPING
* SUPPLY AND RETURN PIPING IN RECIRCULATION SYSTEMS OTHER THAN DEMAND RECIRCULATION SYSTEMS

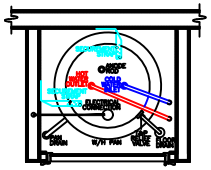
TOTAL FIXTURE UNITS ON COLD WATER SUPPLY: 16.4
TOTAL FIXTURE UNITS ON HOT WATER SUPPLY: 7.4
TOTAL FIXTURE UNITS (INLET): 23.8
MAXIMUM FIXTURE UNITS PER TABLE P2903.6
FOR 50-60 PSI AND 80' COLUMN MAXIMUM ALLOWABLE LENGTH PER 2023 FBC-R (APPENDIX P) TABLE AP201.1
1/2"=2.5
3/4"=9.5
1"=32



TYPICAL ABOVE FLOOR FIXTURE RISER FOR ALL LAVS, SINKS, AND COMMODES-RISERS WILL BE POLY WITH CHROME/PVC CUTOFFS.



FRONT VIEW ISOMETRIC
TYPICAL WATER HEATER DETAIL



PLAN VIEW

RYAN W. BORING
LICENSE
No 72674
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Feb 13, 2025

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

APPROVED BY NTA 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

NOTES!!

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

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	RH	01/19/25

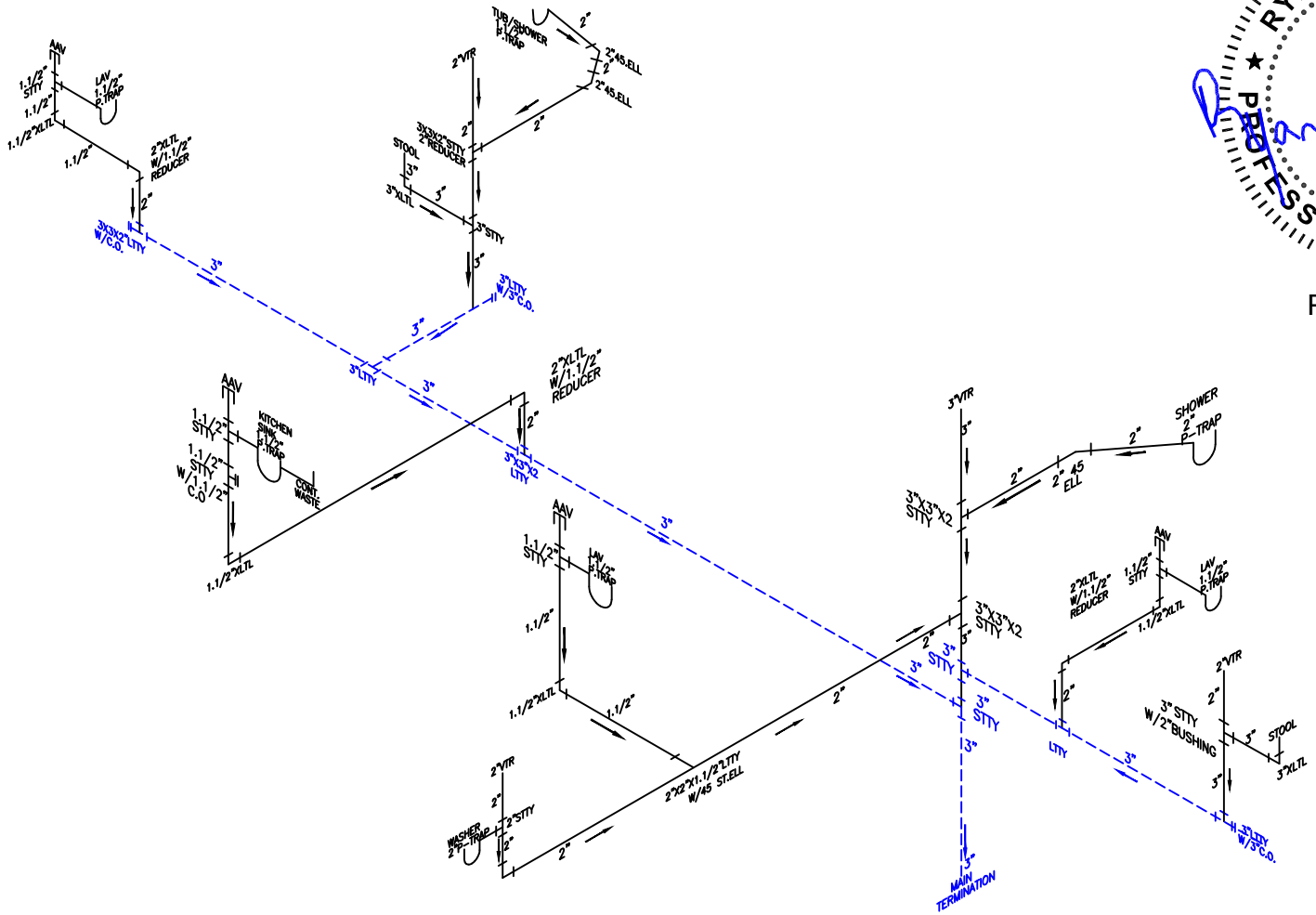
TITLE: WATER SCHEMATIC

NTS

NO: MFT-15732-624-84-4-32

REV:

SHEET: 5 of 7



RYAN W. BORING
LICENSE
No 72674
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Feb 13, 2025

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

APPROVED BY NTA INC.

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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

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

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

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

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	RH	01/19/25

GRAPHIC SCALE 0 1' 2' 3' 4' 5'

TITLE: DRAIN SCHEMATIC

NO: MFT-15732-624-84-4-32-1

REV:

SHEET: 6 of 7

TRUSS TO EXTERIOR WALL LATERAL:
(4) 0.131"X3" NAILS 24" O.C.

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

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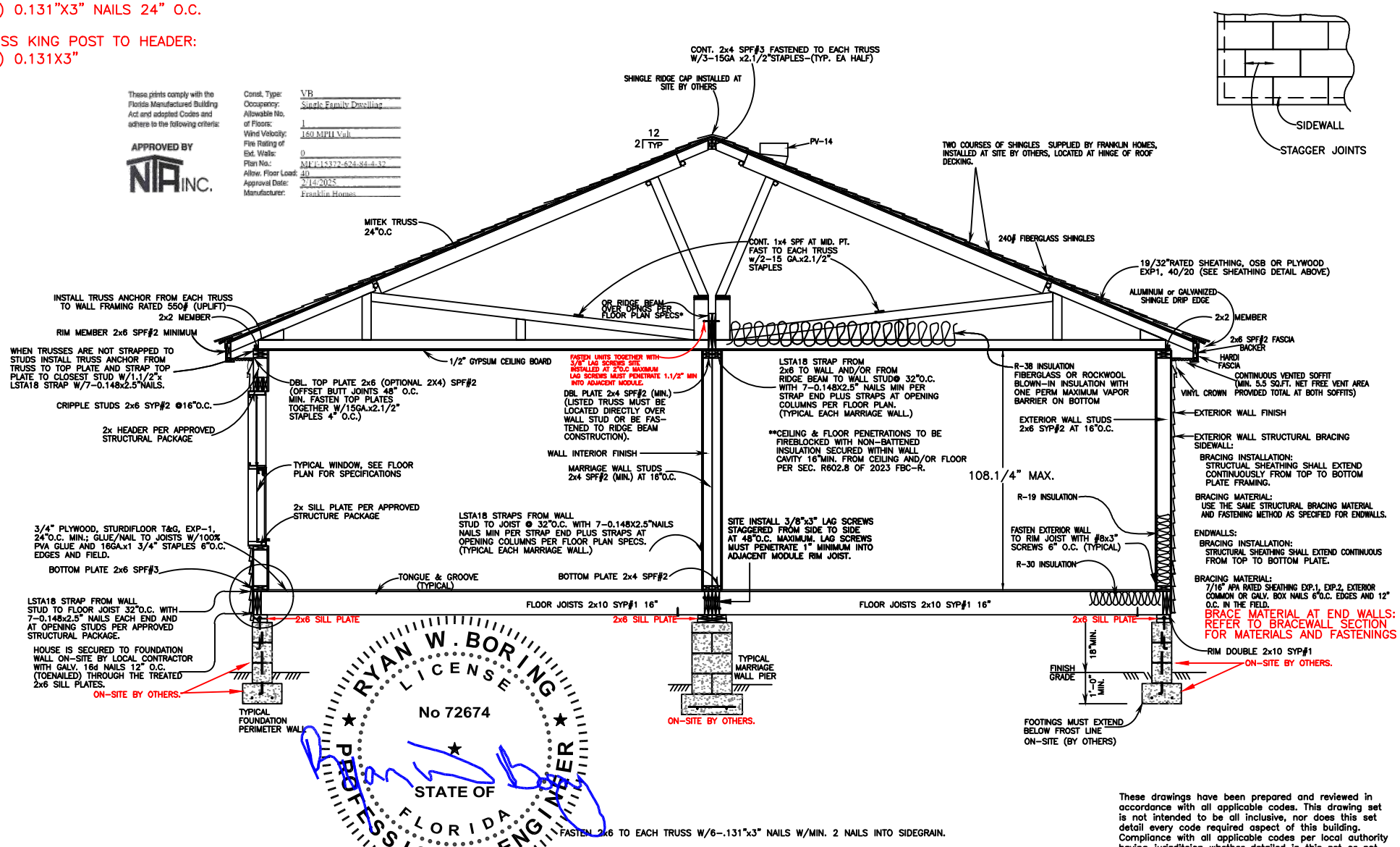
Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult
Fire Rating of Ext. Walls:	0
Plan No.:	MFT-15372-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes



RYAN W. BORING LICENSE No 72674 STATE OF FLORIDA PROFESSIONAL ENGINEER

Feb 13, 2025

FASTEN 2x6 TO EACH TRUSS W/6-.131"x3" NAILS W/MIN. 2 NAILS INTO SIDEGRAIN.

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. ALL LAG SCREWS MUST COMPLY WITH ASTM A307.
3. SEE FOUNDATION PLAN FOR PIER AND TIE DOWN STRAPPING LOCATIONS, ORIENTATIONS, AND SPECIFICATIONS.
4. ALL GRADE LUMBER IS MINIMUM SPECS.

INTERIOR FINISH MATERIAL

CEILING-1/2" MINIMUM GYPSUM BOARD INSTALLED PER MANUFACTURER'S SPECIFICATIONS. (CLASS-A)

WALL -1/2" VC GYPSUM BOARD THROUGH OUT (CLASS-A)

FLOOR -VINYL IN BATHS, UTILITY RM, KITCHEN & BREAKFAST RM-CARPET ALL OTHER AREAS.

EXTERIOR FINISH MATERIAL

ROOF-FIBERGLASS ROOF SHINGLES INSTALLED ON ROOFS WITH LESS THAN 4/12 ROOF PITCH SHALL HAVE TWO LAYERS OF #15 FELT.

WALL -VINYL LAP OR HARDI CEMPLANK SIDING

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 jurisditcion 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.

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:		1/15/25
SCALE:	N.T.S.	

TITLE: TYPICAL OFF-FRAME CROSS SECTION

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’

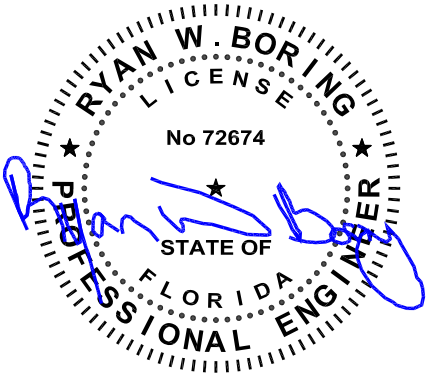
Roof Live Load: 20psf Roof LL

Wind Speeds: 160mph Vult

Wind Exposure: C

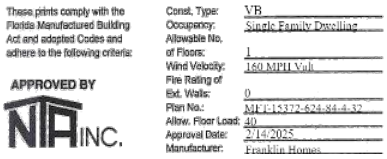
Wall Height: 9’

Max Mean Roof Height: 20’



Feb 13, 2025

NOTE:
-These calculations are applicable only to the structural elements and loading criteria specifically noted herein.
-Structural elements not contained herein are to be constructed in accordance with the prescriptive requirements of the adopted building code or designed by other registered design professionals.
-Specified design criteria are based solely on information provided by the client and must be verified and approved by the LAHJ.
-Ryan W. Boring, P.E. is not responsible for fabrication or erection.



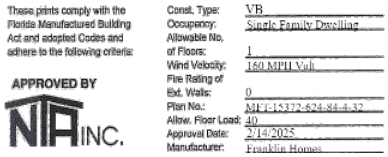
Wind Pressures for Low-rise buildings or buildings with h<60ft

ASCE 7-22:

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	-59.3
Zone 2	Min	0.7	-2.7	Zone 2	Min	44.2	-144.7
	100	0.7	-1.4		100	44.2	-79.4
Zone 3	Min	0.7	-3.6	Zone 3	Min	44.2	-189.9
	100	0.7	-1.8		100	44.2	-99.5
OH Z1	Min		-2.5	OH Z1	Min		-134.6
	100		-1.5		100		-84.4
OH Z2	Min		-3.5	OH Z2	Min		-184.9
	100		-2.4		100		-129.6
OH Z3	Min		-4.7	OH Z3	Min		-245.2
	100		-2.3		100		-124.6



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

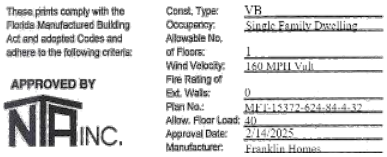
Longitudinal

	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		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-62.80	-38.06	-43.71	-29.28	-93.94892	-74.85769	-24.74	58.23	-14.43	38.70
Long	-62.80	-35.67	-43.71	-27.63	-93.94892	-	-27.13	52.25	-16.08	34.67

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



Design Criteria:

Total Length:	80.00	ft						
Total Width:	30.04	ft	Top chord DL:	10	psf	Vult:	160	mph
Unit Width:	15.02	ft	Bottom chord DL:	10	psf	Vasd:	124	mph
Pitch:	2	/12	Bottom chord LL:	0	psf	Exposure:	C	
Roof Angle:	9.5	deg	Stories:	1		Internal Press:	0.18	
Wall height:	9	ft	Floor Live Load:	40	psf	End zone, 2a:	6.00833333	ft
Overhang:	12	in	Floor Dead Load:	10	psf			
Blocking Height:	36	in	Wall Dead Load:	5	psf			
Eave Height:	10.00	ft	Ceiling R value:	35				
Min Mean Roof ht:	20	ft	Framing Rafters?:	no				
Mean Roof Height:	14.25	ft	Truss Spacing:	24	in oc			

Snow Loading:			Wind Loading:			
Ground Snow Load:	0	psf		WW	LW	WWOH
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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APPROVED BY NTA INC.

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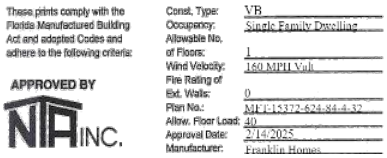
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult.
Fire Rating of Ext. Walls:	0
Plan No.:	MFG15372-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes



Truss Reactions

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

Load Cases for Ranch		Roof			Roof and 1 Story			
	Load Case	Sidewall	Matewall	Endwall	Sidewall	Matewall	Endwall	LDF
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

Matewall Headers Supporting Roof
No splices considered in span

Vertical Load

Dead Load:	150	plf	D
Live Load:	150	plf	Lr
Total Load:	300	plf	D+Lr
Uplift Load:	-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	
Volume effect exp (e):	0.136		
Cr (LVL):	1.04		

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	9.25	SPF	#2	Edge	1	1.1	875	135	425	1400000	510000	1203	169	13.9	21.4	98.9
2	1	1.5	9.25	SYP	#2	Edge	1	1.0	800	175	565	1400000	510000	1000	219	13.9	21.4	98.9
3	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	21.4	98.9
4	1	1.5	11.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3468	285	16.9	31.6	178.0
5	1	1.5	14	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3366	285	21.0	49.0	343.0
6	1	1.5	16	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3306	285	24.0	64.0	512.0
7	1	1.5	18	LVL		Edge	1	0.9	2750	285	750	2000000	1016411	3253	285	27.0	81.0	729.0
8	1	1.5	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) Gravity	Reactions (lbs) Uplift	Bearing (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					

.131x3"			# nails	
Grav	69.1	lb	17.37	9.84
uplift	88.4	lb		

	Grav	Uplift
1	17.37	9.84
2	15.92	8.93
3	28.95	16.96
4	34.74	20.35
5	41.97	24.88
6	47.76	28.27
7	53.55	31.43
8	11.58	6.33

can be based off span or header

.131x3" nails per header
18
16
29
35
42
48
54
12

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

APPROVED BY NTA 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.:	MF115372-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/4/2025
Manufacturer:	Franklin Homes

Location: Matewall

Matewall Columns

Supporting: Roof

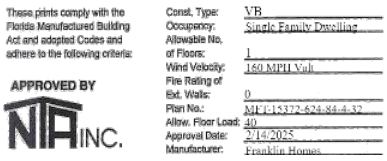
Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)				
NDS Load:	300 plf	D+Lr	Lateral only			Vertical:	150 plf		0	Top/Btm Plate (tp): 4.5 in
Total Load:	300 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	5 psf	W		LVL: Microllam
Uplift Load:	-230 plf	.6D+Wn	Lateral:	5 psf	W	Combined Vert and Lat (max Vert)				LVL MOE (E): 2000000 psi
						Vertical:	263 plf	0		E min: 1016411 psi
						Lateral:	3.8 psf	.75W		Fb: 2750 psi
			def=.7 C&C			Combined Uplift and Lat				Fv: 285 psi
Cr:	1					Vertical:	-230 plf	.6D+Wn		Fcperp: 750 psi
Cd:	1.6					Lateral:	3.8 psf	W		Vol eff (e): 0.136
Cd grav:	1.25		ateral deflection L/	120						Cr (LVL): 1.04

Vertical

	Spacing	B	D	Species	Grade	c	Ie/D	Cfb	CfC	Fb	Fc (grav)	Fc (comb)	Fcperp	E	Emin	FcE	Ft
1	16	1.5	3.5	SPF	#3	0.8	29.6	1.5	1.15	500	650	650	425	1200000	440000	414	250
									Cp	0.39	0.32						
									Allowable:	1200	366	379	425	1200000	440000		600
	Bearing length:	1.5												Non braced (between spans)			
														69	35	23	
														76	304	684	
														0.07991	0.299583	0.5756	
# of Studs				1	2	3	4	5	6	7	8	9	10	1	2	3	
Properties																	
Area	in^2			5.3	10.5	15.8	21.0	26.3	31.5	36.8	42.0	47.3	52.5	5.3	10.5	15.8	
Sx	in^3			3.1	6.1	9.2	12.3	15.3	18.4	21.4	24.5	27.6	30.6	3.1	6.1	9.2	
Ix	in^4			5.4	10.7	16.1	21.4	26.8	32.2	37.5	42.9	48.2	53.6	5.4	10.7	16.1	
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				
				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.



Location: Sidewall

Sidewall Headers Supporting Roof U-Headers

Supporting: Roof

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

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) Gravity	Reactions (lbs) Uplift	Bearing (in)
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				

.131x3"			# nails	
			Grav	Uplift
Grav	69.1	lb	4.34	2.43
uplift	88.4	lb	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

can be based off span or header

.131x3" nails per header
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:

APPROVED BY NTA 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.: MF115372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Location: Sidewall

Sidewall Studs (King)

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
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:	35 psf	W	Header height:	80	in
Uplift Load:	-270 plf	.6D+Wn	Zone 5:	43 psf	W	Combined Vert and Lat (max Vert)			LVL:	Microllam	
			Zone 4:	36 psf	W	Vertical:	288 plf	0	LVL MOE (E):	2000000	psi
						Lateral:	26.2 psf	.75W	E min:	1016411	psi
			def=.7 C&C			Combined Uplift and Lat			Fb:	2750	psi
Cr:	1					Vertical:	-270 plf	.6D+Wn	Fv:	285	psi
Cd:	1.6					Lateral:	26.2 psf	W	Fcperp:	750	psi
Cd grav:	1.25		ateral deflection L/	120					Vol eff (e):	0.136	
Vertical									Cr (LVL):	1.04	

	Trib	B	D	Species	Grade	c	Ie/D	Cfb	CfC	Fb	Fc (grav)	Fc (comb)	Fcperp	E	Emin	FcE	Ft	Fv
1	16	1.5	5	SYP	#2	0.8	20.7	1.0	1.00	1000	1400	1400	565	1400000	510000	978	600	175.0
										Cp	0.47	0.39						
									Allowable:	1600	829	868	565	1400000	510000		960	

Single King Stud

Opening:	16	in	Lateral Only		Vertical Only		Combined Max Lat		Combind Max Vert				
			Fb:	1024 psi	Fc:	59 psi	CSI:	0.66	CSI:	0.51	Max CSI:	0.66	**OK**

Check Single stud for a max given max opening

Then check jacks and kings seperately and take controlling number , say calc 1 king for wind and it spans X distance and it takes 3 jacks to span that

give results for different combinations

		King Studs End Zone					King Studs Int Zone				
		1	2	3	4	5	1	2	3	4	5
Properties											
Area	in^2	7.5	15.0	22.5	30.0	37.5	7.5	15.0	22.5	30.0	37.5
Sx	in^3	6.3	12.5	18.8	25.0	31.3	6.3	12.5	18.8	25.0	31.3
Ix	in^4	15.6	31.3	46.9	62.5	78.1	15.6	31.3	46.9	62.5	78.1
Lateral Only (trib)		1	2	3	4	5	1	2	3	4	5
Moment at Center		25	50	75	100	125	30	59	89	119	148
Moment at Header		33	67	100	134	167	40	79	119	159	198
Shear		57	113	170	226	283	67	134	201	268	335
Combined Loading											
Max Lat		333	837	1329	1819	2308	333	837	1329	1819	2308
Max Vert		208	486	759	1031	1303	208	486	759	1031	1303
Deflection Check	L/	203	203	203	203	203	171	171	171	171	171
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Max Span		25	50	75	100	125	30	59	89	119	148

Max Span	End Zone						Interior Zone					
1	33 in	=	2	ft -	9	in	43 in	=	3	ft -	7	in
2	83 in	=	6	ft -	11	in	102 in	=	8	ft -	6	in
3	133 in	=	11	ft -	1	in	161 in	=	13	ft -	4	in
4	183 in	=	15	ft -	3	in	221 in	=	18	ft -	5	in
5	233 in	=	19	ft -	5	in	280 in	=	23	ft -	3	in

All studs are to be braced in weak axis by gypsum or sheathing.

Center column must be in center 1/3 of span.

Studs must be as wide as header.

Note: ripped lumber must be regraded

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

APPROVED BY NTA 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.: MFI-15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Location: Sidewall

Sidewall Studs (Jack)

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
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	Combined Vert and Lat (max Vert)			LVL MOE (E):	2000000	psi
						Vertical:	288 plf	0	E min:	1016411	psi
						Lateral:	16.2 psf	.75W	Fb:	2750	psi
			def=.7 C&C			Combined Uplift and Lat			Fv:	285	psi
Cr:	1					Vertical:	-270 plf	.6D+Wn	Fcperp:	750	psi
Cd:	1.6					Lateral:	16.2 psf	W	Vol eff (e):	0.136	
Cd grav:	1.25		ateral deflection L/	120					Cr (LVL):	1.04	

Vertical

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

Header width: 1.5 in
3 in
4.5 in

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

APPROVED BY NTA 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.: MFG-15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
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 NTA 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.:	MFI-13372-624-84-4-32
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

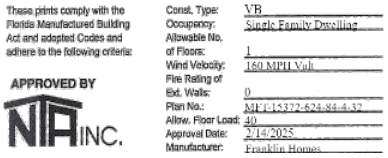
fasteners: 14 .148x 2.5" or .131x 2.5"

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



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

Lateral Load
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
10							

Sill and header lateral connection:

Span (ft)	Load @ Ends (lbs)	Nail Zeg(lb)	0.131 Nails	15ga Zeg(lb)	15gax2.5" 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
10			

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

APPROVED BY NTA 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.: MFI-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 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		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-62.8	-38.1	-43.7	-29.3	-93.9	-74.9	-24.7	58.2	-14.4	38.7
Long	-62.8	-35.7	-43.7	-27.6	-93.9	-	-27.1	52.2	-16.1	34.7

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	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 NTA 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.: MFI-15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Shearwalls:

Left Endwall:			Right Endwall:		
End Zone:	Yes		End Zone:	Yes	
Trib:	40	ft	Trib:	40	ft
End Roof:	0	lb	End Roof:	0	lb
End Wall:	1048	lb	End Wall:	1048	lb
Int Roof:	0	lb	Int Roof:	0	lb
Int Wall:	3948	lb	Int Wall:	3948	lb
Total force:	4996	lb	Total force:	4996	lb
Sheathing Thickness:	7/16	in	Sheathing Thickness:	7/16	in
Fastener:	.131 nail		Fastener:	15ga staple	
Wall Length:	19.35	ft	Wall Length:	30.04	ft
FHS Length:	7.56	ft	FHS Length:	30.04	ft
Wall Height:	9	ft	Wall Height:	9	ft
Tallest Opening:	2h/3		Tallest Opening:	h/3	
r:	0.49		r:	1.00	
Co:	0.62		Co:	1.00	
Perf or Segmented:	S		Perf or Segmented:	P	
Blocked:	YES		Blocked:	YES	
PLF required:	660.87		PLF required:	166.29	
Framing:	SYP		Framing:	SYP	
Required Spacing:	3	" OC	Required Spacing:	6	" OC
Tiedown:	5947.8	lb	Tiedown:	1496.6	lb
Strap for:	2498	lb	Strap for:	2498	lb

These prints comply with the 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 Vult
Fire Rating of Ext. Walls:	0
Plan No.:	MFI-15372-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes

Top Sidewall:			Bottom Sidewall:		
End Zone:	Yes		End Zone:	Yes	
Trib:	15.02	ft	Trib:	15.02	ft
End Wall:	1153	lb	End Wall:	1153	lb
Int Wall:	1414	lb	Int Wall:	1414	lb
Total force:	2567	lb	Total force:	2567	lb
Sheathing Thickness:	7/16	in	Sheathing Thickness:	7/16	in
Fastener:	15ga staple		Fastener:	15ga staple	
Wall Length:	72.25	ft	Wall Length:	72.25	ft
FHS Length:	45.09	ft	FHS Length:	51.63	ft
Wall Height:	9	ft	Wall Height:	9	ft
Tallest Opening:	5h/6		Tallest Opening:	5h/6	
r:	0.67		r:	0.75	
Co:	0.64		Co:	0.70	
Perf or Segmented:	P		Perf or Segmented:	P	
Blocked:	YES		Blocked:	YES	
PLF required:	89.04		PLF required:	71.01	
Framing:	SPF		Framing:	SPF	
Required Spacing:	6	" OC	Required Spacing:	6	" OC
Tiedown:	801.4	lb	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

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

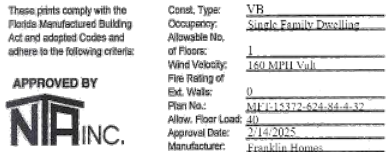
Connections

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	



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.

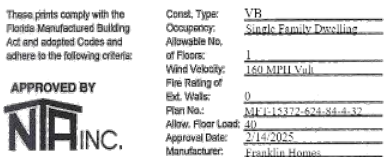
Plate to floor and plate interconnection (top plate):

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.



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) Gravity	Reactions (lbs) Uplift	Bearing (in)
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:

APPROVED BY NTA INC.

Const. Type: VB
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 160 MPH Ult.
Fire Rating of Ext. Walls: 0
Plan No.: MFL15372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/4/2025
Manufacturer: Franklin Homes

Location: Matewall

Matewall Headers Supporting Roof & 1 Floor

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) Gravity	Reactions (lbs) Uplift	Bearing (in)
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 NTA 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.:	MFI-15372-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/4/2025
Manufacturer:	Franklin Homes

Location: Matewall

Matewall Girders Supporting Floor Load Only

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) Gravity	Reactions (lbs) Uplift	Bearing (in)
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					

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

Location: Sidewall

Porch Headers

Supporting: Roof

Vertical Load

Dead Load:	160 plf	D	
Live Load:	170 plf	Lr	
Total Load:	330 plf	D+Lr	Since deflection doesn't govern the LDF between uplift and gravity (1.6 vs 1.25)
Uplift Load:	-416 plf	.6D+Wn	allow a maximum uplift per truss of (330*1.6/1.25*2ft=844lb)

Cr: 1.15 LL defl L/ 240

Cd: 1.25 TL defl L/ 180

Wall height:	108 in
Min sill height:	18 in
LVL:	Micrallam
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	2	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	21.8	26.3	95.3
2	2	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	21.8	26.3	95.3
3	1	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	10.9	13.1	47.6
4	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	21.4	98.9
5	2	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	21.8	26.3	95.3
6	2	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	27.8	42.8	197.9
7	1	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	10.9	13.1	47.6
8	1	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	10.9	13.1	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) Gravity	Reactions (lbs) Uplift	Bearing (in)
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 NTA 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.: MF115372-624-84-4-32
Allow. Floor Load: 40
Approval Date: 2/14/2025
Manufacturer: Franklin Homes

Location: Matewall

Porch Column (1-ply Header)

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	330 plf	D+Lr	Lateral only			Vertical:	150 plf	0	Top/Btm Plate (tp):	0	in
Total Load:	330 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	5 psf	W	LVL:	Microllam	
Uplift Load:	-416 plf	.6D+Wn	Lateral:	79 psf	W	Combined Vert and Lat (max Vert)			LVL MOE (E):	2000000	psi
						Vertical:	330 plf	0	E min:	1016411	psi
						Lateral:	3.8 psf	.75W	Fb:	2750	psi
			def=.7 C&C			Combined Uplift and Lat			Fv:	285	psi
Cr:	1					Vertical:	-416 plf	.6D+Wn	Fcperp:	750	psi
Cd:	1.6					Lateral:	3.8 psf	W	Vol eff (e):	0.136	
Cd grav:	1.25		Lateral deflection L/	120					Cr (LVL):	1.04	

Vertical

	Spacing	B	D	Species	Grade	c	Ie/D	Cfb	CfC	Fb	Fc (grav)	Fc (comb)	Fcperp	E	Emin	FcE	Ft
1	16	3.5	3.5	SYP	#2	0.8	30.9	1.0	1.00	1100	1450	1450	565	1400000	510000	440	675
									Cp	0.23	0.18						
	Header	1.5	inches						Allowable:	1760	416	422	565	1400000	510000		1080

# of Studs	1
Properties	
Area in^2	12.3
Sx in^3	7.1
Ix in^4	12.5
Axial Loading	
Fc compression	185
Fc Perp compression	108
Tension	382
Fcperp	
Combined Loading	
Uplift/Lateral	382
Vert/Lateral max Lat	398
Vert/Lateral Max Vert	182
Deflection Check	L/ 121
	OK
	108

Max Span	Max Trib
1	108 in

Max Side Opening	Max Center opening
211 in = 17 ft - 6 in	155 in = 12 ft - 11 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 NTA 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.:	MFI-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%

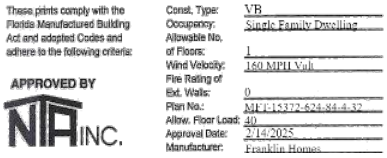
Heating Equipment

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



Meets all requirements of ACCA Manual S.

wrightsoft

Load Short Form
Entire House

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

APPROVED BY NTA 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

Job: MFT-15372-18087-624-84-4...
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
Outside db (°F)	23	98
Inside db (°F)	70	75
Design TD (°F)	47	23
Daily range	-	M
Inside humidity (%)	30	50
Moisture difference (gr/lb)	19	56

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

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			

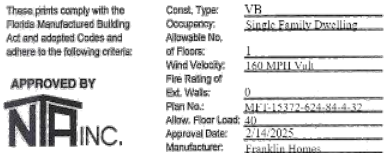
COOLING EQUIPMENT

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.

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



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

Project Information

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

Design Conditions

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

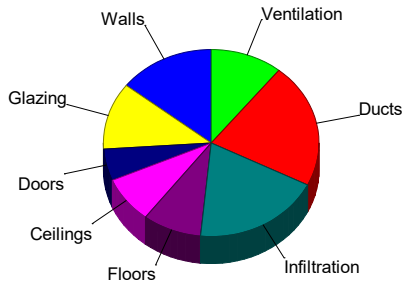
Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	23	98
Daily range (°F)	-	18 (M)
Wet bulb (°F)	-	79
Wind speed (mph)	15.0	7.5

Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	70	75
Design TD (°F)	47	23
Relative humidity (%)	30	50
Moisture difference (gr/lb)	18.7	56.1

Infiltration:	
Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

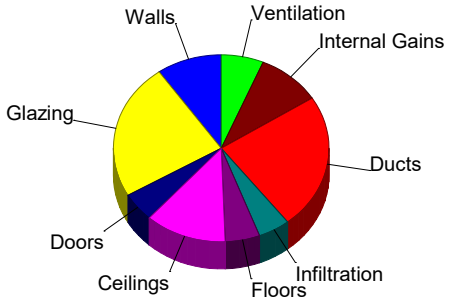
Heating

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 NTA 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

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:	Heating	Cooling
Dry bulb (°F)	23	98
Daily range (°F)	-	18 (M)
Wet bulb (°F)	-	79
Wind speed (mph)	15.0	7.5

Indoor:	Heating	Cooling
Indoor temperature (°F)	70	75
Design TD (°F)	47	23
Relative humidity (%)	30	50
Moisture difference (gr/lb)	18.7	56.1

Infiltration:

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

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 NTA 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

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 NTA INC.

Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Ult.
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

Design Information

Weather: Gainesville, FL, US

Winter Design Conditions

Outside db	23	°F
Inside db	70	°F
Design TD	47	°F
Ventilation Method	MJ8	

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

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

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

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

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

Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	

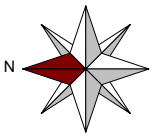
Efficiency	100	AFUE
Heating input	10.3	kW
Heating output	35081	Btuh
Temperature rise	26	°F
Actual air flow	1226	cfm
Air flow factor	0.039	cfm/Btuh
Static pressure	0.30	in H2O
Space thermostat		

Cooling Equipment Summary

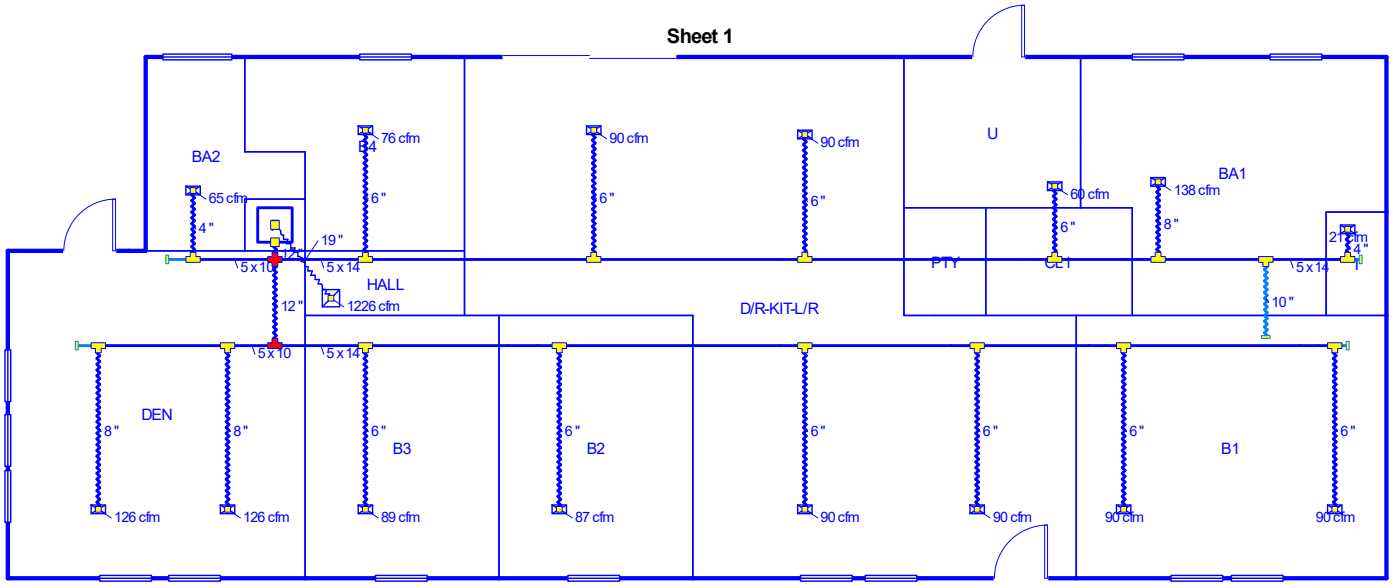
Make	Generic
Trade	
Cond	SEER2 14.3
Coil	
AHRI ref	

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



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APPROVED BY NTA 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

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

Scale: 1 : 134

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25.0.01 RSU56435
2025-Feb-12 15:57:57
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Duct System Summary
Entire House

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

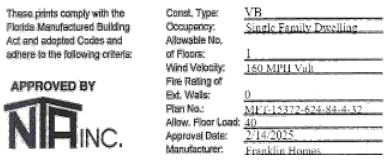
Project Information

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	0x 0	VlFx	64.8	310.0	st8
B1-A	c 2015	81	90	0.068	6.0	0x 0	VlFx	77.0	300.0	st8
B2	c 1946	69	87	0.070	6.0	0x 0	VlFx	32.0	335.0	st8
B3	c 1981	70	89	0.070	6.0	0x 0	VlFx	20.8	345.0	st8
B4	c 1693	69	76	0.093	6.0	0x 0	VlFx	13.8	260.0	st3
BA1	h 3521	138	123	0.088	8.0	0x 0	VlFx	56.8	235.0	st3
BA2	h 1660	65	38	0.114	***4.0***	***0x 0***	VlFx	9.8	215.0	st2
D/R-KIT-L/R	c 2005	80	90	0.089	6.0	0x 0	VlFx	27.0	260.0	st3
D/R-KIT-L/R-A	c 2005	80	90	0.068	6.0	0x 0	VlFx	56.2	320.0	st8
D/R-KIT-L/R-B	c 2005	80	90	0.068	6.0	0x 0	VlFx	46.2	330.0	st8
D/R-KIT-L/R-C	c 2005	80	90	0.088	6.0	0x 0	VlFx	39.0	250.0	st3
DEN	h 3219	126	112	0.078	8.0	0x 0	VlFx	18.2	310.0	st7
DEN-A	h 3218	126	112	0.078	8.0	0x 0	VlFx	25.8	300.0	st7
T	h 538	21	10	0.090	4.0	0x 0	VlFx	65.0	220.0	st4
U	h 1525	60	39	0.087	6.0	0x 0	VlFx	50.5	245.0	st3



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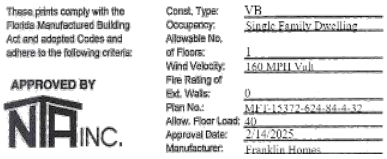
Supply Trunk Detail Table

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***	VinlFlx	st1
st1	Peak AVF	1226	1226	0.068	1561	***12.0***	***0*** x ***0***	VinlFlx	

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		VlFx	



Bold/italic values have been manually overridden

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

APPROVED BY NTA INC.

Const. Type:	VB
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	140 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

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	Robin Hardin	1/7/2025
Manufacturer's Authorized Agent Signature	Printed Name	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.

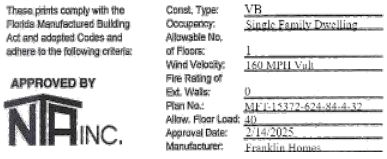
Name: License #:
Address:
City: State:

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.

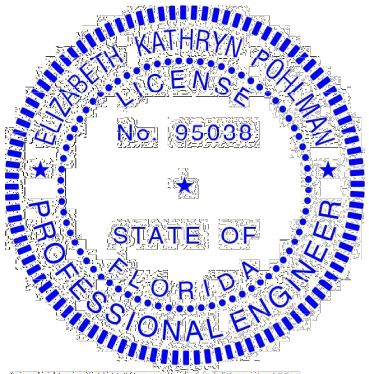
No.	Seal#	Truss Name	Date
1	I62570345	8024-C	12/14/23
2	I62570346	8024-CP	12/14/23



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.



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

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

December 14,2023

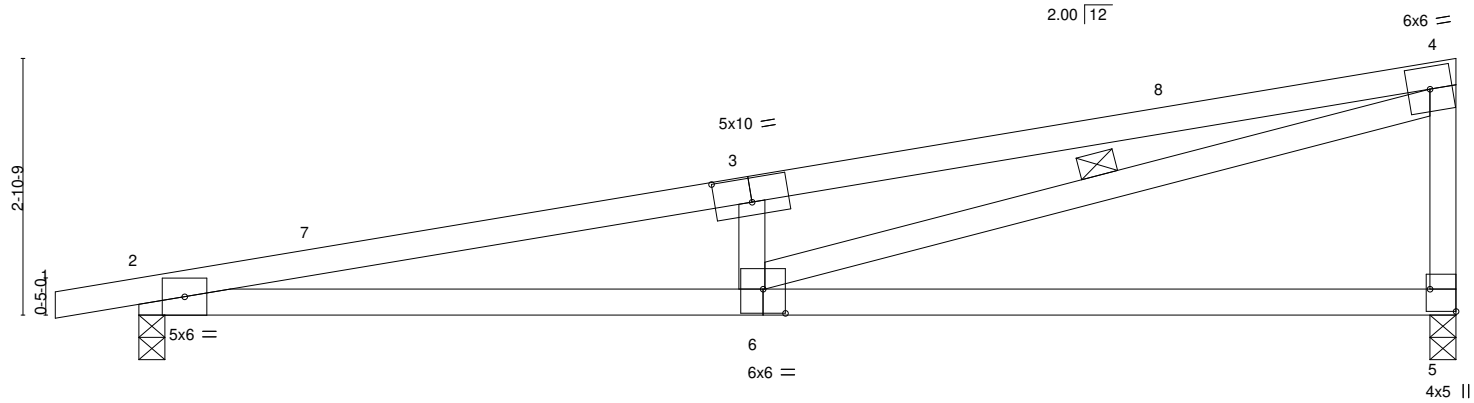
Pohlman, Elizabeth

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

Franklin Structures, LLC., Russelville, AL - 35653, 8.730 s Nov 13 2023 MiTek Industries, Inc. Thu Dec 14 14:50:17 2023 Page 1
ID:UvccRizZaxSt2pLcl8WyXbyi26q-ALtshuY_B7Kk6HnO3N5BmfmR?hBzdDK9lYxG63y90Tq

-0-11-4 0-11-4 | 7-0-4 7-0-4 | 14-9-4 7-9-0

Scale = 1:25.8



7-0-4 7-0-4 | 14-9-4 7-9-0

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

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-2-6 oc bracing.
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:

APPROVED BY NTA 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.:	MFI-15372-624-84-4-32
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.

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

MiTek®
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	I62570346
					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
ID:UvccRizZaxSt2pLcl8WyXbyi26q-eYRFuEZcyRSbjRMad5cQltJfF5XCMbsJ_CgqeVy90Tp

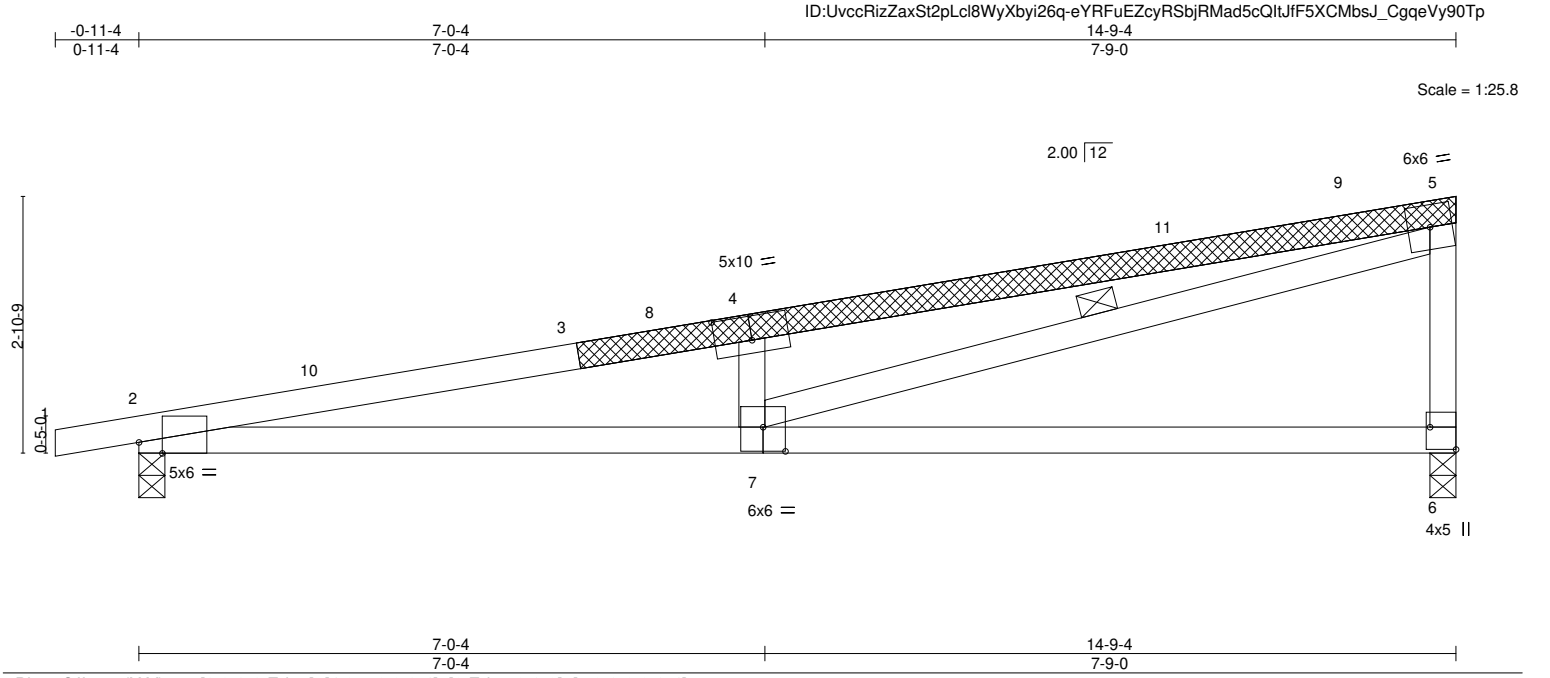


Plate Offsets (X,Y)-- [2:0-3-2,Edge], [4:0-5-0,0-3-4], [6:Edge,0-3-8], [7:0-3-0,0-3-4]

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

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
LBR SCAB	3-5 2x4 SPF No.2 both sides

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-9-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-8-11 oc bracing.
WEBS	1 Row at midpt 5-7

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., GCpi=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:

APPROVED BY NTA 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.:	MFI-15372-624-84-4-32
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.

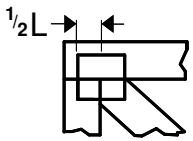
Elizabeth Kathryn Pohlman PE No.95038
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Road
Chesterfield, MO 63017
Date:

December 14,2023

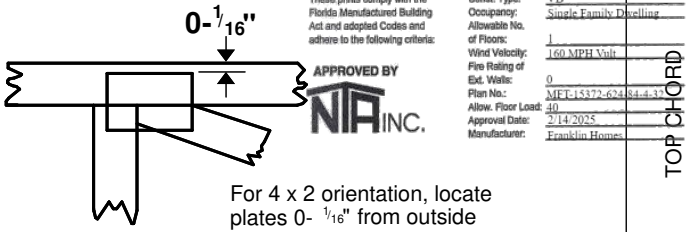
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

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.

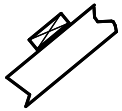
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

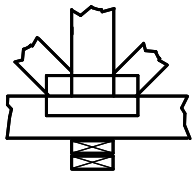
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

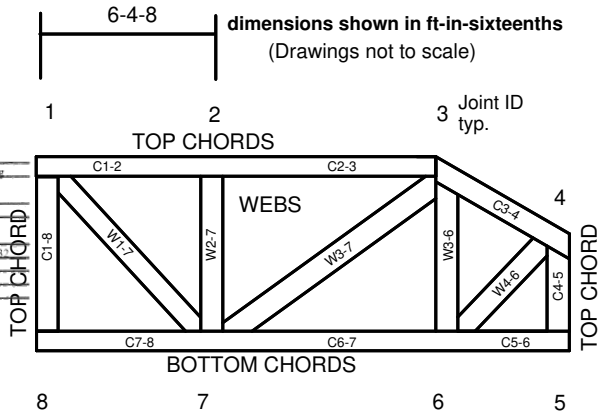


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.

MiTek®

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. **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. **2.Complete the tables for air infiltration and installed equipment.**
3. **3.Read the MANDATORY REQUIREMENTS table and check each box to indicate your intent to comply with all applicable items.**
4. **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.**

apps

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT[1]

REQUIREMENTS	FENESTRATION *U*-FACTOR[2, 3, 4]	SKYLIGHT[2] *U*-FACTOR	GLAZEDFENESTRATIONSHGC[2, 3]	CEILING *R*-VALUE	WOODFRAMEWALL *R*-VALUE[5]	MASS WALL *R*- VALUE[5, 6]	FLOOR *R*-VALUE	BASEMENTWALL *R*-VALUE	SLAB[7] *R*-VALUE &DEPTH	CRAWLSPACEWALL *R*-VALUE
CLIMATE ZONE 1	NR	0.75	0.25	30	13	3/4	13	0	0	0
CLIMATE ZONE 2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
VALUE	AVG	AVG	AVG	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST
INSTALLED:	.34		.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.

apps

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

apps

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

APPROVED BY NTA 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:	7/14/2025
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 system[1]	Not allowed in attic	Location: ON SITE
Air handling unit	Factory Sealed	Factory Sealed? Y/N
Duct *R*-value	= R-8 (Ducts in unconditioned attics, Diameter ≥ 3 in.)	*R*-Value (In unc. attic) =
	= R-6 (Ducts in unconditioned non attics, Diam. ≥ 3 in.)	*R*-Value (In unc. non attics) =
	= R-6 (Ducts in unconditioned attics, Diameter < 3 in.)	*R*-Value (Small ducts in attic) =
	= R-4.2 (Ducts in unconditioned not attics, Diam. < 3 in.)	*R*-Value (Small ducts in unc) =
	All ducts are in conditioned space (No minimum)	All in conditioned space ? 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 NAECA[2]:	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 NAECA[2]:	
Heat pump ≤ 65,000 Btu/h	HSPF ≥ 8.2	HSPF (Min) =
Gas furnace, non-weatherized	HSPF ≥ 80%	AFUE (Min) =
Oil furnace, non-weatherized	HSPF ≥ 83%	AFUE (Min) =
Other:		Type = Effic. (min) =
Water heating system (storage type):	Minimum federal standard required by NAECA[2]:	Capacity =
Electric[3, 6]	UEF 40 gal. 0.923; 50 gal.: 0.921; 60 gal.: 2.051	UEF (Min) =
Gas fired[4, 6]	UEF 40 gal. 0.580; 50 gal.: 0.563; 60 gal.: 0.766	UEF (Min) =
Other (describe)[5, 6]:		Type = Effic. (min) =

Equipment Efficiency—[PASS / FAIL]

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

MANDATORY REQUIREMENTS			
Component	**Section**	**Summary of Requirements**	**Check**
Air leakage	R402.4	To be caulked, gasketed, weatherstripped or otherwise sealed perTable R402.4.1.1. Recessed lighting IC-rated as having ≤ 2.0 cfmtested to ASTM E283.Windows and doors: 0.3 cfm/sq.ft (swinging doors: 0.5 cfm/sf) whentested to NFRC 400 or AAMA/WDMA/CSA 101/I.S. 2/A440.Fireplaces: Tight-fitting flue dampers & outdoor combustion air	X
Programmable thermostat	R403.1.2	A programmable thermostat is required for the primary heating orcooling system.	X
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 NTA 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.:	MH-15372-624-84-4-32
Allow. Floor Load:	40
Approval Date:	2/14/2025
Manufacturer:	Franklin Homes