June 15, 2022

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

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

Dear Ms. Christie Jackson,

The referenced manufactured building has been reviewed and approved. ICC NTA LLC certifies this plan is in compliance with 2020 Florida Codes – 7th Edition w/2021 Supplement as referenced in the approved drawings. This approval covers the factory build structure only. Any alterations to the factory-built structure, on site, voids the approval. This plan is subject to the following limitations:

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

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

Respectfully,

Michael Faller

Michael Faller SMP-056
Account Manager
ICC-NTA LLC

Notes:

1. These plans comply with the:
7th Edition (2020) w/ 2021 Supplement
7th Edition (2020)Energy Conservation w/2021 Supplement
2017 National Electrical Code.
2. These plans comply with Rule 61G20-3.006 for product approval.
3. The raised seal set (or electronic sealed set) of plans are on file in the third agency's office as directed by DBPR.
4. This building is subject to review and approval of the fire inspector on site with compliance with Chapter 633 Fire Safety Code.
5. The manufacturer's data sheet and the state (DBPR) insignia are permanently mounted to or about the electrical panel.
6. This building has been designed for erection or installation on a site built permanent foundation and is not designed to be moved once so erected or installed.

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

APPROVED BY NTA INC.

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

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

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

INDEX TO DRAWINGS DESCRIPTION: SHEET NUMBER

INDEX TO ADDENDUMS

RYAN W. BORING LICENSE No 72674 STATE OF FLORIDA PROFESSIONAL ENGINEER
Jun 14, 2022

Notes:

9. Vult wind speed = EXPOSURE-C AT Vult=130 MPH & Vasd = 101MPH
10. RISK CATEGORY=II
11. Building Mean Roof Height 20'
12. Roof live load = 20 psf
13. Floor live load = 40 psf
14. Seismic Zone = A, B or C
15. Building Category = Type 5B, Unprotected, Wood Construction.
16. Use Group = Single Family Dwelling
17. Roof Interior (zone 1) = +18.9/-36.1sf
18. Roof Exterior (zone 2) = +18.9/-57.5sf
19. Roof Corner (zone 3) = +18.9/-81.1 psf
20. Wall Interior (zone 4) = +25.3/-27.5psf
21. Wall Exterior (zone 5) = +25.3/33.9 psf
22. ROOF OVERHANG(Zone 1) = -46.8 psf.
23. ROOF OVERHANG(Zone 2) = -68.2 psf.
24. ROOF OVERHANG(Zone 2) = -104.7 psf.
25. Site address per FRC R319.1
26. Internal pressure coefficient = +/- 0.18 psf

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

Columbia County Building Department — Plans Reviewed for Code Compliance — State of Florida

SITE INSTALLED ITEMS

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

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

PHYSICAL ADDRESS
sw coyote cir
FORT WHITE FL, 32038
COLUMBIA COUNTY

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

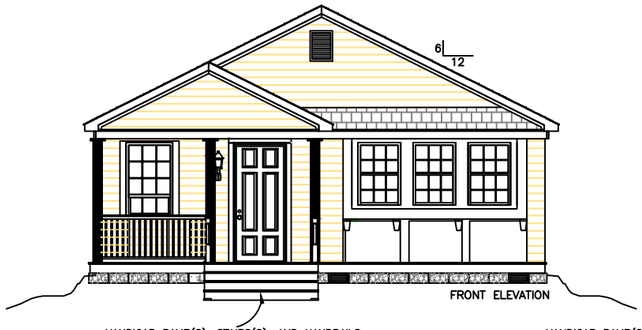
FLORIDA MODULAR

	BY:	DATE:
DRAWN:	M.W.W	5/25/22

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

TITLE: MODULAR INDEX

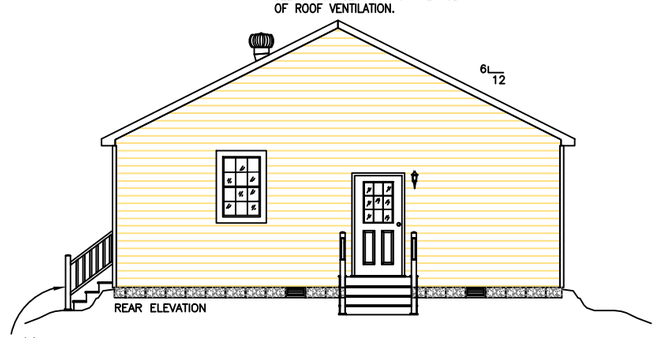
NO: MFT-10886-8015-70-3-32-2 | REV: | SHEET: 1 OF 7



FRONT ELEVATION

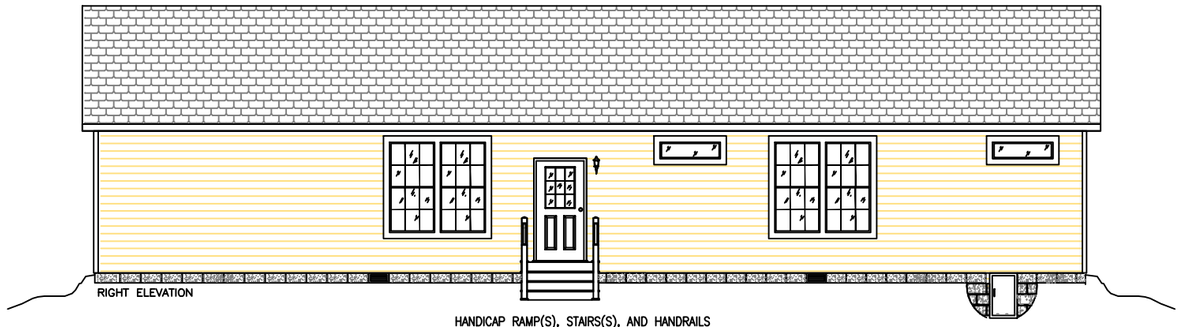
HANDICAP RAMP(S), STAIRS(S), AND HANDRAILS ARE SITE INSTALLED, DESIGNED BY OTHERS, AND SUBJECT TO LOCAL JURISDICTION.

SEE CROSS SECTION FOR METHOD OF ROOF VENTILATION.



REAR ELEVATION

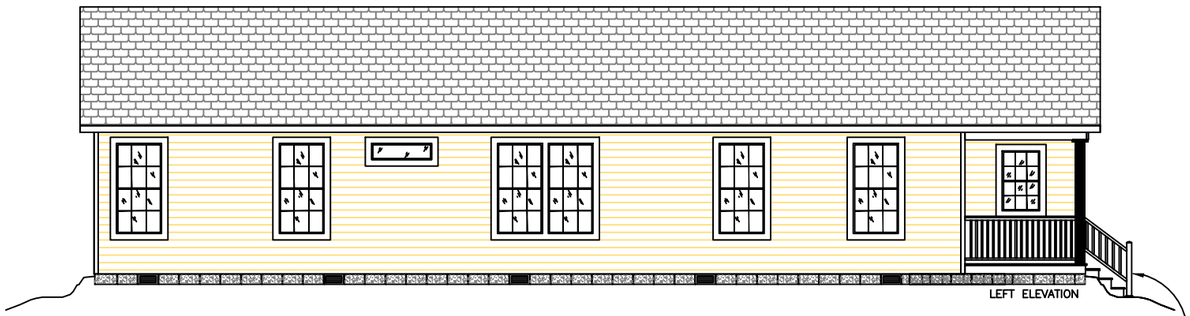
HANDICAP RAMP(S), STAIRS(S), AND HANDRAILS ARE SITE INSTALLED, DESIGNED BY OTHERS, AND SUBJECT TO LOCAL JURISDICTION.



RIGHT 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.



LEFT ELEVATION

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

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

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

Jun 14, 2022

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

NOTES!!
1. EXTERIOR COVERING IS VINYL LAP SIDING WITH VINYL APPURTENANCES STANDARD. OTHER EXTERIOR COVERINGS SHALL CONFORM TO INTERNATIONAL BUILDING CODE. EXTERIOR COVERINGS FOR FRONT AND REAR ELEVATIONS ARE SUPPLIED BY FRANKLIN HOMES AND INSTALLED ON-SITE BY LOCAL CONTRACTOR.
2. ROOF COVERING IS 240# FIBERGLASS SHINGLES. SHINGLES FOR RIDGE ARE SUPPLIED BY FRANKLIN HOMES, INSTALLED ON-SITE BY LOCAL CONTRACTOR.
3. WINDOWS ARE VINYL CLAD THERMOPANE.
4. MINIMUM ATTIC VENTILATION VIA CONTINUOUS VENTILATED SOFFIT & WHIRLY BIRD VENTS IS 6.61 SQ.FT PER 1983 SQ.FT. OF HOME DIVIDED BY 300 SQ.FT. OF CONTINUOUS VENTILATION
5. CRAWL SPACE VENTILATION SHALL CONFORM TO REQUIREMENTS OF 1/150 { BY OTHERS}
6. FOUNDATIONS INSTALLED BY LOCAL CONTRACTOR PER LOCAL CODE REQUIREMENTS.
7. SHUTTERS SHOWN ARE NON-STRUCTURAL (AVAILABLE AS OPTION).

REVISION:	BY:	DATE:

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

	BY:	DATE:
DRAWN:	M.W.W.	6/1/22

TITLE: ELEVATIONS

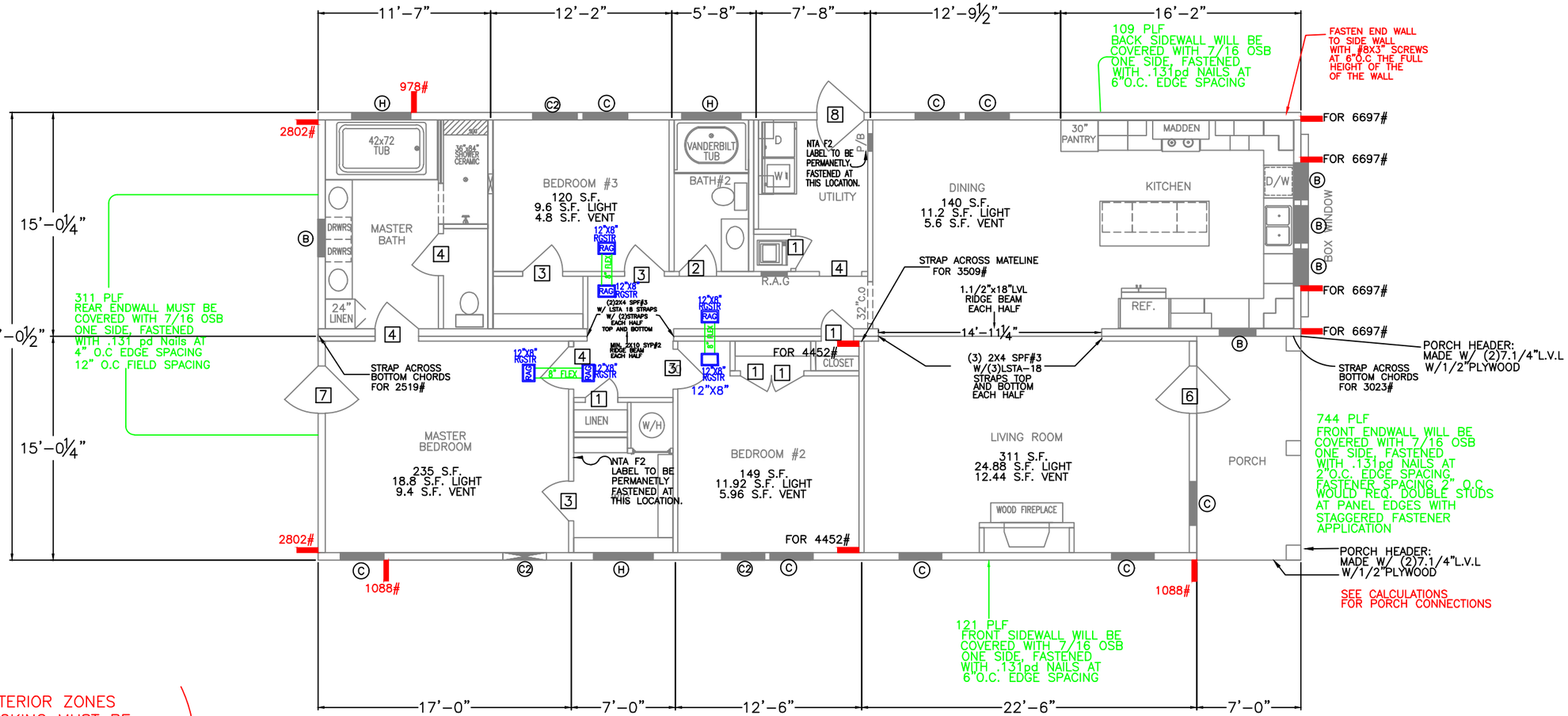
GRAPHIC SCALE 0 1' 2' 3' 4' 5'

NO: MFT-10886-8015-70-3-32-2 REV: SHEET: 2 of 7

ALL TIE DOWNS ARE REQUIRED IN TENSION AND COMPRESSION

8298lbs TOTAL LATERAL LOAD THIS DIRECTION

15980lbs TOTAL LATERAL LOAD THIS DIRECTION



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

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

TIE-DOWNS LOCATIONS ON-SITE BY OTHERS

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

Jun 14, 2022

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

= 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
Ⓑ 3048 VINYL THERMOPANE
Ⓒ 3672 VINYL THERMOPANE
Ⓒ2 3672 VINYL THERMOPANE (E)
Ⓗ 4812 VINYL THERMOPANE

U-Values=0.34 (E) = EGRESS WINDOW
SHGC=0.24 (S.G.) = SAFETY GLAZED

	DOOR SCHEDULE	U.Values	SHGC
1	24"X80" HOLLOW CORE	N/A	N/A
2	28"X80" HOLLOW CORE	N/A	N/A
3	30"X80" HOLLOW CORE	N/A	N/A
4	32"X80" HOLLOW CORE	N/A	N/A
5	36"X80" HOLLOW CORE	N/A	N/A
6	38"X80" STEEL DOOR	0.17	0.01
7	38"X80" 1/2 ATRIUM	0.43	0.30
8	38"X80" STEEL DOOR	0.34	0.19
9			

9'-0" SIDEWALLS

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
6. TRUSSES FOR THIS MODEL ARE 24" MAIN HOUSE & 16" O.C PORCH AREA FACTORY INSTALLED

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	M.W.W	5-1-22

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

TITLE: FLOORPLAN

NO: MFT-10886-8015-70-3-32-2

REV:

SHEET: 3 of 7

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

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

NOTE: ALL CIRCUITS MAY NOT BE USED, SEE APPROVAL DRAWINGS FOR SPECIFIC CIRCUITS

SYMBOLS:

- S – SWITCH
- – 15 AMP RECEPTACLE
- – 20 AMP RECEPTACLE
- – 30 AMP RECEPTACLE
- – 40 AMP RECEPTACLE
- – LIGHT FIXTURE
- – LAVLIGHT&PORCH LIGHT
- S.D. – SMOKE DETECTOR
- – LIGHT\VENT FAN
- – C/L=CAN LIGHT
- PH – TELEPHONE
- TV – TELEVISION
- – 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

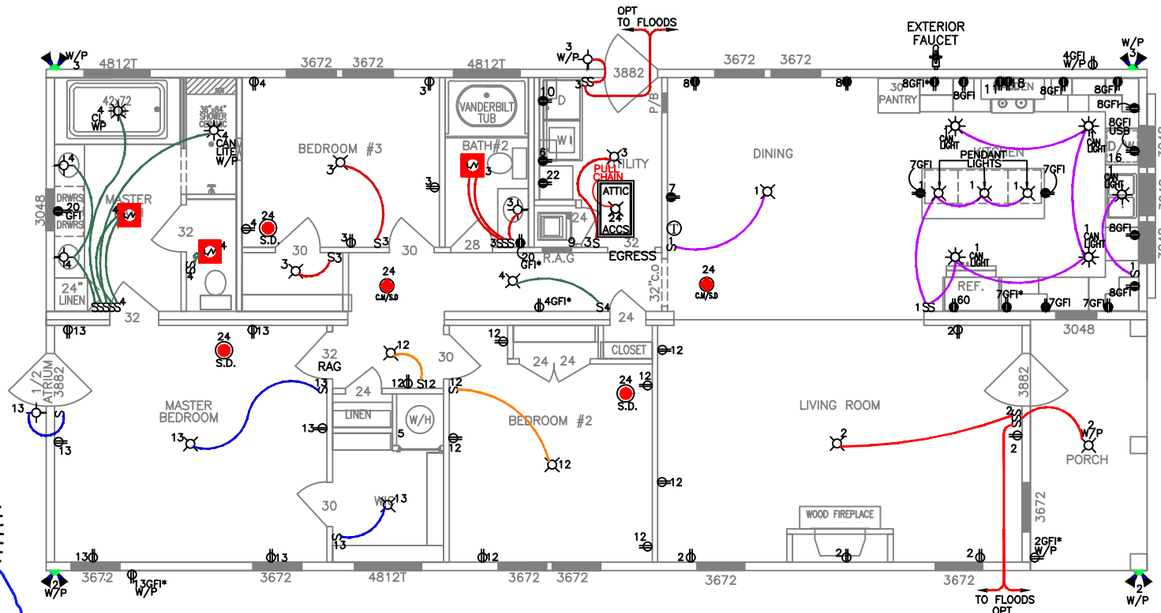
ALL CEILING BOXES MUST BE LISTED AS ABLE TO SUPPORT 50lbs.

ALL RECEPTACLES MUST BE LISTED AS TAMPER RESISTANT

THIS HOME IS BUILT FOR THE 2017 NEC!!

2040 SQ.FT. @ 3 WATTS/SQ.FT.	=	6120 W
SMALL APPLIANCES, 3 @ 1500 W	=	4500 W
WATER HEATER	=	4500 W
WASHER	=	1500 W
DRYER	=	5000 W
RANGE	=	13000 W
DISHWASHER	=	1200 W
MICROWAVE	=	1200 W
		37020 W
FIRST 10000 W @ 100%	=	10000 W
REMAINDER @ 40% (27020)(.4)	=	10808 W
FURNACE (HVAC)	=	20000 W
		40808 W

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



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

Jun 14, 2022

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

* SELECTION IS BASED ON APPLIANCE LOAD AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.

** GENERAL LIGHTING CIRCUITS MAY BE WIRED WITH 12-2 W/G AND 20 AMP BREAKERS

NOTES!!

*1.a)20 AMP; 2 POLE; 12-2 w/G or
b)25 AMP; 2 POLE; 10-2 w/G or
c)30 AMP; 2 POLE; 10-2 w/G

2.a)12KW: 70 AMP; 2 POLE; 6-6-10
b)15KW: 60 AMP; 2 POLE; 6-6-10 and 30 AMP; 2 POLE; 10-2 w/G
c)20KW; 60 AMP; 2 POLE; 6-6-8 and 50 AMP; 2 POLE; 6-6-8

*3.a)15 AMP; 1 POLE; 14-2 w/G or
b)20 AMP; 1 POLE; 12-2 w/G

*4.a)15 AMP; GFI.; 1 POLE; 14-2 w/G or
b)20 AMP; GFI.; 1 POLE; 12-2 w/G

5. CIRCUIT NUMBERS SHOWN HERE ARE USED FOR IDENTIFICATION OF CIRCUITS SHOWN ON ELECTRICAL DIAGRAMS SUBMITTED FOR APPROVALS. CIRCUIT IDENTIFICATION IN THE DISTRIBUTION PANEL BOXES WILL BE ACCOMPLISHED BY DESCRIBING EACH CIRCUIT (EG. WATER HEATER, LIGHTING, ETC.). IT IS PREFERRED THAT CIRCUIT NUMBERS ON DISTRIBUTION PANEL MATCH THOSE SHOWN ON THIS CHART, BUT IT IS NOT A REQUIREMENT.
6. SERVICE ENTRANCE WIRE SIZE IS (3)-#2/0 WITH (1)-#4 COPPER GROUND.
7. ALL FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATIONS ROOMS, CLOSET, HALLWAYS, KITCHEN, LAUNDRY OR SIMILAR AREAS MUST BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER IN ACCORDANCE WITH SEC. 210-12(b) OF THE NEC.

REVISION:	BY:	DATE:

FRANKLIN STRUCTURES LLC
10655 HWY. 43 SOUTH
RUSSELLVILLE, ALABAMA 35653
Phone:256.332.4510
Fax:256.331.2206

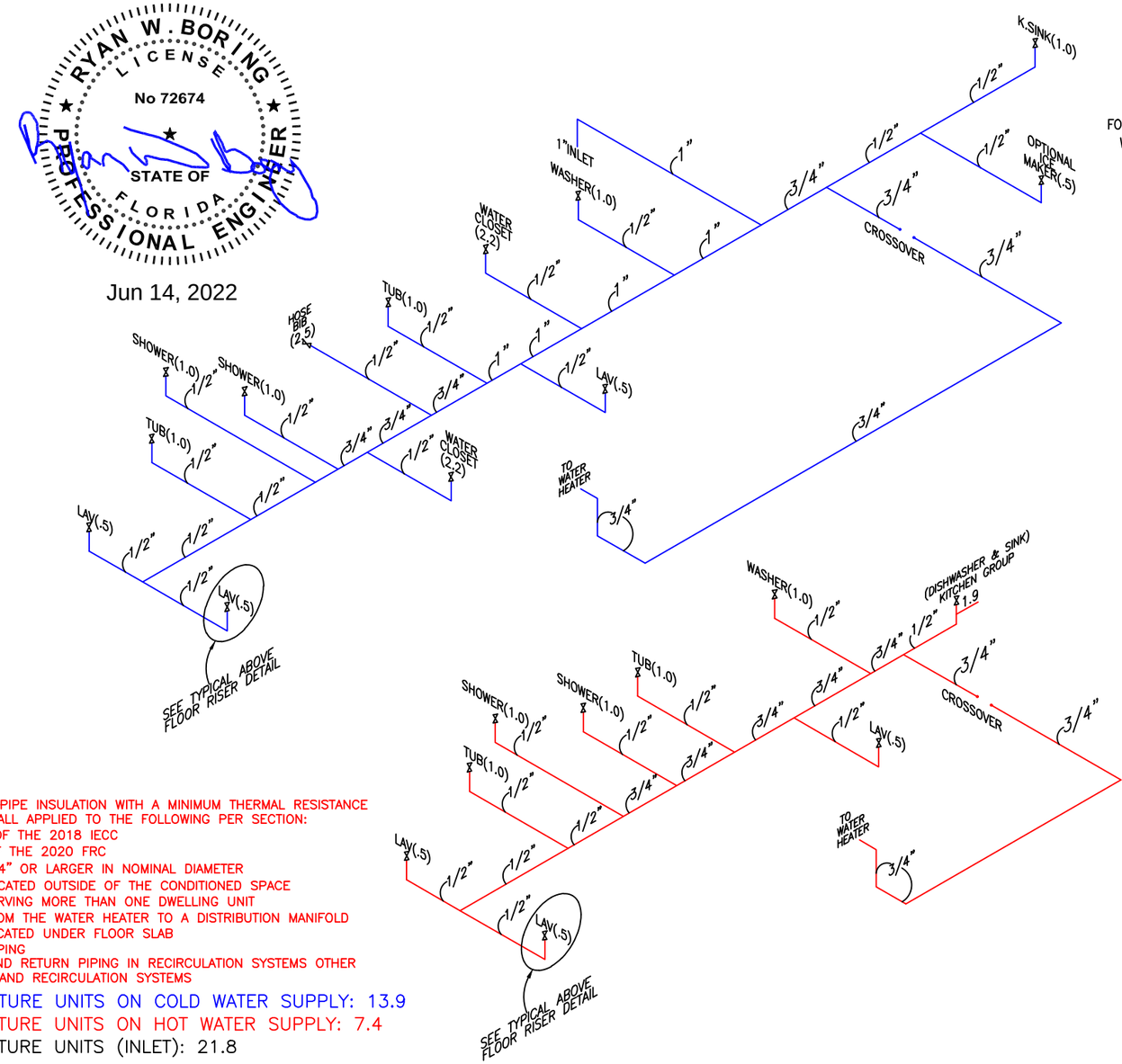
	BY:	DATE:
DRAWN:	MWW	5-1-22

TITLE: ELECTRICAL

NO: MFT-10886-8015-70-3-32-2 | REV: | SHEET: 4 of 7

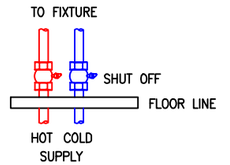
RYAN W. BORING
LICENSE
No 72674
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Jun 14, 2022

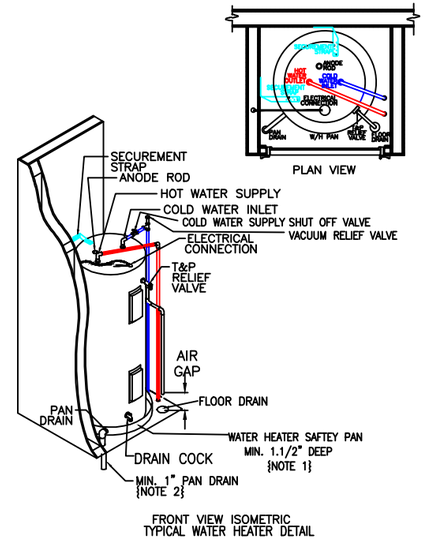


HOT WATER PIPE INSULATION WITH A MINIMUM THERMAL RESISTANCE OF R-3 SHALL APPLIED TO THE FOLLOWING PER SECTION:
N1103.5.3 OF THE 2018 IECC
R403.5.3 OF THE 2020 FRC
* PIPING 3/4" OR LARGER IN NOMINAL DIAMETER
* PIPING LOCATED OUTSIDE OF THE CONDITIONED SPACE
* PIPING SERVING MORE THAN ONE DWELLING UNIT
* 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: 13.9
TOTAL FIXTURE UNITS ON HOT WATER SUPPLY: 7.4
TOTAL FIXTURE UNITS (INLET): 21.8
MAXIMUM FIXTURE UNITS PER TABLE P2903.6
FOR 50-60 PSI AND 80' COLUMN MAXIMUM ALLOWABLE LENGTH PER 2020 FBC-R (APPENDIX P) TABLE AP201.1
1/2"=2.5
3/4"=9.5
1"= 32



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

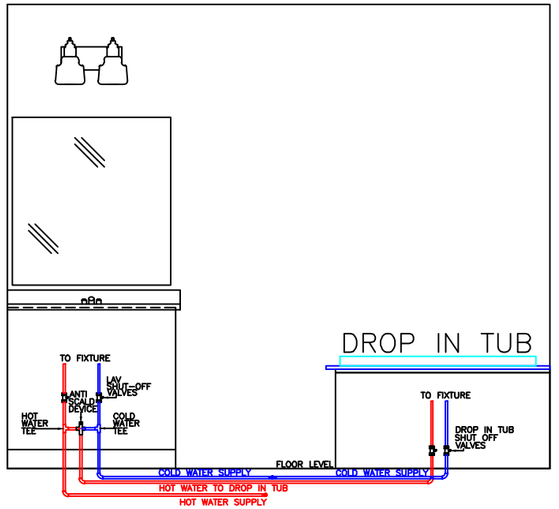


FRONT VIEW ISOMETRIC
TYPICAL WATER HEATER DETAIL

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



NOTES!!

1. 40 GAL. GAS WATER HEATER.
2. THE PAN DRAIN SHALL EXTEND TO THE EXTERIOR OF THE BUILDING AND TERMINATE NOT LESS THAN 6 INCHES OR MORE THAN 24 INCHES ABOVE THE ADJACENT GROUND SURFACE.
3. ALL WATER LINES ARE MADE USING (CROSSLINKED POLYETHYLENE) PEX WITH INSERT FITTING
4. WATER HAMMER ARRESTORS TO BE INSTALLED WHERE QUICK CLOSING VALVES ARE UTILIZED. ARRESTORS SHALL CONFORM TO ASSE 1010.

REVISION:	BY:	DATE:

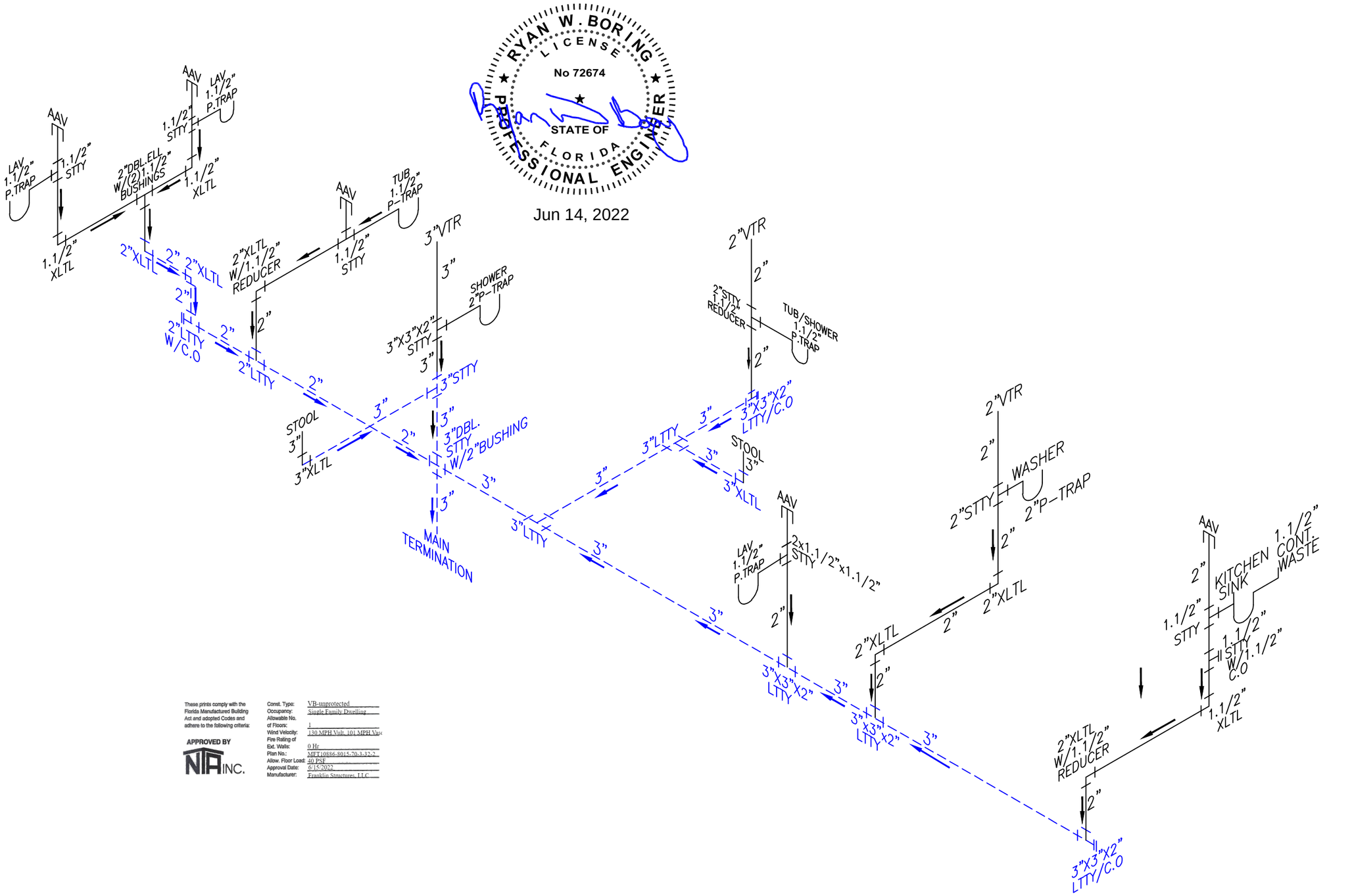
FRANKLIN STRUCTURES LLC
10655 HWY. 43 SOUTH
RUSSELLVILLE, ALABAMA 35653

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	M.W	5-1-22
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	

TITLE: WATER SCHEMATIC

NO: MFT-10886-8015-70-3-32-2 | REV: | SHEET: 5 of 7



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

Jun 14, 2022

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

NOTES!!
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

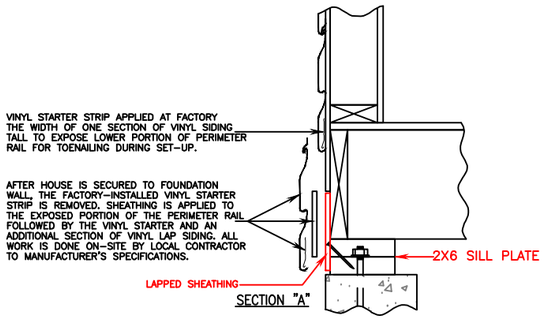
DBL. ELL = DOUBLE ELL
VTR = VENT THRU ROOF
CO = CLEANOUT ADAPTER WITH PLUG
ALL P-TRAPS SHALL BE P-TRAP WITH UNION JOINT.
SHOWER STALLS & WASHER P-TRAPS SHALL BE 2";
ALL OTHER P-TRAPS SHALL BE 1.1/2"MIN.
RE-VENTING MAY BE REPLACED WITH INDIVIDUAL VTR'S.
4. - - - - - - = FIELD INSTALLED PLUMBING.
5. —·—·—·—·—·—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

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

FLORIDA MODULAR

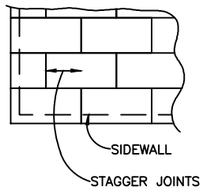
	BY:	DATE:
DRAWN:	M.W	6-1-22
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	

TITLE: DRAIN SCHEMATIC
NO: MFT-10886-8015-70-3-32-2
REV:
SHEET: 6 of 7



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

Jun 14, 2022



ROOF SHEATHING DETAIL

FASTEN UNITS TOGETHER AT PEAK WITH #8x3" WOOD SCREWS AT 6" O.C
1" MINIMUM PENETRATION INTO RECEIVING MEMBER IS REQUIRED
ALL GAPS BETWEEN THE RIDGE SECTIONS MUST BE SHIMMED WITH OSB.
SCREW LENGTH MUST BE INCREASED TO ACHIEVE 1" PENETRATION.

SHINGLE RIDGE CAP INSTALLED AT SITE BY OTHERS

12 / 6 TYP

ROOF VENT, SUPPLIED BY FRANKLIN HOMES, INSTALLED AT SITE BY OTHERS.

TWO COURSES OF SHINGLES SUPPLIED BY FRANKLIN HOMES, INSTALLED AT SITE BY OTHERS, LOCATED AT HINGE OF ROOF DECKING.

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

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

CONT. 2x4 SPF#3 FASTENED TO EACH TRUSS W/3-15GA x2.1/2"STAPLES (TYP. EA HALF)

MITEK TRUSS

RIDGE BEAM OVER OPNGS PER FLOOR PLAN SPECS*

CONT. 1x4 SPF AT MID. PT. FAST TO EACH TRUSS w/2-15 GA.x2.1/2" STAPLES

7/16 RATED SHEATHING, OSB OR PLYWOOD EXP1, 24/16 (SEE SHEATHING DETAIL ABOVE)
240# FIBERGLASS SHINGLES

BEARING FOR ROOF TRUSSES AT MATING RIDGE BEAM TO BE DONE USING (6).131"x3" LONG NAILS END GRAIN

*15/32 RATED SHEATHING, PLYWOOD FOR ROOF DECKING IF METAL ROOF IS INSTALLED.

ALUMINUM or GALVANIZED SHINGLE DRIP EDGE

INSTALL TRUSS ANCHOR FROM EACH TRUSS TO WALL FRAMING RATED 550# (UPLIFT)

2x2 MEMBER

RIM MEMBER 2x6 SYP#2

WHEN TRUSSES DO NOT FALL OVER STUDS INSTALL TRUSS ANCHOR FROM TRUSS TO TOP PLATE AND STRAP TOP PLATE TO CLOSEST STUD.
LSTA-18 STEEL STRAPS WITH 14-.131NAILS

HARDIE SOFFIT

CRIPPLE STUDS 2x6 SYP#2 @16"O.C.

2x HEADER PER APPROVED STRUCTURAL PACKAGE

1/2" GYPSUM CEILING BOARD

DBL. TOP PLATE 2x6 (OPTIONAL 2X4) SPF#3 (OFFSET BUTT JOINTS 48" O.C. MIN. FASTEN TOP PLATES TOGETHER W/15GA.x2.1/2" STAPLES 5" O.C.)

FASTEN UNITS TOGETHER WITH 3/8" LAG SCREWS SITE INSTALLED AT 2'O.C MAXIMUM
LAG SCREWS MUST PENETRATE 1.1/2" MIN INTO ADJACENT MODULE.

DBL PLATE 2x3 SPF#3 (MIN.) PER STRUCTURAL CALCULATIONS
(LISTED TRUSS MUST BE LOCATED DIRECTLY OVER WALL STUD OR BE FASTENED TO RIDGE BEAM CONSTRUCTION)

WALL INTERIOR FINISH

MARRIAGE WALL STUDS 2x3 SPF#3 (MIN.) AT 16"O.C. PER STRUCTURAL CALCULATIONS

LSTA-18 STEEL STRAP FROM 2x6 TO WALL AND/OR FROM RIDGE BEAM TO WALL STUD@ 32"O.C. WITH 14-.148 NAILS PER STRAP END PLUS STRAPS AT OPENING COLUMNS PER FLOOR PLAN. (TYPICAL EACH MARRIAGE WALL.)

**CEILING & FLOOR PENETRATIONS TO BE FIREBLOCKED WITH NON-BATTENED INSULATION SECURED WITHIN WALL CAVITY 16"MIN. FROM CEILING AND/OR FLOOR PER SEC. R602.8 OF 2020 FRC.

R-38 INSULATION FIBERGLASS OR ROCKWOOL BLOWN-IN INSULATION WITH ONE PERM MAXIMUM VAPOR BARRIER ON BOTTOM

EXTERIOR WALL STUDS 2x6 SYP#2 MIN AT 16"O.C.

102.1/4" MAX.

2x6 SPF#3 FASCIA BACKER

HARDI FASCIA

CONTINUOUS VENTED SOFFIT (MIN. 5.5 SQ.FT. NET FREE VENT AREA PROVIDED TOTAL AT BOTH SOFFITS)

VINYL CROWN

EXTERIOR WALL FINISH (VINYL SIDING)

EXTERIOR WALL STRUCTURAL BRACING SIDEWALL:

BRACING INSTALLATION:
STRUCTUAL SHEATHING SHALL EXTEND CONTINUOUSLY FROM TOP TO BOTTOM PLATE FRAMING.

BRACING MATERIAL:
USE THE SAME STRUCTURAL BRACING MATERIAL AND FASTENING METHOD AS SPECIFIED FOR ENDWALLS.

ENDWALLS:
BRACING INSTALLATION:
STRUCTURAL SHEATHING SHALL EXTEND CONTINUOUS FROM TOP TO BOTTOM PLATE.

BRACING MATERIAL:
7/16" APA RATED SHEATHING EXP.1, EXP.2, EXTERIOR
REFER TO BRACEWALL SECTION FOR MATERIALS AND FASTENINGS

R-19 INSULATION W/KRAFT BACK ON INSIDE

FASTEN EXTERIOR WALL TO RIM JOIST WITH #8x3" SCREWS 12" O.C. (TYPICAL)

R-30 INSULATION

CRIPPLE STUDS 2x6 SYP#2 @16"O.C.

3/4" PLYWOOD, STURDIFLOOR T&G, EXP-1, 24"O.C. MIN.; GLUE/NAIL TO JOISTS W/100% PVA GLUE AND 16GA.x1 3/4" STAPLES 6"O.C. EDGES AND FIELD.

2x SILL PLATE PER APPROVED STRUCTURE PACKAGE

48"TYPICAL

TONGUE & GROOVE (TYPICAL)

BOTTOM PLATE 2x6 SPF#3MIN

LSTA-18 STEEL STRAP FROM WALL STUD TO FLOOR JOIST 16"O.C. WITH (14).148" NAILS AT OPENING STUDS PER APPROVED STRUCTURAL PACKAGE. (TYPICAL SIDEWALLS & ENDWALLS)

90"

2x6 SILL PLATE

SEE SECTION "A"

MODULE℄

HOUSE IS SECURED TO FOUNDATION WALL ON-SITE BY LOCAL CONTRACTOR

ON-SITE BY OTHERS.

TYPICAL FOUNDATION PERIMETER WALL

LSTA-18 STEEL STRAPS FROM WALL STUD TO JOIST@ 32"O.C. WITH 14-.148 NAILS PER STRAP END PLUS STRAPS AT OPENING COLUMNS PER FLOOR PLAN (TYPICAL EACH MARRIAGE WALL.)

BOTTOM PLATE 2x4 SPF#3MIN

RIM JOIST DBL 2x10 SYP#1 EACH HALF

FLOOR JOISTS 2x10 SYP#1 16" O.C.

2x6 SILL PLATE

TYPICAL MARRIAGE WALL PIER

BEARING FOR FLOOR JOIST AT MATING GIRDER TO BE DONE USING (5)16pd 3.1/2" LONG NAILS END GRAIN WITH 2x2 LEDGER STRIP, JOIST HANGER OR A 2x6 MUD SILL
IF THE 2x2 LEDGER STRIP IS NOT AVAILABLE FOR EXTRA SUPPORT 2x2 LEDGER FASTENED TO RIM JOIST W/0.131"x3" NAILS AT 4" O.C
2x6 SILL PLATE FASTENED TO RIM JOIST PER HALF WITH (2) ROWS#8x3" SCREWS AT 6" O.C
DOUBLE 2x10 SYP#1 GIRDERS AT MARRIAGE LINE OF EACH MODULE ARE FASTENED TOGETHER SITE INTALLED 3/8"x6" LAG BOLTS STAGGERED FROM SIDE TO SIDE AT 48" O.C MAXIMUM
LAG SCREWS MUST PENETRATE 1.1/2" INTO ADJACENT MODULE GIRDER.

2x6 SILL PLATE

18"MIN.

FINISH GRADE

1'-0" MIN.

FOOTINGS MUST EXTEND BELOW FROST LINE

RIM DOUBLE 2x10 SYP#1

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

RIDGE BEAM CONSTRUCTION

1 LAYER 1.1/2"x18" MICROLAM, EACH MODULE.

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

GENERAL CROSS SECTION NOTES

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

INTERIOR FINISH MATERIAL

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

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

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

EXTERIOR FINISH MATERIAL

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

WALL -VINYL LAP SIDING

*FASTEN RIDGE BEAM TO EACH TRUSS W/6-.131"x3" NAILS INTO SIDE GRAIN; FASTEN 2x6 TO EACH TRUSS W/6-.131"x3" NAILS W/MIN. 2 NAILS INTO SIDEGRAIN.

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	TRACIE	6/1/22
SCALE:	N.T.S.	

TITLE: TYPICAL OFF-FRAME CROSS SECTION

NO: MTF-10886-8015-70-3-32-2

REV:

SHEET: 7 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-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult, 101 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

Franklin Structures, LLC

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

Width: 30’- 1/2”

Length: 66’

Roof Live Load: 20psf Roof LL

Wind Speeds: 130mph Vult

Wind Exposure: C

Wall Height: 9’

Max Mean Roof Height: 20’

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

Jun 14, 2022

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

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

ASCE 7-16 Chapter 30 Part I:

Wind Speed:	135	MPH	Roof Style:	Gable (Gable or Hip)
Wind Exposure:	C		Roof Pitch:	6 /12
Mean Roof Height:	20	FT	Roof Angle:	26.6
Elevation:	0	FT	Max Width:	30.04 ft
Ke:	1.00			
Kd:	0.85			
Kzt:	1			
kt:	0.90			
qh:	35.77	psf		
Building Type:	Enclosed			
Gcpi:	0.18			
	-0.18			
Min net pressure:	16	psf		

Roof

GCP	Area	Pos	Neg	Pressure	Area	Pos	Neg
Zone 1	Min	0.7	-1.5	Zone 1	Min	31.5	-60.1
	100	0.7	-1.1		100	31.5	-45.8
Zone 2	Min	0.7	-2.5	Zone 2	Min	31.5	-95.9
	100	0.7	-1.4		100	31.5	-56.5
Zone 3	Min	0.7	-3.6	Zone 3	Min	31.5	-135.2
	100	0.7	-1.8		100	31.5	-70.8
OH Z1	Min		-2	OH Z1	Min		-78.0
	100		-1.9		100		-74.4
OH Z2	Min		-3	OH Z2	Min		-113.7
	100		-2		100		-78.0
OH Z3	Min		-4.7	OH Z3	Min		-174.5
	100		-2.4		100		-92.3

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

APPROVED BY NTA INC.

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

Walls

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

Design Pressures

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

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

MWFRS

Transverse

	1	2	3	4	1e	2e	3e	4e
+GCpi	13.22	-9.98	-22.43	-20.41	19.59	-13.24	-27.36	-25.57
-Gcpi	26.10	2.89	-9.56	-7.53	32.47	-0.37	-14.48	-12.70
Max	26.10	-9.98	-22.43	-20.41	32.47	-13.24	-27.36	-25.57

Longitudinal

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

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-13.24	-27.36	-9.98	-22.43	-35.4191	-32.1594	14.12	45.16	12.45	33.63
Long	-44.71	-25.39	-31.12	-19.67	-35.4191	-	-19.31	37.20	-11.45	24.68

Design Loading

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

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

APPROVED BY NTA INC.

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

Design Criteria:

Total Length:	68	ft					
Total Width:	30.04	ft	Top chord DL:	10	psf	Vult:	135 mph
Unit Width:	15.02	ft	Bottom chord DL:	10	psf	Vasd:	105 mph
Pitch:	6	/12	Bottom chord LL:	0	psf	Exposure:	C
Roof Angle:	26.6	deg	Stories:	1		Internal Press:	0.18
Wall height:	9	ft	Floor Live Load:	40	psf	End zone, 2a:	6.0083333 ft
Overhang:	12	in	Floor Dead Load:	10	psf		
Blocking Height:	36	in	Wall Dead Load:	5	psf		
Eave Height:	10	ft	Ceiling R value:	30			
Min Mean Roof ht:	20	ft	Framing Rafters?:	N			
Mean Roof Height:	17.76	ft	Truss Spacing:	24	in oc		

Snow Loading:		
Ground Snow Load:	0	psf
Snow Thermal factor:	1.1	
Snow exposure factor:	1	
Snow importance Factor:	1	
Flat Roof Snow, Pf:	0	psf
Sloped Roof Snow Ps:	0	psf
Unbalanced Roof Load:	0.00	psf
Minimum Roof Lr:	20	psf

Wind Loading:

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

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

Truss Reactions

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

Load Cases for Ranch		Roof			Roof and 1 Story			
	Load Case	Sidewall	Matewall	Endwall	Sidewall	Matewall	Endwall	LDF
1	D	164	150	30	284	270	85	0.9
2	S	0	0	0	0	0	0	1.15
3	Su	0	0	0	0	0	0	1.15
4	Lr	170	150	40	170	150	40	1.25
5	L	0	0	0	300	300	40	1
6	Wp	0	0	0	0	0	0	1.6
7	Wn	-207	-175	-71	-207	-175	-71	1.6
8	.75(L+Lr)	128	113	30	353	338	60	1.25
9	.75(L+S)	0	0	0	225	225	30	1.15
10	.75(L+Su)	0	0	0	225	225	30	1.15
11	.75(L+S+Wp)	0	0	0	225	225	30	1.6
12	D+L	164	150	30	585	571	125	1
13	D+Lr	334	300	70	455	421	125	1.25
14	D+S	164	150	30	284	270	85	1.15
15	D+Su	164	150	30	284	270	85	1.15
16	D+.75(L+Lr)	292	263	60	637	608	145	1.25
17	D+.75(L+S)	164	150	30	510	496	115	1.15
18	D+.75(L+Su)	164	150	30	510	496	115	1.15
19	D+.75(L+S+Wp)	164	150	30	510	496	115	1.6
20	.6D+Wn	-207	-175	-53	-36	-12	-20	1.6
	Dead Load:	164	150	30	284	270	85	
	Dead LC:	D	D	D	D	D	D	
	Live Load:	170	150	40	353	338	60	
	Live LC:	Lr	Lr	Lr	.75(L+Lr)	.75(L+Lr)	.75(L+Lr)	
	Total Load:	334	300	70	637	608	145	
	Total LC:	D+Lr	D+Lr	D+Lr	D+.75(L+Lr)	D+.75(L+Lr)	D+.75(L+Lr)	
	Uplift Load:	-207	-175	-53	-36	-12	-20	
	Uplift LC:	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	
	Design Load:	334	300	70	585	571	125	
	Design LC:	D+Lr	D+Lr	D+Lr	D+L	D+L	D+L	
	Design LDF:	1.25	1.25	1.25	1	1	1	

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

Floor Load only

Live			300	300		1
Dead			75	75		0.9

Combined Loading:

Max Bending:

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

Max Axial

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

Location: Matewall

Matewall Headers Supporting Roof

Supporting: Roof

No splices considered in span

Vertical Load

Dead Load:	150	plf	D
Live Load:	150	plf	Lr
Total Load:	300	plf	D+Lr
Uplift Load:	-175	plf	.6D+Wn

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

Cr: 1.15 LL defl L/ 240

Cd: 1.25 TL defl L/ 180

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	9.25	SPF	#2	Edge	1	1.1	875	135	425	1400000	510000	1203	169	13.9	21.4	98.9
2	1	1.5	9.25	SYP	#2	Edge	1	1.0	800	175	565	1400000	510000	1000	219	13.9	21.4	98.9
3	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	21.4	98.9
4	1	1.5	11.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3468	285	16.9	31.6	178.0
5	1	1.5	14	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3366	285	21.0	49.0	343.0
6	1	1.5	16	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3306	285	24.0	64.0	512.0
7	1	1.5	18	LVL		Edge	1	0.9	2750	285	750	2000000	1016411	3253	285	27.0	81.0	729.0
8	1	1.5	24	LVL		Edge	1	0.9	2750	285	750	2000000	1016411	3128	285	36.0	144.0	1728.0
9																		
10																		

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

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(1) 2x 10 SPF #2	90 in	1200	-660	1.9
2	(1) 2x 10 SYP #2	82 in	1100	-600	1.5
3	(1) 2x 9.25 LVL	156 in	2000	-1140	1.1
4	(1) 2x 11.25 LVL	187 in	2400	-1360	1.1
5	(1) 2x 14 LVL	229 in	2900	-1670	1.1
6	(1) 2x 16 LVL	260 in	3300	-1900	1.1
7	(1) 2x 18 LVL	290 in	3700	-2110	1.1
8	(1) 2x 24 LVL	379 in	4800	-2760	1.1
9					
10					

.131x3"			# nails Grav	# nails Uplift	# can be based off span or header # .131x3" nails per header
Grav	69.1	lb			
uplift	88.4	lb			
			17.37	7.46	18
			15.92	6.78	16
			28.95	12.89	29
			34.74	15.38	35
			41.97	18.88	42
			47.76	21.48	48
			53.55	23.86	54
			69.47	31.21	70

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

Location: Matewall

Matewall Columns

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
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:	-175 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:	-175 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		217	433	650	866	1083	1300	1516	1733	1950	2166			
Combined Loading														
Uplift/Lateral		217	433	650	866	1083	1300	1516	1733	1950	2166			
Vert/Lateral max Lat		67	252	401	551	704	857	1011	1165	1321	1476			
Vert/Lateral Max Vert		67	150	236	323	411	499	588	677	766	855			
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					
1	38 in	58 in	=	4	ft -	10 in	
2	76 in	133 in	=	11	ft -	1 in	
3	115 in	208 in	=	17	ft -	3 in	
4	153 in	283 in	=	23	ft -	6 in	
5	191 in	358 in	=	29	ft -	9 in	
6	229 in	433 in	=	36	ft -	1 in	
7	267 in	508 in	=	42	ft -	4 in	
8	306 in	583 in	=	48	ft -	7 in	
9	344 in	658 in	=	54	ft -	10 in	
10	382 in	732 in	=	61	ft -	0 in	

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

Location: Matewall

Matewall Columns at Endwall

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
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:	-175 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:	-175 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	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
	Bearing length:		5											Non braced (between spans)			
														69	35	23	
														88	352	792	
														0.04979	0.192126	0.3996	

# of Studs	1	2
Properties		
Area in^2	7.5	15.0
Sx in^3	6.3	12.5
Ix in^4	15.6	31.3
Axial Loading		
Fc compression	248	497
Fc Perp compression	169	339
Tension	495	990
Combined Loading		
Uplift/Lateral	495	990
Vert/Lateral max Lat	258	939
Vert/Lateral Max Vert	258	547
Deflection Check	L/ 2727	5455
	OK	OK
	169	339

Max Span	Max Trib
1	169 in
2	339 in

Max Side Opening						
321 in	=	26	ft -	9	in	
658 in	=	54	ft -	10	in	

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

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

APPROVED BY NTA INC.

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

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:	164	plf	D
Live Load:	170	plf	Lr
Total Load:	334	plf	D+Lr
Uplift Load:	-207	plf	.6D+Wn

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

Cr: 1.15 LL defl L/ 240

Cd: 1.25 TL defl L/ 180

Vertical

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

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

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(2) 2x 3 SPF #2	38 in	600	-330	0.5
2	(2) 2x 4 SPF #2	53 in	800	-460	0.5
3	(2) 2x 6 SPF #2	78 in	1100	-680	0.5
4	(2) 2x 8 SPF #2	99 in	1400	-860	0.5
5	(2) 2x 3 SYP #2	35 in	500	-310	0.4
6	(2) 2x 4 SYP #2	49 in	700	-430	0.4
7	(2) 2x 6 SYP #2	77 in	1100	-670	0.4
8	(2) 2x 8 SYP #2	93 in	1300	-810	0.4
9					
10					

.131x3"			# nails Grav	# nails Uplift	# can be based off span or header # .131x3" nails per header
Grav	69.1	lb			
uplift	88.4	lb			
			4.34	1.87	5
			5.79	2.60	6
			7.96	3.84	8
			10.13	4.86	11
			3.62	1.75	4
			5.07	2.43	6
			7.96	3.79	8
			9.41	4.58	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-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult, 101 MPH Vasc
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

Location: Sidewall

Sidewall Studs (King) Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	334 plf	D+Lr	Lateral only			Vertical:	164 plf	0	Top/Btm Plate (tp):	4.5	in
Total Load:	334 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	27 psf	W	Header height:	80	in
Uplift Load:	-207 plf	.6D+Wn	Zone 5:	31 psf	W	Combined Vert and Lat (max Vert)			LVL:	Microllam	
			Zone 4:	26 psf	W	Vertical:	292 plf	0	LVL MOE (E):	2000000	psi
						Lateral:	20.3 psf	.75W	E min:	1016411	psi
			def=.7 C&C			Combined Uplift and Lat			Fb:	2750	psi
Cr:	1					Vertical:	-207 plf	.6D+Wn	Fv:	285	psi
Cd:	1.6					Lateral:	20.3 psf	W	Fcperp:	750	psi
Cd grav:	1.25		ateral deflection L/	120					Vol eff (e):	0.136	
									Cr (LVL):	1.04	

Vertical

	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:	729 psi	Fc:	59 psi	CSI:	0.47	CSI:	0.36	Max CSI:	0.47	**OK**

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

		King Studs End Zone					King Studs Int Zone				
		1	2	3	4	5	1	2	3	4	5
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		35	70	105	140	176	42	83	125	167	208
Moment at Header		47	94	141	188	235	56	111	167	223	279
Shear		79	159	238	318	397	94	188	283	377	471
Combined Loading											
Max Lat		364	849	1327	1805	2281	364	849	1327	1805	2281
Max Vert		221	492	761	1029	1297	221	492	761	1029	1297
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		35	70	105	140	176	42	83	125	167	208

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

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

Note: ripped lumber must be regraded

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

APPROVED BY NTA INC.

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

Location: Sidewall

Sidewall Studs (Jack)

Supporting: Roof

Vertical Load

NDS Load: 334 plf D+Lr

Total Load: 334 plf D+Lr

Uplift Load: -207 plf .6D+Wn

Wall height: 108 in

Top/Btm Plate (tp): 4.5 in

LVL: Microllam

LVL MOE (E): 2000000 psi

E min: 1016411 psi

Fb: 2750 psi

Fv: 285 psi

Fcperp: 750 psi

Vol eff (e): 0.136

Cr (LVL): 1.04

Cr: 1

Cd: 1.6

Cd grav: 1.25 ateral deflection L/ 120

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

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

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

Note: ripped lumber must be regraded

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

APPROVED BY NTA INC.

Const. Type: VB-unprotected

Occupancy: Single Family Dwelling

Allowable No. of Floors: 1

Wind Velocity: 130 MPH Vult, 101 MPH Vasc

Fire Rating of Ext. Walls: 0 Hr

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

Allow. Floor Load: 40 PSF

Approval Date: 6/15/2022

Manufacturer: Franklin Structures, LLC

Uplift Straps: Sidewall

Uplift: -207 plf

Stud Spacing: 16 in

Strapping

Strap All: 1110 lbs LSTA18

fasteners: 14 .148x 2.5"

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

At openings

Span (in)

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

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

APPROVED BY NTA INC.

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

If sheathing is being used for uplift NOT at openings:

Max OSB per E510A: 1500 plf

.131 Nail: 108 lb

15ga: 82 lb

Spacing from OSB to rail:

.131 Nail: 6.28 " oc

15ga: 4.76 " oc

fasteners into Studs:

.131 Nail: 2.5 lb Use 3

15ga: 3.4 lb Use 4

Uplift Straps: Matewall

Uplift: -175 plf

Stud Spacing: 16 in

Strapping

Strap All: 1110 lbs LSTA18

fasteners: 14 .148x 2.5"

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

At openings

Span (in)

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

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

APPROVED BY NTA INC.

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

If sheathing is being used for uplift NOT at openings:

Max OSB per E510A: 1500 plf

.131 Nail: 108 lb

15ga: 82 lb

Spacing from OSB to rail:

.131 Nail: 7.43 " oc

15ga: 5.64 " oc

fasteners into Studs:

.131 Nail: 2.2 lb Use 3

15ga: 2.8 lb Use 3

Sill Plates

Lateral Load
Lateral only
Wind: 128 plf (C&C)
def=.7 C&C

Cr: 1.15

Cd: 1.6 Lateral deflection L/ 120

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

Note: ripped lumber must be regraded

	lu	le	Fbe	Cl
1	84.5	152.8	1803	0.78
2	109.9	194.1	1419	0.66
3	128.0	223.6	1232	0.52
4	80.8	146.7	1878	0.87
5	107.5	190.2	1448	0.77
6	126.8	221.7	1242	0.62
7				
8				
9				
10				

Shear	Moment	Def
212	85	109
413	110	138
615	128	158
272	81	109
533	107	138
795	127	158

Sill and header lateral connection:

Span (ft)	Load @ Ends (lbs)	Nail Zeg(lb)	0.131 Nails	15ga Zeg(lb)	15gax2.5" Staples
2	128.48	88	2	48	3
3	192.72		3		5
4	256.97		3		6
5	321.21		4		7
6	385.45		5		9
7	449.69		6		10
8	513.93		6		11
9	578.17		7		13
10	642.41		8		14
11	706.65		8		15
12	770.90		9		17
13	835.14		10		18
14	899.38		11		19

	Member	Max Span	Reactions (lbs) Gravity
1	(1) 2x 5 SPF #2	84 in	500
2	(2) 2x 5 SPF #2	109 in	600
3	(3) 2x 5 SPF #2	127 in	700
4	(1) 2x 5 SYP #2	80 in	500
5	(2) 2x 5 SYP #2	107 in	600
6	(3) 2x 5 SYP #2	126 in	700
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-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 130 MPH Vult, 101 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-8015-70-3-32-2
Allow. Floor Load: 40 PSF
Approval Date: 6/15/2022
Manufacturer: Franklin Structures, LLC

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

Wind Speed, Vult:	130 MPH	Roof Style:	Gable
Wind Exposure:	C	Roof Pitch:	6 /12
Mean Roof Height:	20 FT	Roof Angle:	26.6
Elevation:	0 FT	Width	30.04 ft
Ke:	1.00	2a:	6 ft
Kd:	0.85	Wall Height:	9 ft
Kzt:	1	Heel Ht:	6 in
kt:	0.90	Roof Ht:	7.51 ft
qh:	33.17 psf	Stud Spacing:	16 "oc
Building Type:	Enclosed	Overhang:	12 "
Gcpi:	0.18	Int. Shearwall:	NO
	-0.18		
Min net pressure:	16 psf		

MWFRS

Transverse

	1	2	3	4	1e	2e	3e	4e
+GCpi	12.3	-9.3	-20.8	-18.9	18.2	-12.3	-25.4	-23.7
-Gcpi	24.2	2.7	-8.9	-7.0	30.1	-0.3	-13.4	-11.8
Max	24.2	-9.3	-20.8	-18.9	30.1	-12.3	-25.4	-23.7

Longitudinal

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

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

Design Loading

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

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

Shearwalls:

Left Endwall:

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

Right Endwall:

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

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

APPROVED BY NTA INC.

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

Top Sidewall:

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

Bottom Sidewall:

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

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

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

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

2" oc fastener spacing requires double studs and staggered fasteners at panel seams.

Diaphragm:

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

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

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

Lateral Foundation Loads:

Endwalls:	15980	lb
Sidewalls:	8298	lb

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

APPROVED BY NTA INC.

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

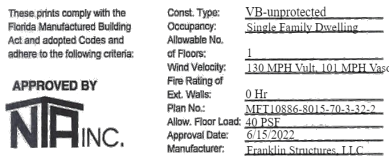
Connections

Truss to exterior wall uplift:

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

Truss to exterior wall Lateral:

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



Truss king post to Header:

Uplift:	349	lb
Gravity:	552	lb
.131 nail EG:	88.44	lb
.131 nail EG LL:	69.09	lb
# .131x3":	8.0	Nails

Or hanger rated for 552lb grav and 349 uplift

Stud to Plate:

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

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

Plate to floor and plate interconnection (top plate):

End:	30.6	psf
Int:	25.8	psf
Height:	9	ft
Load:	137.8672	plf
.131 Nailx3":	108	lb
Spacing of .131 nail:	9.4	" OC int and end zones
15gax2.5" staple:	72	lb
Spacing of 15ga:	6.27	" OC int and end zones

Sheathing Suction Connections (wall and roof)

	End	Int	
Wall:	-30.6	-27.5	psf
Roof:	-81.1	-36.1	psf
.131x2.5:	66	66	lbs
15gax2.5" staple:	56.8	56.8	lbs
Wall			
Member spacing:	16	16	" oc
Nail:	12.0	12.0	" oc
Staple:	12.0	12.0	" oc
Roof			
Member spacing:	24	24	" oc
Nail:	4.9	11.0	" oc
Staple:	4.2	9.5	" oc

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

APPROVED BY NTA INC.

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

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

Truss Kneewall Connection:

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

Tension:

CS 22:	845	lb

Shear:

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

Floor Joist Calculation

Vertical Load

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

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

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	13.9	21.4	98.9
2	1	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1250	175	10.9	13.1	47.6
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

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

	Member	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-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult, 101 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

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:	-12	plf	.6D+Wn

Cr: 1.15 LL defl L/ 360

Cd: 1 TL defl L/ 240

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

Vertical

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

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

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(1) 2x 10 SYP #1	61 in	1500	-40	1.8
2	(1.5) 2x 10 SYP #1	75 in	1800	-40	1.2
3	(2) 2x 10 SYP #1	86 in	2100	-50	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-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult, 101 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

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					

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-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult, 101 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

Porch Headers Sidewall and Matewall

Location: Sidewall
Supporting: Roof

Vertical Load

Dead Load:	164	plf	D
Live Load:	170	plf	Lr
Total Load:	334	plf	D+Lr
Uplift Load:	-178	plf	.6D+Wn

Since deflection doesn't govern the LDF between uplift and gravity (1.6 vs 1.25)
allow a maximum uplift per truss of (334*1.6/1.25*2ft=855lb)

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

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

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

Mateline Connection:
Load: 552.0 lb
0.131" nails EG: 88.44 lb
nails: 7
Connect porch truss to mateline header
with (7) 0.131"x3" nails endgrain
or per manual whichever is worse

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

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

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

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

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

APPROVED BY NTA INC.

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

Porch Column Sidewall and Matewall

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	334 plf	D+Lr	Lateral only			Vertical:	150 plf		0 Top/Btm Plate (tp):	0	in
Total Load:	334 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	5 psf	W	LVL:	Microllam	
Uplift Load:	-178 plf	.6D+Wn	Lateral:	5 psf	W	Combined Vert and Lat (max Vert)			LVL MOE (E):	2000000	psi
						Vertical:	334 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:	-178 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	183
Fc Perp compression	106
Tension	892
Fcperp	
Combined Loading	
Uplift/Lateral	892
Vert/Lateral max Lat	398
Vert/Lateral Max Vert	180
Deflection Check	L/ 1921
	OK
	106

Max Span	Max Trib	Max Side Opening
1	106 in	209 in = 17 ft - 5 in

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

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

APPROVED BY NTA INC.

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

FLORIDA BUILDING CODE, ENERGY CONSERVATION	
Residential Building Thermal Envelope Approach	
R-Value Computation Method	
FORM R402—2020	Florida Climate Zone : 2

	BUILDER:
PROJECT NAMEAND ADDRESS:	PERMITTING OFFICE:
MFT-10886-8015-70-3-32-2 sw coyote cir FORT WHITE FL, 32038	JURISDICTION NUMBER:
OWNER: DEWEES	PERMIT NUMBER:
PERMIT TYPE: **Residential**	NUMBER OF UNITS: **2**
WORST CASE?	CONDITIONED FLOOR AREA:1983

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

General Instructions:

1. **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		.21 for GRID/ .24 NO GRID	38	19		30			

***R*-Value Calculation Method - [PASS / FAIL]**

For SI: 1 foot = 304.8 mm; NR = No requirement.

1. (1)*R*-values are minimums. *U*-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed *R*-value of the insulation shall not be less than the *R*-value specified in the table.
2. (2)The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.
3. (3)For impact rated fenestration complying with Section R301.2.1.2 of the Florida Building Code, Residential or Section 1609.1.2 of the Florida Building Code, Building, the maximum U-factor shall be 0.65 in Climate Zone 2. An area-weighted average of *U*-factor and SHGC shall be accepted to meet the requirements, and up to 15 square feet of glazed fenestration area are exempted from the *U*-factor and SHGC requirement based on Section R402.3.1, R402.3.2 and R402.3.3.
4. (4)One side-hinged opaque door assembly up to 24 square feet is exempted from this *U*-factor requirement based on Section R402.3.4.
5. (5)*R*-values are for insulation material only as applied in accordance with manufacturer's installation instructions.
6. (6)The second R-value applies when more than half the insulation is on the interior of the mass wall.
7. (7)R-5 shall be added to the required slab edge *R*-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.

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

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-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult, 101 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

FORM R402—continued
EQUIPMENT REQUIREMENTS AND INSTALLED VALUES

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

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

Equipment Efficiency—[PASS / FAIL]

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

MANDATORY REQUIREMENTS			
Component	**Section**	**Summary of Requirements**	**Check**
Air leakage	R402.4	To be caulked, gasketed, weatherstripped or otherwise sealed perTable R402.4.1.1. Recessed lighting IC-rated as having ≤ 2.0 cfmtested to ASTM E283.Windows and doors: 0.3 cfm/sq.ft (swinging doors: 0.5 cfm/sf) whentested to NFRC 400 or AAMA/WDMA/CSA 101/I.S. 2/A440.Fireplaces: Tight-fitting flue dampers & outdoor combustion air	X
Programmable thermostat	R403.1.2	A programmable thermostat is required for the primary heating orcooling system.	X
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: Tracie Terry Date 2/25/21 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-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult, 101 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

FL MODULAR

WINDOWS ARE WITH GRIDS
U.VALUE– 0.34
SHGC–0.21

U.VALUE– 0.32 ┐
SHGC–0.33 ┘ FOR TRANSOM WINDOWS

DOORS

38"X80" STEEL DOOR	0.17	0.01
38"X80" 1/2 ATRIUM	0.43	0.30
38"X80" STEEL DOOR	0.34	0.19

INSULATION VALUES

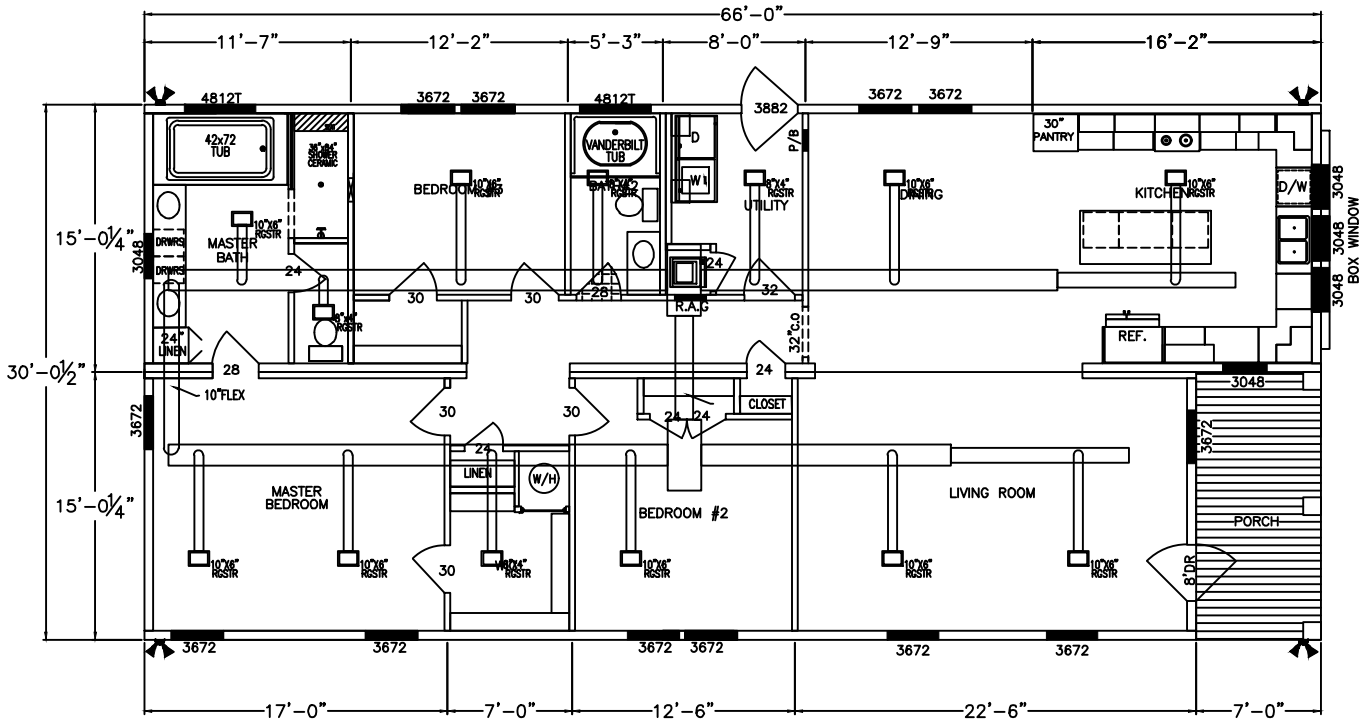
FLOOR	R-30
WALLS	R-19
ROOF	R-38

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

6/12 HINDGED ROOF 9; CEILING HEIGHT

PHYSICAL ADDRESS

sw coyote cir
FORT WHITE FL, 32038
COLUMBIA COUNTY



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

					BY:	DATE:	FRANKLIN STRUCTURES, LLC. RUSSELLVILLE, ALABAMA	
				DRAWN:			TITLE: UPFLOW HEAT DUCT	NO: FP–8015–70–3–32–2 REV: SHT:
				CHKD:				
				SCALE:	N.T.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-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult, 101 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

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

Project Information

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

Design Information

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

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

HEATING EQUIPMENT

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

COOLING EQUIPMENT

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

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

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

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

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

APPROVED BY NTA INC.

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

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

Project Information

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

Notes:

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

APPROVED BY NTA INC.

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

Design Information

Weather: St Augustine, FL, US

Winter Design Conditions

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

Summer Design Conditions

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

Heating Summary

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

Sensible Cooling Equipment Load Sizing

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

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

	Heating	Cooling
Area (ft²)	1903	1903
Volume (ft³)	17128	17128
Air changes/hour	0.45	0.20
Equiv. AVF (cfm)	128	57

Latent Cooling Equipment Load Sizing

Structure	4012	Btuh
Ducts	2062	Btuh
Central vent (36 cfm) Outside air	1886	Btuh
Equipment latent load	7960	Btuh
Equipment Total Load (Sen+Lat)	30550	Btuh
Req. total capacity at 0.70 SHR	2.7	ton

Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	

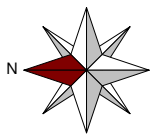
Efficiency	100 AFUE	
Heating input	7.9	kW
Heating output	26807	Btuh
Temperature rise	25	°F
Actual air flow	960	cfm
Air flow factor	0.038	cfm/Btuh
Static pressure	0.30	in H2O
Space thermostat		

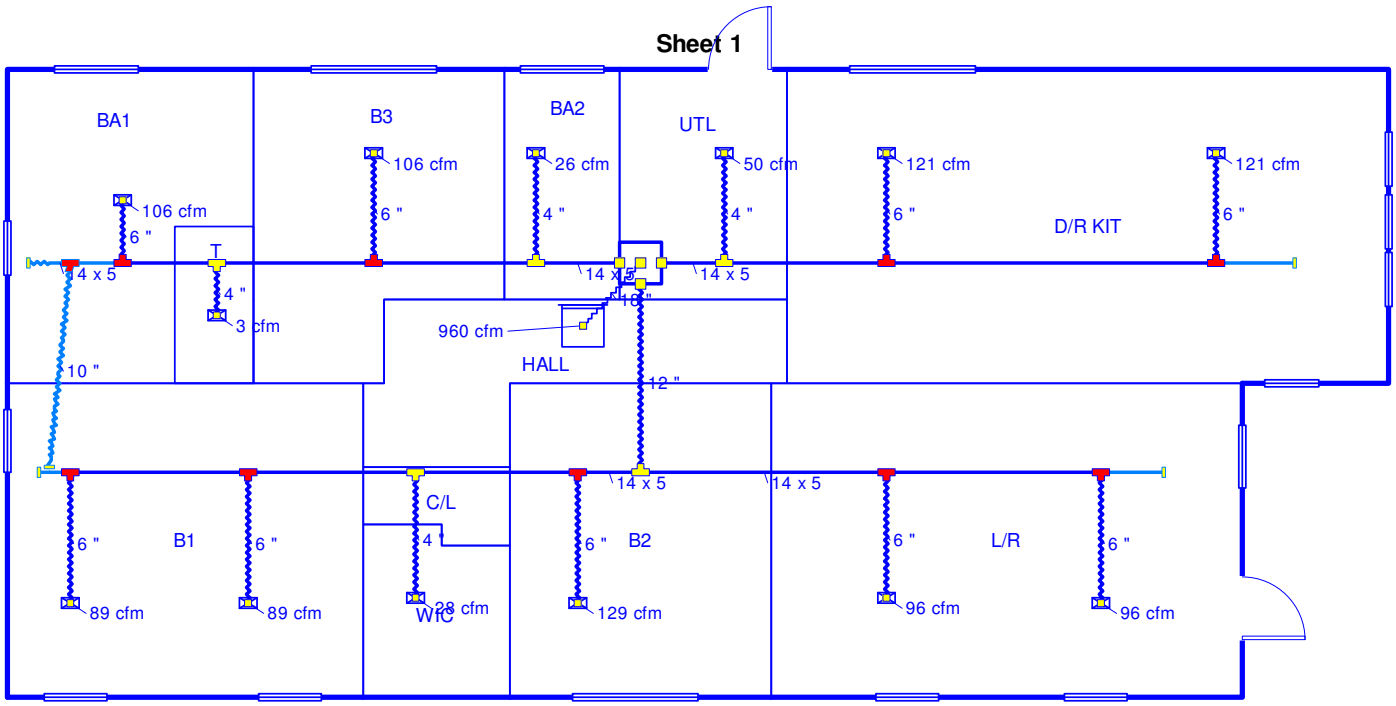
Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER 14.0
Coil	
AHRI ref	

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

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





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

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

Scale: 1 : 110

Right-Suite® Universal 2022
22.0.01 RSU02009
2022-Jun-07 08:53:18
...10886 8015-70-3-32-2UFL-FL-MOD....

Duct System Summary
Entire House

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

Project Information

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

	Heating	Cooling
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0.06 in H2O	0.06 in H2O
Available static pressure	0.24 in H2O	0.24 in H2O
Supply / return available pressure	0.190 / 0.050 in H2O	0.190 / 0.050 in H2O
Lowest friction rate	0.078 in/100ft	0.078 in/100ft
Actual air flow	960 cfm	960 cfm
Total effective length (TEL)	307 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
B1	c 1993	77	89	0.080	6.0	0x 0	VlFx	42.5	195.0	st4
B1-A	c 1993	77	89	0.079	6.0	0x 0	VlFx	34.0	205.0	st4
B2	c 2878	83	129	0.078	***6.0***	***0x 0***	VlFx	18.3	225.0	st4
B3	c 2367	76	106	0.107	6.0	0x 0	VlFx	17.0	160.0	st3
BA1	h 2759	106	67	0.114	6.0	0x 0	VlFx	26.8	140.0	st3
BA2	h 692	26	22	0.109	4.0	0x 0	VlFx	9.3	165.0	st3
D/R KIT	h 3157	121	108	0.122	***6.0***	***0x 0***	VlFx	16.0	140.0	st1
D/R KIT-A	h 3157	121	108	0.117	***6.0***	***0x 0***	VlFx	31.8	130.0	st1
L/R	h 2518	96	91	0.082	6.0	0x 0	VlFx	37.3	195.0	st5
L/R-A	h 2518	96	91	0.082	6.0	0x 0	VlFx	26.8	205.0	st5
T	c 75	3	3	0.111	4.0	0x 0	VlFx	21.8	150.0	st3
UTL	h 1295	50	37	0.120	4.0	0x 0	VlFx	8.3	150.0	st1
WIC	h 728	28	17	0.079	4.0	0x 0	VlFx	25.8	215.0	st4

Supply Trunk Detail Table

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

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

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x 0	960	960	64.1	0.078	543	18.0	0x 0		VlFx	

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

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

PRODUCT APPROVAL SPECIFICATION SHEET

Manufacturer: Franklin Structures, LLC. **Plan #:** MFT10866-8015-70-3-32-2

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

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

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

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

Robert K Gann	Robert k Gann	5/17/2022
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: MH7281R24-FL20 -

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

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

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

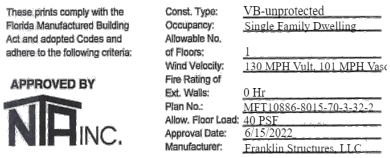
Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: N/A Wind Speed: 140 mph
Roof Load: 40.0 psf Floor Load: N/A psf

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

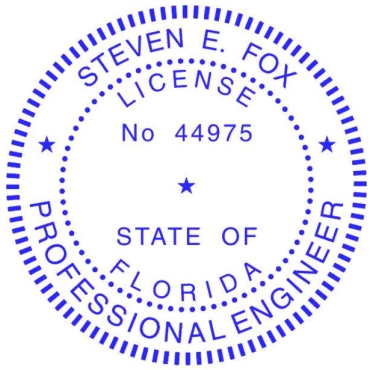
No.	Seal#	Truss Name	Date
1	I45895620	A1	4/29/21
2	I45895621	A1P	4/29/21



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

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

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



Steven E. Fox PE No.44975
MiTek USA, Inc. 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.

April 29,2021

Job	Truss	Truss Type	Qty	Ply	
MH7281R24-FL20	A1	HINGED MONO	1	1	I45895620
					Job Reference (optional)

Franklin Structures, LLC., Russelville, AL - 35653, 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Apr 29 13:21:29 2021 Page 1
ID:BRaPv9Nif1RAr?agFqcHTAyUDZv-mFliJDVNduRs0cDSbK1px3dvVkO2giNXR81TZRzLrVK

Scale = 1:47.4

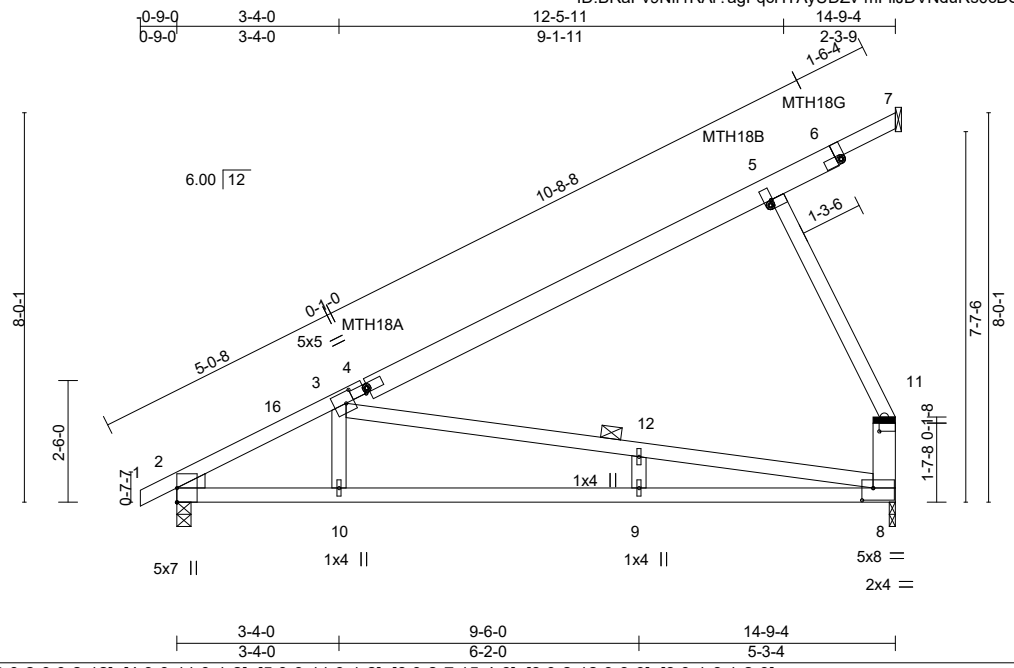


Plate Offsets (X,Y)-- [3:0-2-0,0-2-12], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [6:0-2-7,15-4-6], [8:0-2-12,0-3-0], [8:0-1-8,1-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	-0.31	9	>557	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.58	9-10	>299	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 68 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud *Except*
8-11: 2x6 SPF No.2, 3-8: 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-5-6 oc bracing.
WEBS 1 Row at midpt 3-8

REACTIONS. (size) 2=0-3-8, 8=0-1-8, 7=Mechanical
Max Horz 2=383(LC 10), 7=77(LC 10)
Max Uplift 2=-211(LC 10), 8=-349(LC 10)
Max Grav 2=667(LC 1), 8=552(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-16=-1080/242, 3-16=-1016/255, 3-4=-336/0, 4-5=-343/46, 8-11=-299/346
BOT CHORD 2-10=-587/874, 9-10=-578/878, 8-9=-578/878
WEBS 3-10=0/333, 3-12=-742/421, 8-12=-749/413, 5-11=-332/384

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

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

NOTES-
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-0 to 2-3-0, Interior(1) 2-3-0 to 14-8-8 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) All plates are MT20 plates unless otherwise indicated.
4) See HINGE PLATE DETAILS for plate placement.
5) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
6) All additional member connections shall be provided by others for forces as indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 211 lb uplift at joint 2 and 349 lb uplift at joint 8.

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

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

April 29,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

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

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Apr 29 13:20:33 2021 Page 1
ID:BRaPv9Nif1RAr?agFqcHTAyUDZv-PTMXY4qFphNpI0xhJa1hfFILf9G9YMrIYRTWbhzLrWC

Scale = 1:47.4

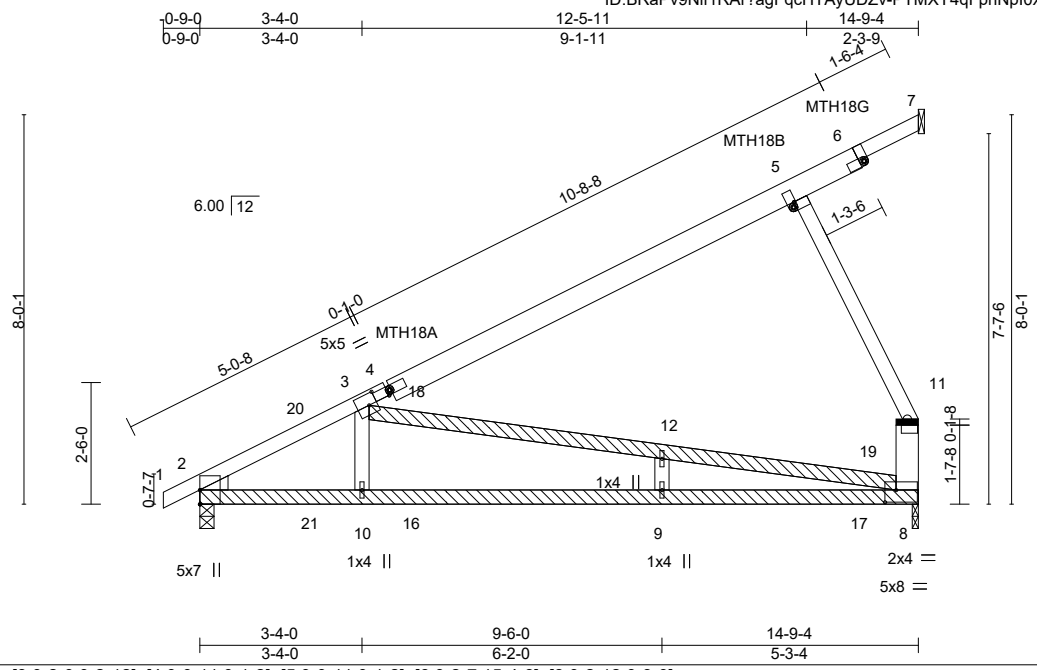


Plate Offsets (X,Y)-- [3:0-2-0,0-2-12], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [6:0-2-7,15-4-6], [8:0-2-12,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	0.52	9-10	>334	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	0.42	9-10	>412	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	-0.03	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 98 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 4-6: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF Stud *Except* 8-11: 2x6 SPF No.2, 3-8: 2x4 SPF No.2
OTHERS	2x4 SPF No.2
LBR SCAB	2-8 2x4 SPF No.2 one side 3-8 2x4 SPF No.2 one side
WEDGE	
Left: 2x4 SPF No.2	

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-7-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 5-2-6 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-1-8, 7=Mechanical
Max Horz 2=383(LC 10), 7=77(LC 10)
Max Uplift 2=-260(LC 7), 8=-356(LC 7)
Max Grav 2=667(LC 1), 8=552(LC 1)

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

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

TOP CHORD	2-20=-1043/1588, 3-20=-976/1601, 3-4=-327/0, 4-5=-341/46, 8-11=-299/346
BOT CHORD	2-21=-1756/841, 10-21=-1756/841, 10-16=-1750/841, 9-16=-1750/841, 9-17=-1750/841, 8-17=-1750/841
WEBS	3-10=-574/288, 3-18=-705/1594, 12-18=-705/1594, 12-19=-712/1628, 8-19=-712/1628, 5-11=-332/384

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

NOTES-

1) Attached 14-9-4 scab 2 to 8, front face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 1-3-0 from end at joint 2, nail 1 row(s) at 4" o.c. for 4-1-0; starting at 12-6-8 from end at joint 2, nail 1 row(s) at 7" o.c. for 2-0-0.
2) Attached 10-11-10 scab 3 to 8, front face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c..
3) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-0 to 2-3-0, Interior(1) 2-3-0 to 14-8-8 zone; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are MT20 plates unless otherwise indicated.
6) See HINGE PLATE DETAILS for plate placement.
7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
8) All additional member connections shall be provided by others for forces as indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

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

April 29,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 260 lb uplift at joint 2 and 356 lb uplift at joint 8.

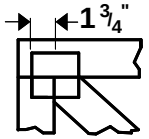
These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

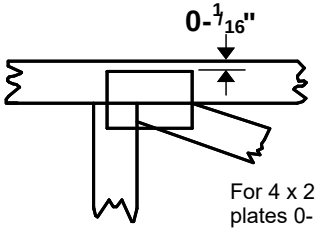
Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult, 101 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

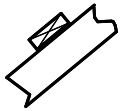
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

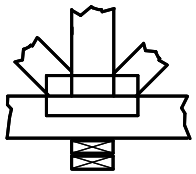
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

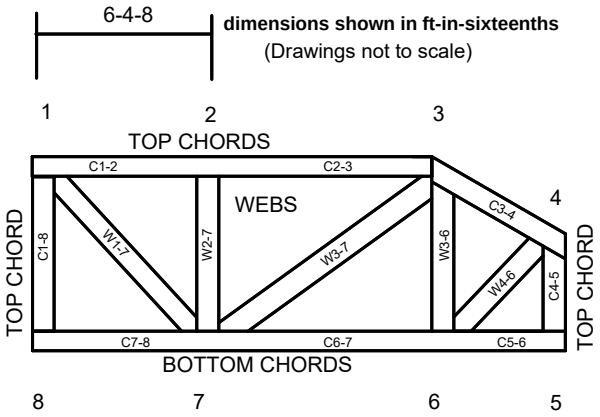


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR-1988, ESR-2685, ER-3907, ESR-2362, ESR-1397, ESR-3282

These prints comply with the Florida Manufactured Building Act and adopted Codes and standards listed in the following criteria:

APPROVED BY NTA, INC.

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

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

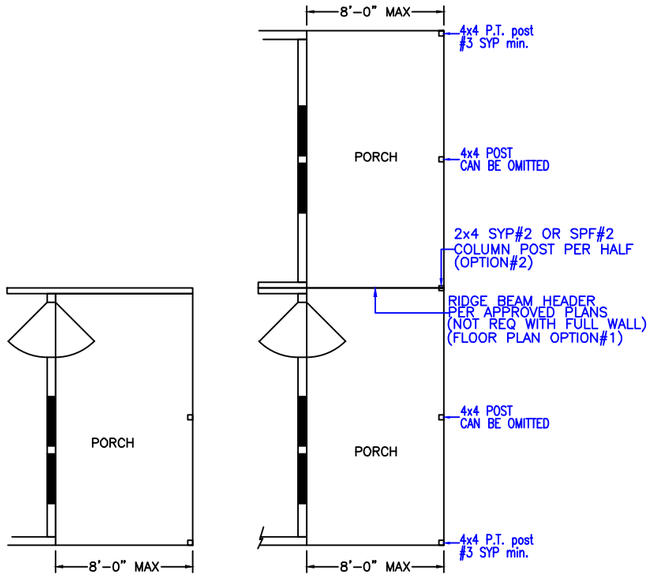
Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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

General Safety Notes

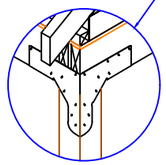
Failure to Follow Could Cause Property Damage or Personal Injury

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

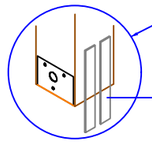


TYPICAL PLAN DETAIL OPTION#1

TYPICAL PLAN DETAIL OPTION#2

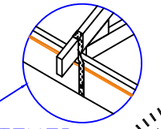


SIMPSON RTC44 CORNER BRACKET FASTENED W/ (29).162 X 3.1/2" NAILS (TYPICAL AT ALL CORNERS)

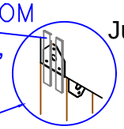


SIMPSON BC40 BRACKET FASTENED W/ (10).162 X 3.1/2" NAILS

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



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

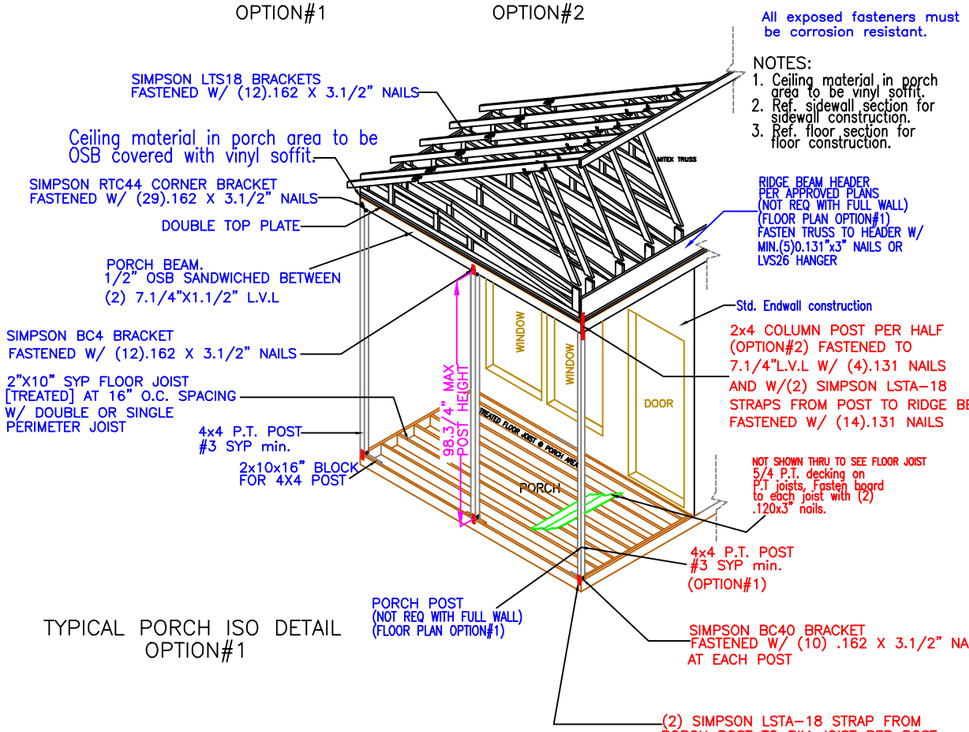


(2) SIMPSON LSTA-18 STRAP FROM PORCH POST TO 7.1/4" L.V.L FASTENED W/ (14).162 X 3.1/2" NAILS

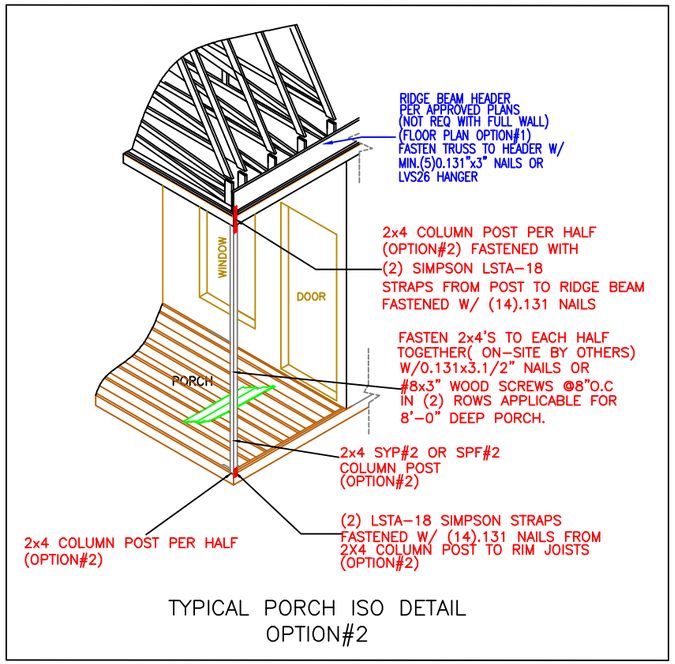
SIMPSON BC4 BRACKET FASTENED W/ (12).162 X 3.1/2" NAILS

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

Jun 14, 2022



TYPICAL PORCH ISO DETAIL OPTION#1



TYPICAL PORCH ISO DETAIL OPTION#2

TYPICAL POST CROSSSECTION DETAIL

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

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-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	130 MPH Vult. 101 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr.
Plan No.:	MET10886-8015-70-3-32-2
Allow. Floor Load:	40 PSF
Approval Date:	6/15/2022
Manufacturer:	Franklin Structures, LLC

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

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

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

MODULAR

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