September 27, 2024
Franklin Structures, LLC
10655 Hwy 43, South
Russellville, AL 35653

RE: MFT-10886-5091-82-4-32-4-FL
NTA JOB NUMBER: FH092524-30

Dear Ms. Melissa Wood,

The referenced manufactured building has been reviewed and approved. ICC NTA LLC certifies this plan is in compliance with 8th Edition (2023) Florida Codes with 2024 Supplement 1 – as referenced in the approved drawings. This approval covers the factory-built 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

ICC NTA, LLC Office • 305 N. Oakland Ave., Nappanee, IN 46550, US

Notes:

1. These plans comply with the 2020 NATIONAL ELECTRICAL CODE (NFPA 70) 8th Edition (2023) Florida Residential Building Code WITH 2024 SUPPLEMENTS 1
8TH EDITION (2023) FLORIDA ENERGY CONSERVATION CODE, 2024 SUPPLEMENTS 1
FAC 61-41 MANUFACTURED BUILDINGS
2. Plans comply with Rule 61G20-3.006 for product approval.
3. The raised seal set (or electronic sealed set) of plans are on file in the third agency's office as directed by DBPR.
4. This building is subject to review and approval of the fire inspector on-site w/compliance to Chapter633 Fire Safety Code.
5. The manufacturer's data sheet and the state (DBPR) insignia are permanently mounted to or about the electrical panel.
6. This building has been designed for erection or installation on a site built permanent foundation and is not designed to be moved once so erected or installed.

SPECIAL CONDITIONS & REQUIREMENTS:

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

2. THIS BUILDING HAS NOT BEEN DESIGNED OR APPROVED FOR PLACEMENT IN HIGH HURRICANE ZONES (HVHZ) (I.E DADE AND BROWARD COUNTIES)

INDEX TO DRAWINGS DESCRIPTION: SHEET NUMBER

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:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr.
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

INDEX TO ADDENDUMS

Notes:

9. Vult wind speed = EXPOSURE-C AT Vult=120 MPH & Vasd = 95 MPH
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) = +17.5/-33.4 psf
18. Roof Exterior (zone 2) = +17.5/-53.3 psf
19. Roof Corner (zone 3) = +17.5/-63.3 psf
20. Wall Interior (zone 4) = +23.5/-25.5 psf
21. Wall Exterior (zone 5) = +23.5/-31.4 psf
22. Roof Overhang (zone 1) = -43.4 psf
23. Roof Overhang (zone 2) = -63.3 psf
24. Roof Overhang(Zone 3) = -97.1 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

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

Sep 27, 2024

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

DATE 9/27/2024 CERT. NO SMP-056
PLAN NUMBER MFT-10886-5091-82-4-32-4
APPROVED BY Michael Faller
(signature)

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) FIRE PLACE UNIT AND CHIMNEY PIPE (IF APPLICABLE) AND SUBJECT TO LOCAL CODES
14) HVAC EQUIPMENT AN RETURN (IF APPLICABLE) SUBJECT TO LOCAL CODES
15) ANY WIND BORNE DEBRIS PROTECTION TO BE PROVIDED ON-SITE BY OTHERS AND SUBJECT TO LOCAL CODES
    a.) Wood structural panels to be provided for all glazed openings per R301.2.1.2
16) ANY RADON CONTROL(IF APPLICABLE) TO BE PROVIDED ON-SITE BY OTHERS AND SUBJECT TO LOCAL CODES
17) ANY GAS LINES (IF APPLICABLE) TO BE SIZED AND INSTALLED ON-SITE BY OTHERS AND SUBJECT TO LOCAL CODES

PHYSICAL ADDRESS

SPRINGS ROAD
FORT WHITE, FL 32038
COLUMBIA COUNTY

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

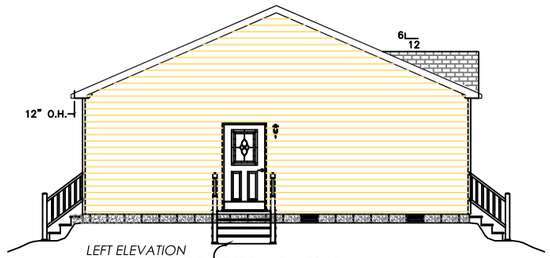
FLORIDA MODULAR

	BY:	DATE:
DRAWN:	M.W.W	12/1/22

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

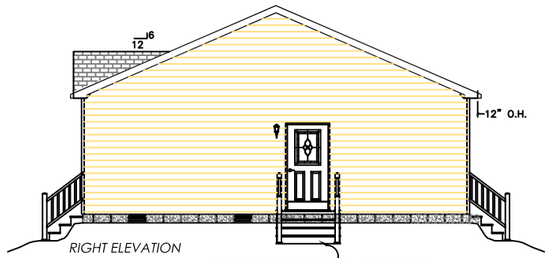
TITLE: MODULAR INDEX

NO: MFT-10886-5091-82-4-32-4 | REV: | SHEET: 1 of 7



LEFT ELEVATION

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

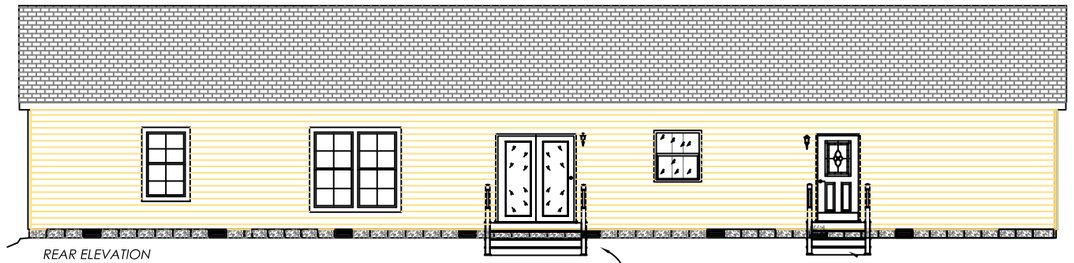


RIGHT ELEVATION

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

FRONT ELEVATION

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



REAR ELEVATION

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

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:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

NOTES!!
1. EXTERIOR COVERING IS VINYL LAP SIDING INSTALLED PER MFR'S SPECIFICATIONS. (OTHER APPROVED EXTERIOR COVERINGS MAY BE INSTALLED PER MFR'S SPECIFICATIONS.) EXTERIOR COVERINGS FOR ENDWALLS ARE SUPPLIED BY FRANKLIN HOMES AND INSTALLED ON-SITE BY LOCAL CONTRACTOR.
2. ROOF COVERING IS 240# FIBERGLASS SHINGLES OR METAL. SHINGLES FOR RIDGE ARE SUPPLIED BY FRANKLIN STRUCTURES, INSTALLED ON-SITE BY LOCAL CONTRACTOR.
3. WINDOWS ARE VINYL CLAD THERMOPANE.
4. MINIMUM ATTIC VENTILATION VIA CONTINUOUS VENTILATED SOFFIT & WHIRLY BIRD VENTS IS 7.8 SQ.FT PER 2340 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).

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

Sep 27, 2024

REVISION:	BY:	DATE:

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	M.W.W	11/29/22

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

TITLE: ELEVATIONS

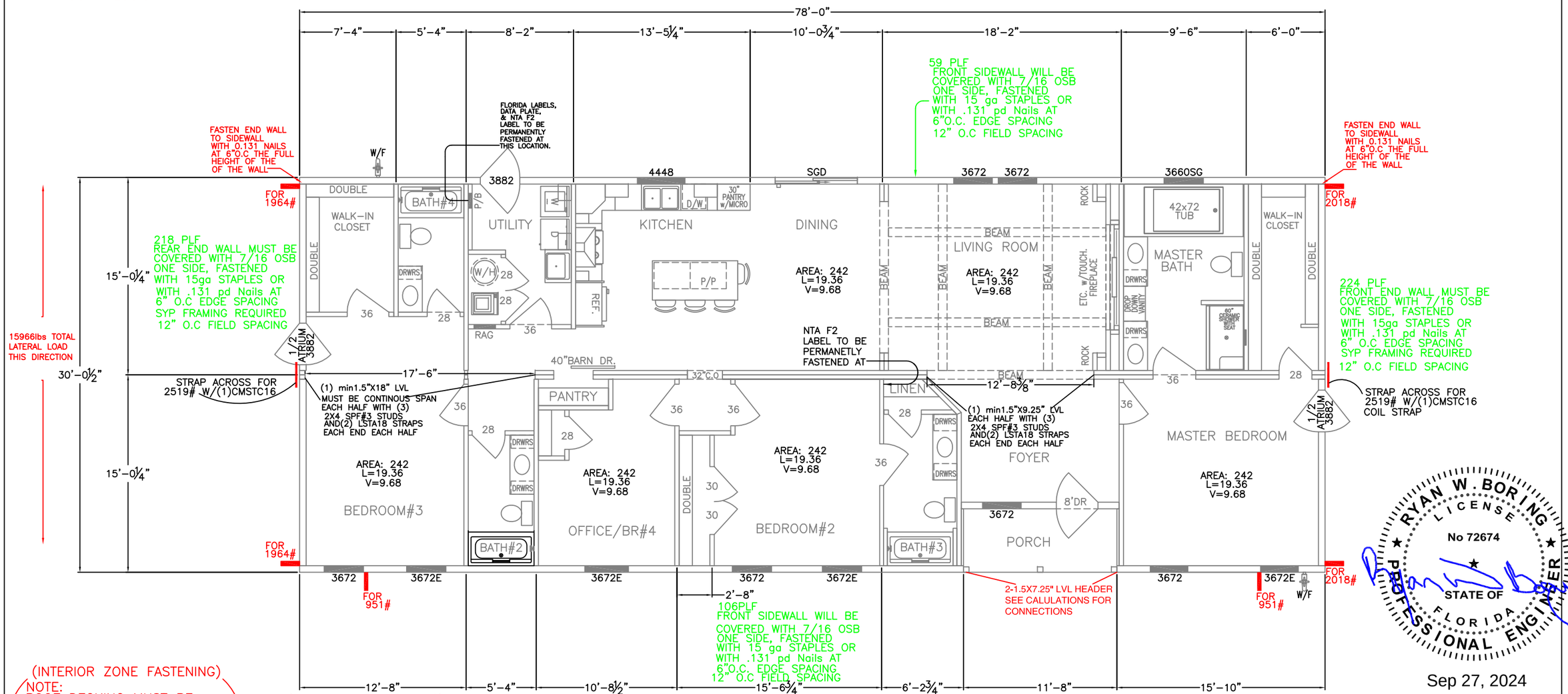
NO: MFT-10886-5091-82-4-32-4

REV:

SHEET: 2 of 7

ALL TIE DOWN FORCES ARE REQUIRED IN TENSION AND COMPRESSION

7071lbs TOTAL LATERAL LOAD THIS DIRECTION



(INTERIOR ZONE FASTENING)
NOTE:
ROOF DECKING MUST BE FASTENED WITH 15ga STAPLES
6" O.C BOUNDARY
6" O.C EDGE
6" O.C FIELD

(END ZONE FASTENING)
NOTE:
ROOF DECKING MUST BE FASTENED WITH 15ga STAPLES
4" O.C BOUNDARY
4" O.C EDGE
4" O.C FIELD

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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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

Sep 27, 2024

= 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
4448 VINYL THERMOPANE
3672 VINYL THERMOPANE SG
3672 VINYL THERMOPANE
3672 VINYL THERMOPANE (E)*
3660 VINYL THERMOPANE SG

U-Values=0.34
SHGC=0.21
(E) = EGRESS WINDOW
(S.G.) = SAFETY GLAZED

DOOR SCHEDULE	U.Values	SHGC
24"X80" HOLLOW CORE	N/A	N/A
28"X80" HOLLOW CORE	N/A	N/A
30"X80" HOLLOW CORE	N/A	N/A
32"X80" HOLLOW CORE	N/A	N/A
36"X80" HOLLOW CORE	N/A	N/A
40"x80" BARN DR	N/A	N/A
38"X82" 1/2 ATRIUM DOOR	0.33	0.30
38"X96" STEEL DOOR	.25	0.1
72"X75" SGD	0.43	0.30

9'-0" SIDEWALLS

NOTES!!

1. ATTIC ACCESS (22"X30"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. RADON CONTROL PER APPENDIX-F(FBC)(IF APPLICABLE) ON SITE BY OTHERS
6. TRUSSES FOR THIS MODEL ARE 24" O.C

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	M.W.W	1/1/21

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

TITLE: FLOORPLAN

NO: MFT-10886-5091-82-4-32-4

REV:

SHEET: 3 of 7

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

CIR#	DESCRIPTION	BREAKER	POLES	WIRE
22	UTILITY CIRCUIT	20 AMP/AFI/GFI	1	12-2 W/G
23	ON DEMAND EXTERIOR GAS W/H	20 AMP/AFI/GFI	1	12-2 W/G
24	SMOKE DETECTORS	15 AMP/AFI	1	14-2 W/G
40**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
41**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
42**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
43**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
44**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
45**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
46**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
47**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
48**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
49**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
50**	GENERAL LIGHTING	15 AMP/AFI	1	14-2 W/G
51	ELECTRIC FIRE PLACE	20 AMP/AFI	1	12-2 W/G
60	REFRIGERATOR CIRCUIT	20 AMP/AFI	1	12-2 W/G

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

*ALL RECEPTACLES MUST BE LISTED AS TAMPER RESISTANT

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

SYMBOLS:

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

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

1980 SQ.FT. @ 3 WATTS/SQ.FT.	=	5940 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
		36840 W
FIRST 10000 W @ 100%	=	10000 W
REMAINDER @ 40% (26840)(.4)	=	10736 W
FURNACE (HVAC)	=	20000 W
		40736 W

CALCULATED LOAD FOR SERVICE SIZE
40736 WATTS / 240 VOLTS = 170 AMPERES
200 AMP SERVICE STANDARD

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

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APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	120 Vult. 95 Vasd. EXP C
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Allow. Floor Load:	40 PSF
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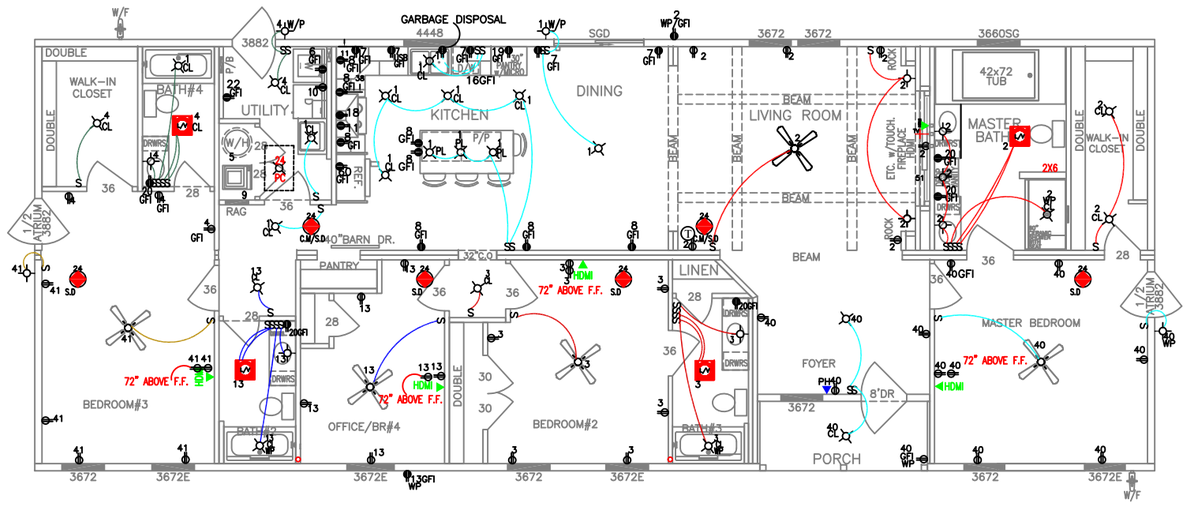
Manufacturer:	FRANKLIN STRUCTURES



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

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

NOTES!!

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

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

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

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

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

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

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

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

Sep 27, 2024

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	SAM	8/15/24

TITLE: ELECTRICAL

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

NO: MFT-10886-5091-82-4-32-4

REV:

SHEET: 4 of 7

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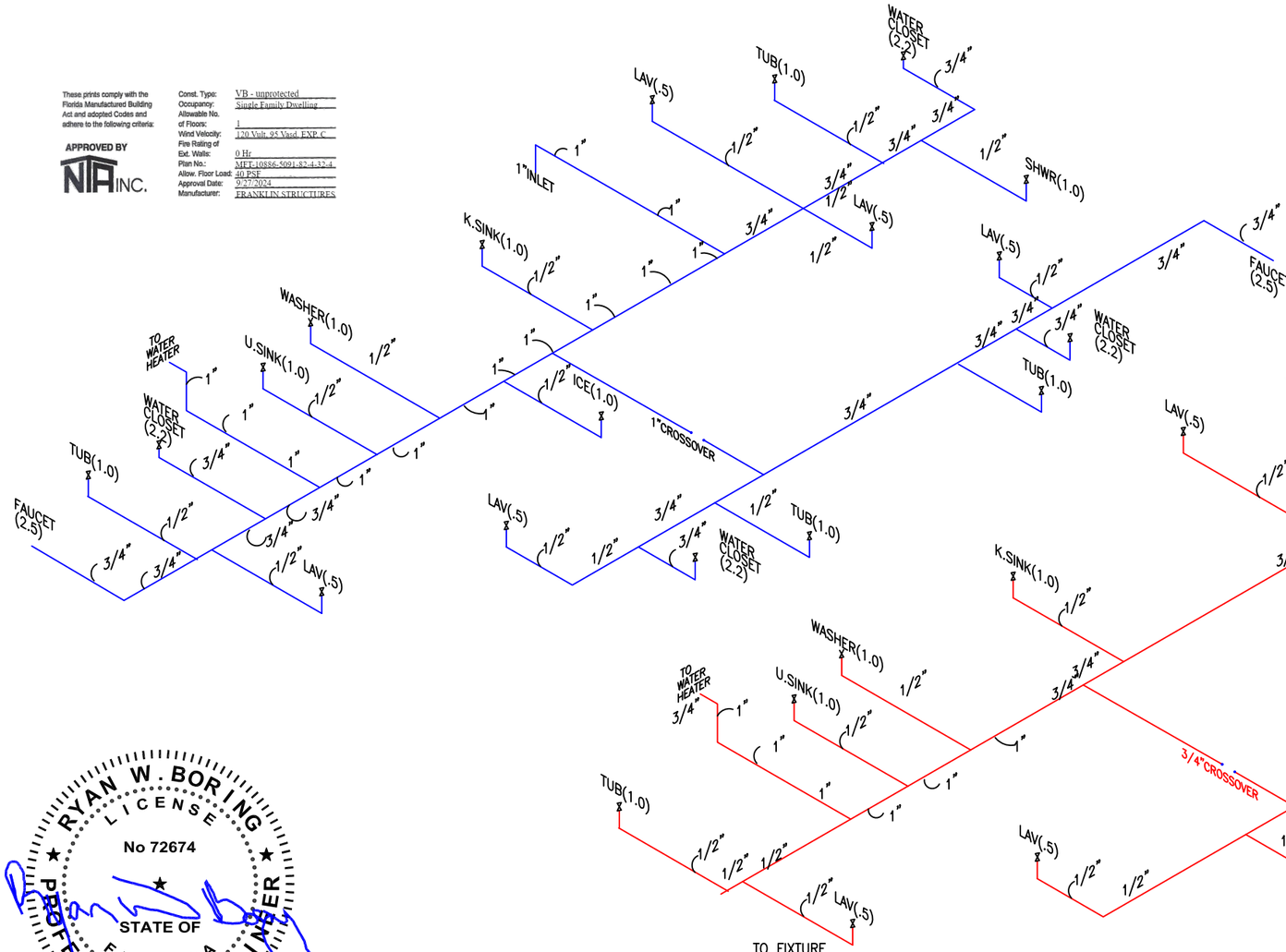
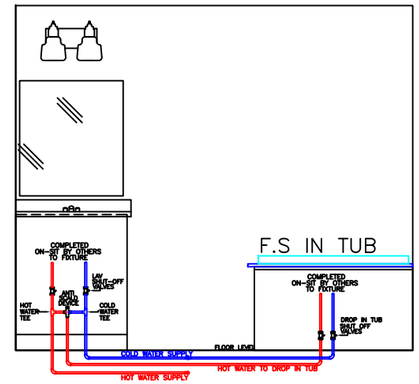
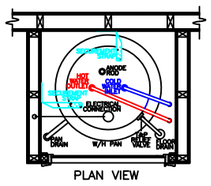
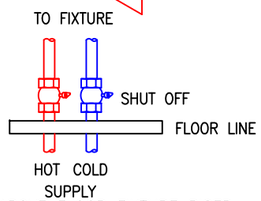






FRONT VIEW ISOMETRIC



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

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

Sep 27, 2024

TOTAL FIXTURE UNITS ON COLD WATER SUPPLY: 20.1
TOTAL FIXTURE UNITS ON HOT WATER SUPPLY: 10
TOTAL FIXTURE UNITS (INLET): 30.1
MAXIMUM FIXTURE UNITS PER TABLE P2903.6
FOR 50–60 PSI AND 100' COLUMN MAXIMUM ALLOWABLE LENGTH PER 2023 FBC–R (APPENDIX P) TABLE AP201.1
1/2"=2.0
3/4"=8.5
1"= 32

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 IRC
* 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

NOTES!!

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

REVISION:	BY:	DATE:

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

FLORIDA MODULAR

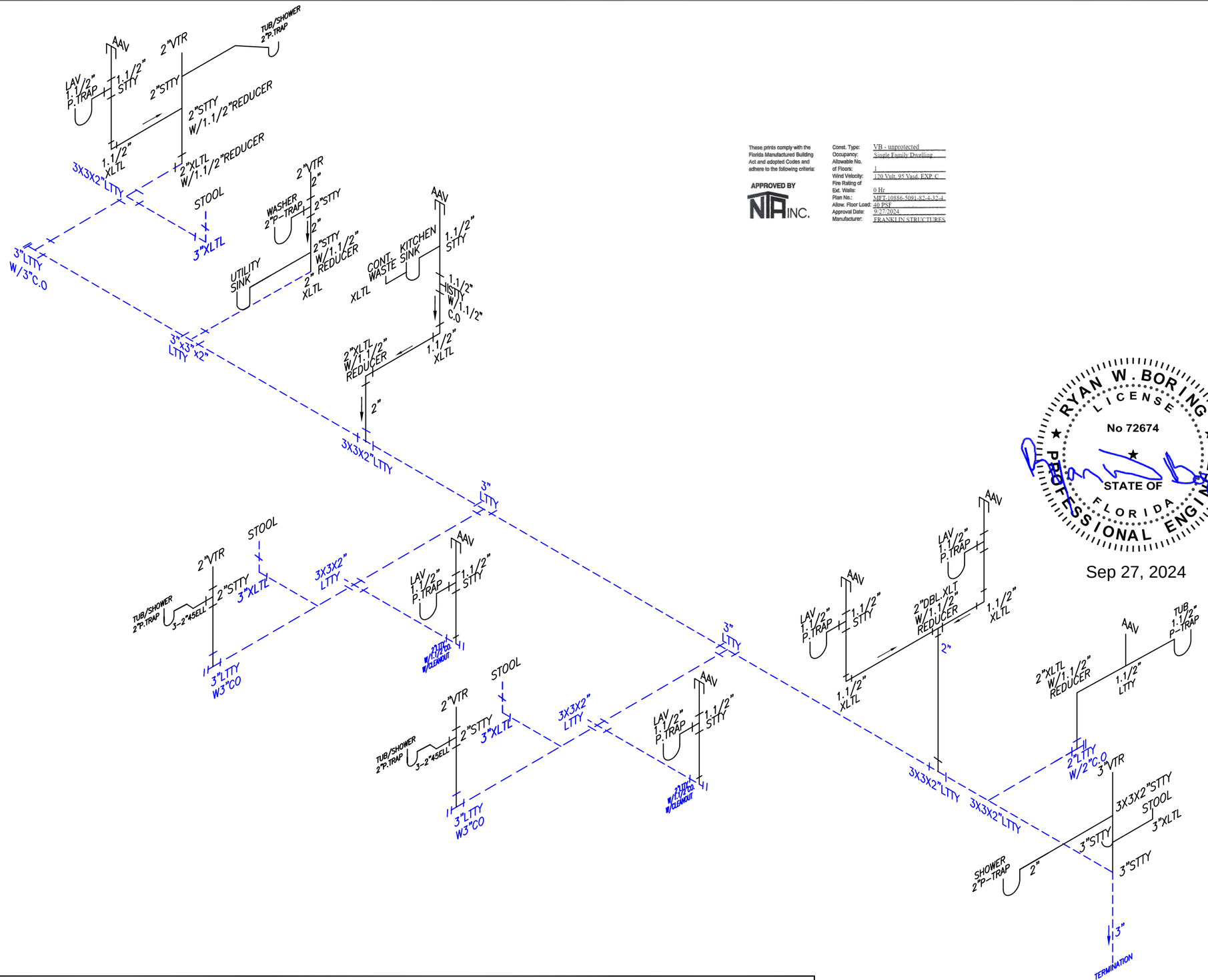
	BY:	DATE:
DRAWN:	M.W.W	11/30/22
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	

TITLE: WATER SCHEMATIC

NO: MFT–10886–5091–84–4–32–1

REV:

SHEET: 5 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:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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

Sep 27, 2024

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.W	11/30/22

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

TITLE: DRAIN SCHEMATIC

NO: MFT-10886-5091-84-4-32-4

REV:

SHEET: 6 of 7

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Wind Velocity:	120 Vult. 95 Vasd. EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

TRUSS TO EXTERIOR WALL LATERAL:
.131X3"NAILS END: 3
.131X3" NAILS INT: 2.0

TRUSS KING POST TO HEADER:
.131X3": 8.0 NAILS
OR HANGER RATED FOR 552LB GRAV AND 349LB UPLIFT

TRUSS KNEEWALL CONNECTION:
TENSION: CS22 OR LSTA18

RAIL TO KING POST TOED
.131X3" NAIL:
#: 1.8 USE 2
RAIL TO RAIL:
.131X3" NAIL: 103.125 LBS
#: 1.6 USE 2 PER BAY

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.

SIDEWALL

STAGGER JOINTS

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

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

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

MITEK TRUSS 24"O.C

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

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

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

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.)

1/2" GYPSUM CEILING BOARD

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 2x4 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 2023FBC-R

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.

ALUMINUM or GALVANIZED SHINGLE DRIP EDGE

2x2 MEMBER

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 6" O.C. (TYPICAL)

R-30 INSULATION

TYPICAL WINDOW, SEE FLOOR PLAN FOR SPECIFICATIONS

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.

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)

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

2x SILL PLATE PER APPROVED STRUCTURE PACKAGE

48"TYPICAL

2x6 SILL PLATE

SEE SECTION "A"

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 3" 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

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

Sep 27, 2024

*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.

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 '2023 FBC-R.

GENERAL CROSS SECTION NOTES

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

INTERIOR FINISH MATERIAL

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

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

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

EXTERIOR FINISH MATERIAL

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

WALL -VINYL LAP SIDING

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	MW.W.	3/17/22
SCALE:	N.T.S.	

TITLE: TYPICAL OFF-FRAME CROSS SECTION

NO: MTF-10886-5091-82-4-32-4

REV:

SHEET: 7 of 7

Franklin Structures, LLC

MFT-10886-5091-82-4-32-4 (17982)

Width: 30’- 1/2”

Length: 78’

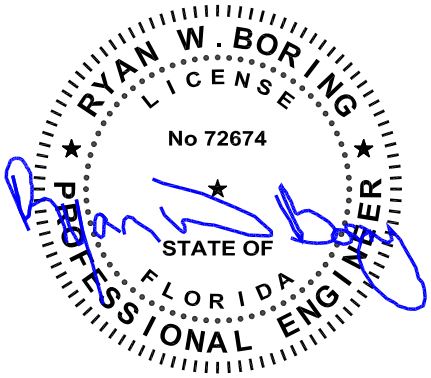
Roof Live Load: 20psf Roof LL

Wind Speeds: 120mph Vult

Wind Exposure: C

Wall Height: 9’

Max Mean Roof Height: 20’



Sep 27, 2024

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

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

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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

ASCE 7-22:

Wind Speed:	130	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:	33.17	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	29.2	-55.7
		100	0.7	-0.98			100	29.2	-38.5
Zone 2		Min	0.7	-2.5	Zone 2		Min	29.2	-88.9
		100	0.7	-1.2			100	29.2	-45.8
Zone 3		Min	0.7	-3	Zone 3		Min	29.2	-105.5
		100	0.7	-1.4			100	29.2	-52.4
OH Z1		Min		-2	OH Z1		Min		-72.3
		100		-1.9			100		-69.0
OH Z2		Min		-3	OH Z2		Min		-105.5
		100		-2			100		-72.3
OH Z3		Min		-4.7	OH Z3		Min		-161.9
		100		-2.4			100		-85.6

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Walls

Gcp	Area		Pos	Neg	Pressure	Area		Pos	Neg
Zone 4		10	1	-1.1	Zone 4		10	39.1	-42.5
		100	0.825	-0.93			100	33.3	-36.6
Zone 5		10	1	-1.4	Zone 5		10	39.1	-52.4
		100	0.825	-1.1			100	33.3	-42.5

Design Pressures

Pressure	Area		Pos	Neg
Zone 1		Min	17.5	-33.4
		100	17.5	-23.1
Zone 2		Min	17.5	-53.3
		100	17.5	-27.5
Zone 3		Min	17.5	-63.3
		100	17.5	-31.4
OH Z1		Min		-43.4
		100		-41.4
OH Z2		Min		-63.3
		100		-43.4
OH Z3		Min		-97.1
		100		-51.3
Zone 4		10	23.5	-25.5
		100	20.0	-22.0
Zone 5		10	23.5	-31.4
		100	20.0	-25.5

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	12.26	-9.26	-20.80	-18.93	18.17	-12.28	-25.37	-23.71
-Gcpi	24.20	2.68	-8.86	-6.99	30.11	-0.34	-13.43	-11.77
Max	24.20	-9.26	-20.80	-18.93	30.11	-12.28	-25.37	-23.71

Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-20.89	-28.85	-18.24	-20.89	7.30	-15.59	-21.89	-41.46	-23.55	-21.89	14.26	-20.23
-Gcpi	-8.95	-16.91	-6.30	-8.95	19.24	-3.65	-9.95	-29.52	-11.61	-9.95	26.20	-8.29
Max	-20.89	-28.85	-18.24	-20.89	19.24	-15.59	-21.89	-41.46	-23.55	-21.89	26.20	-20.23

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-12.28	-25.37	-9.26	-20.80	-32.844	-29.8213	13.09	41.88	11.54	31.19
Long	-41.46	-23.55	-28.85	-18.24	-32.844	-	-17.91	34.49	-10.61	22.88

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-7.37	-15.22	-5.55	-12.48	-19.71	-17.89	7.85	25.13	6.93	18.71
Long	-24.87	-14.13	-17.31	-10.94	-40.79	-33.23	7.85	20.70	6.93	13.73

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Fire Rating of Ext. Walls:	0 Hr
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Allow. Floor Load:	40 PSF
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Manufacturer:	FRANKLIN STRUCTURES

Design Criteria:

Total Width:	30.04	ft	Top chord DL:	10	psf	Vult:	130 mph
Unit Width:	15.02	ft	Bottom chord DL:	10	psf		
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:	6.00833333 ft
Overhang:	12	in	Floor Dead Load:	10	psf		
Blocking Height:	36	in	Wall Dead Load:	5	psf		
Eave Height:	10.00	ft	Ceiling R value:	35			
Min Mean Roof ht:	20	ft	Framing Rafters?:	no			
Mean Roof Height:	16.76	ft	Truss Spacing:	24	in oc		

Snow Loading:			Wind Loading:			
Ground Snow Load:	10	psf		WW	LW	WWOH
Snow Thermal factor:	1.1		Transverse End:	-7.37	-15.22	-19.71
Snow exposure factor:	1		Interior:	-5.55	-12.48	-17.89
Snow importance Factor:	1		Long End:	-24.87	-14.13	-40.79
Flat Roof Snow, Pf:	7.7	psf	Interior:	-17.31	-10.94	-33.23
Sloped Roof Snow Ps:	7.7	psf				
Unbalanced Roof Load:	18.18	psf				
Minimum Roof Lr:	18	psf				

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Truss Reactions

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

Load Cases for Ranch		Roof			Roof and 1 Story			
	Load Case	Sidewall	Matewall	Endwall	Sidewall	Matewall	Endwall	LDF
1	D	160	150	30	280	270	85	0.9
2	S	66	58	15	66	58	15	1.15
3	Su	36	126	36	36	126	36	1.15
4	Lr	173	135	36	173	135	36	1.25
5	L	0	0	0	300	300	40	1
6	Wp	0	0	0	0	0	0	1.6
7	Wn	-202	-265	-66	-202	-265	-66	1.6
8	.75(L+Lr)	130	101	27	355	327	57	1.25
9	.75(L+S)	49	43	12	274	269	42	1.15
10	.75(L+Su)	27	94	27	252	320	57	1.15
11	.75(L+S+Wp)	49	43	12	274	269	42	1.6
12	D+L	160	150	30	581	571	125	1
13	D+Lr	334	285	66	454	406	121	1.25
14	D+S	226	208	45	346	328	100	1.15
15	D+Su	196	276	66	316	396	121	1.15
16	D+.75(L+Lr)	290	252	57	636	597	142	1.25
17	D+.75(L+S)	209	194	42	555	539	127	1.15
18	D+.75(L+Su)	187	245	57	532	590	142	1.15
19	D+.75(L+S+Wp)	209	194	42	555	539	127	1.6
20	.6D+Wn	-106	-175	-48	-33	-102	-15	1.6
	Dead Load:	160	150	30	280	270	85	
	Dead LC:	D	D	D	D	D	D	
	Live Load:	173	135	36	355	327	57	
	Live LC:	Lr	Lr	Su	.75(L+Lr)	.75(L+Lr)	.75(L+Su)	
	Total Load:	334	285	66	636	597	142	
	Total LC:	D+Lr	D+Lr	D+Su	D+.75(L+Lr)	D+.75(L+Lr)	D+.75(L+Su)	
	Uplift Load:	-106	-175	-48	-33	-102	-15	
	Uplift LC:	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	
	Design Load:	334	285	66	581	571	125	
	Design LC:	D+Lr	D+Su	D+Su	D+L	D+L	D+L	
	Design LDF:	1.25	1.15	1.15	1	1	1	

Floor Load only

Live				300	300	1
Dead				75	75	0.9

Combined Loading:

Max Bending:

1	D	160	150	30	280	270	85	plf
2	D+Wp	160	150	30	280	270	85	plf
	Max down	160	150	30	280	270	85	plf
	Lateral	18.06	5	18.06	18.06	5	18.06	psf

Max Axial

1	D+.75(L+Lr)	290	252	57	636	597	142	plf
2	D+.75(L+S)	209	194	42	555	539	127	plf
3	D+.75(L+Su)	187	245	57	532	590	142	plf
4	D+.75(L+S+Wp)	209	194	42	555	539	127	plf
	Max down	290	252	57	636	597	142	plf
	Lateral	13.55	3.75	13.55	13.55	3.75	13.55	psf

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: 120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT-10886-5091-82-4-32-4
Allow. Floor Load: 40 PSF
Approval Date: 9/27/2024
Manufacturer: FRANKLIN STRUCTURES

Location: Matewall

Matewall Headers Supporting Roof

Supporting: Roof

No splices considered in span

Vertical Load

Dead Load:	150	plf	D
Live Load:	135	plf	Lr
Total Load:	285	plf	D+Su
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	5.5	SPF	#2	Edge	1	1.3	875	135	425	1400000	510000	1422	169	8.3	7.6	20.8
9																		
10																		

	Shear	Moment	LL def	TL def
1	150	93	158	150
2	189	85	158	150
3	240	160	178	169
4	292	192	216	205
5	364	236	269	256
6	415	267	308	292
7	467	298	346	329
8	89	60	94	89
9				
10				

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(1) 2x 10 SPF #2	93 in	1200	-680	1.9
2	(1) 2x 10 SYP #2	84 in	1000	-620	1.5
3	(1) 2x 9.25 LVL	160 in	2000	-1170	1.1
4	(1) 2x 11.25 LVL	192 in	2300	-1400	1.1
5	(1) 2x 14 LVL	235 in	2800	-1710	1.1
6	(1) 2x 16 LVL	266 in	3200	-1940	1.1
7	(1) 2x 18 LVL	297 in	3600	-2160	1.1
8	(1) 2x 6 SPF #2	60 in	800	-440	1.9
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	7.69	18
			14.47	7.01	15
			28.95	13.23	29
			33.29	15.83	34
			40.52	19.34	41
			46.31	21.94	47
			52.10	24.42	53
			11.58	4.98	12

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

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Location: Matewall

Matewall Columns

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	285 plf	D+Su	Lateral only			Vertical:	150 plf	0	Top/Btm Plate (tp):	4.5	in
Total Load:	285 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:	252 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:	1.15		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	0.42	0.32					
									Allowable:	1200	361	379	425	1200000	440000		600
	Bearing length:	1.5												Non braced (between spans)			
														69	35	23	
														76	304	684	
														0.08673	0.322732	0.6074	

# 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		80	159	239	319	399	478	558	638	718	797	16	122	346
Fc Perp compression		40	80	121	161	201	241	281	322	362	402			
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		71	252	401	551	704	857	1011	1165	1321	1476			
Vert/Lateral Max Vert		68	155	245	336	427	519	612	705	798	891			
Deflection Check	L/	802	1604	2406	3208	4009	4811	5613	6415	7217	8019			
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
		40	80	121	161	201	241	281	322	362	402			

Max Span	Max Trib	Max Side Opening				Max Center opening (total distance of both spans)			
1	40 in	62 in	=	5 ft -	2 in	23 in	=	1 ft -	11 in
2	80 in	141 in	=	11 ft -	9 in	115 in	=	9 ft -	7 in
3	121 in	220 in	=	18 ft -	3 in	173 in	=	14 ft -	4 in
4	161 in	299 in	=	24 ft -	11 in	231 in	=	19 ft -	3 in
5	201 in	378 in	=	31 ft -	6 in	289 in	=	24 ft -	0 in
6	241 in	457 in	=	38 ft -	1 in	347 in	=	28 ft -	11 in
7	281 in	536 in	=	44 ft -	7 in	405 in	=	33 ft -	9 in
8	322 in	615 in	=	51 ft -	3 in	463 in	=	38 ft -	7 in
9	362 in	694 in	=	57 ft -	10 in	521 in	=	43 ft -	4 in
10	402 in	773 in	=	64 ft -	5 in	578 in	=	48 ft -	1 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:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Location: Matewall

Matewall Columns

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	285 plf	D+Su	Lateral only			Vertical:	150 plf	0	Top/Btm Plate (tp):	4.5	in
Total Load:	285 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:	252 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:	1.15		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	0.42	0.32					
									Allowable:	1200	361	379	425	1200000	440000		600
	Bearing length:	3												Non braced (between spans)			
														69	35	23	
														76	304	684	
														0.08673	0.322732	0.6074	

# 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		80	159	239	319	399	478	558	638	718	797	16	122	346
Fc Perp compression		80	161	241	322	402	482	563	643	724	804			
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		71	252	401	551	704	857	1011	1165	1321	1476			
Vert/Lateral Max Vert		68	155	245	336	427	519	612	705	798	891			
Deflection Check	L/	802	1604	2406	3208	4009	4811	5613	6415	7217	8019			
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
		68	155	239	319	399	478	558	638	718	797			

Max Span	Max Trib	Max Side Opening					Max Center opening (total distance of both spans)				
1	68 in	119 in	=	9	ft -	10 in	23 in	=	1	ft -	11 in
2	155 in	291 in	=	24	ft -	11 in	176 in	=	14	ft -	7 in
3	239 in	457 in	=	38	ft -	1 in	344 in	=	28	ft -	8 in
4	319 in	615 in	=	51	ft -	3 in	459 in	=	38	ft -	3 in
5	399 in	773 in	=	64	ft -	5 in	574 in	=	47	ft -	10 in
6	478 in	931 in	=	77	ft -	6 in	688 in	=	57	ft -	4 in
7	558 in	1089 in	=	90	ft -	9 in	803 in	=	66	ft -	11 in
8	638 in	1247 in	=	103	ft -	11 in	918 in	=	76	ft -	6 in
9	718 in	1405 in	=	117	ft -	0 in	1033 in	=	86	ft -	0 in
10	797 in	1563 in	=	130	ft -	3 in	1148 in	=	95	ft -	8 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:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Location: Sidewall

Sidewall Headers Supporting Roof U-Headers

Supporting: Roof

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

Vertical Load

Dead Load:	160	plf	D
Live Load:	173	plf	Lr
Total Load:	334	plf	D+Lr
Uplift Load:	-106	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	49	48
2	92	54	69	67
3	145	79	109	106
4	191	100	144	139
5	84	35	49	48
6	117	49	69	67
7	184	77	109	106
8	243	94	144	139
9				
10				

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(2) 2x 3 SPF #2	38 in	600	-170	0.5
2	(2) 2x 4 SPF #2	53 in	800	-240	0.5
3	(2) 2x 6 SPF #2	78 in	1100	-350	0.5
4	(2) 2x 8 SPF #2	99 in	1400	-440	0.5
5	(2) 2x 3 SYP #2	35 in	500	-160	0.4
6	(2) 2x 4 SYP #2	49 in	700	-220	0.4
7	(2) 2x 6 SYP #2	77 in	1100	-340	0.4
8	(2) 2x 8 SYP #2	93 in	1300	-410	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	0.96	5
			5.79	1.36	6
			7.96	1.98	8
			10.13	2.49	11
			3.62	0.90	4
			5.07	1.24	6
			7.96	1.92	8
			9.41	2.32	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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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:	160 plf	0	Top/Btm Plate (tp):	4.5	in
Total Load:	334 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	25 psf	W	Header height:	80	in
Uplift Load:	-106 plf	.6D+Wn	Zone 5:	28 psf	W	Combined Vert and Lat (max Vert)			LVL:	Micrallam	
			Zone 4:	24 psf	W	Vertical:	290 plf	0	LVL MOE (E):	2000000	psi
						Lateral:	18.8 psf	.75W	E min:	1016411	psi
			def=.7 C&C			Combined Uplift and Lat			Fb:	2750	psi
Cr:	1					Vertical:	-106 plf	.6D+Wn	Fv:	285	psi
Cd:	1.6					Lateral:	18.8 psf	W	Fcperp:	750	psi
Cd grav:	1.25		ateral deflection L/	120					Vol eff (e):	0.136	
Vertical									Cr (LVL):	1.04	

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

Single King Stud

Opening:	16	in	Lateral Only		Vertical Only		Combined Max Lat		Combind Max Vert				
			Fb:	676 psi	Fc:	59 psi	CSI:	0.44	CSI:	0.34	Max CSI:	0.44	**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		38	76	114	151	189	45	90	135	180	224
Moment at Header		51	101	152	203	253	60	120	180	240	301
Shear		86	171	257	343	429	102	203	305	407	508
Combined Loading											
Max Lat		383	878	1368	1857	2346	383	878	1368	1857	2346
Max Vert		226	498	769	1038	1308	226	498	769	1038	1308
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		38	76	114	151	189	45	90	135	180	224

Max Span	End Zone						Interior Zone					
1	59	in =	4	ft -	11	in	73	in =	6	ft -	0	in
2	135	in =	11	ft -	3	in	163	in =	13	ft -	7	in
3	211	in =	17	ft -	6	in	253	in =	21	ft -	0	in
4	286	in =	23	ft -	9	in	343	in =	28	ft -	6	in
5	362	in =	30	ft -	2	in	432	in =	36	ft -	0	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:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Location: Sidewall

Sidewall Studs (Jack)

Supporting: Roof

Vertical Load

NDS Load: 334 plf D+Lr

Total Load: 334 plf D+Lr

Uplift Load: -106 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	224	447	671	895	1119	1342	1566	1790	2014	2237
Fc Perp compression 1.5 in	46	91	137	183	229	274	320	366	412	457
Fc Perp compression 3 in	91	183	274	366	457	549	640	732	823	915
Fc Perp compression 4.5 in	137	274	412	549	686	823	961	1098	1235	1372
Tension	819	1638	2457	3276	4095	4914	5733	6552	7371	8190

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

Max Span

	Double Headers			Triple Headers		
1	176 in =	14 ft -	7 in	268 in =	22 ft -	3 in
2	353 in =	29 ft -	5 in	536 in =	44 ft -	7 in
3	530 in =	44 ft -	1 in	805 in =	67 ft -	0 in

Note: ripped lumber must be regraded

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Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT-10886-5091-82-4-32-4
Allow. Floor Load: 40 PSF
Approval Date: 9/27/2024
Manufacturer: FRANKLIN STRUCTURES

Uplift Straps: Sidewall

Uplift: -106 plf

Stud Spacing: 16 in

Strapping

Strap All: 1110 lbs LSTA18

fasteners: 14 .148x 2.5"

Strap Spacing: 10.52 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	236	252
2	488	504
3	740	756
4	994	1010
5	1246	1262
6	1498	1514
7	1750	1766
8	2004	2020
		total span

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Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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: 12.28 " oc

15ga: 9.33 " oc

fasteners into Studs:

.131 Nail: 1.3 lb

15ga: 1.7 lb

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

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Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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

15ga: 2.8 lb

Sill Plates

Lateral Load
Lateral only
Wind: 119 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	95.7	171.0	1611	0.73
2	123.4	216.2	1274	0.60
3	143.2	248.4	1109	0.47
4	92.6	165.9	1660	0.83
5	121.5	213.1	1293	0.72
6	142.2	246.7	1116	0.57
7				
8				
9				
10				

Shear	Moment	Def
228	85	112
445	109	141
663	127	162
292	82	112
574	107	141
856	126	162

Sill and header lateral connection:

Span (ft)	Load @ Ends (lbs)	Nail Zeg(lb)	0.131 Nails	15ga Zeg(lb)	15gax2.5" Staples
2	119.14	88	2	48	3
3	178.71		3		4
4	238.28		3		5
5	297.85		4		7
6	357.42		5		8
7	417.00		5		9
8	476.57		6		10
9	536.14		7		12
10	595.71		7		13
11	655.28		8		14
12	714.85		9		15
13	774.42		9		17
14	833.99		10		18

	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	126 in	700
4	(1) 2x 5 SYP #2	81 in	500
5	(2) 2x 5 SYP #2	107 in	600
6	(3) 2x 5 SYP #2	125 in	700
7			
8			
9			
10			

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Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT-10886-5091-82-4-32-4
Allow. Floor Load: 40 PSF
Approval Date: 9/27/2024
Manufacturer: FRANKLIN STRUCTURES

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

Wind Speed, Vult:	120 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:	28.26 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	10.4	-7.9	-17.7	-16.1	15.5	-10.5	-21.6	-20.2
-Gcpi	20.6	2.3	-7.6	-6.0	25.7	-0.3	-11.4	-10.0
Max	20.6	-7.9	-17.7	-16.1	25.7	-10.5	-21.6	-20.2

Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-17.8	-24.6	-15.5	-17.8	6.2	-13.3	-18.7	-35.3	-20.1	-18.7	12.2	-17.2
-Gcpi	-7.6	-14.4	-5.4	-7.6	16.4	-3.1	-8.5	-25.2	-9.9	-8.5	22.3	-7.1
Max	-17.8	-24.6	-15.5	-17.8	16.4	-13.3	-18.7	-35.3	-20.1	-18.7	22.3	-17.2

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-10.5	-21.6	-7.9	-17.7	-28.0	-25.4	11.2	35.7	9.8	26.6
Long	-35.3	-20.1	-24.6	-15.5	-28.0	-	-15.3	29.4	-9.0	19.5

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-6.3	-13.0	-4.7	-10.6	-16.8	-15.2	6.7	21.4	5.9	15.9
Long	-21.2	-12.0	-14.8	-9.3	-34.8	-28.3	6.7	17.6	5.9	11.7

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Wind Velocity:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Shearwalls:

Left Endwall:

End Zone:	Yes	
Trib:	39	ft
End Roof:	302	lb
End Wall:	642	lb
Int Roof:	1463	lb
Int Wall:	2631	lb
Total force:	5037	lb
Sheathing Thickness:	7/16	in
Fastener:	15ga staple	
Wall Length:	30.04	ft
FHS Length:	26.10	ft
Wall Height:	9	ft
Tallest Opening:	2h/3	
r:	0.91	
Co:	0.88	
Perf or Segmented:	P	
Blocked:	YES	
PLF required:	218.26	
Framing:	SYP	
Required Spacing:	6	" OC
Tiedown:	1964.3	lb
Strap for:	2519	lb

Right Endwall:

End Zone:	Yes	
Trib:	39	ft
End Roof:	302	lb
End Wall:	642	lb
Int Roof:	1463	lb
Int Wall:	2631	lb
Total force:	5037	lb
Sheathing Thickness:	7/16	in
Fastener:	15ga staple	
Wall Length:	30.04	ft
FHS Length:	25.71	ft
Wall Height:	9	ft
Tallest Opening:	2h/3	
r:	0.90	
Co:	0.87	
Perf or Segmented:	P	
Blocked:	YES	
PLF required:	224.20	
Framing:	SYP	
Required Spacing:	6	" OC
Tiedown:	2017.8	lb
Strap for:	2519	lb

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Wind Velocity:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Top Sidewall:

End Zone:	Yes	
Trib:	15.02	ft
End Wall:	835	lb
Int Wall:	1475	lb
Total force:	2310	lb
Sheathing Thickness:	7/16	in
Fastener:	15ga staple	
Wall Length:	78.00	ft
FHS Length:	55.59	ft
Wall Height:	9	ft
Tallest Opening:	5h/6	
r:	0.75	
Co:	0.70	
Perf or Segmented:	P	
Blocked:	YES	
PLF required:	59.46	
Framing:	SPF	
Required Spacing:	6	" OC
Tiedown:	535.1	lb

Bottom Sidewall:

End Zone:	Yes	
Trib:	15.02	ft
End Wall:	835	lb
Int Wall:	1475	lb
Total force:	2310	lb
Sheathing Thickness:	7/16	in
Fastener:	15ga staple	
Wall Length:	78.00	ft
FHS Length:	38.48	ft
Wall Height:	9	ft
Tallest Opening:	5h/6	
r:	0.54	
Co:	0.57	
Perf or Segmented:	P	
Blocked:	YES	
PLF required:	105.66	
Framing:	SPF	
Required Spacing:	6	" OC
Tiedown:	950.9	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	6 "OC	1964 lb	P	
Right Endwall	15ga staple	6 "OC	2018 lb	P	
Top Sidewall	15ga staple	6 "OC	535 lb	P	YES
Bottom Sidewall	15ga staple	6 "OC	951 lb	P	YES

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

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

Diaphragm:

Max Force:	5037.2	lbs
Load:	167.7	plf
Sheathing:	7/16	in
Fastener:	.131 Nail	
Framing:	SPF	
Unblocked Capacity:	294.4	plf
Blocked:	200.9	plf
Blocking distance:	0.0	ft

0 ft blocked each end with .131 Nail @ 6"OC edge and field

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

Lateral Foundation Loads:

Endwalls:	15966	lb
Sidewalls:	7071	lb

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Fire Rating of Ext. Walls:	0 Hr
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Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

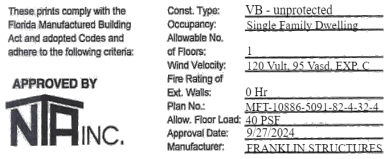
Connections

Truss to exterior wall uplift:

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

Truss to exterior wall Lateral:

End:	31.4	psf
Int:	25.5	psf
Height:	9	ft
Spacing:	24	in oc
Load:		
End:	283.0	lb
Int:	229.2	lb
.131 nail:	114.84	lb
.131x3"Nails End:	2.5	
.131xx3" Nails Int:	2.0	



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 349lb uplift

Stud to Plate:

End:	28.41	psf	(reduced for stud area)
Int:	23.96	psf	
Height:	9	ft	
Spacing:	16	in oc	
Load:			
End:	170.5	lb	
Int:	143.7	lb	
.131 nail:	88.44	lb	
Nails End:	1.9		
Nails Int:	1.6		

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

Plate to floor and plate interconnection (top plate):

End:	28.4	psf
Int:	24.0	psf
Height:	9	ft
Load:	127.8439	plf
.131 Nailx3":	108	lb
Spacing of .131 nail:	10.1	" OC int and end zones
15gax2.5" staple:	72	lb
Spacing of 15ga:	6.76	" OC int and end zones

Sheathing Suction Connections (wall and roof)

	End	Int	
Wall:	-28.4	-25.5	psf
Roof:	-63.3	-33.4	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:	6.3	11.8	" oc
Staple:	5.4	10.2	" oc

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Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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:	352	lb	Compare to truss print,
Shear:	165	lb	Must be higher then truss.

Tension:

CS 22/LSTA18:	845	lb

Shear:

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

Floor Joist Calculation at 16"oc

Vertical Load

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

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Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Location: Matewall

Matewall Headers Supporting Roof & 1 Floor

Supporting: Roof & 1 Floor

Vertical Load

Dead Load:	270	plf	D
Live Load:	327	plf	.75(L+Lr)
Total Load:	571	plf	D+L
Uplift Load:	-102	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	107	110
2	121	75	123	125
3	155	87	135	138
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	-270	1.8
2	(1.5) 2x 10 SYP #1	75 in	1800	-330	1.2
3	(2) 2x 10 SYP #1	86 in	2100	-370	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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Porch Headers sidewall

Location: Sidewall
Supporting: Roof

Vertical Load

Dead Load:	160	plf	D
Live Load:	173	plf	Lr
Total Load:	334	plf	D+Lr
Uplift Load:	-130	plf	.6D+Wn

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	2	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	21.8	26.3	95.3
2	2	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	21.8	26.3	95.3
3	1	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	10.9	13.1	47.6
4	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	21.4	98.9
5	2	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	21.8	26.3	95.3
6	2	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	27.8	42.8	197.9
7	1	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	10.9	13.1	47.6
8	1	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	10.9	13.1	47.6
9																		
10																		

	Shear	Moment	LL def	TL def
1	243	109	150	145
2	191	100	144	139
3	163	118	128	124
4	208	148	164	159
5	312	167	162	157
6	398	209	206	200
7	129	77	119	115
8	103	70	114	110
9				
10				

Connections:
Connect truss to header with LTS18 strap: capacity 650lbs.
Max Truss reaction for header @24" is 260==> OK

Header to Column:
BC4 Bracket: capacity 605lbs.
(2) LSTA18 Straps: 2220lbs
Total: 2825lbs
Max reaction for header @ 12ft: 1560lb OK

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(2) 2x 8 SYP #1	108 in	1600	-590	1.0
2	(2) 2x 8 SPF #2	99 in	1400	-540	1.3
3	(1) 2x 7.25 LVL	118 in	1700	-640	1.5
4	(1) 2x 9.25 LVL	148 in	2100	-810	1.5
5	(2) 2x 7.25 LVL	156 in	2200	-850	0.8
6	(2) 2x 9.25 LVL	199 in	2800	-1080	0.8
7	(1) 2x 8 SYP #1	76 in	1100	-420	1.9
8	(1) 2x 8 SPF #2	70 in	1000	-380	2.6
9					
10					

Column to Floor:
BC-40 Bracket: 510lbs
(2) LSTA18 Straps: 2220lbs
Total: 2730lbs
Max reaction for header @ 12ft: 1560lb OK

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

APPROVED BY NTA INC.

Const. Type: VB - unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT-10886-5091-82-4-32-4
Allow. Floor Load: 40 PSF
Approval Date: 9/27/2024
Manufacturer: FRANKLIN STRUCTURES

Porch Column

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:	108 in
NDS Load:	334 plf	D+Lr	Lateral only			Vertical:	150 plf	0	Top/Btm Plate (tp):	0 in
Total Load:	334 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	5 psf	W	LVL:	Microllam
Uplift Load:	-130 plf	.6D+Wn	Lateral:	79 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:	-130 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	1221
Fcperp	
Combined Loading	
Uplift/Lateral	1221
Vert/Lateral max Lat	398
Vert/Lateral Max Vert	180
Deflection Check	L/ 121
	OK
	106

Max Span	Max Trib	Max Side Opening	Max Center opening
1	106 in	209 in = 17 ft - 5 in	153 in = 12 ft - 9 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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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

	BUILDER: Franklin Structures
PROJECT NAME AND ADDRESS:	**PERMITTING OFFICE:**
MFT-10886-5091-84-4-32-4 FORT WHITE, FL 32038	**JURISDICTION NUMBER:**
OWNER: clayton homes of lake city	**PERMIT NUMBER:**
PERMIT TYPE: Residential	**NUMBER OF UNITS:** 2
WORST CASE?	**CONDITIONED FLOOR AREA:**2284

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.**

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT[1]

REQUIREMENTS	FENESTRATION *U*-FACTOR[2, 3, 4]	SKYLIGHT[2] *U* -FACTOR	GLAZEDFENESTRATIONSHGC[2, 3]	CEILING *R* -VALUE	WOODFRAMEWALL *R*-VALUE[5]	MASS WALL *R*- VALUE[5, 6]	FLOOR *R* -VALUE	BASEMENTWALL *R*-VALUE	SLAB[7] *R* -VALUE &DEPTH	CRAWLSPACEWALL *R*-VALUE
CLIMATE ZONE 1	NR	0.75	0.25	30	13	3/4	13	0	0	0
CLIMATE ZONE 2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
VALUE	AVG	AVG	AVG	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST
INSTALLED:	.34		.22 for grid/.23 NC 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.

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.

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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-84-4-32-4
Allow. Floor Load:	50 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-S2-4-32-d
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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? yes
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 ?
Air leakage/Duct test	Air handler installed: Total leakage = 4 cfm/100 s.f.	
	Air handler not installed: Total leakage = 3 cfm/100 s.f.	Total leakage = _____ cfm/100 s.f.
		Air handler installed? Yes
Duct testing	Test not required if all ducts and AHU are within the building thermal envelope and for additions or alterations where ducts extended from existing heating and cooling system through unconditioned space are < 40 linear ft.	Test report required? yes
Air conditioning systems:	Minimum federal standard required by NAECA[2]:	On-site

Central system < 45,000 Btu/h	SEER2 14.3	Cap.(Btu/h) =
Central system ≥ 45,000 Btu/h	SEER2 13.8	SEER2 (Min) =
Central heat pump	SEER2 = 14.3	SEER2 (Min) =
PTAC, PTHP, SPVAC or SPVHP	EER [from Table C403.2.3(3)]	Type =Cap. (Btu/h) =EER (Min) =
Other:	See Tables C403.2.3(1)–(11)	Type =Effic. (min) =
Heating systems:	Minimum federal standard required by NAECA[2]:	
Electric resistance	Not allowed in Climate Zone 2	
Heat pump	HSPF ≥ 7.5	HSPF2 (Min) =
Gas furnace, nonweatherized	AFUE ≥ 80%	AFUE (Min) =
Oil furnace, nonweatherized	AFUE ≥ 83%	AFUE (Min) =
PTHP or SPVHP	COP_H [from Table C403.2.3(3)]	Type =Cap. (Btu/h) =COP_H (Min) =
Other:	See Tables C403.2.3(1)–(16)	Type =Effic. (min) =
Water heating system (storage type):	Minimum federal standard required by NAECA[2]:	Capacity =
Electric[3, 6]	UEF 40 gal.; 0.931; 50 gal.: 0.930; 60 gal.: 2.176	UEF (Min) =
Gas fired[4, 6]	UEF 40 gal.; 0.64; 50 gal.: 0.627; 60 gal.: 0.789	UEF (Min) =
Other (describe)[5, 6]:		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 high draw pattern value provided by manufacturer.

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:	120 Vult- 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-S2-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

OTHER REQUIREMENTS			
Component	**Section**	**Summary of Requirements**	**Check**
Air leakage	R402.4	To be caulked, gasketed, weather stripped or otherwise sealed per Table R402.4.1.1. Recessed lighting IC-rated as having ≤ 2.0 cfm tested to ASTM E283.Windows and doors: 0.3 cfm/sq.ft (swinging doors: 0.5 cfm/sf) when tested to NFRC 400 or AAMA/WDMA/CSA 101/I.S. 2/A440.Fireplaces: Tight-fitting flue dampers & outdoor combustion air	X
Programmable thermostat	R403.1.2	A programmable thermostat is required for the primary heating or cooling system.	X
Air distribution system	R403.3.2R403.3.4	Ducts shall be tested as per Section R403.3.2 by either individuals as defined in Section 553.993(5) or (7), *Florida Statutes*, or individuals licensed as set forth in Section 489.105(3) (f), (g) or (i),*Florida Statutes*. Air handling units are not allowed in attics.	ON-SITE
Water heaters	R403.5	Comply with efficiencies in Table C404.2. Hot water pipes insulated to ≥ R-3 to kitchen outlets, other cases. Circulating systems to have an automatic or accessible manual OFF switch. Heat trap required for vertical pipe risers.	X
Cooling/heating equipment	R403.7	Sizing calculation performed & attached. Special occasion cooling or heating capacity requires separate system or variable capacity system.	X
Swimming pools & spas	R403.10	Spas and heated pools must have vapor-retardant covers or a liquid cover or other means proven to reduce heat loss except if70% of heat from site-recovered energy. Off/timer switch required. Gas heaters minimum thermal efficiency is 82%. Heat pump pool heaters minimum COP is 4.0.	N/A
Lighting equipment	R404.1	All permanently installed luminaires, excluding those in kitchen appliances, shall have an efficacy of at least 45 lumens-per-watt or shall utilize lamps with an efficacy of not less than 65 lumens-per-watt.	ON-SITE

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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

I hereby certify that the plans and specifications covered by this form are in compliance with the *Florida Building Code, Energy Conservation*. PREPARED BY: Melissa Wood Date: 1/23/24 PREPARED BY SIGNATURE: *Melissa A Wood* I hereby certify that this building is in compliance with the *Florida Building Code, Energy Conservation*. OWNER/AGENT: Date: OWNER/AGENT SIGNATURE:	Review of plans and specifications covered by this form indicate compliance with the *Florida Building Code, Energy Conservation*. Before construction is complete, this building will be inspected for compliance in accordance with Section 553.908, F.S.CODE OFFICIAL: Date: CODE OFFICIAL SIGNATURE:

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:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-52-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Job: MFT-10886-17982-5091-82-...
Date: 8/19/24
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN STRUCTURES, MFT-10886-17982-5091-82-4-32UFL

Design Information

	Htg	Clg
Outside db (°F)	23	98
Inside db (°F)	70	75
Design TD (°F)	47	23
Daily range	-	M
Inside humidity (%)	30	50
Moisture difference (gr/lb)	19	56

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

HEATING EQUIPMENT

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	

Efficiency	100 AFUE	
Heating input	9.8	kW
Heating output	33497	Btuh
Temperature rise	25	°F
Actual air flow	1200	cfm
Air flow factor	0.039	cfm/Btuh
Static pressure	0.30	in H2O
Space thermostat		

COOLING EQUIPMENT

Make	Generic
Trade	
Cond	SEER2 14.3
Coil	
AHRI ref	

Efficiency	12.2 EER2, 14.3 SEER2	
Sensible cooling	29025	Btuh
Latent cooling	12439	Btuh
Total cooling	41464	Btuh
Actual air flow	1200	cfm
Air flow factor	0.045	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.79	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
C3	76	1614	711	63	32
BA4	55	587	301	23	13
U	95	1349	807	53	36
KT\DR	356	4241	4456	166	199
LR	263	2846	2824	111	126
BA1	150	1522	1238	60	55
C1	86	1878	823	73	37
B1	229	4411	4174	173	187
FOY	125	1959	1772	77	79
BA3	69	1074	510	42	23
LN	17	0	0	0	0
B2	187	2406	2979	94	133
B4	161	1867	2012	73	90
C2	26	0	0	0	0

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

A	19	0	0	0	0
BA2	58	646	340	25	15
H	54	0	0	0	0
B3	244	4258	3869	167	173
Entire House	2270	30658	26814	1200	1200
Other equip loads		2839	1392		
Equip. @ 1.03 RSM			29024		
Latent cooling			7479		
TOTALS	2270	33497	36503	1200	1200

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APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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

Project Information

For: FRANKLIN STRUCTURES, MFT-10886-17982-5091-82-4-32UFL

Design Conditions

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

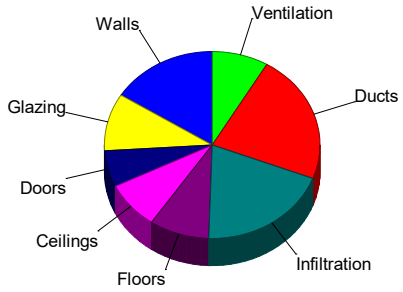
Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	23	98
Daily range (°F)	-	18 (M)
Wet bulb (°F)	-	79
Wind speed (mph)	15.0	7.5

Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	70	75
Design TD (°F)	47	23
Relative humidity (%)	30	50
Moisture difference (gr/lb)	18.7	56.0

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

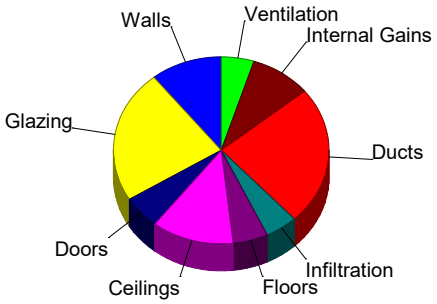
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	3.2	5369	16.0
Glazing	15.9	3329	9.9
Doors	16.3	2104	6.3
Ceilings	1.2	2756	8.2
Floors	1.3	3025	9.0
Infiltration	3.2	6595	19.7
Ducts		7478	22.3
Piping		0	0
Humidification		0	0
Ventilation		2839	8.5
Adjustments		0	
Total		**33497**	**100.0**



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.8	3030	10.7
Glazing	31.0	6498	23.0
Doors	12.4	1597	5.7
Ceilings	1.5	3479	12.3
Floors	0.7	1483	5.3
Infiltration	0.7	1366	4.8
Ducts		6781	24.0
Ventilation		1392	4.9
Internal gains		2580	9.1
Blower		0	0
Adjustments		0	
Total		**28206**	**100.0**



Latent Cooling Load = 7479 Btuh
Overall U-value = 0.056 Btuh/ft²-°F, Window / Floor Area = 9.2 %

Data entries checked.

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

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Project Information

For: FRANKLIN STRUCTURES, MFT-10886-17982-5091-82-4-32UFL

Design Conditions

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

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

Indoor:	Heating	Cooling
Indoor temperature (°F)	70	75
Design TD (°F)	47	23
Relative humidity (%)	30	50
Moisture difference (gr/lb)	18.7	56.0

Infiltration:

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

Construction descriptions	Or	Area ft²	U-value Btuh/ft²-°F	Insul R ft²-°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
12E-0sw: Frm wall, vnl ext, 3/8" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud	n	294	0.068	19.0	3.18	934	1.79	527
	e	571	0.068	19.0	3.18	1814	1.79	1023
	s	294	0.068	19.0	3.18	934	1.79	527
	w	532	0.068	19.0	3.18	1689	1.79	953
	all	1691	0.068	19.0	3.18	5369	1.79	3030
Partitions								
(none)								
Windows								
2 glazing, clr outr, air gas, wd frm mat, clr innr, 1/4" gap, 1/8" thk: 2 glazing, clr outr, air gas, wd frm mat, clr innr, 1/4" gap, 1/8" thk; 6.67 ft head ht	e	66	0.340	0	15.9	1043	27.9	1835
	w	144	0.340	0	15.9	2286	27.9	4023
	all	210	0.340	0	15.9	3329	27.9	5858
Doors								
Door, wd sc type	n	21	0.330	0	15.4	324	11.7	246
	e	21	0.340	0	15.9	333	12.1	253
	e	42	0.430	0	20.1	843	15.2	640
	s	21	0.330	0	15.4	324	11.7	246
	w	24	0.250	0	11.7	280	8.86	213
	all	129	0.250	0	16.3	2104	12.4	1597
Ceilings								
16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		2270	0.026	38.0	1.21	2756	1.53	3479
Floors								
19A-30cscp: Flr floor, frm flr, 8" thkns, carpet flr fnsh, r-30 cav ins, tight crwl ovr		2270	0.034	30.0	1.33	3025	0.65	1483

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:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

wrightsoft®

Project Summary
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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Job: MFT-10886-17982-5091-82-...
Date: 8/19/24
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN STRUCTURES, MFT-10886-17982-5091-82-4-32UFL

Notes: HVAC DUCT MATERIAL USED IN CALC IS R8 MINIMUM

Design Information

Weather: Gainesville, FL, US

Winter Design Conditions

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

Summer Design Conditions

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

Heating Summary

Structure	23179	Btuh
Ducts (R-8.0)	7478	Btuh
Central vent (56 cfm)	2839	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	33497	Btuh

Sensible Cooling Equipment Load Sizing

Structure	20034	Btuh
Ducts (R-8.0)	6781	Btuh
Central vent (56 cfm)	1392	Btuh
Outside air		
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	1.03	
Equipment sensible load	29024	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

	Heating	Cooling
Area (ft²)	2270	2270
Volume (ft³)	20430	20430
Air changes/hour	0.38	0.16
Equiv. AVF (cfm)	129	54

Latent Cooling Equipment Load Sizing

Structure	3267	Btuh
Ducts	2106	Btuh
Central vent (56 cfm)	2106	Btuh
Outside air		
Equipment latent load	7479	Btuh
Equipment Total Load (Sen+Lat)	36503	Btuh
Req. total capacity at 0.70 SHR	3.5	ton

Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	

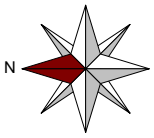
Efficiency	100	AFUE
Heating input	9.8	kW
Heating output	33497	Btuh
Temperature rise	25	°F
Actual air flow	1200	cfm
Air flow factor	0.039	cfm/Btuh
Static pressure	0.30	in H2O
Space thermostat		

Cooling Equipment Summary

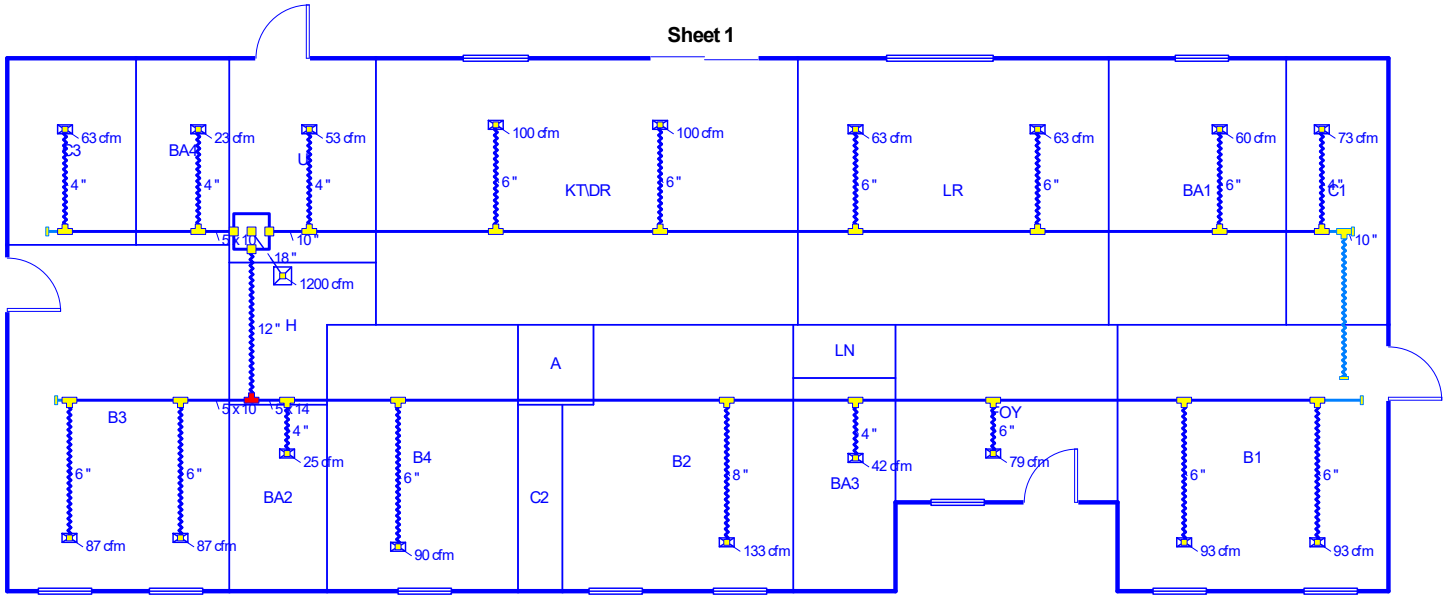
Make	Generic
Trade	
Cond	SEER2 14.3
Coil	
AHRI ref	

Efficiency	12.2 EER2, 14.3 SEER2	
Sensible cooling	29025	Btuh
Latent cooling	12439	Btuh
Total cooling	41464	Btuh
Actual air flow	1200	cfm
Air flow factor	0.045	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.79	

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



Sheet 1



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

APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Job #: MFT-10886-17982-5091-82-4-32UFL
Performed by AMS of Indiana, Inc. for:
FRANKLIN STRUCTURES

Scale: 1 : 130

Right-Suite® Universal 2023
23.0.05 RSU02009
2024-Aug-19 12:47:41
...-10886-17982-5091-82-4-32UFL.rup

Duct System Summary
Entire House

Job: MFT-10886-17982-5091-82-...
Date: 8/19/24
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN STRUCTURES, MFT-10886-17982-5091-82-4-32UFL

	Heating	Cooling
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0 in H2O	0 in H2O
Available static pressure	0.30 in H2O	0.30 in H2O
Supply / return available pressure	0.247 / 0.053 in H2O	0.247 / 0.053 in H2O
Lowest friction rate	0.084 in/100ft	0.084 in/100ft
Actual air flow	1200 cfm	1200 cfm
Total effective length (TEL)	357 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	2087	86	93	0.084	6.0	0x 0	VlFx	69.0	225.0	st7
B1-A	c	2087	86	93	0.085	6.0	0x 0	VlFx	76.5	215.0	st7
B2	c	2979	94	133	0.084	8.0	0x 0	VlFx	43.3	250.0	st7
B3	c	1935	83	87	0.102	6.0	0x 0	VlFx	26.5	215.0	st6
B3-A	c	1935	83	87	0.101	6.0	0x 0	VlFx	20.3	225.0	st6
B4	c	2012	73	90	0.087	6.0	0x 0	VlFx	25.0	260.0	st7
BA1	h	1522	60	55	0.118	6.0	0x 0	VlFx	59.3	150.0	st1
BA2	h	646	25	15	0.090	4.0	0x 0	VlFx	13.5	260.0	st7
BA3	h	1074	42	23	0.085	4.0	0x 0	VlFx	45.8	245.0	st7
BA4	h	587	23	13	0.167	4.0	0x 0	VlFx	7.8	140.0	st3
C1	h	1878	73	37	0.120	***4.0***	***0x 0***	VlFx	65.0	140.0	st1
C3	h	1614	63	32	0.170	***4.0***	***0x 0***	VlFx	15.3	130.0	st3
FOY	c	1772	77	79	0.086	6.0	0x 0	VlFx	53.3	235.0	st7
KT\DR	c	2228	83	100	0.127	6.0	0x 0	VlFx	18.8	175.0	st1
KT\DR-A	c	2228	83	100	0.122	6.0	0x 0	VlFx	28.0	175.0	st1
LR	c	1412	56	63	0.121	6.0	0x 0	VlFx	38.8	165.0	st1
LR-A	c	1412	56	63	0.118	6.0	0x 0	VlFx	49.0	160.0	st1
U	h	1349	53	36	0.135	4.0	0x 0	VlFx	8.0	175.0	st1

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APPROVED BY NTA INC.

Const. Type:	VB - unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	120 Vult, 95 Vasd, EXP. C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

Bold/italic values have been manually overridden

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st6	Peak AVF	167	173	0.101	499	7.1	10 x 5	ShtMetl	st2
st3	Peak AVF	86	45	0.167	248	5.0	10 x 5	ShtMetl	
st1	Peak AVF	463	454	0.118	849	10.0	0 x 0	ShtMetl	
st7	Peak AVF	484	527	0.084	1085	***10.8***	***14*** x ***5***	ShtMetl	st2
st2	Peak AVF	650	700	0.084	892	12.0	0 x 0	VinlFlx	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x 0	1200	1200	63.1	0.084	679	18.0	0x 0		ShMt	

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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

PRODUCT APPROVAL SPECIFICATION SHEET

Manufacturer: Franklin Structures, LLC. **Plan #: MFT10866-4388-84-4-47**

UPDATED 2/7/2024 RKG CC/QAM

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

Category	Manufacturer	Product Description	Approval #(s)
EXTERIOR DOORS			
Swinging	Dunbarton	Achiever Steel Frame	15362-R4
Swinging	Dunbarton	Atrium Frame	15362.1-R4
9231.1, 15362.1, 15362.3,15362.9, 15362.12,			
Sliding	Lippert	Sliding Glass Door	31609-R4
WINDOWS			
Single Hung	Kinro	Windows	993 R-19
ROOFING PRODUCTS			
Metal roof	Roof Mart LLC	26 GA PBR ROOF PANEL	12718-R4
Underlayments	Epilay	ROOFING UNERLAYMENT	16850-R8
Asphalt Shingles	Owens Corning	Oakridge	10674-R19
PANEL WALL			
Siding	Hardie Lap		13192-R8
Siding	Hardie Panel		13223-R8
Siding	Royal Vinyl		15935-R7
Soffits	LP Smart Soffit		9103-R8
Soffits	Hardie Soffit		13265-R7
STRUCTURAL COMPONENTS			
Wood Connector / Anchor	Simpson	HDU11-SDS2.5	10441-R9
Wood Connector / Anchor	Simpson	H2.5T	10446.16
Wood Connector / Anchor	Simpson	HD3B	11496-R7
Wood Connector / Anchor	Simpson	HDQ8	10441-R9
Wood Connector / Anchor	Simpson	CMSTC16	13872-R5
Wood Connector / Anchor	Simpson	LSTA18	10456.15-R8
Wood Connector / Anchor	Simpson	STHD14	10441.12-R9
Truss Plates	MiTek	MT18 & MT20	2197-R11
Engineered Lumber	Trusjoist	LVL	
Engineered Lumber	Versa-lam	LVL	1644-R11

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

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

Melissa Wood	Melissa Wood	6/6/2024
Manufacturer's Authorized Agent Signature	Printed Name	Date

MiTek®

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

RE: MH7281R58 -

MiTek, Inc.
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

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

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

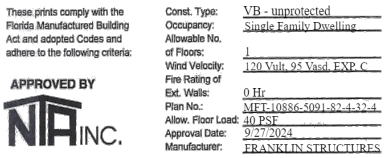
Name: License #:
Address:
City: State:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: N/A Wind Speed: 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	I62648625	A1	12/19/23
2	I62648626	A1P	12/19/23

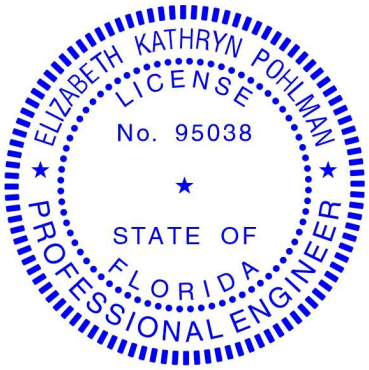


This item has been electronically signed and sealed by Pohlman, Elizabeth, PE using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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

Truss Design Engineer's Name: Pohlman, Elizabeth
My license renewal date for the state of Florida is February 28, 2025.

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



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

December 19,2023

Job	Truss	Truss Type	Qty	Ply	
MH7281R58	A1	HINGED MONO	1	1	I62648625
					Job Reference (optional)

Franklin Structures, LLC., Russellville, AL - 35653, 8.730 s Nov 16 2023 MiTek Industries, Inc. Tue Dec 19 13:31:53 2023 Page 1
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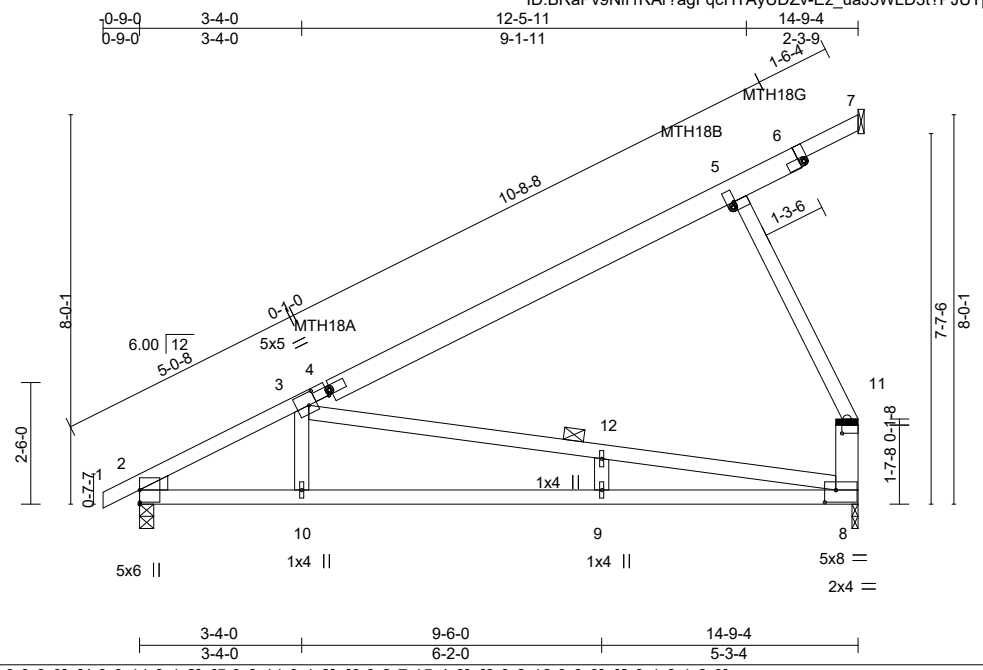

Plate Offsets (X,Y)-- [3:0-2-0,0-3-0], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [6:0-2-7,15-4-6], [8:0-2-12,0-3-0], [8:0-1-8,1-2-0]

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	0.50	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 FBC2023/TPI2014		Matrix-MS							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 Sheathed or 5-2-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-11-6 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 2-3=-1080/207, 3-4=-336/0, 4-5=-343/40, 8-11=-299/317
BOT CHORD 2-10=-518/874, 9-10=-509/878, 8-9=-509/878
WEBS 3-10=0/333, 3-12=-742/365, 8-12=-749/358, 5-11=-332/352

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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-S2-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
11=332/352/152/0

NOTES-
1) Wind: ASCE 7-22; 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(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) 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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
10) 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.

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16023 Swingley Ridge Road
Chesterfield, MO 63017
Date:

December 19,2023

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

Job	Truss	Truss Type	Qty	Ply	
MH7281R58	A1P	HINGED MONO	1	1	I62648626
					Job Reference (optional)

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

8.730 s Nov 16 2023 MiTek Industries, Inc. Tue Dec 19 13:32:04 2023 Page 1
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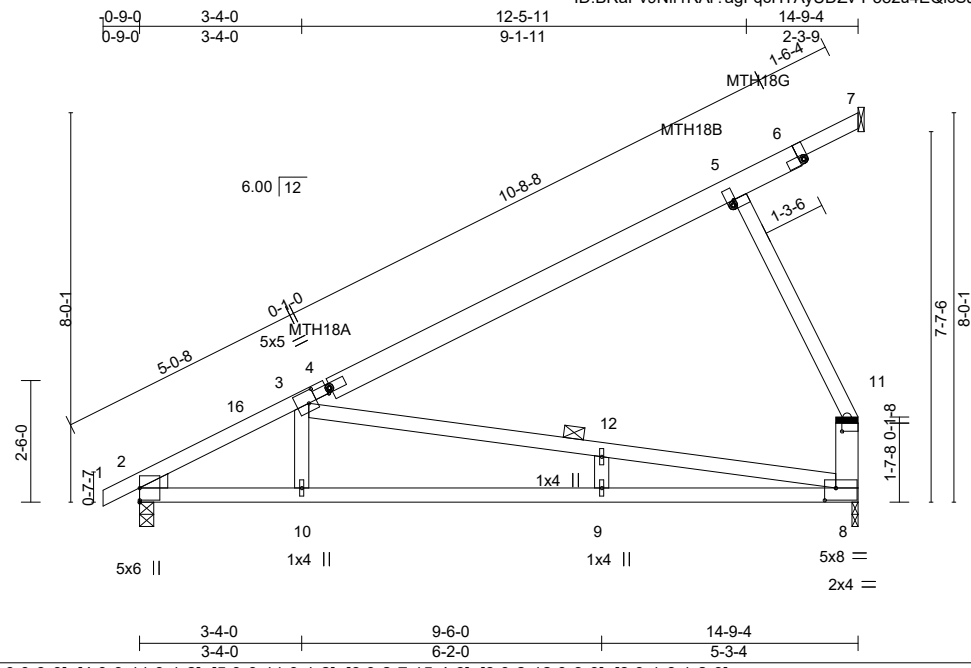

Scale = 1:47.4

Plate Offsets (X,Y)-- [3:0-2-0,0-3-0], [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]

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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 FBC2023/TPI2014		Matrix-MS							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 Sheathed or 5-4-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-2-14 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=-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:	120 Vult, 95 Vasd, EXP C
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT-10886-5091-82-4-32-4
Allow. Floor Load:	40 PSF
Approval Date:	9/27/2024
Manufacturer:	FRANKLIN STRUCTURES

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-16=-1080/848, 3-16=-1016/861, 3-4=-336/0, 4-5=-343/40, 8-11=-299/317
BOT CHORD 2-10=-1081/874, 9-10=-1090/878, 8-9=-1090/878
WEBS 3-10=-192/333, 3-12=-742/952, 8-12=-749/963, 5-11=-332/352

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
11=332/352/152/0

NOTES-
1) Wind: ASCE 7-22; 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 14-6-8 to 14-6-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
10) 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.

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December 19,2023

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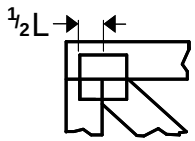
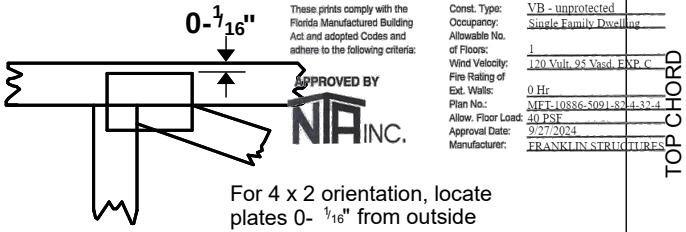
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

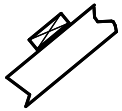
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

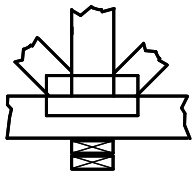
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

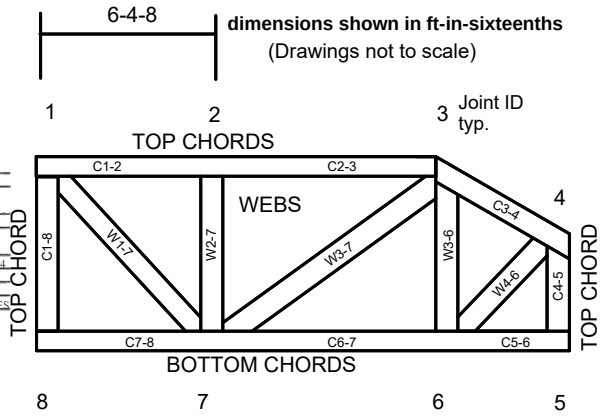


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

MiTek®

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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