April 10, 2024

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

RE: MFT10886-5117-80-4-47-FL
NTA JOB NUMBER: FH040824-131

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 – 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:

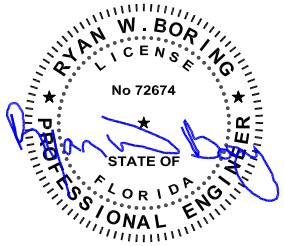
1. These plans comply with the 8th Edition (2023) Florida Residential Building Code, 8th Edition (2023) Florida Energy Conservation Code and 2020 National Electrical Code.
2. Plans comply with Rule 61G20-3.006 for product approval.
3. The raised seal set (or electronic sealed set) of plans are on file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

SPECIAL CONDITIONS & REQUIREMENTS:

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

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

DATE 4/10/2024 CERT NO SMP-056
PLAN NUMBER MFT10886-5117-80-4-47
APPROVED BY Michael Faller
(signature)



Apr 10, 2024

Document Description: ..... Sheet Number:

INDEX TO ADDENDUMS

Notes:

7. Vult wind speed = EXPOSURE-C AT (Vult=160 & Vasd = 124MPH)
8. RISK CATEGORY = II
9. Building Mean Roof Height = 24ft
10. Roof live load = 20 psf
11. Floor live laod = 40 psf
12. Seismic Zone = A, B or C
13. Building Category = Type 5B, Unprotected, Wood Construction.
14. Use Group = Single Family Dwelling
15. Roof Interior (Zone 1) = +27.6/-52.6 psf
16. Roof Exterior (Zone 2) = +27.6/-83.9 psf
17. Roof Corner (Zone 3) = +27.6/-118.4 psf
18. Wall Interior (Zone 4) = +37.0/-40.1 psf
19. Wall Exterior (Zone 5) = +37.0/-49.5 psf
20. Roof Overhang (Zone 1) = -68.3 psf
21. Roof Overhang (Zone 2) = -99.6 psf
22. Roof Overhang (Zone 3) = -152.9 psf
23. Site address per FRC R319.1
24. Internal pressure coefficient = +/- 0.18 psf

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

SITE INSTALLED ITEMS

NOTE: THAT THIS LIST DOES NOT NECESSARILY LIMIT THE ITEMS OF WORK AND MATERIALS THAT MAY BE REQUIRED FOR A COMPLETE INSTALLATION.
ALL SITE RELATED ITEMS ARE SUBJECT TO LOCAL BUILDING OFFICIAL REVIEW AND APPROVAL, REQUIRING TO BE IN COMPLIANCE WITH THE 2023 FLORIDA BUILDING CODE.

1) THE COMPLETE FOUNDATION SUPPORT AND TIE DOWN SYSTEM
2) RAMPS, STAIRS, AND GENERAL ACCESS TO THE BUILDING
3) PORTABLE FIRE EXTINGUISHER(S)
4) BUILDING DRAINS, CLEAN OUTS AND HOOKUP TO PLUMBING SYSTEM
5) ELECTRICAL SERVICE HOOKUP, INCLUDING THE FEEDERS, TO THE BUILDING
6) THE MAIN ELECTRICAL PANEL AND SUB-FEEDERS
7) CONNECTION OF ELECTRICAL CIRCUITS CROSSING OVER MODULE MATE LINES (MULTI-UNITS ONLY)
8) STRUCTURAL AND AESTHETIC INTERCONNECTIONS BETWEEN MODULES (MULTI-UNITS ONLY)
9) ALL GAS LINES ARE TO BE DESIGNED AND INSTALLED ON-SITE. THEY ARE THE RESPONSIBILITY OF THE LOCAL CONTRACTOR AND ARE SUBJECT TO LOCAL CODES.
10) ANY SITE FLASHING OR SHINGLES INSTALLED AT SITE REFER TO ARMA PUBLICATION "RESIDENTIAL ASPHALT ROOFING MANUAL", IN GUIDE LINES WITH FBC CODE
11) ALL FOUNDATION WORK WILL BE COMPLETED ON SITE. IS THE RESPONSIBILITY OF THE LOCAL CONTRACTOR AND IS SUBJECT TO LOCAL JURISDICTION.
12) MANDATORY BLOWER DOOR TEST MUST BE COMPLETED PER FLORIDA ENERGY CODE
13) MAIN DISCONNECT WILL BE INSTALLED ON-SITE AND SUBJECT TO LOCAL CODES
14) FIRE PLACE UNIT AND CHIMNEY PIPE (IF APPLICABLE) AND SUBJECT TO LOCAL CODES
15) HVAC EQUIPMENT AND RETURN (IF APPLICABLE) SUBJECT TO LOCAL CODES
16) ANY WINDBORNE DEBRIS PROTECTION TO BE PROVIDED ON-SITE BY OTHERS AND SUBJECT TO LOCAL CODES
    a.) Wood structural panels to be provided for all glazed openings per R301.2.1.2
17) INSTALLATION OF THE METAL ROOF(IF APPLICABLE)
18) ANY RADON CONTROL (IF APPLICABLE) TO BE PROVIDED ON-SITE BY OTHERS AND SUBJECT TO LOCAL CODES

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

Florida Plan Number: Model MFT-10886-5117-80-4-47

PHYSICAL ADDRESS

1054 HASTINGS FEDERAL POINT RD
PALATKA, FL 32131
PUTMAN COUNTY

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

FLORIDA MODULAR

BY:	DATE:
DRAWN: M.W.	1/10/23

TITLE: MODULAR INDEX

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

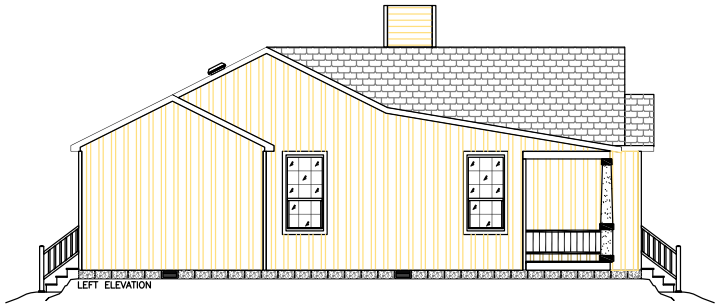
NO: MFT-10886-5117-80-4-47

REV:

SHEET: 1 of 7

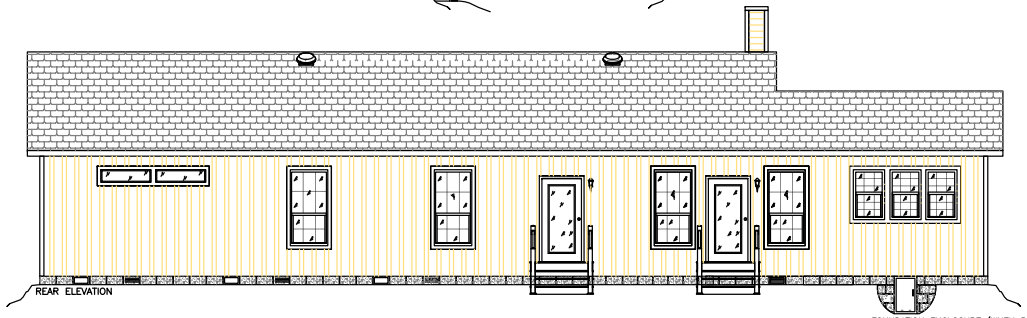
FRONT ELEVATION

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



LEFT ELEVATION

RIGHT ELEVATION



REAR ELEVATION

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

Those 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:	160 MPH Vult. 124 MPH Vasd
Fire Rating of Est. Walls:	0 Hr.
Plan No.:	MFT-0886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	6/10/2024
Manufacturer:	Franklin Structures, LLC

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

Apr 10, 2024

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

NOTES!!
1. EXTERIOR COVERING IS VINYL LAP SIDING WITH VINYL APPURTENANCES STANDARD. OTHER EXTERIOR COVERINGS SHALL CONFORM TO INTERNATIONAL BUILDING CODE. EXTERIOR COVERINGS FOR FRONT AND REAR ELEVATIONS ARE SUPPLIED BY FRANKLIN HOMES AND INSTALLED ON-SITE BY LOCAL CONTRACTOR.
2. ROOF COVERING IS 240# FIBERGLASS SHINGLES. SHINGLES FOR RIDGE ARE SUPPLIED BY FRANKLIN HOMES, INSTALLED ON-SITE BY LOCAL CONTRACTOR.
3. WINDOWS ARE VINYL CLAD THERMOPANE.
4. MINIMUM ATTIC VENTILATION VIA CONTINUOUS VENTILATED SOFFIT & WHIRLY BIRD VENTS IS 9.4 SQ.FT PER 2822 SQ.FT. OF HOME DIVIDED BY 300 SQ.FT. OF CONTINUOUS VENTILATION
5. CRAWL SPACE VENTILATION SHALL CONFORM TO REQUIREMENTS OF 1/150 { BY OTHERS}
6. FOUNDATIONS INSTALLED BY LOCAL CONTRACTOR PER LOCAL CODE REQUIREMENTS.
7. SHUTTERS SHOWN ARE NON-STRUCTURAL (AVAILABLE AS OPTION).

REVISION:	BY:	DATE:

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

TYPICAL MODULAR

	BY:	DATE:
DRAWN:	CANDY	6/13/23

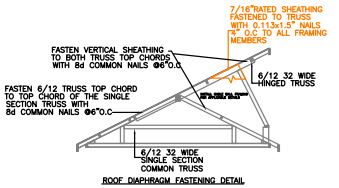
GRAPHIC SCALE 0 1' 2' 3' 4' 5'

TITLE: ELEVATIONS

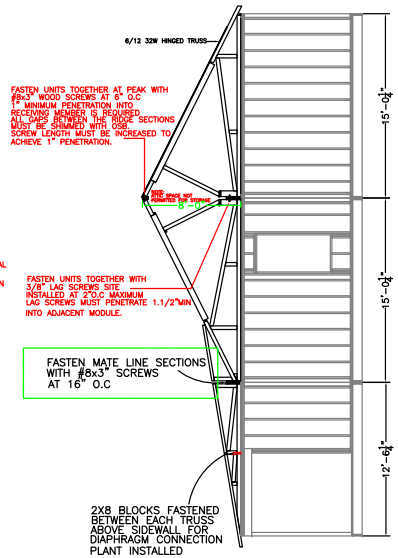
NO: 5117-80-4-47

REV:

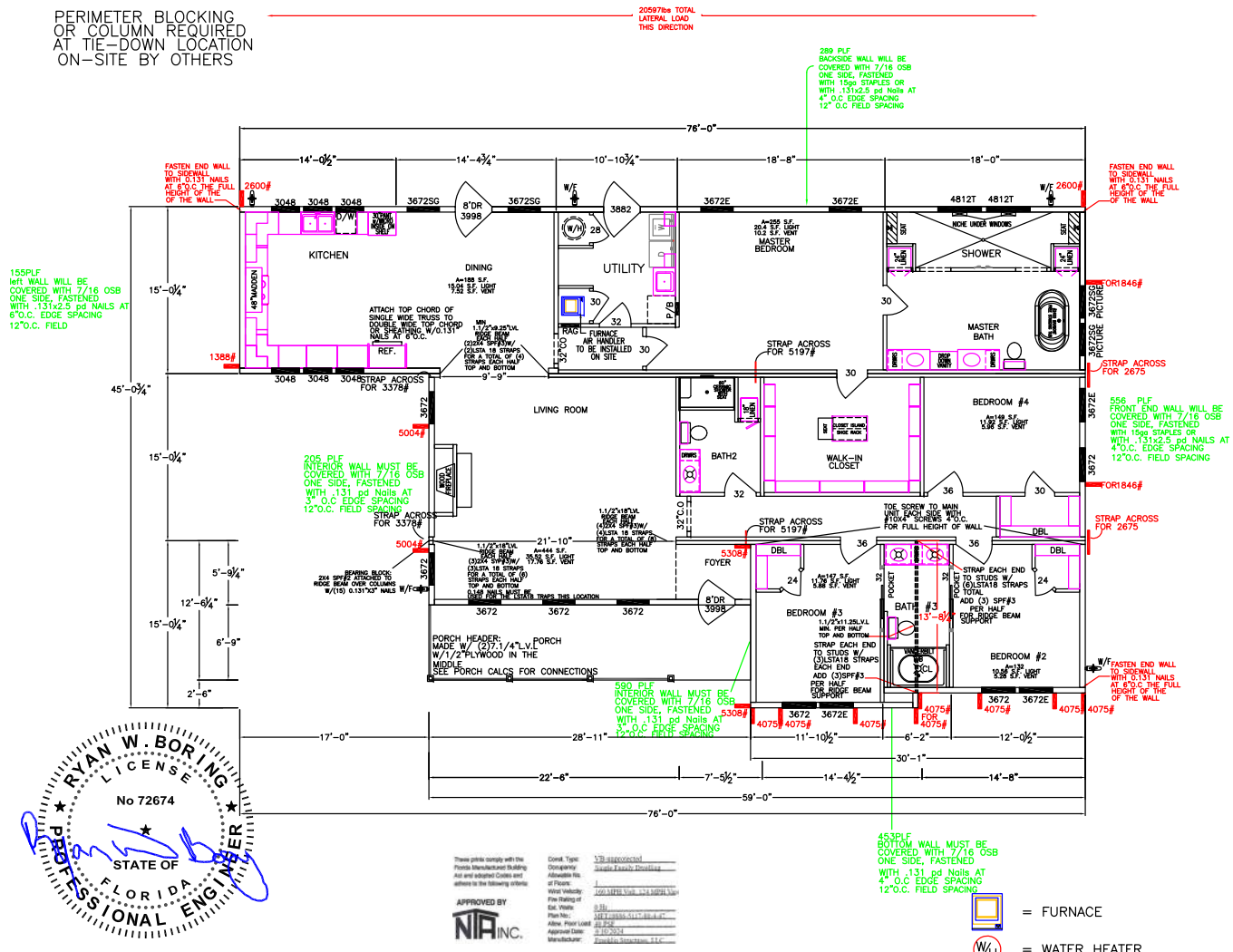
SHEET: 2 of 7



ROOF DIAPHRAGM FASTENING DETAIL



PERIMETER BLOCKING OR COLUMN REQUIRED AT TIE-DOWN LOCATION ON-SITE BY OTHERS



ALL TIE DOWN FORCES ARE REQUIRED IN TENSION AND COMPRESSION

▬TIE-DOWNS LOCATIONS FACTORY INSTALLED

INTERIOR ZONE FASTENING			
NOTE:ROOF DECKING MUST BE FASTENED WITH 15ga STAPLES OR 0.131 NAILS			
STAPLES		NAILS	
6" O.C BOUNDARY	6" O.C BOUNDARY		
6" O.C FIELD	6" O.C FIELD		
END ZONE FASTENING			
NOTE:ROOF DECKING MUST BE FASTENED WITH 15ga STAPLES OR 0.131 NAILS			
STAPLES		NAILS	
2.5" O.C BOUNDARY	3" O.C BOUNDARY		
2.5" O.C EDGE	3" O.C EDGE		
2.5" O.C FIELD	3" O.C FIELD		

Apr 10, 2024

APPROVED BY NTA INC.

= FURNACE
= WATER HEATER
= SINK
= REFRIGERATOR
= RANGE

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

WINDOW SCHEDULE
3048 VINYL THERMOPANE
3660 VINYL THERMOPANE (S.G.)
3672 VINYL THERMOPANE
3672 VINYL THERMOPANE (E)*
3672 VINYL THERMOPANE (S.G.)
4812T VINYL THERMOPANE
3672 VINYL THERMOPANE (P.W.)
(E) = EGRESS WINDOW U-Values=0.34
(S.G.) = SAFETY GLAZED SHGC=0.24
(P.W.) = PICTURE WINDOW

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
42"X80" BARN DOOR	N/A	N/A
38"X82" STEEL DOOR	0.34	0.19
39"X96" STEEL DOOR	0.36	0.30
FRENCH DOOR	0.33	0.30

9'-0" SIDEWALLS

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

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

FLORIDA MODULAR

DRAWN:	BY: M.W.W	DATE: 4/1/23
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	

TITLE: FLOORPLAN
NO: MFT-10886-5117-80-4-47
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

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

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

*ALL RECEPTACLES MUST BE LISTED AS TAMPER RESISTANT

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

SYMBOLS:

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

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

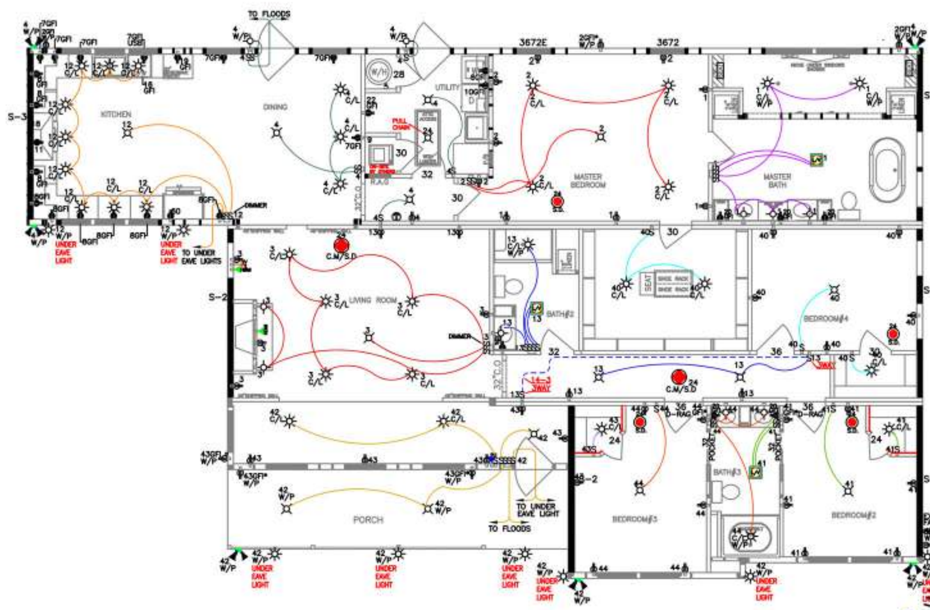
2280 SQ.FT. @ 3 WATTS/SQ.FT.	=	6840	W
SMALL APPLIANCES, 3 @ 1500 W	=	4500	W
WATER HEATER	=	4500	W
WASHER	=	1500	W
DRYER	=	5000	W
RANGE	=	13000	W
DISHWASHER	=	1200	W
MICROWAVE	=	1200	W
		37020	W
FIRST 10000 W @ 100%	=	10000	W
REMAINDER @ 40% (27020)(.4)	=	10808	W
FURNACE (HVAC)	=	20000	W
		40808	W

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

These plans 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: 160 MPH Vult, 124 MPH Vasd
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT-10886-5117-80-4-47
Allow. Floor Load: 40 PSF
Approval Date: 3-19-2024
Manufacturer: Franklin Structures, LLC



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

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

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

* 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

Apr 10, 2024

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.

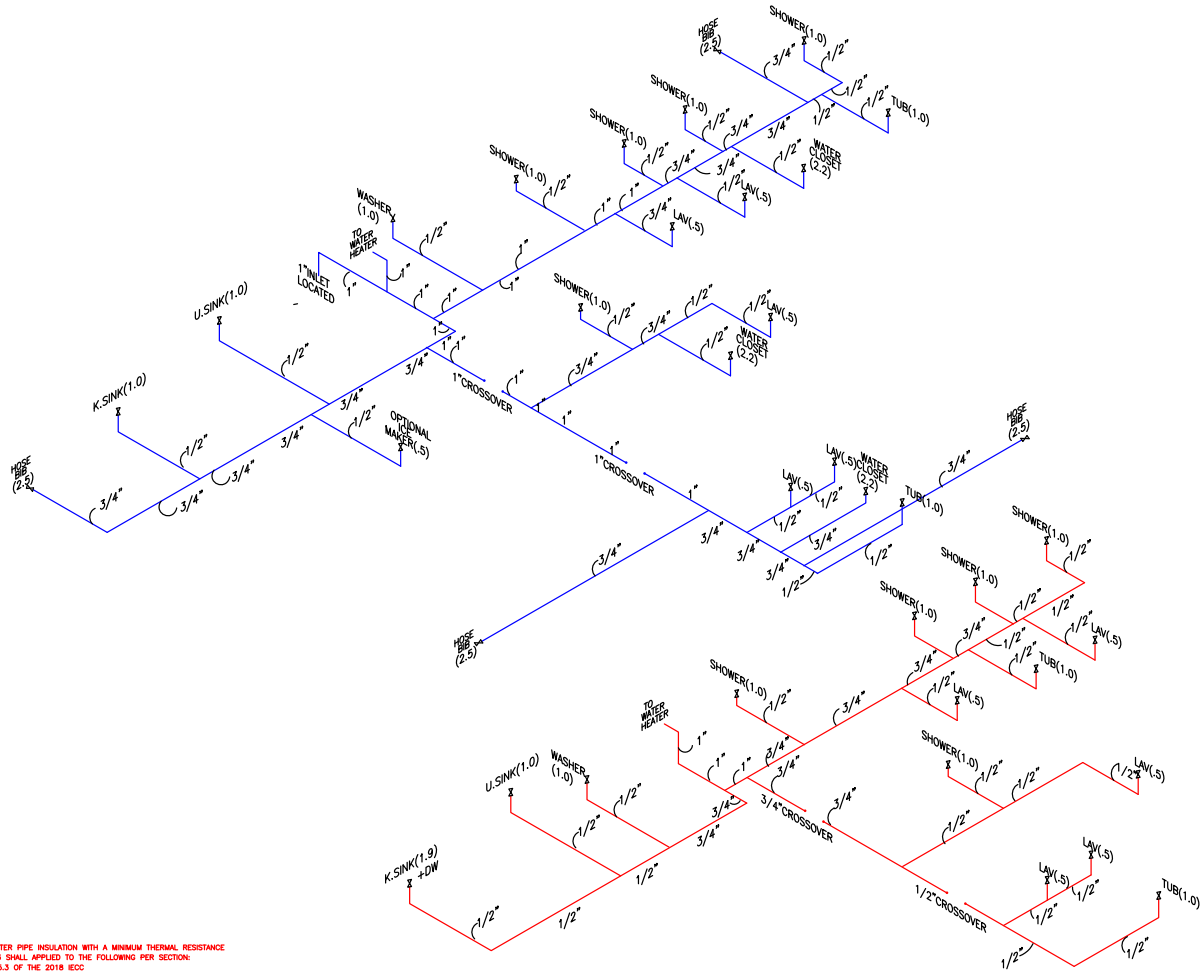
7. ALL FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSET, HALLWAYS, KITCHEN, LAUNDRY OR SIMILAR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER DEVICE OF THE COMBINATION TYPE.

PHYSICAL ADDRESS
4451 Tarpon Avenue
Bonita Springs, FL.34134
Lee County.

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

FLORIDA MODULAR

DRAWN:	BY: M.W	DATE: 12-21-23	TITLE: ELECTRICAL
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	NO: MFT-10886-5117-80-4-47	REV: / SHEET: 4 of 7



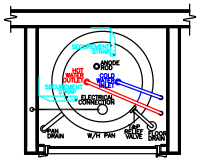
HOT WATER PIPE INSULATION WITH A MINIMUM THERMAL RESISTANCE OF R-3 SHALL APPLIED TO THE FOLLOWING PER SECTION:
N1103.5.3 OF THE 2018 IECC
R403.5.3 OF THE 2020 FBC-R
* PIPING 3/4" OR LARGER IN NOMINAL DIAMETER
* PIPING LOCATED OUTSIDE OF THE CONDITIONED SPACE
* PIPING SERVING MORE THAN ONE DWELLING UNIT
* PIPING FROM THE WATER HEATER TO A DISTRIBUTION MANIFOLD
* PIPING LOCATED UNDER FLOOR SLAB
* BURIED PIPING
* SUPPLY AND RETURN PIPING IN RECIRCULATION SYSTEMS OTHER THAN DEMAND RECIRCULATION SYSTEMS

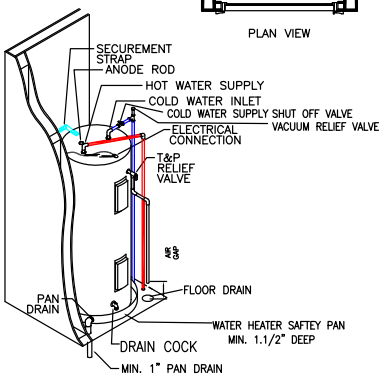
TOTAL FIXTURE UNITS ON COLD WATER SUPPLY: 24.1
TOTAL FIXTURE UNITS ON HOT WATER SUPPLY: 5.4
TOTAL FIXTURE UNITS (INLET): 30.4
MAXIMUM FIXTURE UNITS PER TABLE P2903.6
FOR 50-60 PSI AND 80' COLUMN MAXIMUM ALLOWABLE LENGTH PER 2023 FBC-R (APPENDIX P) TABLE AP201.1
1/2"=2.0
3/4"=9.0
1"= 32

APPROVED BY NTA INC.

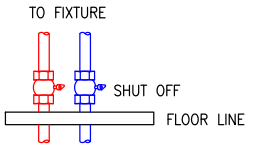
RYAN W. BORING LICENSE No 72674 STATE OF FLORIDA PROFESSIONAL ENGINEER

Apr 10, 2024





FRONT VIEW ISOMETRIC
TYPICAL WATER HEATER DETAIL



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

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

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	M.W.W	8/20/22

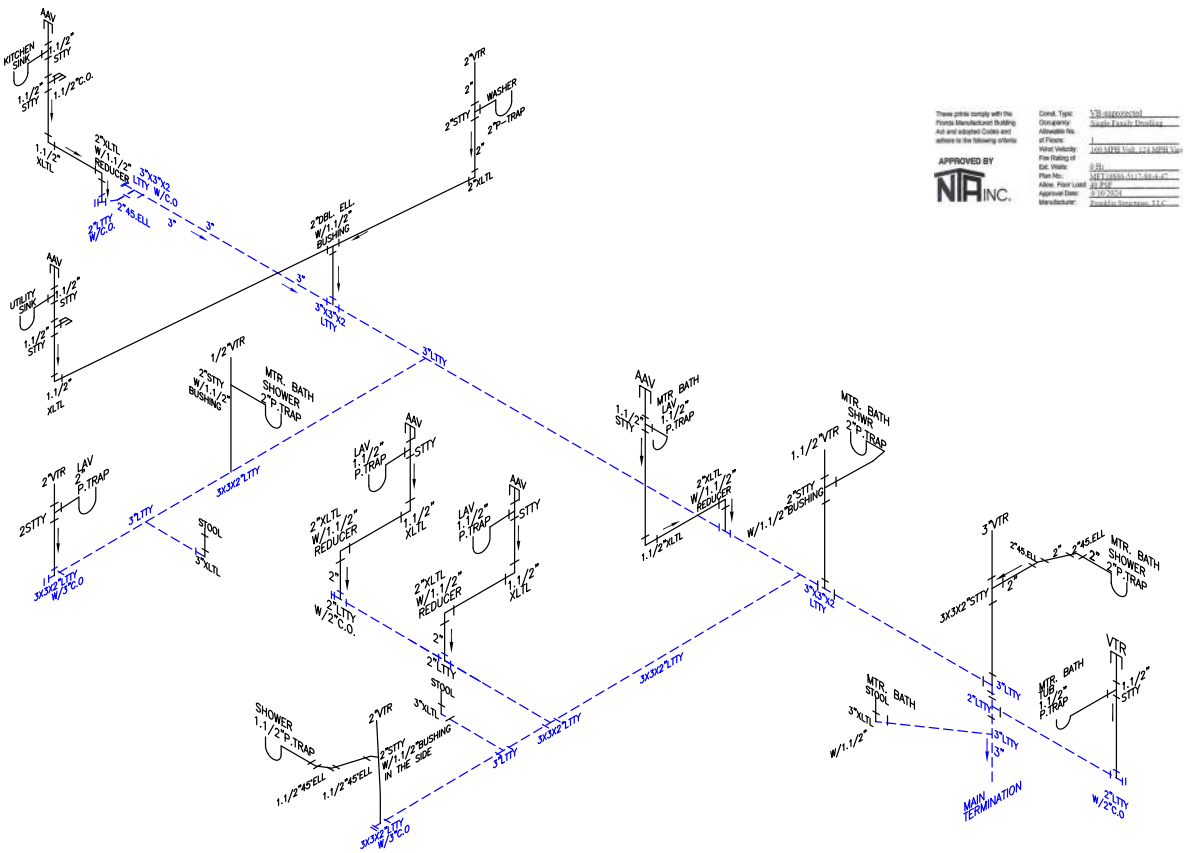
TITLE: WATER SCHEMATIC

NTS

NO: MFT-10886-5117-80-4-47

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-supported
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Ult. / 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No:	MFT-10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approved Date:	3/10/2024
Manufacturer:	Franklin Structures, LLC

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

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

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

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

Apr 10, 2024

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	M.W.W	7/10/23

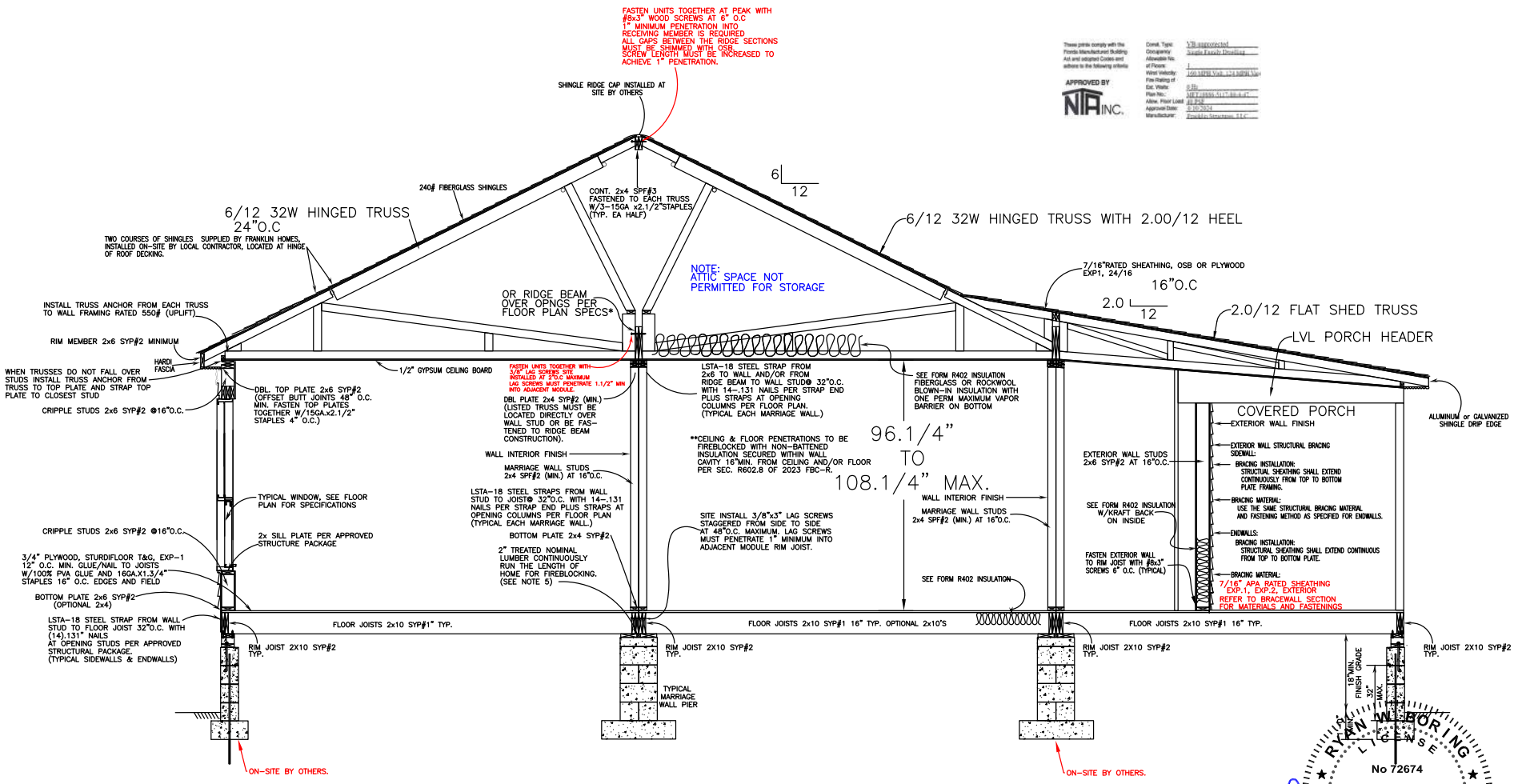
TITLE: DRAIN SCHEMATIC

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

NO: MFT-10886-5117-80-4-47

REV:

SHEET: 6 of 7



RIDGE BEAM CONSTRUCTION

NOTES:

1. MICROLAM GRADE 2.0
2. MICROLAM MUST BE CONTINUOUS OVER CLEARSPAN(S) AND EXTEND PAST OPENING STUDS.
3. BEAMS SUPPORTED BY ENDWALL COLUMNS NUST 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

RYAN ANDREW BORING LICENSE No 72674 STATE OF FLORIDA PROFESSIONAL ENGINEER

Apr 10, 2024

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	M.W.W	5/01/23
SCALE:	N.T.S.	

TITLE: W/ OFF-FRAME FOUNDATION CROSS SECTION

NO: MTF-10886-5117-80-4-47

REV:

SHEET: 7 of 7

Franklin Structures, LLC

MFT-10886-5117-80-4-47 (17782)

Width: 45’- 0 3/4”

Length: 76’

Roof Live Load: 20psf Roof LL

Wind Speeds: 160mph Vult

Wind Exposure: C

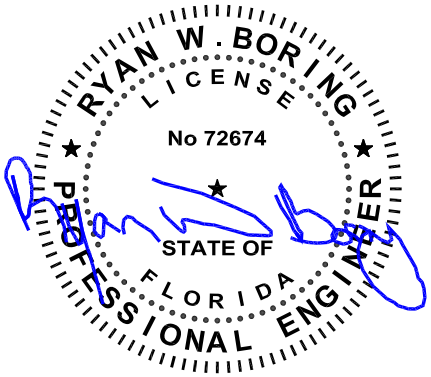
Wall Height: 9’

Max Mean Roof Height: 24’

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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC



Apr 10, 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.

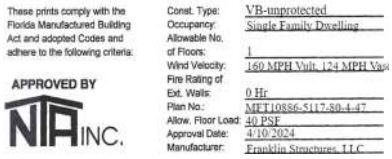
Wind Pressures for Low-rise buildings or buildings with h<60ft

ASCE 7-22 Chapter 30 Part I:

Wind Speed:	160	MPH	Roof Style:	Gable	(Gable or Hip)
Wind Exposure:	C		Roof Pitch:	6	/12
Mean Roof Height:	24	FT	Roof Angle:	26.6	
Elevation:	0	FT	Max Width:	30.04	ft
Ke:	1.00				
Kd:	0.85				
Kzt:	1				
kt:	0.94				
qh:	52.21	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	45.9	-87.7
	100	0.7	-1.1		100	45.9	-66.8
Zone 2	Min	0.7	-2.5	Zone 2	Min	45.9	-139.9
	100	0.7	-1.4		100	45.9	-82.5
Zone 3	Min	0.7	-3.6	Zone 3	Min	45.9	-197.3
	100	0.7	-1.8		100	45.9	-103.4
OH Z1	Min		-2	OH Z1	Min		-113.8
	100		-1.9		100		-108.6
OH Z2	Min		-3	OH Z2	Min		-166.0
	100		-2		100		-113.8
OH Z3	Min		-4.7	OH Z3	Min		-254.8
	100		-2.4		100		-134.7



Walls

Gcp	Area	Pos	Neg	Pressure	Area	Pos	Neg
Zone 4	10	1	-1.1	Zone 4	10	61.6	-66.8
	100	0.825	-0.93		100	52.5	-57.7
Zone 5	10	1	-1.4	Zone 5	10	61.6	-82.5
	100	0.825	-1.1		100	52.5	-66.8

Design Pressures

Pressure	Area	Pos	Neg
Zone 1	Min	27.6	-52.6
	100	27.6	-40.1
Zone 2	Min	27.6	-83.9
	100	27.6	-49.5
Zone 3	Min	27.6	-118.4
	100	27.6	-62.0
OH Z1	Min		-68.3
	100		-65.2
OH Z2	Min		-99.6
	100		-68.3
OH Z3	Min		-152.9
	100		-80.8
Zone 4	10	37.0	-40.1
	100	31.5	-34.6
Zone 5	10	37.0	-49.5
	100	31.5	-40.1

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	19.30	-14.57	-32.74	-29.79	28.60	-19.33	-39.94	-37.33
-Gcpi	38.09	4.22	-13.95	-11.00	47.39	-0.54	-21.14	-18.53
Max	38.09	-14.57	-32.74	-29.79	47.39	-19.33	-39.94	-37.33

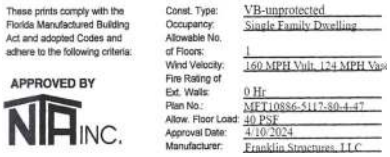
Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-32.89	-45.42	-28.71	-32.89	11.49	-24.54	-34.46	-65.26	-37.07	-34.46	22.45	-31.85
-Gcpi	-14.10	-26.63	-9.92	-14.10	30.28	-5.74	-15.66	-46.46	-18.27	-15.66	41.24	-13.05
Max	-32.89	-45.42	-28.71	-32.89	30.28	-24.54	-34.46	-65.26	-37.07	-34.46	41.24	-31.85

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-19.33	-39.94	-14.57	-32.74	-51.6987	-46.9407	20.60	65.92	18.17	49.09
Long	-65.26	-37.07	-45.42	-28.71	-51.6987	-	-28.19	54.29	-16.71	36.02

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-11.60	-23.96	-8.74	-19.65	-31.02	-28.16	12.36	39.55	10.90	29.45
Long	-39.15	-22.24	-27.25	-17.23	-64.21	-52.31	12.36	32.58	10.90	21.61



Design Criteria:

Total Length:	76 ft						
Total Width:	45.06 ft	Top chord DL:	10 psf	Vult:	160 mph		
Unit Width:	15.02 ft	Bottom chord DL:	10 psf	Vasd:	124 mph		
Pitch:	6 /12	Bottom chord LL:	0 psf	Exposure:	C		
Roof Angle:	26.6 deg	Stories:	1	Internal Press:	0.18		
Wall height:	9 ft	Floor Live Load:	40 psf	End zone, 2a:	9.0125 ft		
Overhang:	12 in	Floor Dead Load:	10 psf				
Blocking Height:	36 in	Wall Dead Load:	5 psf				
Eave Height:	10 ft	Ceiling R value:	30				
Min Mean Roof ht:	24 ft	Framing Rafters?:	N				
Mean Roof Height:	17.76 ft						

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

Wind Loading:

	WW	LW	WWOH
Transverse End:	-11.60	-23.96	-31.02
Interior:	-8.74	-19.65	-28.16
Long End:	-39.15	-22.24	-64.21
Interior:	-27.25	-17.23	-52.31

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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Truss Reactions:

Gravity	Matewall:	621 lbs	Uplift:	Matewall:	652 lbs
	Sidewall:	667 lbs		Sidewall:	480 lbs
	Truss Spacing:	24 in oc.		Snow Load:	0 psf

Load Cases

Load Cases for Ranch		Roof			Roof and 1 Story			
	Load Case	Sidewall	Matewall	Endwall	Sidewall	Matewall	Endwall	LDF
1	D	164	154	30	284	274	85	0.9
2	S	0	0	0	0	0	0	1.15
3	Su	0	0	0	0	0	0	1.15
4	Lr	170	157	40	170	157	40	1.25
5	L	0	0	0	300	300	40	1
6	Wp	0	0	0	0	0	0	1.6
7	Wn	-319	-326	-103	-319	-326	-103	1.6
8	.75(L+Lr)	128	118	30	353	343	60	1.25
9	.75(L+S)	0	0	0	225	225	30	1.15
10	.75(L+Su)	0	0	0	225	225	30	1.15
11	.75(L+S+Wp)	0	0	0	225	225	30	1.6
12	D+L	164	154	30	585	575	125	1
13	D+Lr	334	311	70	455	432	125	1.25
14	D+S	164	154	30	284	274	85	1.15
15	D+Su	164	154	30	284	274	85	1.15
16	D+.75(L+Lr)	292	272	60	637	618	145	1.25
17	D+.75(L+S)	164	154	30	510	500	115	1.15
18	D+.75(L+Su)	164	154	30	510	500	115	1.15
19	D+.75(L+S+Wp)	164	154	30	510	500	115	1.6
20	.6D+Wn	-319	-326	-85	-149	-161	-52	1.6
	Dead Load:	164	154	30	284	274	85	
	Dead LC:	D	D	D	D	D	D	
	Live Load:	170	157	40	353	343	60	
	Live LC:	Lr	Lr	Lr	.75(L+Lr)	.75(L+Lr)	.75(L+Lr)	
	Total Load:	334	311	70	637	618	145	
	Total LC:	D+Lr	D+Lr	D+Lr	D+.75(L+Lr)	D+.75(L+Lr)	D+.75(L+Lr)	
	Uplift Load:	-319	-326	-85	-149	-161	-52	
	Uplift LC:	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	
	Design Load:	334	311	70	585	575	125	
	Design LC:	D+Lr	D+Lr	D+Lr	D+L	D+L	D+L	
	Design LDF:	1.25	1.25	1.25	1	1	1	

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Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Floor Load only

	Live			300	300		1
	Dead			75	75		0.9

Combined Loading:

Max Bending:

1	D	164	154	30	284	274	85	plf
2	D+Wp	164	154	30	284	274	85	plf
	Max down	164	154	30	284	274	85	plf
	Lateral	28.44	5	28.44	28.44	5	28.44	psf

Max Axial

1	D+.75(L+Lr)	292	272	60	637	618	145	plf
2	D+.75(L+S)	164	154	30	510	500	115	plf
3	D+.75(L+Su)	164	154	30	510	500	115	plf
4	D+.75(L+S+Wp)	164	154	30	510	500	115	plf
	Max down	292	272	60	637	618	145	plf
	Lateral	21.33	3.75	21.33	21.33	3.75	21.33	psf

Location: Matewall

Matewall Headers Supporting Roof

Supporting: Roof

No splices considered in span

Vertical Load

Dead Load:	154	plf	D
Live Load:	157	plf	Lr
Total Load:	311	plf	D+Lr
Uplift Load:	-326	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	SPF	#2	Edge	1	1.0	875	135	425	1400000	510000	1094	169	16.9	31.6	178.0
5	1	1.5	11.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3468	285	16.9	31.6	178.0
6	1	1.5	12	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3438	285	18.0	36.0	216.0
7	1	1.5	14	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3366	285	21.0	49.0	343.0
8	1	1.5	16	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3306	285	24.0	64.0	512.0
9	1	1.5	18	LVL		Edge	1	0.9	2750	285	750	2000000	1016411	3253	285	27.0	81.0	729.0
10	1	1.5	5.5	SPF	#2	Edge	1	1.3	875	135	425	1400000	510000	1422	169	8.3	7.6	20.8

	Shear	Moment	LL def	TL def
1	139	89	150	145
2	174	81	150	145
3	222	153	169	163
4	169	103	183	176
5	270	184	206	198
6	288	195	219	211
7	335	225	256	247
8	383	255	292	282
9	431	285	329	317
10	83	58	89	86

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(1) 2x 10 SPF #2	89 in	1200	-1210	1.9
2	(1) 2x 10 SYP #2	81 in	1100	-1110	1.5
3	(1) 2x 9.25 LVL	153 in	2000	-2080	1.1
4	(1) 2x 12 SPF #2	103 in	1400	-1400	1.9
5	(1) 2x 11.25 LVL	183 in	2400	-2490	1.1
6	(1) 2x 12 LVL	195 in	2600	-2650	1.1
7	(1) 2x 14 LVL	225 in	3000	-3060	1.1
8	(1) 2x 16 LVL	255 in	3400	-3470	1.1
9	(1) 2x 18 LVL	285 in	3700	-3880	1.1
10	(1) 2x 6 SPF #2	57 in	800	-780	1.9

.131x3"			# nails		# can be based off span or header # .131x3" nails per header
Grav	69.1	lb	Grav	Uplift	
uplift	88.4	lb	17.37	13.68	18
			15.92	12.55	16
			28.95	23.52	29
			20.26	15.83	21
			34.74	28.15	35
			37.63	29.96	38
			43.42	34.60	44
			49.21	39.24	50

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: 160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5117-80-4-47
Allow. Floor Load: 40 PSF
Approval Date: 4/10/2024
Manufacturer: Franklin Structures, LLC

Location: Matewall

Matewall Columns

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	311 plf	D+Lr	Lateral only			Vertical:	154 plf	0	Top/Btm Plate (tp):	4.5	in
Total Load:	311 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	5 psf	W	LVL:	Microllam	
Uplift Load:	-326 plf	.6D+Wn	Lateral:	5 psf	W	Combined Vert and Lat (max Vert)			LVL MOE (E):	2000000	psi
						Vertical:	272 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:	-326 plf	.6D+Wn	Fcperp:	750	psi
Cd:	1.6					Lateral:	3.8 psf	W	Vol eff (e):	0.136	
Cd grav:	1.25		ateral deflection L/	120					Cr (LVL):	1.04	

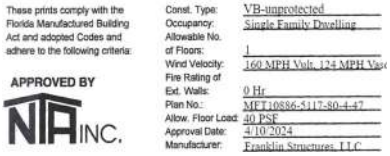
Vertical

	Spacing	B	D	Species	Grade	c	Ie/D	Cfb	CfC	Fb	Fc (grav)	Fc (comb)	Fcperp	E	Emin	FcE	Ft
1	16	1.5	3.5	SPF	#3	0.8	29.6	1.5	1.15	500	650	650	425	1200000	440000	414	250
										Cp	0.39	0.32					
										Allowable:	1200	366	379	425	1200000	440000		600
	Bearing length:	1.5												Non braced (between spans)			
														69	35	23	
														76	304	684	
														0.07991	0.299583	0.5756	

# of Studs		1	2	3	4	5	6	7	8	9	10	1	2	3
Properties														
Area	in^2	5.3	10.5	15.8	21.0	26.3	31.5	36.8	42.0	47.3	52.5	5.3	10.5	15.8
Sx	in^3	3.1	6.1	9.2	12.3	15.3	18.4	21.4	24.5	27.6	30.6	3.1	6.1	9.2
Ix	in^4	5.4	10.7	16.1	21.4	26.8	32.2	37.5	42.9	48.2	53.6	5.4	10.7	16.1
Axial Loading														
Fc compression		74	148	222	296	371	445	519	593	667	741	15	113	326
Fc Perp compression		37	74	111	147	184	221	258	295	332	368			
Tension		116	232	348	464	580	696	812	928	1044	1160			
Combined Loading														
Uplift/Lateral		116	232	348	464	580	696	812	928	1044	1160			
Vert/Lateral max Lat		64	245	390	537	685	835	985	1135	1286	1438			
Vert/Lateral Max Vert		64	145	228	312	397	483	568	654	740	826			
Deflection Check	L/	802	1604	2406	3208	4009	4811	5613	6415	7217	8019			
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
		37	74	111	147	184	221	258	295	332	368			

Max Span	Max Trib	Max Side Opening					Max Center opening (total distance of both spans)				
1	37 in	56 in	=	4	ft -	8 in	21 in	=	1	ft -	9 in
2	74 in	128 in	=	10	ft -	7 in	106 in	=	8	ft -	10 in
3	111 in	200 in	=	16	ft -	8 in	159 in	=	13	ft -	3 in
4	147 in	272 in	=	22	ft -	8 in	212 in	=	17	ft -	8 in
5	184 in	344 in	=	28	ft -	8 in	265 in	=	22	ft -	0 in
6	221 in	417 in	=	34	ft -	9 in	318 in	=	26	ft -	6 in
7	258 in	489 in	=	40	ft -	9 in	371 in	=	30	ft -	11 in
8	295 in	561 in	=	46	ft -	9 in	424 in	=	35	ft -	4 in
9	332 in	633 in	=	52	ft -	9 in	477 in	=	39	ft -	9 in
10	368 in	705 in	=	58	ft -	9 in	530 in	=	44	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.



Location: Matewall

Matewall Columns

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	311 plf	D+Lr	Lateral only			Vertical:	154 plf	0	Top/Btm Plate (tp):	4.5	in
Total Load:	311 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	5 psf	W	LVL:	Microllam	
Uplift Load:	-326 plf	.6D+Wn	Lateral:	5 psf	W	Combined Vert and Lat (max Vert)			LVL MOE (E):	2000000	psi
						Vertical:	272 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:	-326 plf	.6D+Wn	Fcperp:	750	psi
Cd:	1.6					Lateral:	3.8 psf	W	Vol eff (e):	0.136	
Cd grav:	1.25		ateral deflection L/	120					Cr (LVL):	1.04	

Vertical

	Spacing	B	D	Species	Grade	c	Ie/D	Cfb	CfC	Fb	Fc (grav)	Fc (comb)	Fcperp	E	Emin	FcE	Ft
1	16	1.5	3.5	SPF	#3	0.8	29.6	1.5	1.15	500	650	650	425	1200000	440000	414	250
										Cp	0.39	0.32					
									Allowable:	1200	366	379	425	1200000	440000		600
	Bearing length:	3												Non braced (between spans)			
														69	35	23	
														76	304	684	
														0.07991	0.299583	0.5756	

# of Studs		1	2	3	4	5	6	7	8	9	10	1	2	3
Properties														
Area	in^2	5.3	10.5	15.8	21.0	26.3	31.5	36.8	42.0	47.3	52.5	5.3	10.5	15.8
Sx	in^3	3.1	6.1	9.2	12.3	15.3	18.4	21.4	24.5	27.6	30.6	3.1	6.1	9.2
Ix	in^4	5.4	10.7	16.1	21.4	26.8	32.2	37.5	42.9	48.2	53.6	5.4	10.7	16.1
Axial Loading														
Fc compression		74	148	222	296	371	445	519	593	667	741	15	113	326
Fc Perp compression		74	147	221	295	368	442	516	590	663	737			
Tension		116	232	348	464	580	696	812	928	1044	1160			
Combined Loading														
Uplift/Lateral		116	232	348	464	580	696	812	928	1044	1160			
Vert/Lateral max Lat		64	245	390	537	685	835	985	1135	1286	1438			
Vert/Lateral Max Vert		64	145	228	312	397	483	568	654	740	826			
Deflection Check	L/	802	1604	2406	3208	4009	4811	5613	6415	7217	8019			
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
		64	145	221	295	368	442	516	590	663	737			

Max Span	Max Trib	Max Side Opening	Max Center opening (total distance of both spans)
1	64 in	111 in = 9 ft - 3 in	21 in = 1 ft - 9 in
2	145 in	271 in = 22 ft - 6 in	163 in = 13 ft - 7 in
3	221 in	421 in = 35 ft - 1 in	318 in = 26 ft - 6 in
4	295 in	567 in = 47 ft - 3 in	424 in = 35 ft - 4 in
5	368 in	713 in = 59 ft - 4 in	530 in = 44 ft - 1 in
6	442 in	859 in = 71 ft - 6 in	636 in = 53 ft - 0 in
7	516 in	1005 in = 83 ft - 9 in	742 in = 61 ft - 10 in
8	590 in	1151 in = 95 ft - 11 in	848 in = 70 ft - 8 in
9	663 in	1297 in = 108 ft - 0 in	955 in = 79 ft - 6 in
10	737 in	1442 in = 120 ft - 2 in	1061 in = 88 ft - 5 in

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

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Location: Sidewall

Sidewall Headers Supporting Roof U-Headers Supporting: Roof

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

Vertical Load

Dead Load:	164	plf	D
Live Load:	170	plf	Lr
Total Load:	334	plf	D+Lr
Uplift Load:	-319	plf	.6D+Wn

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

Cr: 1.15 LL defl L/ 240

Cd: 1.25 TL defl L/ 180

Vertical

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

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

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(2) 2x 3 SPF #2	38 in	600	-510	0.5
2	(2) 2x 4 SPF #2	53 in	800	-710	0.5
3	(2) 2x 6 SPF #2	78 in	1100	-1040	0.5
4	(2) 2x 8 SPF #2	99 in	1400	-1320	0.5
5	(2) 2x 3 SYP #2	35 in	500	-470	0.4
6	(2) 2x 4 SYP #2	49 in	700	-660	0.4
7	(2) 2x 6 SYP #2	77 in	1100	-1030	0.4
8	(2) 2x 8 SYP #2	93 in	1300	-1240	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	2.88	5
			5.79	4.01	6
			7.96	5.88	8
			10.13	7.46	11
			3.62	2.66	4
			5.07	3.73	6
			7.96	5.82	8
			9.41	7.01	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: 160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5117-80-4-47
Allow. Floor Load: 40 PSF
Approval Date: 4/10/2024
Manufacturer: Franklin Structures, LLC

Location: Sidewall

Sidewall Studs (King)

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	334 plf	D+Lr	Lateral only			Vertical:	164 plf	0	Top/Btm Plate (tp):	4.5	in
Total Load:	334 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	40 psf	W	Header height:	80	in
Uplift Load:	-319 plf	.6D+Wn	Zone 5:	45 psf	W	Combined Vert and Lat (max Vert)			LVL:	Microllam	
			Zone 4:	38 psf	W	Vertical:	292 plf	0	LVL MOE (E):	2000000	psi
						Lateral:	29.7 psf	.75W	E min:	1016411	psi
			def=.7 C&C			Combined Uplift and Lat			Fb:	2750	psi
Cr:	1					Vertical:	-319 plf	.6D+Wn	Fv:	285	psi
Cd:	1.6					Lateral:	29.7 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:	1065 psi	Fc:	59 psi	CSI:	0.69	CSI:	0.53	Max CSI:	0.69	**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		24	48	72	96	120	29	57	86	114	143
Moment at Header		32	64	97	129	161	38	76	115	153	191
Shear		54	109	163	218	272	65	129	194	258	323
Combined Loading											
Max Lat		299	797	1279	1757	2234	299	797	1279	1757	2234
Max Vert		196	471	741	1009	1278	196	471	741	1009	1278
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		24	48	72	96	120	29	57	86	114	143

Max Span	End Zone						Interior Zone					
1	32 in	=	2	ft -	8	in	41 in	=	3	ft -	5	in
2	80 in	=	6	ft -	8	in	98 in	=	8	ft -	1	in
3	128 in	=	10	ft -	7	in	155 in	=	12	ft -	11	in
4	176 in	=	14	ft -	7	in	212 in	=	17	ft -	8	in
5	224 in	=	18	ft -	8	in	269 in	=	22	ft -	5	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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Location: Sidewall

Sidewall Studs (Jack)

Supporting: Roof

Vertical Load

NDS Load: 334 plf D+Lr

Total Load: 334 plf D+Lr

Uplift Load: -319 plf .6D+Wn

Wall height: 108 in

Top/Btm Plate (tp): 4.5 in

LVL: Microllam

LVL MOE (E): 2000000 psi

E min: 1016411 psi

Fb: 2750 psi

Fv: 285 psi

Fcperp: 750 psi

Vol eff (e): 0.136

Cr (LVL): 1.04

Cr: 1

Cd: 1.6

Cd grav: 1.25 ateral deflection L/ 120

Vertical

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

Header width: 1.5 in

3 in

4.5 in

# of Studs	1	2	3	4	5	6	7	8	9	10
Properties										
Area in^2	7.5	15.0	22.5	30.0	37.5	45.0	52.5	60.0	67.5	75.0
Sx in^3	6.3	12.5	18.8	25.0	31.3	37.5	43.8	50.0	56.3	62.5
Ix in^4	15.6	31.3	46.9	62.5	78.1	93.8	109.4	125.0	140.6	156.3
Axial Loading										
Fc compression	223	446	669	893	1116	1339	1562	1785	2008	2231
Fc Perp compression 1.5 in	46	91	137	182	228	274	319	365	411	456
Fc Perp compression 3 in	91	182	274	365	456	547	639	730	821	912
Fc Perp compression 4.5 in	137	274	411	547	684	821	958	1095	1232	1369
Tension	271	541	812	1082	1353	1623	1894	2165	2435	2706

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

Max Span

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

Note: ripped lumber must be regraded

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

APPROVED BY NTA INC.

Const. Type: VB-unprotected

Occupancy: Single Family Dwelling

Allowable No. of Floors: 1

Wind Velocity: 160 MPH Vult, 124 MPH Vasd

Fire Rating of Ext. Walls: 0 Hr

Plan No.: MFT10886-5117-80-4-47

Allow. Floor Load: 40 PSF

Approval Date: 4/10/2024

Manufacturer: Franklin Structures, LLC

Uplift Straps: Sidewall

Uplift: -319 plf

Stud Spacing: 16 in

Strapping

Strap All: 921.3 lbs LSTA18

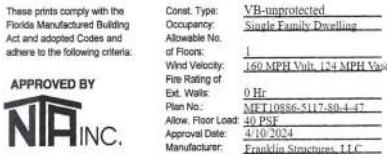
fasteners: 14 .148x 2.5" or .131x 2.5"

Strap Spacing: 2.89 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	52	68
2	122	138
3	190	206
4	260	276
5	330	346
6	398	414
7	468	484
8	536	552
		total span



If sheathing is being used for uplift NOT at openings:

Max OSB per E510A: 1500 plf

.131 Nail: 108 lb

15ga: 82 lb

Spacing from OSB to rail:

.131 Nail: 4.06 " oc

15ga: 3.08 " oc

fasteners into Studs:

.131 Nail: 3.9 lb

15ga: 5.2 lb

Uplift Straps: Matewall

Uplift: -326 plf

Stud Spacing: 16 in

Strapping

Strap All: 921.3 lbs LSTA18

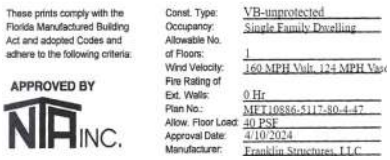
fasteners: 14 .148x 2.5" or .131x 2.5"

Strap Spacing: 2.83 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	50	66
2	118	134
3	186	202
4	254	270
5	322	338
6	390	406
7	458	474
8	526	542
		total span



If sheathing is being used for uplift NOT at openings:

Max OSB per E510A: 1500 plf

.131 Nail: 108 lb

15ga: 82 lb

Spacing from OSB to rail:

.131 Nail: 3.98 " oc

15ga: 3.02 " oc

fasteners into Studs:

.131 Nail: 4.0 lb

15ga: 5.3 lb

At 21'-10" LR Opening: 3455.461365 lbs

CS14 Strap: 2490 lbs, Use (2) CS14 or (3) LSTA18 with SYP #2 lumber and 0.148" nails (3705#)

Sill Plates

Lateral Load
Lateral only
Wind: 188 plf (C&C)
def=.7 C&C

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

Cr: 1.15

Cd: 1.6 Lateral deflection L/ 120

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	5	SPF	#2	Edge	1	1.4	875	135	425	1400000	510000	1960	216	7.5	6.3	15.6
2	2	1.5	5	SPF	#2	Edge	1	1.4	875	135	425	1400000	510000	1960	216	15.0	12.5	31.3
3	3	1.5	5	SPF	#2	Edge	1	1.4	875	135	425	1400000	510000	2254	216	22.5	18.8	46.9
4	1	1.5	5	SYP	#2	Edge	1	1.0	1000	175	565	1400000	510000	1600	280	7.5	6.3	15.6
5	2	1.5	5	SYP	#2	Edge	1	1.0	1000	175	565	1400000	510000	1600	280	15.0	12.5	31.3
6	3	1.5	5	SYP	#2	Edge	1	1.0	1000	175	565	1400000	510000	1840	280	22.5	18.8	46.9
7																		
8																		
9																		
10																		

Note: ripped lumber must be regraded

	lu	le	Fbe	Cl
1	72.5	133.2	2068	0.84
2	95.5	170.6	1614	0.73
3	111.9	197.4	1395	0.58
4	68.2	126.2	2182	0.91
5	92.3	165.5	1664	0.83
6	110.4	195.0	1412	0.69
7				
8				
9				
10				

Shear	Moment	Def
148	72	96
286	95	121
425	112	139
189	68	96
368	92	121
547	110	139

Sill and header lateral connection:

Span (ft)	Load @ Ends (lbs)	Nail Zeg(lb)	0.131 Nails	15ga Zeg(lb)	15gax2.5" Staples
2	187.54	88	3	48	4
3	281.31		4		6
4	375.07		5		8
5	468.84		6		10
6	562.61		7		12
7	656.38		8		14
8	750.15		9		16
9	843.92		10		18
10	937.68		11		20
11	1031.45		12		22
12	1125.22		13		24
13	1218.99		14		26
14	1312.76		15		28

Member	Max Span	Reactions (lbs) Gravity
1 (1) 2x 5 SPF #2	72 in	600
2 (2) 2x 5 SPF #2	95 in	800
3 (3) 2x 5 SPF #2	111 in	900
4 (1) 2x 5 SYP #2	68 in	600
5 (2) 2x 5 SYP #2	92 in	800
6 (3) 2x 5 SYP #2	110 in	900
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: 160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5117-80-4-47
Allow. Floor Load: 40 PSF
Approval Date: 4/10/2024
Manufacturer: Franklin Structures, LLC

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

Wind Speed, Vult:	160	MPH	Roof Style:	Gable	
Wind Exposure:	C		Roof Pitch:	6 /12	
Mean Roof Height:	24	FT	Roof Angle:	26.6	
Elevation:	0	FT	Width	30.04 ft	(for roof height)
Ke:	1.00		2a:	6 ft	
Kd:	0.85		Wall Height:	9 ft	
Kzt:	1		Heel Ht:	6 in	
kt:	0.94		Roof Ht:	7.51 ft	
qh:	52.21	psf	Stud Spacing:	16 "oc	
Building Type:	Enclosed		Overhang:	12 "	
Gcpi:	0.18		Int. Shearwall:	Yes	
	-0.18				
Min net pressure:	16	psf			

MWFRS

Transverse

	1	2	3	4	1e	2e	3e	4e
+GCpi	19.3	-14.6	-32.7	-29.8	28.6	-19.3	-39.9	-37.3
-Gcpi	38.1	4.2	-13.9	-11.0	47.4	-0.5	-21.1	-18.5
Max	38.1	-14.6	-32.7	-29.8	47.4	-19.3	-39.9	-37.3

Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-32.9	-45.4	-28.7	-32.9	11.5	-24.5	-34.5	-65.3	-37.1	-34.5	22.4	-31.8
-Gcpi	-14.1	-26.6	-9.9	-14.1	30.3	-5.7	-15.7	-46.5	-18.3	-15.7	41.2	-13.1
Max	-32.9	-45.4	-28.7	-32.9	30.3	-24.5	-34.5	-65.3	-37.1	-34.5	41.2	-31.8

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-19.3	-39.9	-14.6	-32.7	-51.7	-46.9	20.6	65.9	18.2	49.1
Long	-65.3	-37.1	-45.4	-28.7	-51.7	-	-28.2	54.3	-16.7	36.0

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-11.6	-24.0	-8.7	-19.6	-31.0	-28.2	12.4	39.6	10.9	29.5
Long	-39.2	-22.2	-27.3	-17.2	-64.2	-52.3	12.4	32.6	10.9	21.6

Gable end:
area: 112.8 sq. ft.
force: 3067.5 lbs

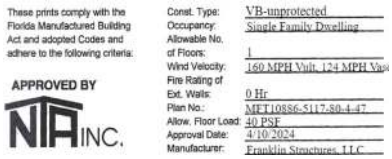
Tag Load (added to bottom sidewall):

End Zone:	Yes	
Trib:	15.02	ft
End Roof:	557	lb
End Wall:	1187	lb
Int Roof:	739	lb
Int Wall:	1328	lb
Total force:	3811	lb

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC



Shearwalls:

Left Endwall:			Right Endwall:			Interior Shearwall 1:		
End Zone:	Yes		End Zone:	Yes		End Zone:	Yes	
Trib:	8.50	ft	Trib:	15.04	ft	Trib:	22.96	ft
End Roof:	557	lb	End Roof:	557	lb	End Roof:	557	lb
End Wall:	1187	lb	End Wall:	1187	lb	End Wall:	1187	lb
Int Roof:	205	lb	Int Roof:	740	lb	Int Roof:	1388	lb
Int Wall:	368	lb	Int Wall:	1332	lb	Int Wall:	2497	lb
Total force:	2317	lb	Total force:	5349	lb	Total force	5630	lb
Sheathing Thickness:	7/16	in	Sheathing Thickness:	7/16	in	Sheathing Thickness:	7/16	in
Fastener:	.131 nail		Fastener:	15ga staple		Fastener:	.131 nail	
Wall Length:	15.02	ft	Wall Length:	43.56	ft	Wall Length:	20.79	ft
FHS Length:	15.02	ft	FHS Length:	26.08	ft	FHS Length:	10.13	ft
Wall Height:	9	ft	Wall Height:	9	ft	Wall Height:	9	ft
Tallest Opening:	2h/3		Tallest Opening:	2h/3		Tallest Opening:	5h/6	
r:	1.00		r:	0.69		r:	0.53	
Co:	1.00		Co:	0.71		Co:	0.57	
Perf or Segmented:	S		Perf or Segmented:	S		Perf or Segmented:	S	
Blocked:	YES		Blocked:	YES		Blocked:	YES	
PLF required:	154.22		PLF required:	205.08		PLF required:	556.01	
Framing:	SPF		Framing:	SPF		Framing:	SPF	
Required Spacing:	6	" OC	Required Spacing:	4	" OC	Required Spacing:	3	" OC
Tiedown:	1388.0	lb	Tiedown:	1845.8	lb	Tiedown:	5004.1	lb
			Strap for:	2675	lb	Strap for:	3378	lb

Top Sidewall:			Bottom Sidewall:			Interior Shearwall 2:		
End Zone:	Yes		End Zone:	Yes		End Zone:	Yes	
Trib:	22.69	ft	Trib:	7.31	ft	Trib:	29.50	ft
End Wall:	1543	lb	End Wall:	2100	lb	End Roof:	557	lb
Int Wall:	4702	lb	Int Wall:	1924	lb	End Wall:	1187	lb
Total force:	6244	lb	Total force:	7834	lb	Int Roof:	1924	lb
Sheathing Thickness:	7/16	in	Sheathing Thickness:	7/16	in	Int Wall:	3461	lb
Fastener:	15ga staple		Fastener:	.131 nail		Total force	8662	lb
Wall Length:	76.00	ft	Wall Length:	30.08	ft	Sheathing Thickness:	7/16	in
FHS Length:	37.88	ft	FHS Length:	17.30	ft	Fastener:	.131 nail	
Wall Height:	9	ft	Wall Height:	9	ft	Wall Length:	14.69	ft
Tallest Opening:	5h/6		Tallest Opening:	2h/3		FHS Length:	14.69	ft
r:	0.54		r:	0.67		Wall Height:	9	ft
Co:	0.57		Co:	0.70		Tallest Opening:	5h/6	
Perf or Segmented:	P		Perf or Segmented:	S		r:	1.00	
Blocked:	YES		Blocked:	YES		Co:	1.00	
PLF required:	288.93		PLF required:	452.78		Perf or Segmented:	S	
Framing:	SPF		Framing:	SPF		Blocked:	YES	
Required Spacing:	4	" OC	Required Spacing:	4	" OC	PLF required:	589.77	
Tiedown:	2600.3	lb	Tiedown:	4075.0	lb	Framing:	SPF	
			Trib=30-22.69 (then tag added on)			Required Spacing:	3	" OC
						Tiedown:	5308.0	lb
Sidewall interconnection:	6	"oc .131 Nails				Strap for:	5197	lb
Capacity:	130	lbs per nail						
Total Capacity	2340	lbs						

Summary:	Fastener	Edge Spacing	Tiedown Force	Perf/ Segment	Corner Connection**
Left Endwall	.131 nail	6 "OC	1388 lb	S	YES
Interior Shearwall 1:	.131 nail	3 " OC	5004 lb	S	NO
Interior Shearwall 2:	.131 nail	3 " OC	5308 lb	S	NO
Right Endwall	15ga staple	4 "OC	1846 lb	S	YES
Top Sidewall	15ga staple	4 "OC	2600 lb	P	NO
Bottom Sidewall	.131 nail	4 "OC	4075 lb	S	NO

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

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

Diaphragm:

Max Force:	5349.3 lbs
Load:	166.9 plf
Sheathing:	7/16 in
Fastener:	.131 Nail
Framing:	SPF
Unblocked Capacity:	294.4 plf
Blocked:	331.2 plf
Blocking distance:	0.0 ft

0 ft blocked each end with .131 Nail or fasten with .131 nails 6" oc Boundary, 6" oc Edge

Single Wide Diaphragm:

Max Force:	2316.6 lbs
Load:	136.1 plf
Sheathing:	7/16 in
Fastener:	.131 Nail
Framing:	SPF
Unblocked Capacity:	294.4 plf
Blocked:	331.2 plf
Blocking distance:	0.0 ft

0 ft blocked each end with .131 Nail or fasten with .131 nails 6" oc Boundary, 6" oc Edge

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

Total Lateral:

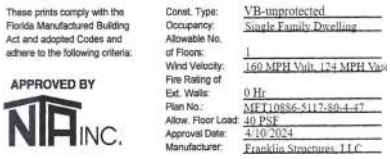
Endwalls:	32576 lb
Sidewalls:	20597 lb

Tag to Main Unit:

Force:	5108 lb
Per side:	2554 lb
#8x3" screw:	125 lb
Wall height:	9.00 ft
spacing:	5.3 " oc

Single Wide to Double Wide:

Force:	2317 lb
#8x3" screw:	125 lb
Length:	15.00 ft
spacing:	9.7 " oc
0.131" nail	132 lb
spacing:	10.3 " oc



Connections

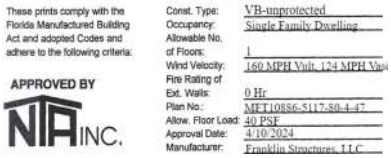
Truss to exterior wall uplift:

Uplift Force:	480	lb
H2.5A:	535	lb
MTS18:	1030	lb

Truss to exterior wall Lateral:

End:	49.5	psf
Int:	40.1	psf
Height:	9	ft
Spacing:	24	in oc
Load:		
End:	445.4	lb
Int:	360.8	lb
.131 nail:	114.84	lb
.131x3"Nails End:	3.9	
.131x3" Nails Int:	3.1	

Truss king post to Header:



Uplift:	652	lb
Gravity:	621	lb
.131 nail EG:	88.44	lb
.131 nail EG LL:	69.09	lb
# .131x3":	9.0	Nails

Or hanger rated for 621lb grav and 652lb uplift

Stud to Plate:

End:	44.72	psf	(reduced for stud area)
Int:	37.71	psf	
Height:	9	ft	
Spacing:	16	in oc	
Load:			
End:	268.3	lb	
Int:	226.2	lb	
.131 nail:	88.44	lb	
Nails End:	3.0		
Nails Int:	2.6		

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

Plate to floor and plate interconnection (top plate):

End:	44.7	psf
Int:	37.7	psf
Height:	9	ft
Load:	201.2348	plf
.131 Nailx3":	108	lb
Spacing of .131 nail:	6.4	" OC int and end zones
15gax2.5" staple:	72	lb
Spacing of 15ga:	4.29	" OC int and end zones

Sheathing Suction Connections (wall and roof)

	End	Int	
Wall:	-44.7	-40.1	psf
Roof:	-118.4	-52.6	psf
.131x2.5:	66	66	lbs
15gax2.5" staple:	56.8	56.8	lbs
Wall			
Member spacing:	16	16	" oc
Nail:	12.0	12.0	" oc
Staple:	11.4	12.0	" oc
Roof			
Member spacing:	24	24	" oc
Nail:	3.3	7.5	" oc
Staple:	2.9	6.5	" oc

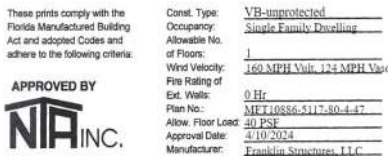
Note End zone is 3ft from the end of the house and from eave/ridge on roof
This spacing is a minimum for edge AND field fastening.

Truss Kneewall Connection:

Tension:	562	lb	Compare to truss print,
Shear:	243	lb	Must be higher then truss.

Tension:

CS 22:	845	lb



Shear:

Rail to king post toed		
.131x3" nail:	85.59375	lb
#:	2.8	
Rail to rail:		
.131x3" nail:	103.125	lbs
#:	2.4	

Bearing Blocks:

Matewall Load:	311	plf
Fcperp:	425	lb/sq. in.
Trib:	10.92	ft
Bearing Needed:	11.11	sq. in.
(3) studs:	2.47	in.
Single ply Header:	1.5	in.
Bearing Block:	0.97	in.
Load to Transfer:	1334.13	lbs
0.131" nail:	95	lbs
# nails:	15	nails block to beam

Floor Joist Calculation

Vertical Load

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

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

Vertical

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

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

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

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Location: Matewall

Matewall Headers Supporting Roof & 1 Floor

Supporting: Roof & 1 Floor

Vertical Load

Dead Load:	274	plf	D
Live Load:	343	plf	.75(L+Lr)
Total Load:	575	plf	D+L
Uplift Load:	-161	plf	

Cr: 1.15 LL defl L/ 360

Cd: 1 TL defl L/ 240

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

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	13.9	21.4	98.9
2	1.5	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	86	61	106	108
2	120	75	121	124
3	154	87	133	136
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	-420	1.8
2	(1.5) 2x 10 SYP #1	75 in	1800	-510	1.2
3	(2) 2x 10 SYP #1	86 in	2100	-580	0.9
4					
5					
6					
7					
8					
9					
10					

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Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Location: Matewall

Matewall Girders Supporting Floor Load Only

Supporting: Roof & 1 Floor

Vertical Load

Dead Load:	75	plf	D
Live Load:	301	plf	L
Total Load:	376	plf	D+L
Uplift Load:	0	plf	

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

Cr: 1.15 LL defl L/ 360

Cd: 1 TL defl L/ 240

Vertical

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

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

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

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Ult. 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Location: Sidewall

Porch Headers

Supporting: Roof

Vertical Load

Dead Load:	164	plf	D
Live Load:	170	plf	Lr
Total Load:	334	plf	D+Lr
Uplift Load:	-360	plf	.6D+Wn

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

Cr: 1.15 LL defl L/ 240

Cd: 1.25 TL defl L/ 180

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

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	10.9	13.1	47.6
2	1	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	10.9	13.1	47.6
3	1	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	10.9	13.1	47.6
4	2	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	21.8	26.3	95.3
5	2	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	21.8	26.3	95.3
6	2	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	21.8	26.3	95.3
7																		
8																		
9																		
10																		

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

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(1) 2x 8 SYP #1	76 in	1100	-1150	1.3
2	(1) 2x 8 SPF #2	70 in	1000	-1060	1.8
3	(1) 2x 7.25 LVL	117 in	1700	-1760	1.0
4	(2) 2x 8 SYP #1	108 in	1600	-1630	0.7
5	(2) 2x 8 SPF #2	99 in	1400	-1490	0.9
6	(2) 2x 7.25 LVL	156 in	2200	-2350	0.5
7					
8					
9					
10					

Connections:
Connect truss to header with LTS18 strap: capacity 755lbs.
Max Truss reaction for header @16" is 480==> OK

Header to Column Corner:
RTC-44 Bracket: capacity 1980lbs.
Max reaction for header @ 8ft: 1440 lb OK

Column to Floor Corner:
BC-40 Bracket: 510lbs
LSTA18 Strap: 1110lbs
Total: 1620lbs
Max reaction for header @8ft: 1440lb OK

Header to Column Center:
BC4 Bracket: 605lbs
(2) LSTA18 Straps: 2220lbs
Total: 2825lbs
Max reaction for header @ 7.25ft: 2610lb OK

Column to Floor Center:
BC40 Bracket: 510lbs
(2) LSTA18 Straps: 2220lbs
Total: 2730lbs
Max reaction for header @ 7.25ft: 2610lb 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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Porch Column

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	334	plf	Lateral only			Vertical:	164	plf	0 Top/Btm Plate (tp):	0	in
Total Load:	334	plf	Stud area:	27.0	ft^2	Lateral:	45	psf W	LVL:	Microllam	
Uplift Load:	-360	plf	Lateral:	45	psf W	Combined Vert and Lat (max Vert)			LVL MOE (E):	2000000	psi
						Vertical:	292	plf	E min:	1016411	psi
						Lateral:	33.5	psf .75W	Fb:	2750	psi
			def=.7 C&C			Combined Uplift and Lat			Fv:	285	psi
Cr:	1					Vertical:	-360	plf	Fcperp:	750	psi
Cd:	1.6					Lateral:	33.5	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	3.5	SYP	#1	0.8	36.0	1.0	1.00	1500	1650	1650	565	1600000	580000	368	1000
										Cp	0.17	0.14					
	Header	3	inches						Allowable:	2400	353	357	565	1600000	580000		1600

# of Studs	1
Properties	
Area in^2	10.5
Sx in^3	6.1
Ix in^4	10.7
Axial Loading	
Fc compression	133
Fc Perp compression	182
Tension	560
Fcperp	
Combined Loading	
Uplift/Lateral	560
Vert/Lateral max Lat	181
Vert/Lateral Max Vert	117
Deflection Check	L/ 210
	OK
	117

Max Span	Max Trib	Max Side Opening	Max Center opening
1	117 in	214 in = 17 ft - 9 in	175 in = 14 ft - 7 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.

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Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Manual S Compliance Report
Entire House

Job: 17782-5117-80-4-47
Date: 4/8/24
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN STRUCTURES, 17782-5117-80-4-47

Cooling Equipment

Design Conditions

Outdoor design DB:	97.5°F	Sensible gain:	32302	Btuh	Entering coil DB:	76.1°F
Outdoor design WB:	79.3°F	Latent gain:	8786	Btuh	Entering coil WB:	63.5°F
Indoor design DB:	75.0°F	Total gain:	41088	Btuh		
Indoor RH:	50%	Estimated airflow:	1370	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split AC				
Manufacturer:	Generic		Model:	SEER2 14.3	
Actual airflow:	1370	cfm			
Sensible capacity:	37194	Btuh	115% of load		
Latent capacity:	15940	Btuh	181% of load		
Total capacity:	53134	Btuh	129% of load	SHR:	70%

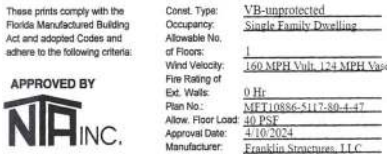
Heating Equipment

Design Conditions

Outdoor design DB:	27.1°F	Heat loss:	35740	Btuh	Entering coil DB:	67.9°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Elec furnace					
Manufacturer:	Generic		Model:	AFUE 100		
Actual airflow:	1370	cfm				
Output capacity:	35740	Btuh	100% of load		Temp. rise:	0 °F



Meets all requirements of ACCA Manual S.

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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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Job: 17782-5117-80-4-47
Date: 4/8/24
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN STRUCTURES, 17782-5117-80-4-47

Design Information

	Htg	Clg
Outside db (°F)	27	98
Inside db (°F)	70	75
Design TD (°F)	43	23
Daily range	-	M
Inside humidity (%)	30	50
Moisture difference (gr/lb)	16	58

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

HEATING EQUIPMENT

Make	Generic		
Trade			
Model	AFUE 100		
AHRI ref			
Efficiency		100 AFUE	
Heating input		10.5	kW
Heating output		35740	Btuh
Temperature rise		24	°F
Actual air flow		1370	cfm
Air flow factor		0.042	cfm/Btuh
Static pressure		0.30	in H2O
Space thermostat			

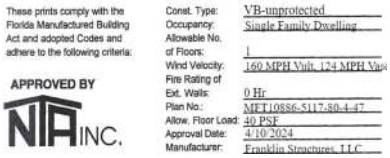
COOLING EQUIPMENT

Make	Generic		
Trade			
Cond	SEER2 14.3		
Coil			
AHRI ref			
Efficiency		12.2 EER2,14.3 SEER2	
Sensible cooling		37194	Btuh
Latent cooling		15940	Btuh
Total cooling		53134	Btuh
Actual air flow		1370	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)
KT\DR	424	7522	7924	315	354
U	116	1411	843	59	38
B1	295	2906	3316	122	148
H	36	0	0	0	0
BA1	266	3955	2514	166	112
B4	160	2122	1796	89	80
C1	157	580	509	24	23
BA2	85	316	277	13	12
GR	501	7108	6471	298	289
H2	115	0	0	0	0
C4	31	0	0	0	0
B2	165	3213	3381	135	151
BA3	86	770	452	32	20
B3	173	2806	3230	118	144

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

Entire House	2608	32709	30713	1370	1370
Other equip loads		3031	1590		
Equip. @ 1.02 RSM			33110		
Latent cooling			8786		
TOTALS	2608	35740	41896	1370	1370



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

Project Information

For: FRANKLIN STRUCTURES, 17782-5117-80-4-47

Design Conditions

Location:
Jacksonville Craig, FL, US
Elevation: 41 ft
Latitude: 30 °N

Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	27	98
Daily range (°F)	-	16 (M)
Wet bulb (°F)	-	79
Wind speed (mph)	15.0	7.5

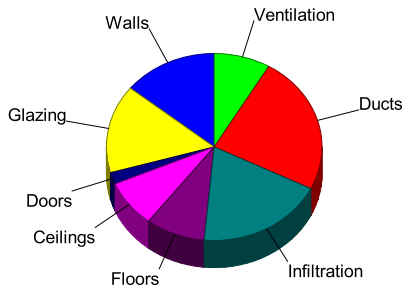
Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	70	75
Design TD (°F)	43	23
Relative humidity (%)	30	50
Moisture difference (gr/lb)	15.8	57.9

Infiltration:

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

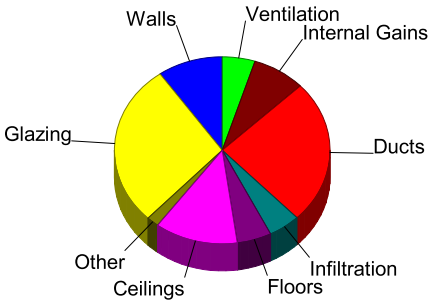
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	2.9	5066	14.2
Glazing	14.6	5455	15.3
Doors	11.4	721	2.0
Ceilings	1.1	2909	8.1
Floors	1.2	3192	8.9
Infiltration	3.1	6840	19.1
Ducts		8526	23.9
Piping		0	0
Humidification		0	0
Ventilation		3031	8.5
Adjustments		0	
Total		**35740**	**100.0**



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.8	3159	9.8
Glazing	24.3	9088	28.1
Doors	9.6	602	1.9
Ceilings	1.5	4024	12.5
Floors	0.6	1674	5.2
Infiltration	0.7	1547	4.8
Ducts		8040	24.9
Ventilation		1590	4.9
Internal gains		2580	8.0
Blower		0	0
Adjustments		0	
Total		**32302**	**100.0**



Latent Cooling Load = 8786 Btuh
Overall U-value = 0.057 Btuh/ft²-°F, Window / Floor Area = 14.3 %

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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Project Information

For: FRANKLIN STRUCTURES, 17782-5117-80-4-47

Design Conditions

Location:
Jacksonville Craig, FL, US
Elevation: 41 ft
Latitude: 30 °N

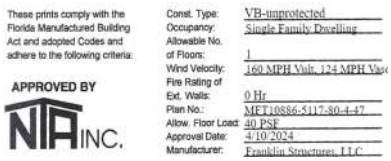
Outdoor:	Heating	Cooling
Dry bulb (°F)	27	98
Daily range (°F)	-	16 (M)
Wet bulb (°F)	-	79
Wind speed (mph)	15.0	7.5

Indoor:	Heating	Cooling
Indoor temperature (°F)	70	75
Design TD (°F)	43	23
Relative humidity (%)	30	50
Moisture difference (gr/lb)	15.8	57.9

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	369	0.068	19.0	2.92	1076	1.82	671
	e	530	0.068	19.0	2.92	1545	1.82	964
	s	333	0.068	19.0	2.92	971	1.82	606
	w	505	0.068	19.0	2.92	1472	1.82	918
	all	1737	0.068	19.0	2.92	5066	1.82	3159
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; NFRC rated (SHGC=0.22); 6.67 ft head ht	n	36	0.340	0	14.6	525	12.2	440
	e	110	0.340	0	14.6	1604	28.8	3163
	s	72	0.340	0	14.6	1050	13.9	1000
	w	156	0.340	0	14.6	2275	28.8	4485
	all	374	0.340	0	14.6	5455	24.3	9088
Doors								
Door, wd sc type	e	42	0.230	0	9.87	414	8.25	346
	w	21	0.340	0	14.6	306	12.2	256
	all	63	0.340	0	11.4	721	9.56	602
Ceilings								
16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		2608	0.026	38.0	1.12	2909	1.54	4024
Floors								
19A-30cscp: Flr floor, frm flr, 8" thkns, carpet flr fnsh, r-30 cav ins, tight crwl ovr		2608	0.034	30.0	1.22	3192	0.64	1674



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Project Summary
Entire House

Job: 17782-5117-80-4-47
Date: 4/8/24
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN STRUCTURES, 17782-5117-80-4-47

Notes:

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult, 124 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Design Information

Weather: Jacksonville Craig, FL, US

Winter Design Conditions

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

Summer Design Conditions

Outside db	98	°F
Inside db	75	°F
Design TD	23	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	58	gr/lb

Heating Summary

Structure	24183	Btuh
Ducts (R-8.0)	8526	Btuh
Central vent (64 cfm)	3031	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	35740	Btuh

Sensible Cooling Equipment Load Sizing

Structure	22673	Btuh
Ducts (R-8.0)	8040	Btuh
Central vent (64 cfm)	1590	Btuh
Outside air		
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	1.02	
Equipment sensible load	33110	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

	Heating	Cooling
Area (ft²)	2608	2608
Volume (ft³)	23469	23469
Air changes/hour	0.37	0.16
Equiv. AVF (cfm)	145	63

Latent Cooling Equipment Load Sizing

Structure	3659	Btuh
Ducts	2599	Btuh
Central vent (64 cfm)	2527	Btuh
Outside air		
Equipment latent load	8786	Btuh
Equipment Total Load (Sen+Lat)	41896	Btuh
Req. total capacity at 0.70 SHR	3.9	ton

Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	

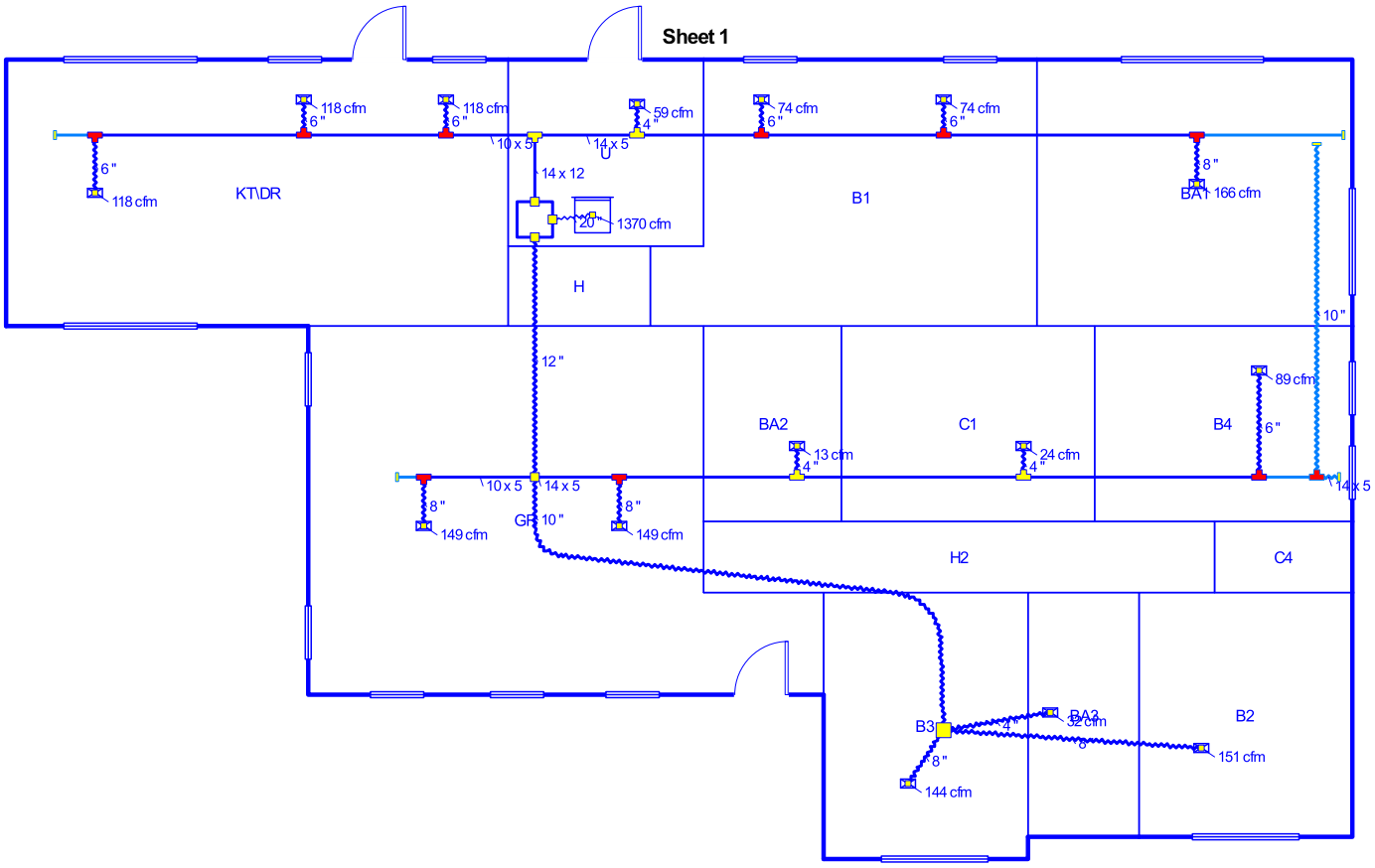
Efficiency	100	AFUE
Heating input	10.5	kW
Heating output	35740	Btuh
Temperature rise	24	°F
Actual air flow	1370	cfm
Air flow factor	0.042	cfm/Btuh
Static pressure	0.30	in H2O
Space thermostat		

Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER2 14.3
Coil	
AHRI ref	

Efficiency	12.2 EER2,14.3 SEER2	
Sensible cooling	37194	Btuh
Latent cooling	15940	Btuh
Total cooling	53134	Btuh
Actual air flow	1370	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.



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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

Job #: 17782-5117-80-4-47
Performed by AMS of Indiana, Inc. for:
FRANKLIN STRUCTURES

Scale: 1 : 129

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Duct System Summary
Entire House

Job: 17782-5117-80-4-47
Date: 4/8/24
By: AMS of Indiana, Inc.

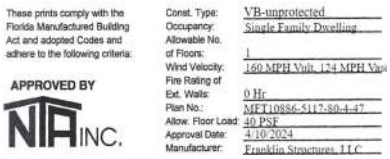
Project Information

For: FRANKLIN STRUCTURES, 17782-5117-80-4-47

	Heating	Cooling
External static pressure	0.30 in H2O	0.30 in H2O
Pressure losses	0.06 in H2O	0.06 in H2O
Available static pressure	0.24 in H2O	0.24 in H2O
Supply / return available pressure	0.194 / 0.046 in H2O	0.194 / 0.046 in H2O
Lowest friction rate	0.073 in/100ft	0.073 in/100ft
Actual air flow	1370 cfm	1370 cfm
Total effective length (TEL)	328 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	1658	61	74	0.083	6.0	0x 0	VlFx	18.5	215.0	st3
B1-A	c	1658	61	74	0.083	6.0	0x 0	VlFx	28.8	205.0	st3
B2	c	3381	135	151	0.077	8.0	0x 0	VlFx	62.7	190.0	st9
B3	c	3230	118	144	0.080	8.0	0x 0	VlFx	51.7	190.0	st9
B4	h	2122	89	80	0.073	6.0	0x 0	VlFx	60.3	205.0	st6
BA1	h	3955	166	112	0.081	8.0	0x 0	VlFx	43.8	195.0	st3
BA2	h	316	13	12	0.076	4.0	0x 0	VlFx	30.0	225.0	st6
BA3	h	770	32	20	0.080	4.0	0x 0	VlFx	54.2	190.0	st9
C1	h	580	24	23	0.075	4.0	0x 0	VlFx	42.8	215.0	st6
GR	h	3554	149	144	0.089	8.0	0x 0	VlFx	22.5	195.0	st5
GR-A	h	3554	149	144	0.077	8.0	0x 0	VlFx	21.0	230.0	st6
KT\DR	c	2641	105	118	0.087	6.0	0x 0	VlFx	18.8	205.0	st4
KT\DR-A	c	2641	105	118	0.086	6.0	0x 0	VlFx	10.8	215.0	st4
KT\DR-B	c	2641	105	118	0.086	6.0	0x 0	VlFx	31.8	195.0	st4
U	h	1411	59	38	0.082	***4.0***	***0***x ***0***	VlFx	11.3	225.0	st3



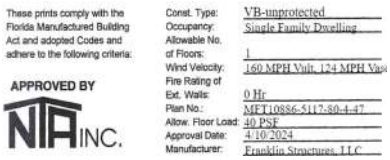
Bold/italic values have been manually overridden

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	275	260	0.073	566	9.1	5 x 14	ShtMetl	st2
st4	Peak AVF	315	354	0.086	1018	***9.6***	***5*** x ***10***	ShtMetl	st1
st3	Peak AVF	347	298	0.081	713	9.7	5 x 14	ShtMetl	st1
st5	Peak AVF	149	144	0.089	429	***6.9***	***5*** x ***10***	ShtMetl	st2
st9	Peak AVF	284	315	0.077	578	***10.0***	***0*** x ***0***	VinlFlx	st2
st2	Peak AVF	709	719	0.073	915	***12.0***	***0*** x ***0***	VinlFlx	
st1	Peak AVF	662	651	0.081	567	12.3	12 x 14	ShtMetl	

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	1370	1370	62.3	0.073	628	20.0	0x 0		VlFx	



Bold/italic values have been manually overridden

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

PRODUCT APPROVAL SPECIFICATION SHEET

Manufacturer: Franklin Structures, LLC. **Plan #:** **MFT10866-5117-80-4-47**

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-R9
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	
Underlayments	Epilay	ROOFING UNERLAYMENT	16850-R7
Asphalt Shingles	Owens Corning	Oakridge	10674-R19
PANEL WALL			
Siding	Hardie Lap		13192-R7
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-R8
Wood Connector / Anchor	Simpson	H2.5T	10446.16
Wood Connector / Anchor	Simpson	HD3B	11496-R7
Wood Connector / Anchor	Simpson	HDQ8	10441-R8
Wood Connector / Anchor	Simpson	CMSTC16	13872-R5
Wood Connector / Anchor	Simpson	LSTA18	10456.15-R8
Wood Connector / Anchor	Simpson	STHD14	10441.12-R8
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.

Robert K Gann	Robert k Gann	2/7/2024
Manufacturer's Authorized Agent Signature	Printed Name	Date

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

RE: MH81011R23 -

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

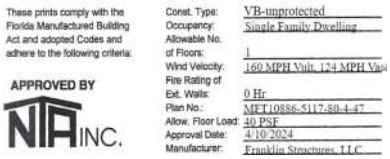
Site Information:
Customer Info: . Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., ..
City: . State: .

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: FRC2023/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-22 Wind Speed: 90 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 3 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.

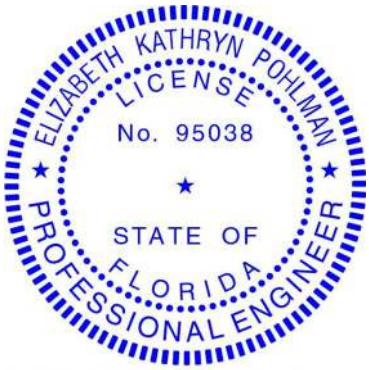
No.	Seal#	Truss Name	Date
1	I64647833	182-FST	4/2/24
2	I64647834	182-MT	4/2/24
3	I64647835	A1	4/2/24



This item has been digitally signed and sealed by Pohlman, Elizabeth, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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

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



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

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

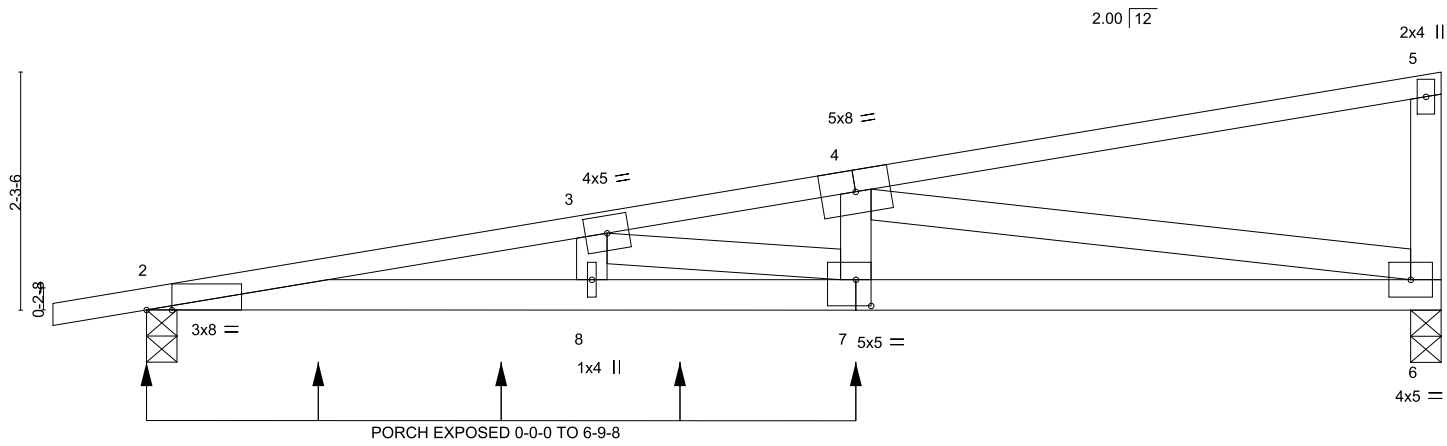
April 2,2024

Job	Truss	Truss Type	Qty	Ply	
MH81011R23	182-FST	MONO TRUSS	1	1	I64647833
					Job Reference (optional)

Franklin Structures, LLC., Russellville, AL - 35653, 8.730 s Mar 21 2024 MiTek Industries, Inc. Tue Apr 2 15:30:12 2024 Page 1
ID:_XuXH9AwMCxqbHJiDZEey2yPrxI-VW7?JQLUX2YyNZpbyYzb3qTiQ3_siC?YoSyu7xzUj8f

-0-10-12	4-3-3	6-9-8	12-4-12
0-10-12	4-3-3	2-6-5	5-7-4

Scale = 1:22.1



4-3-3	6-9-8	12-4-12
4-3-3	2-6-5	5-7-4

Plate Offsets (X,Y)-- [2:0-2-15,Edge], [7:0-1-12,0-3-0]

LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	0.22	8	>660	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	0.18	8	>816	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.53	Horz(CT)	-0.04	6	n/a	n/a		
BCDL	10.0	Code FRC2023/TPI2014		Matrix-MP							Weight: 37 lb	FT = 20%

LUMBER-
TOP CHORD 2x3 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-9-15 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=129(LC 6)
Max Uplift 6=-422(LC 6), 2=-480(LC 6)
Max Grav 6=321(LC 1), 2=366(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1271/1997, 3-4=-990/1562
BOT CHORD 2-8=-2072/1248, 7-8=-2078/1251, 6-7=-1630/979
WEBS 4-7=-256/197, 4-6=-998/1662, 3-7=-284/467

NOTES-
1) Wind: ASCE 7-22; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Encl., GCpi=0.18; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Zone1 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=422, 2=480.

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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

This item has been digitally signed and sealed by Pohlman, Elizabeth, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

April 2,2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	
MH81011R23	182-MT	MONO TRUSS	1	1	I64647834
					Job Reference (optional)

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

8.730 s Nov 16 2023 MiTek Industries, Inc. Tue Apr 2 15:33:03 2024 Page 1
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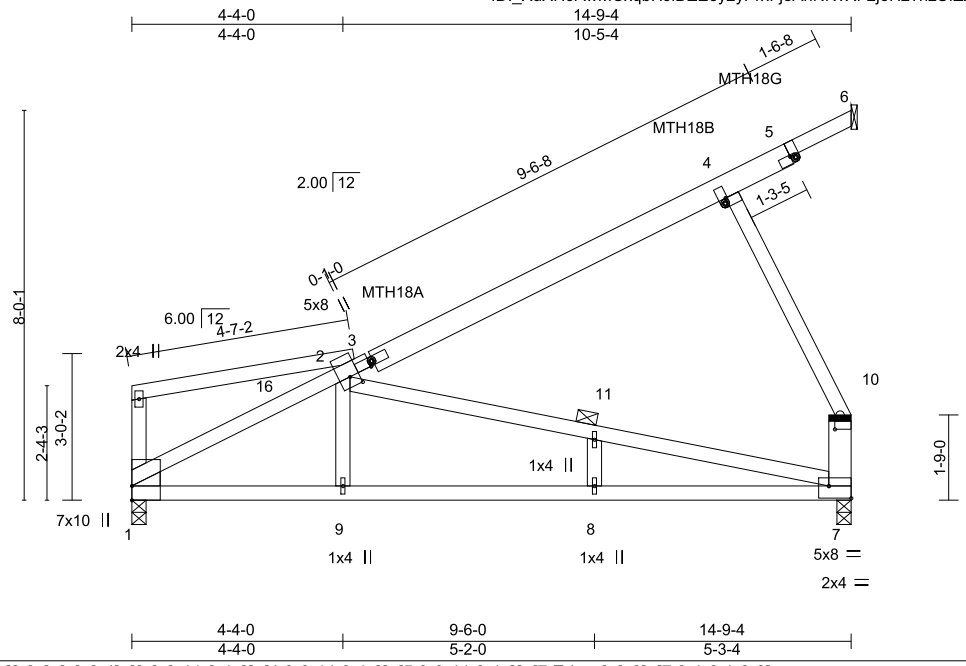

Plate Offsets (X,Y)-- [1:Edge,0-0-0], [2:0-2-8,0-2-4], [3:0-0-11,0-1-2], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [7:Edge,0-3-0], [7:0-1-8,1-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.27	7-8	>642	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.43	8	>409	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	-0.03	7	n/a	n/a		
BCDL	10.0	Code FRC2023/TPI2014		Matrix-MP							Weight: 73 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 7-10: 2x6 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-0-7 oc bracing.
JOINTS 1 Brace at Jt(s): 10, 11

REACTIONS. (size) 1=0-3-8, 7=0-3-8, 6=Mechanical
Max Horz 1=513(LC 10), 6=120(LC 10)
Max Uplift 1=-340(LC 10), 7=-574(LC 10)
Max Grav 1=621(LC 1), 7=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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-1020/478, 2-16=-932/491, 2-3=-317/5, 3-4=-322/81, 7-10=-323/443
BOT CHORD 1-9=-870/921, 8-9=-864/925, 7-8=-864/925
WEBS 2-9=0/295, 2-11=-786/680, 7-11=-793/668, 4-10=-359/492

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
10=359/492/215/0

NOTES-
1) Wind: ASCE 7-22; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C 14-6-8 to 14-6-8 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are MT20 plates unless otherwise indicated.
3) See HINGE PLATE DETAILS for plate placement.
4) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
5) All additional member connections shall be provided by others for forces as indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 340 lb uplift at joint 1 and 574 lb uplift at joint 7.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

This item has been digitally signed and sealed by Pohlman, Elizabeth, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

April 2,2024

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

Job	Truss	Truss Type	Qty	Ply	
MH81011R23	A1	HINGED MONO	1	1	I64647835
					Job Reference (optional)

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

8.730 e Nov 16 2023 MiTek Industries, Inc. Tue Apr 2 15:33:48 2024 Page 1
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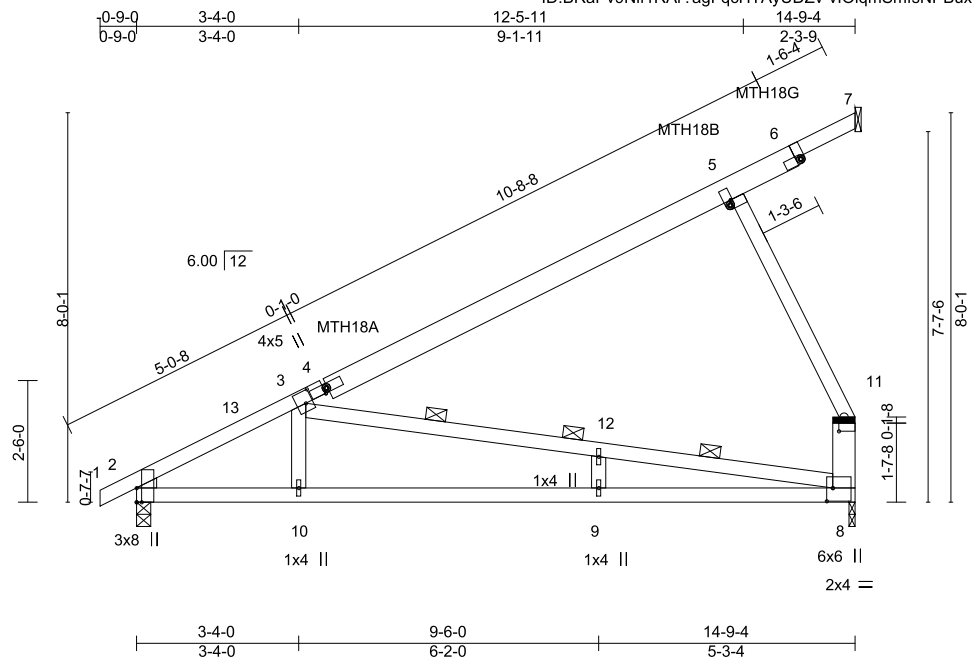


Scale = 1:47.4

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-3-0,0-1-12], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [6:0-2-7,15-4-6], [8:0-3-4,0-1-8], [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	1.15	TC	0.77	Vert(LL)	-0.33	8-9	>523	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.61	9-10	>284	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	-0.03	8	n/a	n/a		
BCDL	10.0	Code FRC2023/TPI2014		Matrix-R							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
WEDGE
Left: 2x3 SPF No.2

BRACING-
TOP CHORD Sheathed or 5-4-15 oc purlins, except end verticals. [P]
BOT CHORD Rigid ceiling directly applied or 3-10-0 oc bracing.
WEBS 3 Rows at 1/4 pts 3-8

REACTIONS. (size) 2=0-3-8, 8=0-1-8, 7=Mechanical
Max Horz 2=535(LC 7), 7=124(LC 7)
Max Uplift 2=-477(LC 7), 8=-652(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:	160 MPH Vult, 124 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-1130/593, 3-13=-1038/599, 3-4=-329/14, 4-5=-341/85, 8-11=-299/506
BOT CHORD 2-10=-989/874, 9-10=-989/874, 8-9=-989/874
WEBS 3-10=0/384, 3-12=-740/767, 8-12=-745/761, 5-11=-332/562

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
11=332/562/243/0

NOTES-
1) Wind: ASCE 7-22; Vult=167mph (3-second gust) Vasd=129mph; TCDL=3.0psf; BCDL=3.0psf; 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;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
2) All plates are MT20 plates unless otherwise indicated.
3) See HINGE PLATE DETAILS for plate placement.
4) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
5) All additional member connections shall be provided by others for forces as indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 477 lb uplift at joint 2 and 652 lb uplift at joint 8.

This item has been digitally signed and sealed by Pohlman, Elizabeth, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

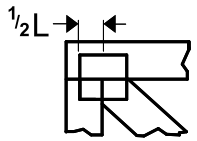
Elizabeth Kathryn Pohlman PE No. 95038
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Road
Chesterfield, MO 63017
Date:

April 2,2024

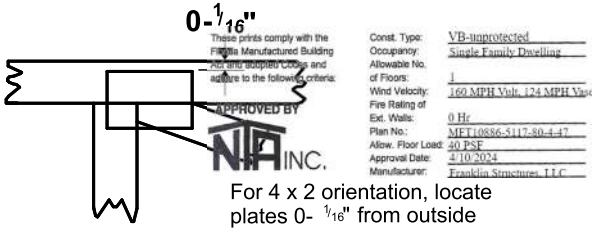
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

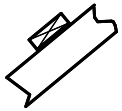
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

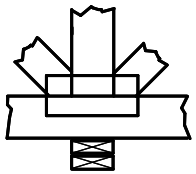
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

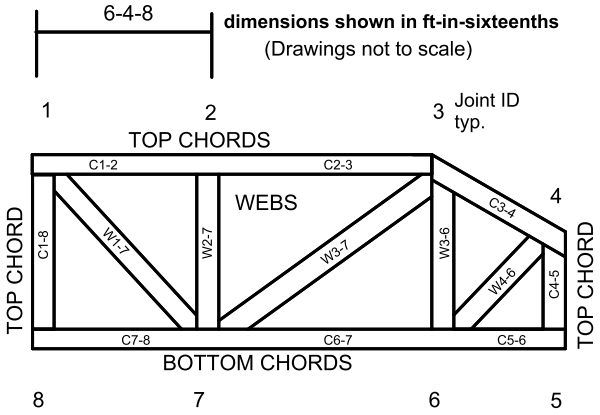


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

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.

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

RE: MH80182R21 -

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: .

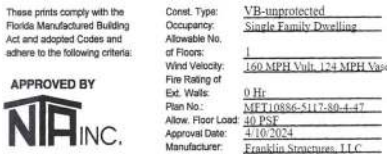
Name Address and License # of Structural Engineer of Record, If there is one, for the building.
Name: License #:
Address:
City: State:

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

Design Code: FRC2023/TPI2014
Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-22
Wind Speed: 167 mph
Roof Load: 40.0 psf
Floor Load: N/A psf

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

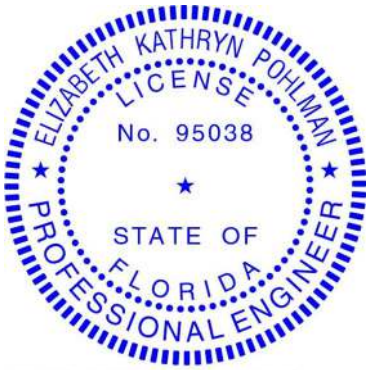
No.	Seal#	Truss Name	Date
1	I64647836	A3	4/2/24
2	I64647837	A3-P	4/2/24



This item has been digitally signed and sealed by Pohlman, Elizabeth, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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

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



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

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

April 2,2024

Job	Truss	Truss Type	Qty	Ply	
MH80182R21	A3	HINGED COMMON	1	1	I64647836
					Job Reference (optional)

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

8.730 e Nov 16 2023 MiTek Industries, Inc. Tue Apr 2 15:37:44 2024 Page 1
ID:BRaPv9Nif1RAr?agFqcHTAyUDZv-_hfwMTJo4N6wV9zox?BSQuB0xGCVchs4knRp_kzUj1b

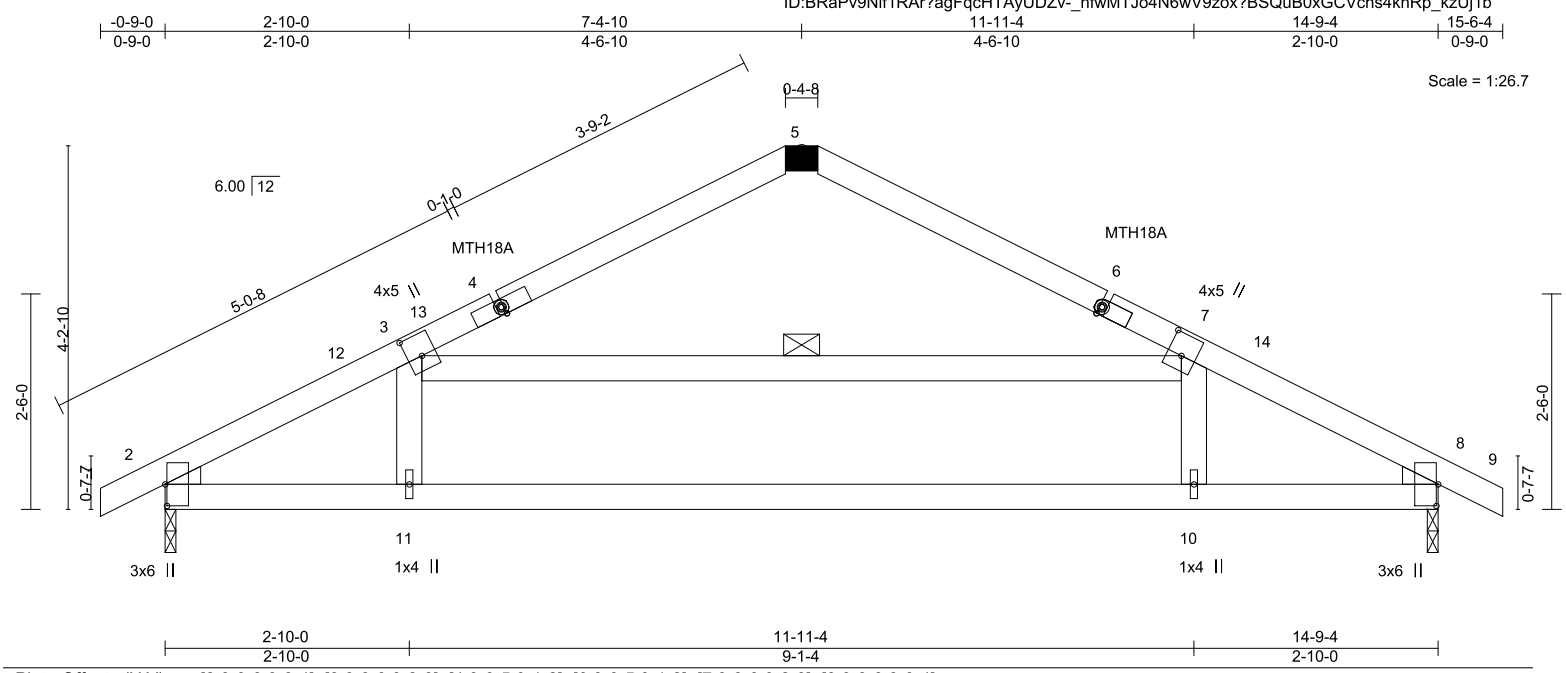


Plate Offsets (X,Y)-- [2:0-3-0,0-0-4], [3:0-3-0,0-2-0], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-3-0,0-2-0], [8:0-3-0,0-0-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	0.25	10-11	>703	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.31	10-11	>566	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code FRC2023/TPI2014		Matrix-R							Weight: 52 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
WEDGE
Left: 2x3 SPF No.2 , Right: 2x3 SPF No.2

BRACING-
TOP CHORD Sheathed or 5-5-6 oc purlins. [P]
BOT CHORD Rigid ceiling directly applied or 6-6-5 oc bracing.
WEBS 1 Row at midpt 3-7

REACTIONS. (size) 2=0-1-8, 8=0-1-8
Max Horz 2=149(LC 6)
Max Uplift 2=-412(LC 6), 8=-410(LC 7)
Max Grav 2=636(LC 1), 8=636(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:	160 MPH Vult, 124 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-12=-1096/1006, 3-12=-1016/1009, 3-13=-313/361, 4-13=-304/363, 4-5=-238/381, 5-6=-239/383, 6-7=-313/363, 7-14=-1016/1003, 8-14=-1096/1000
BOT CHORD 2-11=-777/917, 10-11=-777/917, 8-10=-777/917
WEBS 3-11=-34/329, 7-10=-33/329, 3-7=-704/797

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=192/385/192/0

NOTES- (11-15)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C 12-6-4 to 15-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 2, 8.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 412 lb uplift at joint 2 and 410 lb uplift at joint 8.

This item has been digitally signed and sealed by Pohlman, Elizabeth, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

April 2,2024

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

Job	Truss	Truss Type	Qty	Ply	
MH80182R21	A3-P	HINGED COMMON	1	1	I64647837
					Job Reference (optional)

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

8.730 e Nov 16 2023 MiTek Industries, Inc. Tue Apr 2 15:38:19 2024 Page 1
ID:BRaPv9Nif1RAr?agFqcHTAyUDZv-TQG9iRklq7XyCX9WUsKgKG82mNDrJWaEnjQ9jCzUj12

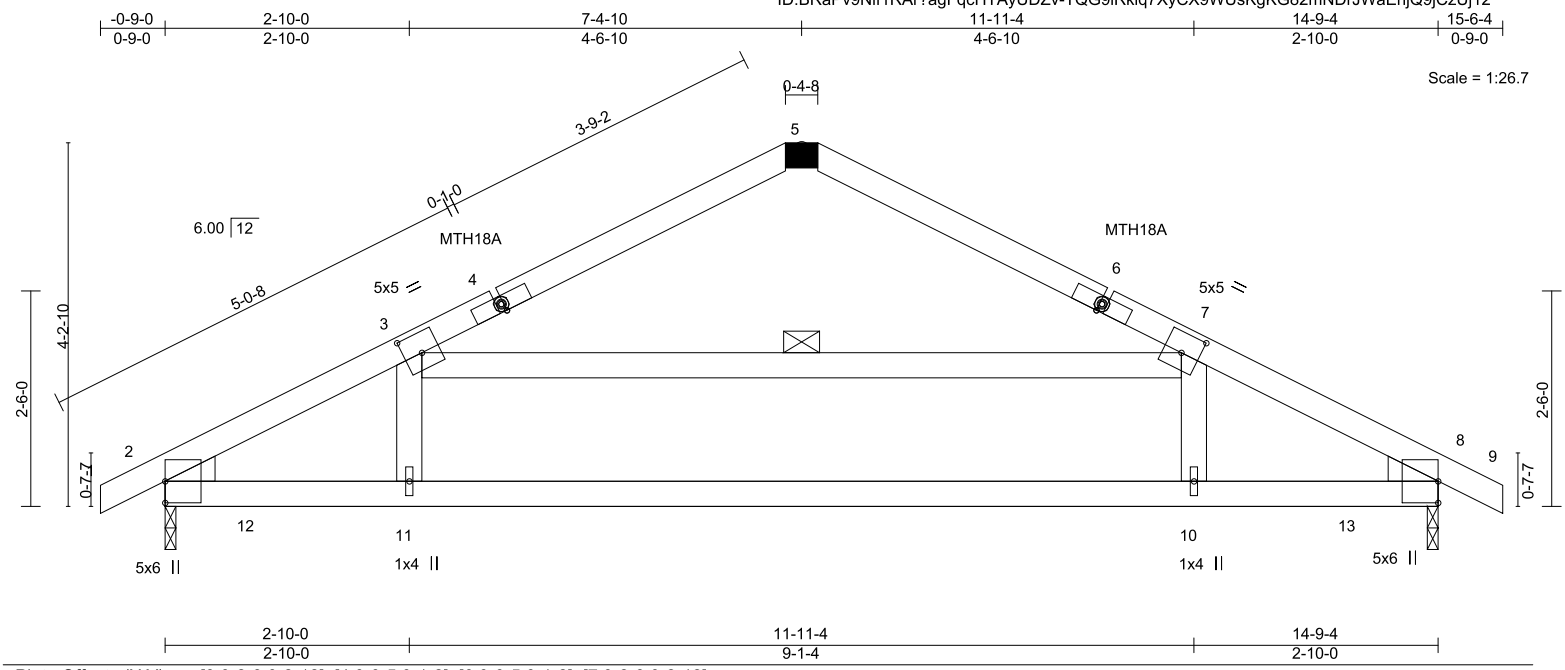


Plate Offsets (X,Y)-- [3:0-2-8,0-2-12], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-2-8,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	0.23	10-11	>783	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.19	10-11	>949	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	-0.02	8	n/a	n/a		
BCDL	10.0	Code FRC2023/TPI2014		Matrix-R							Weight: 70 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF Stud
OTHERS	2x4 SPF No.2
LBR SCAB	2-8 2x4 SPF No.2 one side
WEDGE	
Left: 2x4 SP No.3 , Right: 2x4 SP No.3	

BRACING-

TOP CHORD	Sheathed or 5-4-6 oc purlins.	[P]
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	1 Row at midpt 3-7	

REACTIONS. (size) 2=0-1-8, 8=0-1-8
Max Horz 2=149(LC 6)
Max Uplift 2=-465(LC 5), 8=-464(LC 4)
Max Grav 2=636(LC 1), 8=636(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1086/845, 3-4=-313/223, 6-7=-313/224, 7-8=-1086/847
BOT CHORD 2-12=-691/910, 11-12=-691/910, 10-11=-691/910, 10-13=-691/910, 8-13=-691/910
WEBS 3-11=-326/320, 7-10=-325/320, 3-7=-697/666

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:	160 MPH Vult, 124 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5117-80-4-47
Allow. Floor Load:	40 PSF
Approval Date:	4/10/2024
Manufacturer:	Franklin Structures, LLC

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=192/246/150/0

NOTES- (12-16)
1) Attached 14-9-4 scab 2 to 8, front face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 1-10-0 from end at joint 2, nail 1 row(s) at 7" o.c. for 2-0-0; starting at 10-11-4 from end at joint 2, nail 1 row(s) at 7" o.c. for 2-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-22; Vult=167mph (3-second gust) Vasd=129mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
4) All plates are MT20 plates unless otherwise indicated.
5) See HINGE PLATE DETAILS for plate placement.
6) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
7) All additional member connections shall be provided by others for forces as indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 8.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 465 lb uplift at joint 2 and 464 lb uplift at joint 8.

This item has been digitally signed and sealed by Pohlman, Elizabeth, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

April 2,2024

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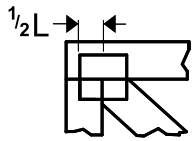
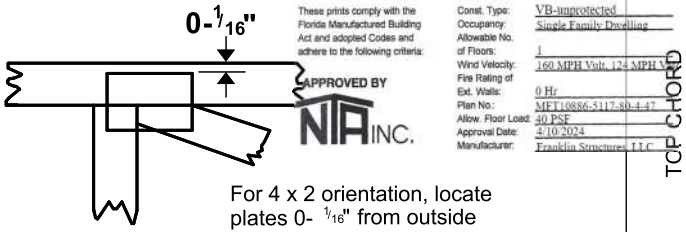
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

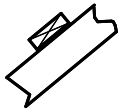
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

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

LATERAL BRACING LOCATION



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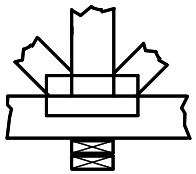
BEARING



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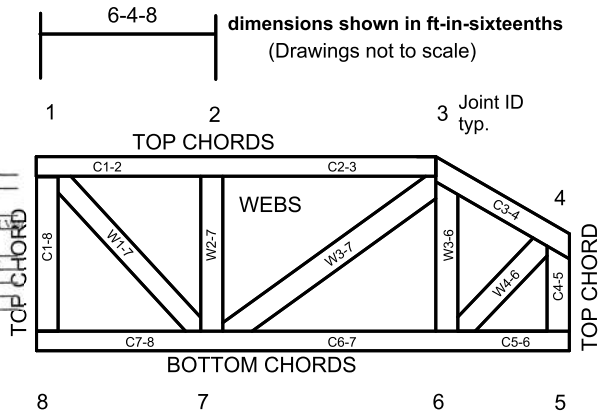

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CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

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.

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MiTek®

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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.
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4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
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6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

FLORIDA BUILDING CODE, ENERGY CONSERVATION	
Residential Building Thermal Envelope Approach	
***R*-Value Computation Method**	
FORM R402—2023	**Florida Climate Zone** 2
	BUILDER: Franklin Structures
PROJECT NAME AND ADDRESS: Hardegree 1026 SW Sunview St	**PERMITTING OFFICE:** Columbia County
MFT-10886-5117-80-4-47 SR# 17782	**JURISDICTION NUMBER:**
OWNER: ~~Meese~~ xxxxxx Hardegree	**PERMIT NUMBER:**
PERMIT TYPE: Residential	**NUMBER OF UNITS:** 3
WORST CASE?	**CONDITIONED FLOOR AREA:**2821

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	GLAZED FENESTRATION SHGC[2, 3]	CEILING *R*-VALUE	WOOD FRAME WALL *R*-VALUE[5]	MASS WALL *R*-VALUE[5, 6]	FLOOR *R*-VALUE	BASEMENT WALL *R*-VALUE	SLAB[7] *R*-VALUE &DEPTH	CRAWLSPACE WALL *R*-VALUE
CLIMATE ZONE 1	NR	0.75	0.25	30	13	3/4	13	0	0	0
CLIMATE ZONE 2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
VALUE	AVG	AVG	AVG	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST
INSTALLED:	.34		.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.

FORM R402—continued EQUIPMENT REQUIREMENTS AND INSTALLED VALUES

ill 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.

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

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: Edgar Laney Date: *7/10/2024*

OWNER/AGENT SIGNATURE: Edgar Laney

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:_____