INTERNATIONAL CODE COUNCIL®

TESTING • INSPECTION • ENGINEERING

305 N. OAKLAND AVE. • P.O. BOX 490 • NAPPANEE, IN 46550 • P: 574.773.7975 • F: 574.773.2732 • ICC-NTA.ORG

July 13, 2021

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

RE: MFT10886-5078-64-3-47-R1
NTA JOB NUMBER: FH062421-5

Dear Ms. Christie Jackson,

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

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

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

Respectfully,

Michael Faller

Michael Faller SMP-056
Account Manager
ICC-NTA LLC

Notes:

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

ANY WINDBORNE DEBRIS PROTECTION TO BE PROVIDED ON-SITE BY OTHERS AND SUBJECT TO LOCAL CODES.
WOOD STRUCTRURAL PANELS TO BE PROVIDED FOR ALL GLAZED OPENINGS PER R301.2.1.2

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

INDEX TO DRAWINGS DESCRIPTION: — SHEET NUMBER

INDEX TO ADDENDUMS

Notes:

9. Vult wind speed = EXPOSURE-C AT Vult=167MPH & Vasd = 130MPH
10. RISK CATEGORY=II
11. Building Mean Roof Height 18'
12. Roof live load = 20 psf
13. Floor live load = 40 psf
14. Seismic Zone = A, B or C
15. Building Category = Type 5B, Unprotected, Wood Construction.
16. Use Group = Single Family Dwelling
17. Roof Interior (zone 1) = +34.7/-63.6psf
18. Roof Exterior (zone 2) = +34.7/-70 psf
19. Roof Corner (zone 3) = +34.7/-108.6 psf
20. Wall Interior (zone 4) = +37.9/-41.1 psf
21. Wall Exterior (zone 5) = +37.9/-50.7 psf
22. OVERHANG EXTERIOR LOAD=(OH Z1) -89.3 psf.
23. OVERHANG EXTERIOR LOAD=(OH Z2) -95.7 psf.
24. Overhang Corner Load =(OH-Z3) -134.3 psf
25. Site address per FRC R319.1
26. Internal pressure coefficient = +/- 0.18 psf

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

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

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

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

Jul 12, 2021

SITE INSTALLED ITEMS

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

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

DATE 7/13/2021 CERT. NO SMP-056
PLAN NUMBER MFT10886-5078-64-347R1
APPROVED BY Michael Faller
(signature)

Florida Plan Number:
Model MFT10886-5078-64-3-47-R1

PHYSICAL ADDRESS
STOCK
1800 STATE ROAD 207
ST.AUGUSTINE FL,
ST. JOHNS COUNTY
ONLY FOR EXPOSURE C

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

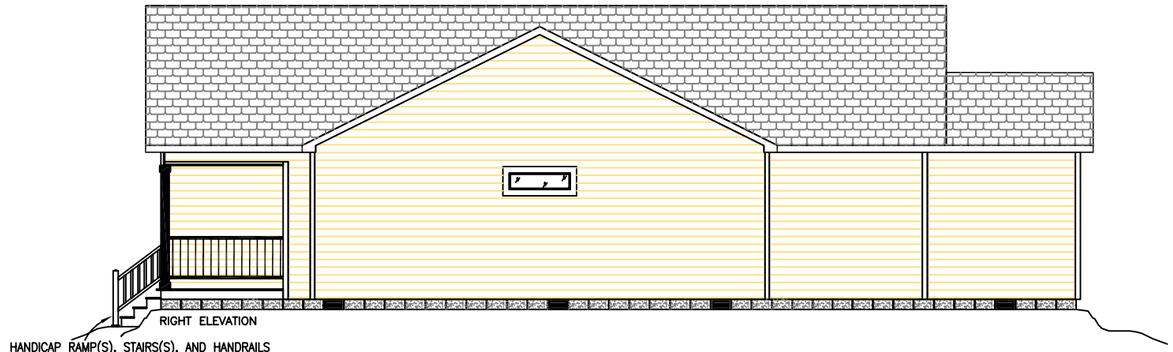
FLORIDA MODULAR

	BY:	DATE:
DRAWN:	WAYNE	6/16/21

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

TITLE: MODULAR INDEX

NO: MFT-10886-5078-64-3-47-R1 | REV: | SHEET: 1 OF 8

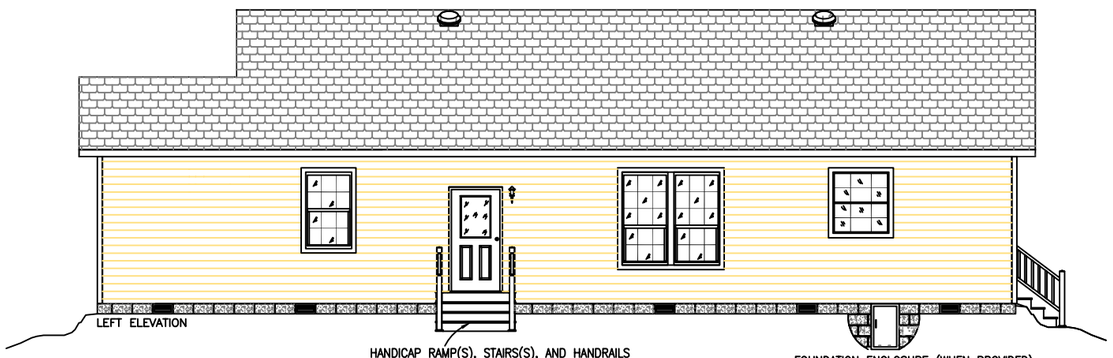


RIGHT ELEVATION

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

FRONT ELEVATION

REAR ELEVATION



LEFT ELEVATION

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

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

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

Jul 12, 2021

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

APPROVED BY NTA INC.

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Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult. 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

NOTES!!
1. EXTERIOR COVERING IS VINYL LAP SIDING WITH VINYL APPURTENANCES STANDARD. OTHER EXTERIOR COVERINGS SHALL CONFORM TO INTERNATIONAL BUILDING CODE. EXTERIOR COVERINGS FOR FRONT AND REAR ELEVATIONS ARE SUPPLIED BY FRANKLIN HOMES AND INSTALLED ON-SITE BY LOCAL CONTRACTOR.
2. ROOF COVERING IS 240# FIBERGLASS SHINGLES. SHINGLES FOR RIDGE ARE SUPPLIED BY FRANKLIN HOMES, INSTALLED ON-SITE BY LOCAL CONTRACTOR.
3. WINDOWS ARE VINYL CLAD THERMOPANE.
4. MINIMUM ATTIC VENTILATION VIA CONTINUOUS VENTILATED SOFFIT & WHIRLY BIRD VENTS IS 8.60 SQ.FT PER 2578 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).

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

REVISION:	BY:	DATE:

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	WAYNE	6/16/21

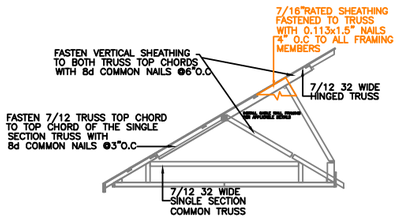
GRAPHIC SCALE 0 1' 2' 3' 4' 5'

TITLE: ELEVATIONS

NO: MFT-10886-5078-64-3-47-R1

REV:

SHEET: 2 of 8



ROOF DIAPHRAGM FASTENING DETAIL

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Allowable No. of Floors:	1
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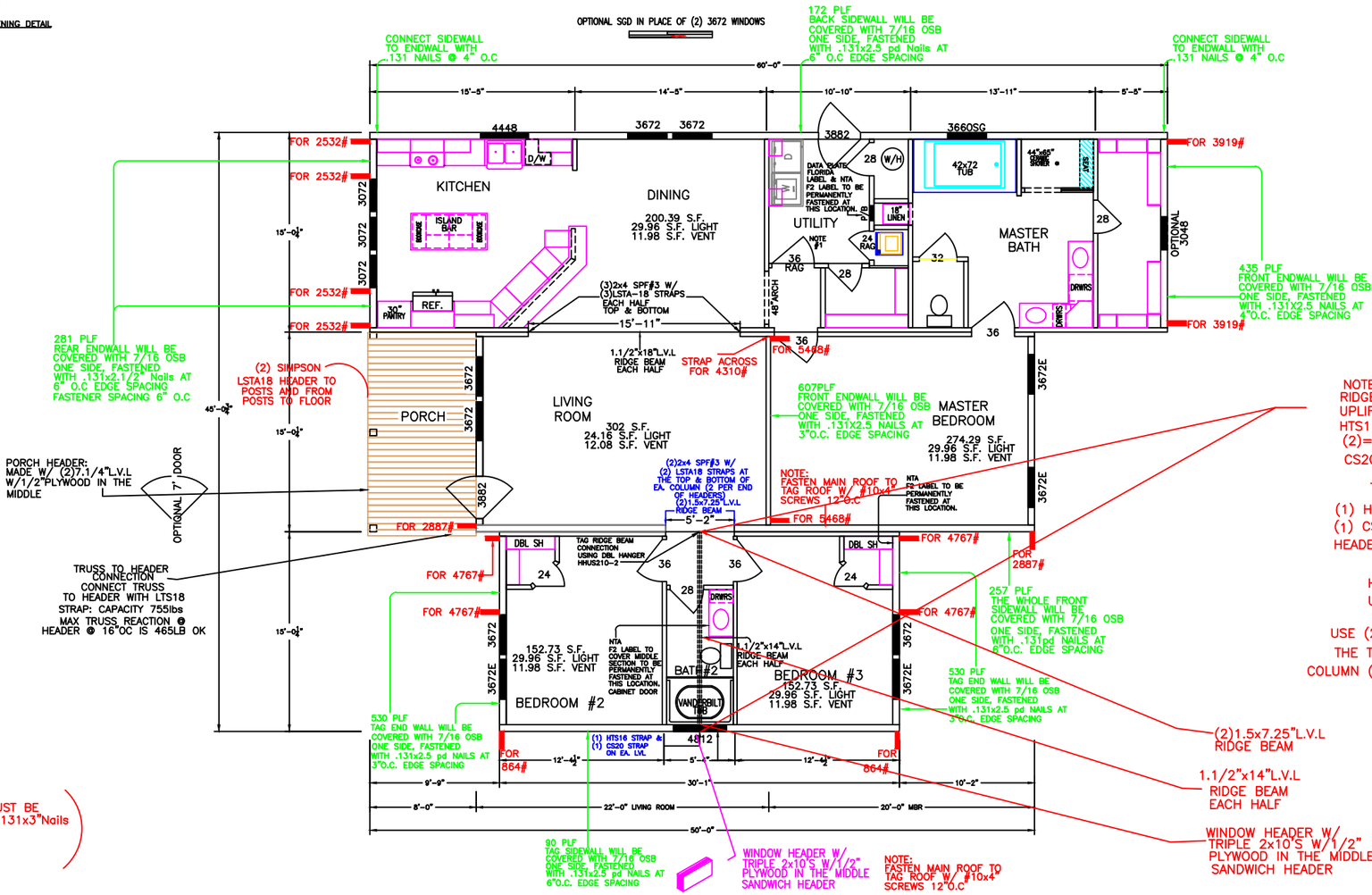
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

OPTIONAL ATRIUM DOOR IN PLACE OF (2) 3672 WINDOWS

OPTIONAL FREESTANDING TUB IN PLACE OF DECK TUB

OPTIONAL SGD IN PLACE OF (2) 3672 WINDOWS



NOTE:
RIDGEBEAM TO HEADER
UPLIFT – 4260LBS EA SIDE OF TAG
HTS16 STRAPS = 1310LBS EA.
(2)=2620LBS
CS20 STRAP 1030LBS
(2)=2060LBS
TOTAL = 4680
(1) HTS16 STRAP AND
(1) CS20 STRAP ON EA. LVL
HEADER TO HEADER BELOW.
NOTE:
HEADER TO COLUMN
UPLIFT – 2158LBS
LSTA18: 1115LBS
USE (2) LSTA18 STRAPS AT
THE TOP BOTTOM OF EA.
COLUMN (2 PER END OF HEADERS)

INTERIOR

NOTE:
ROOF DECKING MUST BE FASTENED WITH 0.131x3"Nails
3" O.C BOUNDARY
3" O.C EDGE
3" O.C FIELD

TIE–DOWNS LOCATIONS
FOR LOAD UP TO 3200LB USE HDQ8 HOLD DOWNS W/(2) SPP STUDS MINIMUM
FOR 3200Lbs TO 5500Lbs USE HDQ8 HOLD DOWNS W/(3) SPP STUDS MINIMUM
FACTORY INSTALLED

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
4812 VINYL THERMOPANE TRANSOM
4448 VINYL THERMOPANE
3660 VINYL THERMOPANE (S.G.)
3672 VINYL THERMOPANE
3672 VINYL THERMOPANE (E)*
3672 VINYL THERMOPANE (S.G.)
3048 VINYL THERMOPANE OPTIONAL
U–Values=0.34
SHGC=0.21
(E) = EGRESS WINDOW
(S.G.) = SAFETY GLAZED

DOOR SCHEDULE	U.Values	SHGC
24"X80" HOLLOW CORE	N/A	N/A
28"X80" HOLLOW CORE	N/A	N/A
30"X80" HOLLOW CORE	N/A	N/A
32"X80" HOLLOW CORE	N/A	N/A
36"X80" HOLLOW CORE	N/A	N/A
42"X80" BARN DOOR	N/A	N/A
38"X80" STEEL DOOR	0.43	0.30
38"X96" STEEL DOOR	0.36	0.30
OPTIONAL ATRIUM DOOR	0.43	0.30
OPTIONAL SGD	0.32	0.33
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

= FURNACE
= WATER HEATER
= SINK
= REFRIGERATOR
= RANGE

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

Jul 12, 2021

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	WAYNE	6/16/21
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	

TITLE: FLOORPLAN
NO: MFT–10886–5078–64–3–47–R1
REV:
SHEET: 3 of 8

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	20 AMP/AFI	1	12–2 W/G
4**	GENERAL LIGHTING	15 AMP/AFI	1	14–2 W/G
5	WATER HEATER	NOTE 1		
6	WASHER	20 AMP/AFI/GFI	1	12–2 W/G
7	PORTABLE APPLIANCE	20 AMP/AFI/GFI	1	12–2 W/G
8	PORTABLE APPLIANCE	20 AMP/AFI/GFI	1	12–2 W/G
9	FURNACE	NOTE 2		
10	DRYER	30 AMP		10–3 W/G
11	RANGE	40 AMP	2	8–3 W/G
11A	GAS RANGE	15 AMP/AFI/GFI	1	14–2 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

CIR#	DESCRIPTION	BREAKER	POLES	WIRE
14A	GAS COOKTOP IGNITER	15 AMP/AFI	1	14–2 W/G
15	OVEN/MICROWAVE	30 AMP	2	10–3 W/G
16	DISHWASHER	NOTE 3/AFI/GFI		
17	OPT. WHIRLPOOL	20 AMP/AFI/GFI	1	14–2 W/G
18	OPT. EURO RANGE HOOD	20 AMP/AFI	1	12–2 W/G
19	MICROWAVE VENT HOOD	20 AMP/AFI/GFI	1	12–2 W/G
20	BATH RECEPTACLES	20 AMP/GFI	1	12–2 W/G
22	LAUNDRY CIRCUIT	20 AMP/AFI/GFI	1	12–2 W/G
24	SMOKE DETECTORS	15 AMP/AFI		14–2 W/G
40**	GENERAL LIGHTING	20 AMP/AFI	1	12–2 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
51**	ELECTRIC FIRE PLACE	15 AMP/AFI/GFI	1	14–2 W/G

SYMBOLS:

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

1984 SQ.FT. @ 3 WATTS/SQ.FT.	=	5952 W
SMALL APPLIANCES, 3 @ 1500 W	=	4500 W
WATER HEATER	=	4500 W
WASHER	=	1500 W
DRYER	=	5000 W
DISHWASHER	=	1200 W
RANGE	=	13000 W
MICROWAVE VENT HOOD	=	1600 W
		37252 W
FIRST 10000 W @ 100%	=	10000 W
REMAINDER @ 40% (27252)(.4)	=	10901 W
FURNACE (HVAC)	=	23000 W
		43901 W

CALCULATED LOAD FOR SERVICE SIZE
43901 WATTS / 240 VOLTS = 183 AMPERES
200 AMP SERVICE STANDARD

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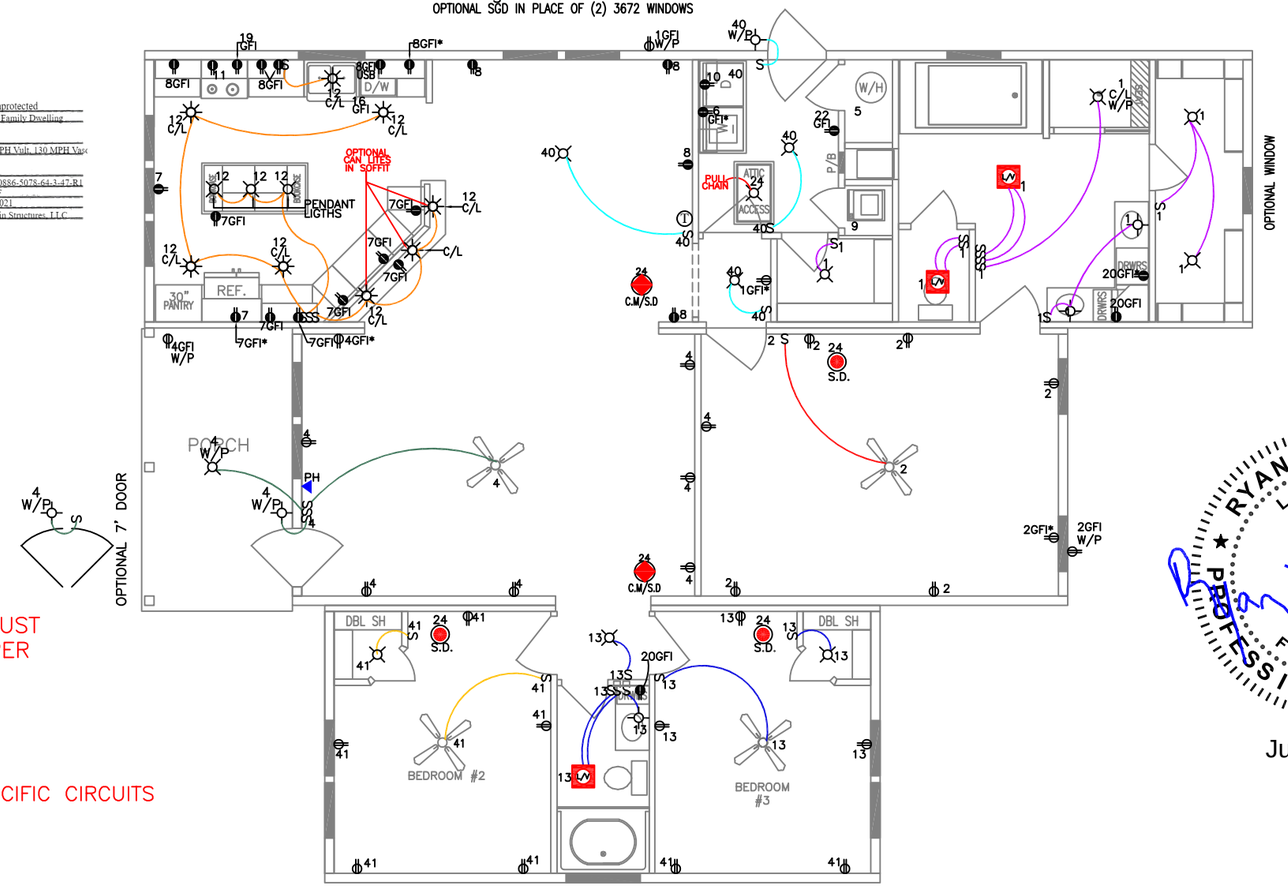
Manufacturer:	Franklin Structures, LLC

OPTIONAL ATRIUM DOOR IN PLACE OF (2) 3672 WINDOWS

OPTIONAL SGD IN PLACE OF (2) 3672 WINDOWS



THIS HOME IS BUILT FOR THE 2017 NEC!!

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

ALL RECEPTACLES MUST BE LISTED AS TAMPER RESISTANT

NOTES:

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

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

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

NOTES!!

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

2.a)15KW: 60 AMP; 2 POLE; 4–4–6 and 30 AMP; 2 POLE; 10–2 W/G
b)20KW; 60 AMP; 2 POLE; (2) 4–4–6
c)23KW; 60 AMP; 2 POLE; 6–6–8 and 50 AMP; 2 POLE; 6–6–8

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

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

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

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

Jul 12, 2021

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	WAYNE	6/16/21
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	

TITLE: ELECTRICAL

NO: MTF–10886–5078–64–3–47–R1 | REV: | SHEET: 4 of 8

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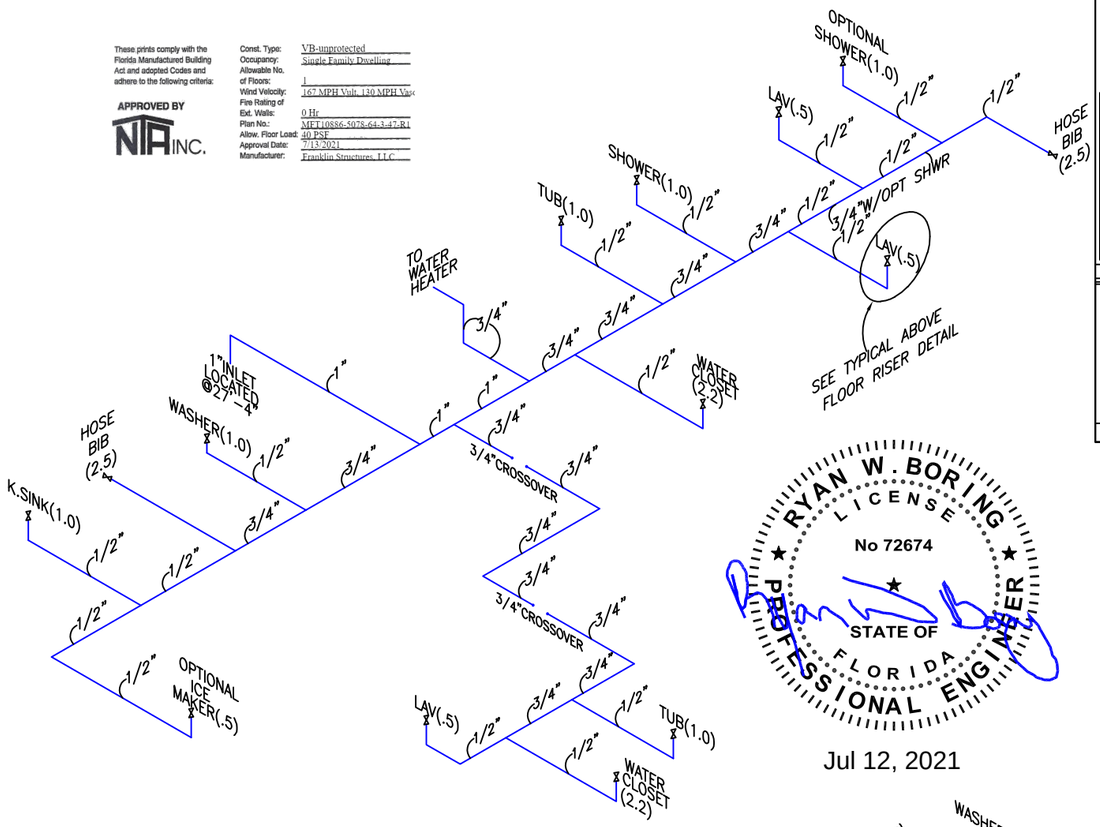
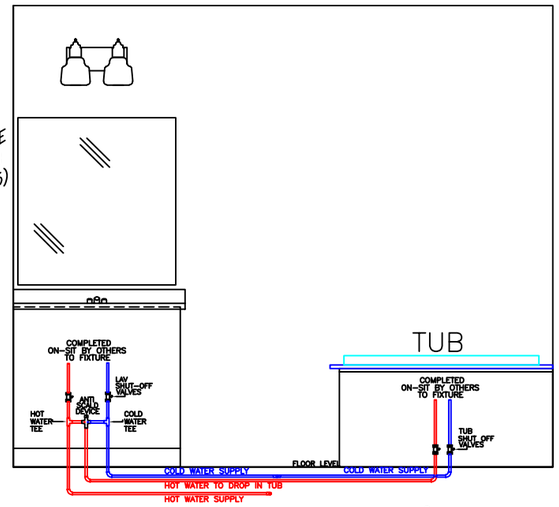
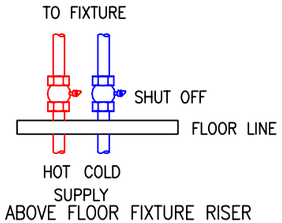


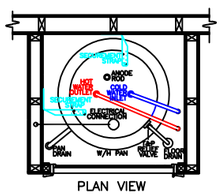


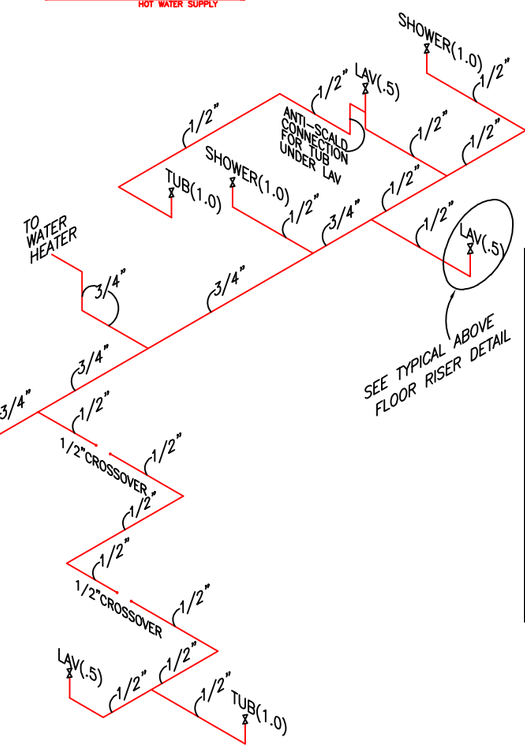


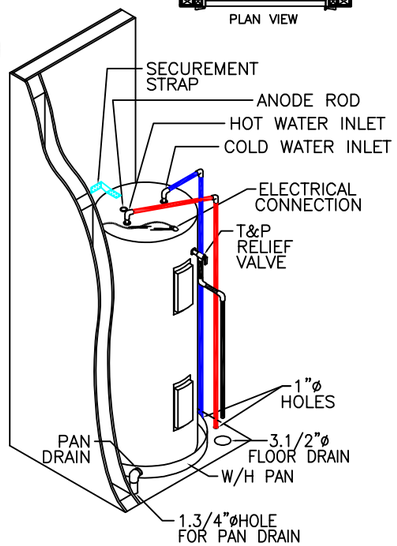
TYPICAL ABOVE FLOOR FIXTURE RISER FOR ALL LAVS, SINKS, AND COMMODES–RISERS WILL BE POLY WITH CHROME/PVC CUTOFFS.

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

Jul 12, 2021







FRONT VIEW ISOMETRIC

NOTES FOR 2018 IECC ONLY!
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: 17.4
TOTAL FIXTURE UNITS ON HOT WATER SUPPLY: 8.4
TOTAL FIXTURE UNITS (INLET): 25.8
MAXIMUM FIXTURE UNITS PER TABLE P2903.6
FOR 50–60 PSI AND 80' COLUMN MAXIMUM ALLOWABLE LENGTH PER 2020 FBC–R (APPENDIX P) TABLE AP201.1
1/2"=2.5
3/4"=9.5
1"=32

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

REVISION:	BY:	DATE:

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	WAYNE	6/16/21

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

TITLE: WATER SCHEMATIC

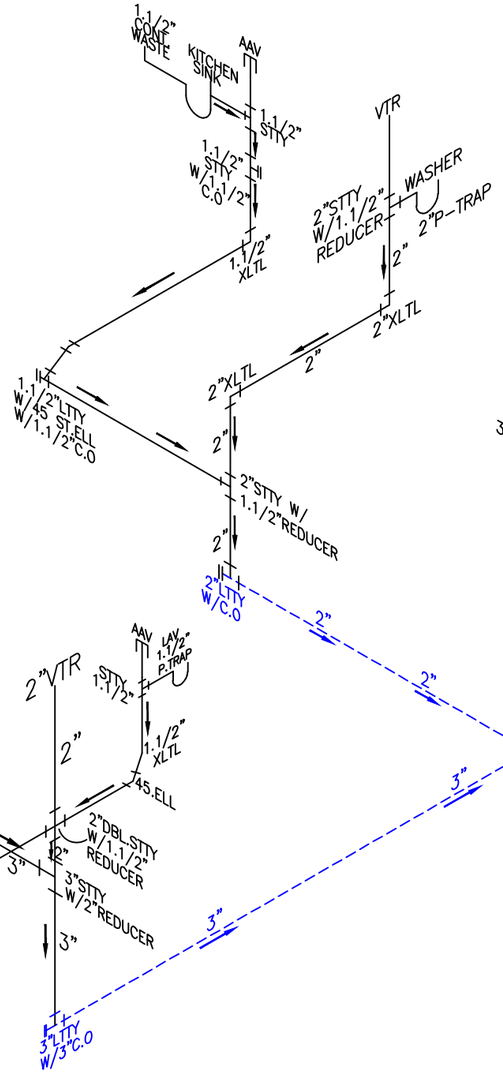
NO: 10886–5078–64–3–47–R1 REV: SHEET: 5 of 8

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

APPROVED BY
NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

OPTIONAL FREESTANDING TUB IN PLACE OF DECK TUB



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
Jul 12, 2021

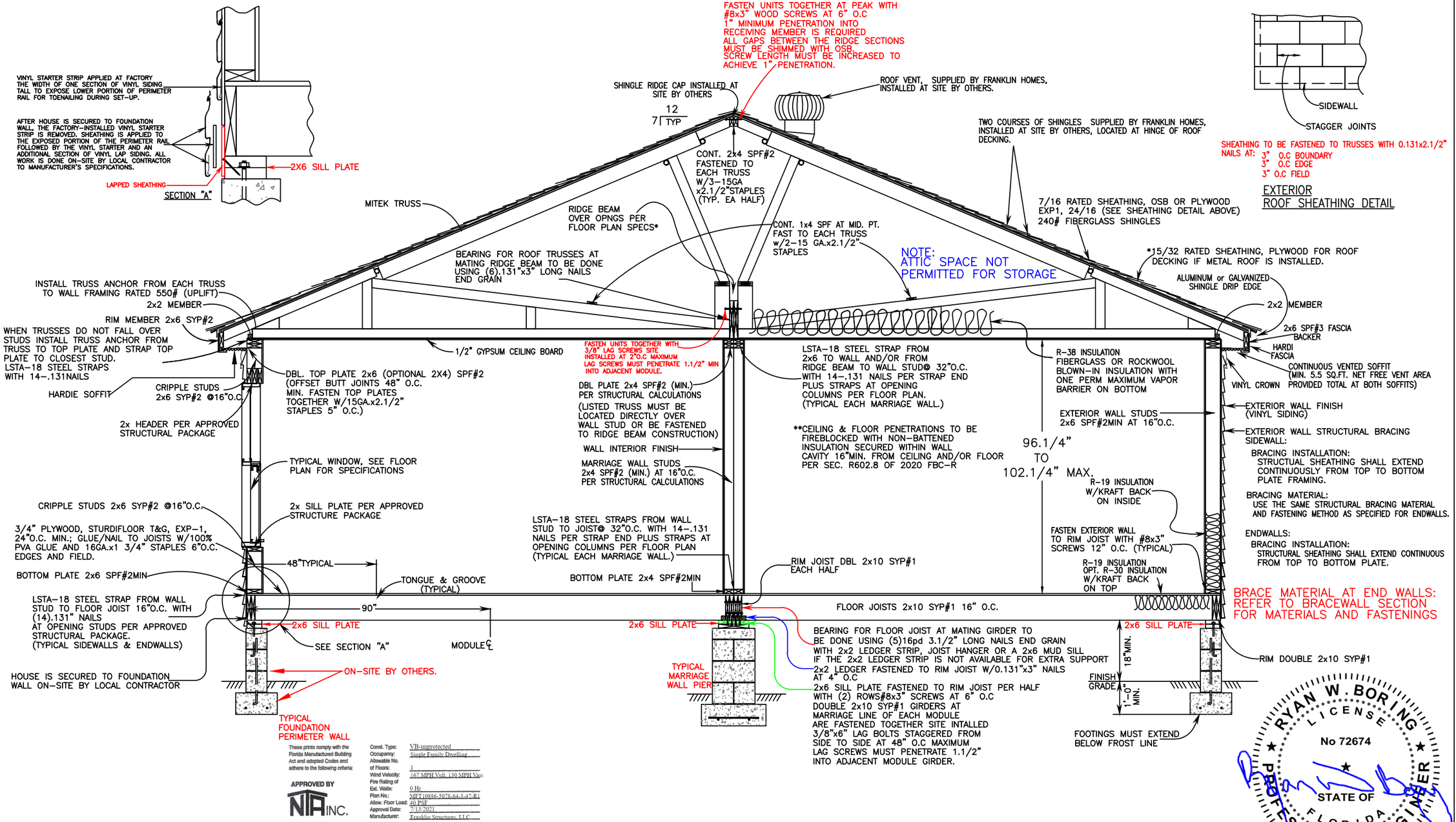
REVISION:	BY:	DATE:

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	WAYNE	6/16/21
GRAPHIC SCALE	0 1' 2' 3' 4' 5'	

TITLE: DRAIN SCHEMATIC
NO: MFT-10886-5078-64-3-47-R1
REV:
SHEET: 6 of 8



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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult. 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

RIDGE BEAM CONSTRUCTION

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

NOTES:

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

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

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	WAYNE	6/16/21
SCALE:	N.T.S.	

TITLE: TYPICAL OFF-FRAME CROSS SECTION

NO: MTF-10886-5078-64-3-47-R1 | REV: | SHEET: 7 of 8

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult. 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr.
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

FULL LENGTH FILLET WELDS ONE SIDE OF ALL FLANGES AND WEBS AT ALL OUTRIGGERS AND CROSSMEMBERS.

13GA. OUTRIGGERS

3"

1.1/8"

1.1/2"

13GA. CROSSMEMBERS (TO BE LOCATED OPPOSITE OUTRIGGERS AS SHOWN)

CROSSMEMBER SECTION

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

SHINGLE RIDGE CAP INSTALLED AT SITE BY OTHERS

12
7 TYP

ROOF VENTS SUPPLIED BY FRANKLIN HOMES INSTALLED ON-SITE BY LOCAL CONTRACTOR. (MIN. 5.5 FT² NET FREE VENT AREA PROVIDED)

MITEK TRUSS

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

240# FIBERGLASS SHINGLES

MIN. 19/32 RATED SHEATHING, PLYWOOD FOR OPTIONAL METAL ROOF

NOTE:
ATTIC SPACE NOT PERMITTED FOR STORAGE

TWO COURSES OF SHINGLES SUPPLIED BY FRANKLIN HOMES, INSTALLED ON-SITE BY LOCAL CONTRACTOR, LOCATED AT HINGE OF ROOF DECKING.

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

CONT 2x4 SPF#3 OR RIDGE BEAM OVER OPNGS PER FLOOR PLAN SPECS*

7/16"RATED SHEATHING, OSB OR PLYWOOD EXP1, 24/16 (SEE SHEATHING DETAIL ABOVE)

ALUMINUM or GALVANIZED SHINGLE DRIP EDGE

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

RIM MEMBER 2x6 SPF#2 MINIMUM

WHEN TRUSSES DO NOT FALL OVER STUDS INSTALL TRUSS ANCHOR FROM TRUSS TO TOP PLATE AND STRAP TOP PLATE TO CLOSEST STUD.

CRIPPLE STUDS 2x4 SPF#2 @16"O.C.

2x HEADER PER APPROVED STRUCTURAL PACKAGE

1/2" GYPSUM CEILING BOARD

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

FASTEN UNITS TOGETHER WITH 3/8" LAG SCREWS SITE INSTALLED AT 4"O.C MAXIMUM LAG SCREWS MUST PENETRATE 1.1/2" MIN INTO ADJACENT MODULE.

DBL PLATE 2x4 SPF#2 (MIN.) (LISTED TRUSS MUST BE LOCATED DIRECTLY OVER WALL STUD OR BE FAS-TENED TO RIDGE BEAM CONSTRUCTION).

LSTA-18 STEEL STRAP FROM 2x6 TO WALL AND/OR FROM RIDGE BEAM TO WALL STUD@ 32"O.C. WITH 14-.131 NAILS PER STRAP END PLUS STRAPS AT OPENING COLUMNS PER FLOOR PLAN. (TYPICAL EACH MARRIAGE WALL.)

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

2x6 SPF#2 FASCIA BACKER

HARDI FASCIA

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

EXTERIOR WALL FINISH

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

EXTERIOR WALL STRUCTURAL BRACING SIDEWALL:

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

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

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

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

RIM JOIST DBL 2x8 SYP#2 (OPTIONAL 2X10)

FLOOR JOISTS 2x8 SYP#2 16" O.C (OPTIONAL 2X10)

HOME REQUIRES CONTINUOUS SUPPORT UNDER PERIMETER WALL.
SUPPORT WILL BE REQUIRED AT PORCH COLUMNS AND END OF EACH BRACEWALL.
SUPPORT AND PIER SPACING BASED ON NUMBER(S) OF RIM JOISTS

ON-SITE BY OTHERS.

WALL INTERIOR FINISH

MARRIAGE WALL STUDS 2x4 SPF#2 (MIN.) AT 16"O.C.

LSTA-18 STEEL STRAPS FROM WALL STUD TO JOIST@ 32"O.C. WITH 14-.131 NAILS PER STRAP END PLUS STRAPS AT OPENING COLUMNS PER FLOOR PLAN (TYPICAL EACH MARRIAGE WALL.)

BOTTOM PLATE 2x4 SPF#2

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

102.1/4" TO 108.1/4"

SITE INSTALL 3/8"x3" LAG SCREWS STAGGERED FROM SIDE TO SIDE AT 48"O.C. MAXIMUM. LAG SCREWS MUST PENETRATE 1" MINIMUM INTO ADJACENT MODULE RIM JOIST.

R-19 INSULATION W/KRAFT BACK ON INSIDE

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

R-19 INSULATION W/OPT. R-30INSULATION W/KRAFT BACK ON TOP

RIM JOIST DBL 2x8 SYP#2 (OPTIONAL 2X10) EACH HALF

I-BEAM - M12x11.8 OR M10x9

TYPICAL MARRIAGE WALL PIER

SUPPORT REQUIRED AT COLUMN LOADS
SUPPORT REQUIRED MATE WALL WITH INTERVALS NO MORE THAN 8'-6" APART
(REFER TO PAGE#2 OF THE STRUCTURAL CALCULATIONS)

LUMBER CONTINUOUSLY RUN THE LENGTH OF HOME FOR FIREBLOCKING. (SEE NOTE 5)

TYPICAL PIER

TYPICAL OUTRIGGER AND CROSSMEMBER SPACING 96"O.C. MAXIMUM

1-5/16"x3" LAG SCREWS THROUGH FLANGE INTO JOIST AT EACH OUTRIGGER

HOUSE IS SECURED TO FOUNDATION

LSTA-18 STEEL STRAP FROM WALL STUD TO FLOOR JOIST 16"O.C. WITH (14).131" NAILS AT OPENING STUDS PER APPROVED STRUCTURAL PACKAGE. (TYPICAL SIDEWALLS & ENDWALLS)

BOTTOM PLATE 2x6 SPF#2

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

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

2x SILL PLATE PER APPROVED STRUCTURE PACKAGE

TONGUE & GROOVE (TYPICAL)

ON-SITE BY OTHERS.

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

SIDEWALL

STAGGER JOINTS

SHEATHING TO BE FASTENED TO TRUSSES WITH 0.131x2.1/2" NAILS AT:
3" O.C BOUNDARY
3" O.C EDGE
3" O.C FIELD

EXTERIOR ROOF SHEATHING DETAIL

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

Jul 12, 2021

RIDGE BEAM CONSTRUCTION

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

NOTES:
1. MICROLAM GRADE 2.0
2. MICROLAM MUST BE CONTINUOUS OVER CLEARSPAN(S) AND EXTEND PAST OPENING STUDS.
3. BEAMS SUPPORTED BY ENDWALL COLUMNS MUST EXTEND CONTINUOUS OVER COLUMNS TO EXTERIOR FACE OF ENDWALL.
4. INSTALL (2x4) X 20" RIDGE BEAM STIFFENER OVER SUPPORT COLUMNS WHEN SPECIFIED ON FLOOR PLAN; FASTEN THE FACE OF THE STIFFENER TO THE RIDGE BEAM WITH 100% GLUE COVERAGE AND 6-16GA. STAPLES WITH 3/4" MINIMUM PENETRATION INTO MICROLAM BEAM.
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GENERAL CROSS SECTION NOTES

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

INTERIOR FINISH MATERIAL

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

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

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

EXTERIOR FINISH MATERIAL

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

WALL -VINYL LAP SIDING

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

FLORIDA MODULAR

	BY:	DATE:
DRAWN:	WAYNE	6/16/21
SCALE:	N.T.S.	

TITLE: TYPICAL OFF-FRAME CROSS SECTION

NO: MTF-10886-5078-64-3-47-R1 | REV: | SHEET: 8 of 8

Franklin Structures, LLC

MTF-5078-64-3-47

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Width: 30’1/2” with 15’1/4” Tag

Length: 60’

Roof Live Load: 20psf Roof LL

Wind Speeds: 167mph Vult

Wind Exposure: C

Wall Height: 9’

Max Mean Roof Height: 18’

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

Jul 12, 2021

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

Page	Description
1-5	Design Criteria and Load Cases (C&C page 1)
6	Matewall Headers
7	Matewall Columns
8	Sidewall Headers
9-10	Sidewall Columns (King & Jack)
11-12	Uplift Straps (Sidewall & Matewall)
13	Sill Plates and Lateral Only Sill/Header Connection (Sill must also be installed at top of window/door)
14-19	Shearwalls and Diaphragms
20-21	Connections
22	Floor Joist
23-24	Matewall Girders
25-26	Porch Design
27-30	Tag Header, Columns and Straps
31-34	On-Frame Floor Joists (w/ and w/out setback)

NOTE: These calculations are applicable only to the structural elements and loading criteria specifically noted herein. These calculations shall not be construed in any way to specify, certify, or design any aspects of the structure not contained 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, as applicable. Specified design criteria are based solely on information provided by the client and must be verified and approved by the local authority having jurisdiction. Ryan W. Boring, P.E. is not responsible for fabrication or erection. If it is suspected that the calculations listed in this index have been modified, substituted, or altered in any way, contact Ryan W. Boring, P.E. directly to obtain a file copy.

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

ASCE 7-10 (and 16) Chapter 30 Part I:

Wind Speed:	167	MPH	Roof Style:	Gable	(Gable or Hip)	
Wind Exposure:	C		Roof Pitch:	7 /12	tag 6/12	
Mean Roof Height:	18	FT	Roof Angle:	30.3		
Elevation:	0	FT	Max Width:	30.04	ft	Main truss width
Ke:	1.00					
Kd:	0.85					
Kzt:	1					
kt:	0.88					
qh:	53.53	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	0.9	-1.8	Zone 1	Min	57.8	-106.0
	100	0.9	-0.8		100	57.8	-52.5
Zone 2	Min	0.9	-2	Zone 2	Min	57.8	-116.7
	100	0.9	-1.2		100	57.8	-73.9
Zone 3	Min	0.9	-3.2	Zone 3	Min	57.8	-180.9
	100	0.9	-1.5		100	57.8	-89.9
OH Z1	Min		-2.6	OH Z1	Min		-148.8
	100		-1.6		100		-95.3
OH Z2	Min		-2.8	OH Z2	Min		-159.5
	100		-2		100		-116.7
OH Z3	Min		-4	OH Z3	Min		-223.8
	100		-2.3		100		-132.8

Walls

Gcp	Area	Pos	Neg	Pressure	Area	Pos	Neg
Zone 4	10	1	-1.1	Zone 4	10	63.2	-68.5
	100	0.825	-0.93		100	53.8	-59.2
Zone 5	10	1	-1.4	Zone 5	10	63.2	-84.6
	100	0.825	-1.1		100	53.8	-68.5

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Design Pressures

Pressure	Area	Pos	Neg
Zone 1	Min	34.7	-63.6
	100	34.7	-31.5
Zone 2	Min	34.7	-70.0
	100	34.7	-44.3
Zone 3	Min	34.7	-108.6
	100	34.7	-54.0
OH Z1	Min		-89.3
	100		-57.2
OH Z2	Min		-95.7
	100		-70.0
OH Z3	Min		-134.3
	100		-79.7
Zone 4	10	37.9	-41.1
	100	32.3	-35.5
Zone 5	10	37.9	-50.7
	100	32.3	-41.1

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	20.34	1.61	-32.65	-29.44	27.30	4.82	-38.01	-35.33
-Gcpi	39.61	20.88	-13.38	-10.17	46.57	2.00	-18.74	-16.06
Max	39.61	20.00	-32.65	-29.44	46.57	4.82	-38.01	-35.33

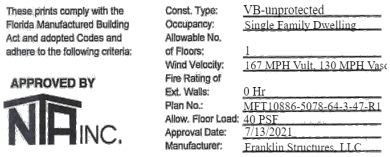
Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-33.72	-46.57	-29.44	-33.72	11.78	-25.16	-35.33	-66.91	-38.01	-35.33	23.02	-32.65
-Gcpi	-14.45	-27.30	-10.17	-14.45	31.05	-5.89	-16.06	-47.64	-18.74	-16.06	42.29	-13.38
Max	-33.72	-46.57	-29.44	-33.72	31.05	-25.16	-35.33	-66.91	-38.01	-35.33	42.29	-32.65

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	4.82	-38.01	20.00	-32.65	-28.3717	-31.5836	42.83	62.63	34.26	49.78
Long	-66.91	-38.01	-46.57	-29.44	-28.3717	-	-28.91	55.67	-17.13	36.94

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	2.89	-22.80	12.00	-19.59	-17.02	-18.95	25.70	37.58	20.56	29.87
Long	-40.15	-22.80	-27.94	-17.67	-65.84	-53.64	25.70	33.40	20.56	22.16



Design Criteria:

Total Length:	60 ft						
Total Width:	30.04 ft	Top chord DL:	10 psf	Vult:	167 mph		
Unit Width:	15.02 ft	Bottom chord DL:	10 psf	Vasd:	129 mph		
Pitch:	7 /12	Bottom chord LL:	0 psf	Exposure:	C		
Roof Angle:	30.3 deg	Stories:	1	Internal Press:	0.18		
Wall height:	9 ft	Floor Live Load:	40 psf	End zone, 2a:	6.0083333 ft		
Overhang:	12 in	Floor Dead Load:	10 psf				
Blocking Height:	36 in	Wall Dead Load:	5 psf				
Eave Height:	10 ft	Ceiling R value:	30				
Min Mean Roof ht:	18 ft	Framing Rafters?:	N				
Mean Roof Height:	19.26 ft	Truss Spacing:	24 in oc				

Snow Loading:		
Ground Snow Load:	0 psf	
Snow Thermal factor:	1.1	
Snow exposure factor:	1	
Snow importance Factor:	1	
Flat Roof Snow, Pf:	0 psf	
Sloped Roof Snow Ps:	0 psf	
Unbalanced Roof Load:	0.00 psf	
Minimum Roof Lr:	17 psf	

Wind Loading:

	WW	LW	WWOH
Transverse End:	2.89	-22.80	-17.02
Interior:	12.00	-19.59	-18.95
Long End:	-40.15	-22.80	-65.84
Interior:	-27.94	-17.67	-53.64

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Snow Loading

Design Parameters:

Eave to ridge Distance, W:	16	ft
Ground Snow Load, p_g:	0	psf
Exposure Factor, C_e:	1.0	
Thermal Factor, C_t:	1.1	
Importance Factor, I:	1.0	
Framing Type:	Trusses/Other	

Snow Density (g):

density:	14	pcf

Flat-Roof Snow Load (p_f):

Pf:	0.0	psf

Rain on Snow Surcharge:

amax:	0.3204167	deg
prss:	0.0	psf
pf:	0.0	psf

Minimum Values for Low-Slope Roofs:

Mono:	15.0	deg
amin:	4.9	deg
	2.38	deg
amin:	15.0	deg
pf, pg<=20:	0.0	psf
pf, pg>20:	20.0	psf
pfmin:	0.0	psf
pf:	0.0	psf

Sloped Roof Snow Loads:

degrees:	30.3
Cs	
Ct=1:	0.99
Ct=1.1:	1.00
Ct=1.2:	1.00
Ps:	0.0

Unbalanced Snow Loads:

amax:	70.00	deg
amin:	4.87	deg
amin:	2.38	deg
minimum:	2.38	deg
S:	1.71	/1
W:	20.0	ft
hd:	0.58	ft
Pww:	0.0	
Plw Ridge:	0.0	
Plw Length:	0.0	
Plw Eave:	0.0	

Ice Dams Along Eves[2]:

ps:	0.0	psf

Minimum Roof Live Load:

R1:	1.0	
R2:	0.85	
F:	7.0	
Lr:	17.0	psf

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Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Truss Reactions

Gravity				Uplift:			
	Matewall:	552	lbs		Matewall:	697	lbs
	Sidewall:	671	lbs		Sidewall:	494	lbs
	Truss Spacing:	24	in oc.		Snow Load:	0	psf

Wost case truss reactions

Load Cases for Ranch		Roof			Roof and 1 Story			
	Load Case	Sidewall	Matewall	Endwall	Sidewall	Matewall	Endwall	LDF
1	D	160	150	30	280	270	85	0.9
2	S	0	0	0	0	0	0	1.15
3	Su	0	0	0	0	0	0	1.15
4	Lr	145	128	34	145	128	34	1.25
5	L	0	0	0	300	300	40	1
6	Wp	5	22	6	5	22	6	1.6
7	Wn	-343	-439	-106	-343	-439	-106	1.6
8	.75(L+Lr)	109	96	26	334	321	56	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)	4	16	4	229	242	34	1.6
12	D+L	160	150	30	581	571	125	1
13	D+Lr	305	278	64	425	398	119	1.25
14	D+S	160	150	30	280	270	85	1.15
15	D+Su	160	150	30	280	270	85	1.15
16	D+.75(L+Lr)	269	246	56	614	591	141	1.25
17	D+.75(L+S)	160	150	30	506	496	115	1.15
18	D+.75(L+Su)	160	150	30	506	496	115	1.15
19	D+.75(L+S+Wp)	164	166	34	509	512	119	1.6
20	.6D+Wn	-247	-349	-88	-175	-276	-55	1.6
	Dead Load:	160	150	30	280	270	85	
	Dead LC:	D	D	D	D	D	D	
	Live Load:	145	128	34	334	321	56	
	Live LC:	Lr	Lr	Lr	.75(L+Lr)	.75(L+Lr)	.75(L+Lr)	
	Total Load:	305	278	64	614	591	141	
	Total LC:	D+Lr	D+Lr	D+Lr	D+.75(L+Lr)	D+.75(L+Lr)	D+.75(L+Lr)	
	Uplift Load:	-247	-349	-88	-175	-276	-55	
	Uplift LC:	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	.6D+Wn	
	Design Load:	336	278	64	581	571	125	
	Design LC:	D+Lr	D+Lr	D+Lr	D+L	D+L	D+L	
	Design LDF:	1.25	1.25	1.25	1	1	1	

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Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Floor Load only

	Live				300	300	1
	Dead				75	75	0.9

Combined Loading:

Max Bending:

1	D	160	150	30	280	270	85	plf
2	D+Wp	165	172	36	285	292	91	plf
	Max down	165	172	36	285	292	91	plf
	Lateral	27.94	5	27.94	27.94	5	27.94	psf

Max Axial

1	D+.75(L+Lr)	269	246	56	614	591	141	plf
2	D+.75(L+S)	160	150	30	506	496	115	plf
3	D+.75(L+Su)	160	150	30	506	496	115	plf
4	D+.75(L+S+Wp)	164	166	34	509	512	119	plf
	Max down	269	246	56	614	591	141	plf
	Lateral	20.96	3.75	20.96	20.96	3.75	20.96	psf

Location: Matewall

Matewall Headers Supporting Roof

Supporting: Roof

Vertical Load

Dead Load:	150	plf	D
Live Load:	128	plf	Lr
Total Load:	278	plf	D+Lr
Uplift Load:	-349	plf	.6D+Wn

Cr: 1.15 LL defl L/ 240

Cd: 1.25 TL defl L/ 180

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

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	10.9	13.1	47.6
2	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	21.4	98.9
3	1	1.5	11.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3468	285	16.9	31.6	178.0
4	1	1.5	14	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3366	285	21.0	49.0	343.0
5	1	1.5	16	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3306	285	24.0	64.0	512.0
6	1	1.5	7.25	SYP	#2	Edge	1	1.0	925	175	565	1400000	510000	1156	219	10.9	13.1	47.6
7	1	1.5	9.25	SYP	#2	Edge	1	1.0	925	175	565	1400000	510000	1156	219	13.9	21.4	98.9
8	1	1.5	11.25	SYP	#2	Edge	1	1.0	750	175	565	1400000	510000	938	219	16.9	31.6	178.0
9							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	193	129	102	134
2	246	162	130	171
3	299	195	158	208
4	373	239	196	259
5	426	270	224	296
6	151	72	90	119
7	193	92	115	152
8	235	101	140	185
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

	Member	Max Span		Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(1) 2x 7.25 LVL	101	in	1200	-1470	1.1
2	(1) 2x 9.25 LVL	129	in	1500	-1880	1.1
3	(1) 2x 11.25 LVL	157	in	1900	-2280	1.1
4	(1) 2x 14 LVL	196	in	2300	-2850	1.1
5	(1) 2x 16 LVL	224	in	2600	-3260	1.1
6	(1) 2x 8 SYP #2	72	in	900	-1050	1.5
7	(1) 2x 10 SYP #2	92	in	1100	-1340	1.5
8	(1) 2x 12 SYP #2	101	in	1200	-1470	1.5
9	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
10	() 0x 0	#N/A	in	#N/A	#N/A	#N/A

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Location: Matewall

Matewall Columns Supporting Roof

Supporting: Roof

Side Column

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	285 plf	D+Lr	Lateral only			Vertical:	150 plf		0 Top/Btm Plate (tp):	4.5	in
Total Load:	285 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	5 psf	W	LVL:	Microllam	
Uplift Load:	-326 plf	.6D+Wn	Lateral:	5 psf	W	Combined Vert and Lat (max Vert)			LVL MOE (E):	2000000	psi
						Vertical:	285 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					
	Header	1.5	inches						Allowable:	1200	366	379	425	1200000	440000		600

# of Studs		1	2	3	4	5	6	7	8
Properties									
Area	in^2	5.3	10.5	15.8	21.0	26.3	31.5	36.8	42.0
Sx	in^3	3.1	6.1	9.2	12.3	15.3	18.4	21.4	24.5
Ix	in^4	5.4	10.7	16.1	21.4	26.8	32.2	37.5	42.9
Axial Loading									
Fc compression		81	162	243	323	404	485	566	647
Fc Perp compression		40	80	121	161	201	241	281	322
Tension		116	232	348	464	580	696	812	928
Fcperp									
Combined Loading									
Uplift/Lateral		116	232	348	464	580	696	812	928
Vert/Lateral max Lat		137	295	453	612	778	936	1095	1254
Vert/Lateral Max Vert		75	158	242	325	379	460	542	624
Deflection Check	L/	802	1604	2406	3208	4009	4811	5613	6415
		OK	OK	OK	OK	OK	OK	OK	OK
		40	80	121	161	201	241	281	322

Max Span	Max Trib	Max Side Opening			
1	40 in	62 in	=	5 ft -	2 in
2	80 in	141 in	=	11 ft -	9 in
3	121 in	220 in	=	18 ft -	3 in
4	161 in	299 in	=	24 ft -	11 in
5	201 in	378 in	=	31 ft -	6 in
6	241 in	457 in	=	38 ft -	1 in
7	281 in	536 in	=	44 ft -	7 in
8	322 in	615 in	=	51 ft -	3 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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Occupancy:	Single Family Dwelling
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Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
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:	160 plf	D	
Live Load:	145 plf	Lr	
Total Load:	336 plf	D+Lr	
Uplift Load:	-247 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							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	65	38	44	50
2	92	54	62	70
3	144	78	97	110
4	190	99	128	145
5	83	35	44	50
6	117	49	62	70
7	183	77	97	110
8	241	93	128	145
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

	Member	Max Span	Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(2) 2x 3 SPF #2	38 in	600	-400	0.5
2	(2) 2x 4 SPF #2	53 in	800	-550	0.5
3	(2) 2x 6 SPF #2	78 in	1100	-810	0.5
4	(2) 2x 8 SPF #2	99 in	1400	-1020	0.5
5	(2) 2x 3 SYP #2	35 in	500	-370	0.4
6	(2) 2x 4 SYP #2	49 in	700	-510	0.4
7	(2) 2x 6 SYP #2	77 in	1100	-800	0.4
8	(2) 2x 8 SYP #2	93 in	1400	-960	0.4
9	() 0x 0	#N/A in	#N/A	#N/A	#N/A
10	() 0x 0	#N/A in	#N/A	#N/A	#N/A

.131x3"			# nails		# can be based off span or header # .131x3" nails per header
			Grav	Uplift	
Grav	69.1	lb	4.34	2.26	5
uplift	88.4	lb	5.79	3.11	6
			7.96	4.58	8
			10.13	5.77	11
			3.62	2.09	4
			5.07	2.88	6
			7.96	4.52	8
			10.13	5.43	11

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

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Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
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:	336 plf	D+Lr	Lateral only			Vertical:	165 plf	0	Top/Btm Plate (tp):	4.5	in
Total Load:	336 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	38 psf	W	Header height:	80	in
Uplift Load:	-247 plf	.6D+Wn	Zone 5:	46 psf	W	Combined Vert and Lat (max Vert)			LVL:	Micrallam	
			Zone 4:	39 psf	W	Vertical:	269 plf	0	LVL MOE (E):	2000000	psi
						Lateral:	28.2 psf	.75W	E min:	1016411	psi
			def=.7 C&C			Combined Uplift and Lat			Fb:	2750	psi
Cr:	1					Vertical:	-247 plf	.6D+Wn	Fv:	285	psi
Cd:	1.6					Lateral:	28.2 psf	W	Fcperp:	750	psi
Cd grav:	1.25		ateral deflection L/	120					Vol eff (e):	0.136	
Vertical									Cr (LVL):	1.04	

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

Single King Stud

Opening:	16	in	Lateral Only		Vertical Only		Combined Max Lat		Combind Max Vert				
			Fb:	1092 psi	Fc:	60 psi	CSI:	0.70	CSI:	0.54	Max CSI:	0.70	**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		23	47	70	94	117	28	56	83	111	139
Moment at Header		31	63	94	126	157	37	74	112	149	186
Shear		53	106	159	212	265	63	126	189	252	315
Combined Loading											
Max Lat		308	802	1281	1757	2233	308	802	1281	1757	2233
Max Vert		217	515	808	1100	1391	217	515	808	1100	1391
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		23	47	70	94	117	28	56	83	111	139

Max Span	End Zone						Interior Zone					
1	30	in =	2	ft -	6	in	39	in =	3	ft -	3	in
2	77	in =	6	ft -	5	in	95	in =	7	ft -	11	in
3	124	in =	10	ft -	4	in	150	in =	12	ft -	6	in
4	171	in =	14	ft -	3	in	206	in =	17	ft -	2	in
5	218	in =	18	ft -	2	in	262	in =	21	ft -	9	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:	167 MPH Vult, 130 MPH Vasc
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Location: Sidewall

Sidewall Studs (Jack)

Supporting: Roof

Vertical Load

NDS Load: 336 plf D+Lr

Total Load: 336 plf D+Lr

Uplift Load: -247 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	222	445	667	890	1112	1334	1557	1779	2002	2224
Fc Perp compression 1.5 in	45	91	136	182	227	273	318	364	409	455
Fc Perp compression 3 in	91	182	273	364	455	546	637	728	818	909
Fc Perp compression 4.5 in	136	273	409	546	682	818	955	1091	1228	1364
Tension	350	700	1049	1399	1749	2099	2449	2798	3148	3498

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

Max Span	Double Headers	Triple Headers
1	175 in = 14 ft - 7 in	266 in = 22 ft - 2 in
2	351 in = 29 ft - 3 in	533 in = 44 ft - 4 in
3	527 in = 43 ft - 11 in	800 in = 66 ft - 8 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: 167 MPH Vult, 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Uplift Straps: Matewall

Uplift: -349 plf

Stud Spacing: 16 in

Strapping

Strap All: 921.3 lbs LSTA18 (.83 reduction for .131)

fasteners: 14 .131x 2.5" (.83 REDUCTION)

Strap Spacing: 2.64 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	46	62
2	110	126
3	174	190
4	236	252
5	300	316
6	364	380
7	428	444
8	490	506
		total span

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

If sheathing is being used for uplift NOT at openings:

Max OSB per E510A: 1500 plf

.131 Nail: 108 lb

15ga: 82 lb

Spacing from OSB to rail:

.131 Nail: 3.72 " oc

15ga: 2.82 " oc

fasteners into Studs:

.131 Nail: 4.3 lb Use 3

15ga: 5.7 lb Use 4

Uplift Straps: Sidewall

Uplift: -247 plf Estimated

Stud Spacing: 16 in

Strapping

Strap All: 921.3 lbs LSTA18 (.83 reduction for .131)

fasteners: 14 .131x 2.5" (.83 REDUCTION)

Strap Spacing: 3.73 ft (MAX SPACING USE 32" OC)

At openings

Span (in)

# of straps	Side opening	center opening
1	72	88
2	162	178
3	252	268
4	342	358
5	430	446
6	520	536
7	610	626
8	700	716
		total span

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

If sheathing is being used for uplift NOT at openings:

Max OSB per E510A: 1500 plf

.131 Nail: 108 lb

15ga: 82 lb

Spacing from OSB to rail:

.131 Nail: 5.25 " oc

15ga: 3.98 " oc

fasteners into Studs:

.131 Nail: 3.0 lb Use 2

15ga: 4.0 lb Use 3

Sill Plates

Lateral Load
Lateral only
Wind: 192 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																		

	lu	le	Fbe	Cl	Shear	Moment	Def
1	1.0	2.1	133689	1.00	145	78	96
2	1.0	2.1	133689	1.00	280	111	120
3	1.0	2.1	133689	1.00	414	145	138
4	1.0	2.1	133689	1.00	185	71	96
5	1.0	2.1	133689	1.00	359	100	120
6	1.0	2.1	133689	1.00	534	131	138
7							
8							
9							
10							

Sill and header lateral connection:

Span (ft)	Load @ Ends (lbs)	Nail Zeg(lb)	0.131 Nails	15ga Zeg(lb)	15gax2.5" Staples
2	192.30	88	3	48	5
3	288.45		4		7
4	384.60		5		9
5	480.75		6		11
6	576.90		7		13
7	673.05		8		15
8	769.19		9		17
9	865.34		10		19
10	961.49		11		21
11	1057.64		12		23
12	1153.79		14		25
13	1249.94		15		27
14	1346.09		16		29

	Member	Max Span	Reactions (lbs) Gravity
1	(1) 2x 5 SPF #2	78 in	700
2	(2) 2x 5 SPF #2	110 in	900
3	(3) 2x 5 SPF #2	137 in	1100
4	(1) 2x 5 SYP #2	70 in	600
5	(2) 2x 5 SYP #2	99 in	800
6	(3) 2x 5 SYP #2	131 in	1100
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: 167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC
Model: 5078-64-3-47
Date: 8/6/2019

Main

Wind Pressures for Low-rise buildings or buildings with h<60ft
ASCE 7-10 Chapter 30 Part I:

Wind Speed, Vult:	167 MPH	Roof Style:	Gable		
Wind Exposure:	C	Roof Pitch:	7 /12		
Mean Roof Height:	18 FT	Roof Angle:	30.3		
Elevation:	0 FT	Width	30.04 ft	Actual Width 42'6.75"	
Ke:	1.00	2a:	6 ft		
Kd:	0.85	Wall Height:	9 ft		
Kzt:	1	Heel Ht:	6 in		
kt:	0.88	Roof Ht:	8.76 ft		
qh:	53.53 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	20.3	1.6	-32.7	-29.4	27.3	4.8	-38.0	-35.3
-Gcpi	39.6	20.9	-13.4	-10.2	46.6	24.1	-18.7	-16.1
Max	39.6	20.9	-32.7	-29.4	46.6	24.1	-38.0	-35.3

Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-33.7	-46.6	-29.4	-33.7	11.8	-25.2	-35.3	-66.9	-38.0	-35.3	23.0	-32.7
-Gcpi	-14.5	-27.3	-10.2	-14.5	31.0	-5.9	-16.1	-47.6	-18.7	-16.1	42.3	-13.4
Max	-33.7	-46.6	-29.4	-33.7	31.0	-25.2	-35.3	-66.9	-38.0	-35.3	42.3	-32.7

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	24.1	-38.0	20.9	-32.7	-28.4	-31.6	42.8	62.6	34.3	49.8
Long	-66.9	-38.0	-46.6	-29.4	-28.4	-	-28.9	55.7	-17.1	36.9

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	14.5	-22.8	12.5	-19.6	-17.0	-19.0	25.7	37.6	20.6	29.9
Long	-40.1	-22.8	-27.9	-17.7	-65.8	-53.6	25.7	33.4	20.6	22.2

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: 167 MPH Vult, 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Franklin Structures, LLC
Model: 5078-64-3-47
Date: 8/6/2019

Reduction due to tag:
Left wall: 3533.58 lb
Interior wall: 1766.79 lb

Shearwalls:

Left Endwall:		Right Endwall:		Interior Shearwall:	
End Zone:	Yes	End Zone:	Yes	End Zone:	Yes
Trib:	15 ft	Trib:	15 ft	Trib:	30 ft
End Roof:	1351 lb	End Roof:	1351 lb	End Roof:	1351 lb
End Wall:	1127 lb	End Wall:	1127 lb	End Wall:	1127 lb
Int Roof:	1621 lb	Int Roof:	1621 lb	Int Roof:	4323 lb
Int Wall:	1344 lb	Int Wall:	1344 lb	Int Wall:	3584 lb
Total force:	1910 lb	Total force:	5443 lb	Total force	8619 lb
Sheathing Thickness:	7/16 in	Sheathing Thickness:	7/16 in	Sheathing Thickness:	7/16 in
Fastener:	.131 nail	Fastener:	.131 nail	Fastener:	.131 nail
Wall Length:	15 ft	Wall Length:	15 ft	Wall Length:	14.19 ft
FHS Length:	6.8 ft	FHS Length:	12.5 ft	FHS Length:	14.19 ft
Wall Height:	9 ft	Wall Height:	9 ft	Wall Height:	9 ft
Tallest Opening:	h/2	Tallest Opening:	h/3	Tallest Opening:	h
r:	0.62	r:	0.94	r:	1.00
Co:	0.79	Co:	1.00	Co:	1.00
Perf or Segmented:	S	Perf or Segmented:	P	Perf or Segmented:	S
Blocked:	YES	Blocked:	YES	Blocked:	YES
PLF required:	281.28	PLF required:	435.48	PLF required:	607.49
Framing:	SPF	Framing:	SPF	Framing:	SPF
Required Spacing:	6 " OC	Required Spacing:	4 " OC	Required Spacing:	3 " OC
Tiedown:	2531.5 lb	Tiedown:	3919.3 lb	Tiedown:	5467.4 lb
				Strap for:	4309.355 lb

Top Sidewall:		Bottom Sidewall:	
End Zone:	yes	End Zone:	Yes
Trib:	18.00 ft	Trib:	18.00 ft
End Wall:	1522 lb	End Wall:	1522 lb
Int Wall:	3834 lb	Int Wall:	3834 lb
Total force:	5356 lb	Total force:	7544 lb
Sheathing Thickness:	7/16 in	Sheathing Thickness:	7/16 in
Fastener:	.131 nail	Fastener:	.131 nail
Wall Length:	60 ft	Wall Length:	42 ft
FHS Length:	43.8 ft	FHS Length:	36.8 ft
Wall Height:	9 ft	Wall Height:	9 ft
Tallest Opening:	5h/6	Tallest Opening:	h
r:	0.76	r:	0.88
Co:	0.71	Co:	0.80
Perf or Segmented:	P	Perf or Segmented:	P
Blocked:	YES	Blocked:	YES
PLF required:	172.16	PLF required:	256.59
Framing:	SPF	Framing:	SPF
Required Spacing:	6 " OC	Required Spacing:	6 " OC
Tiedown:	2178.9 lb	Tiedown:	2886.6 lb

Strap: 2200 S20
Sidewall interconnection: 4 "oc .131 Nails OR #8 Screw
Capacity: 130 lbs per nail
Total Capacity 3510 lbs

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: 167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Summary:	Fastener	Edge Spacing	Tiedown Force	Perf/ Segment	# of S20 or equal	Corner Connection**
Left Endwall	.131 nail	6 "OC	2531.5 lb	S	2	
Right Endwall	.131 nail	4 "OC	3919.3 lb	P	2	
Interior Shearwall	.131 nail	3 " OC	5467.4 lb	S	3	
Top Sidewall	.131 nail	6 "OC	2178.9 lb	P	1	YES
Bottom Sidewall	.131 nail	6 "OC	2886.6 lb	P	2	YES

** 4 "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.

Franklin Structures, LLC
Model: 5078-64-3-47
Date: 8/6/2019

Diaphragm:

Max Force:	8618.7	lbs
Load:	269.0	plf
Sheathing:	7/16	in
Fastener:	.131 Nail	
Framing:	SPF	
Unblocked Capacity:	294.4	plf
Blocked:	200.9	plf
Blocking distance:	0.0	ft

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

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

Single to double connection:

Max Force:	5443	lb
Length:	180	"
.131 nail:	108	lb
Spacing:	3.6	" OC

Connect single wide truss top chords to double wide top chord/gabe endwall w/ .131 nails @ 3" oc

Tag to Main conection:

Connection force:	2188	lb
Length:	30	ft
#10x4" screw:	159	lb
spacing:	12.0	"

Screw tag to main module with #10x4" screw across bottom chord of tag to rail of main unit

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Franklin Structures, LLC Tag Unit
Model: 5078-64-3-47
Date: 8/6/2019

Wind Pressures for Low-rise buildings or buildings with h<60ft
ASCE 7-10 Chapter 30 Part I:

Wind Speed, Vult:	167	MPH	Roof Style:	Gable	
Wind Exposure:	C		Roof Pitch:	6	/12
Mean Roof Height:	18	FT	Roof Angle:	26.6	
Elevation:	0	FT	Width	30.00	ft
Ke:	1.00		2a:	6	ft
Kd:	0.85		Wall Height:	9	ft
Kzt:	1		Heel Ht:	8	in
kt:	0.88		Roof Ht:	7.50	ft
qh:	53.53	psf	Stud Spacing:	16	"oc
Building Type: Enclosed			Overhang:	12	"
Gcpi:	0.18		Int. Shearwall:	NO	
	-0.18				
Min net pressure:	16	psf			

MWFRS

Transverse

	1	2	3	4	1e	2e	3e	4e
+GCpi	19.8	-14.9	-33.6	-30.5	29.3	-19.8	-40.9	-38.3
-Gcpi	39.1	4.3	-14.3	-11.3	48.6	-0.6	-21.7	-19.0
Max	39.1	-14.9	-33.6	-30.5	48.6	-19.8	-40.9	-38.3

Longitudinal

	1	2	3	4	5	6	1e	2e	3e	4e	5e	6e
+GCpi	-33.7	-46.6	-29.4	-33.7	11.8	-25.2	-35.3	-66.9	-38.0	-35.3	23.0	-32.7
-Gcpi	-14.5	-27.3	-10.2	-14.5	31.0	-5.9	-16.1	-47.6	-18.7	-16.1	42.3	-13.4
Max	-33.7	-46.6	-29.4	-33.7	31.0	-25.2	-35.3	-66.9	-38.0	-35.3	42.3	-32.7

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-19.8	-40.9	-14.9	-33.6	-53.0	-48.1	21.1	67.6	18.6	50.3
Long	-66.9	-38.0	-46.6	-29.4	-53.0	-	-28.9	55.7	-17.1	36.9

Wall forces reduced due to wind hitting main unit

Design Loading

	Vertical						Horz			
	End		Int		Overhang		End		Int	
	WW	LW	WW	LW	End	Int	Roof	Wall	Roof	Wall
Trans	-11.9	-24.6	-9.0	-20.1	-31.8	-28.9	12.7	40.6	11.2	30.2
Long	-40.1	-22.8	-27.9	-17.7	-65.8	-53.6	12.7	33.4	11.2	22.2

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:	167 MPH Vult, 130 MPH Vasc
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Franklin Structures, LLC
Model: 5078-64-3-47
Date: 8/6/2019

Pressure reduction for house blocking wind:
Pressure to tag: -22.96 psf End
-18.33 psf Int

Shearwalls:

Left Endwall:		Right Endwall: Transferred to house	
End Zone:	Yes	End Zone:	Yes
Trib:	7.5 ft	Trib:	7.5 ft
End Roof:	570 lb	End Roof:	570 lb
End Wall:	1257 lb	End Wall:	1257 lb
Int Roof:	126 lb	Int Roof:	126 lb
Int Wall:	234 lb	Int Wall:	234 lb
Total force:	2188 lb	Total force:	2188 lb
Sheathing Thickness:	7/16 in		
Fastener:	15ga staple		
Wall Length:	30.08 ft		
FHS Length:	26.00 ft		
Wall Height:	9 ft		
Tallest Opening:	h/2		
r:	0.93		
Co:	0.94		
Perf or Segmented:	P		
Blocked:	YES		
PLF required:	89.85		
Framing:	SPF		
Required Spacing:	6 " OC		
Tiedown:	863.5 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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Top Sidewall:		Bottom Sidewall:	
End Zone:	yes	End Zone:	Yes
Trib:	15 ft	Trib:	15 ft
End Wall:	919 lb	End Wall:	919 lb
Int Wall:	1718 lb	Int Wall:	1718 lb
Total force:	3305 lb	Total force:	3305 lb
Sheathing Thickness:	7/16 in	Sheathing Thickness:	7/16 in
Fastener:	.131 nail	Fastener:	.131 nail
Wall Length:	6.24 ft	Wall Length:	6.24 ft
FHS Length:	6.24 ft	FHS Length:	6.24 ft
Wall Height:	9 ft	Wall Height:	9 ft
Tallest Opening:	5h/6	Tallest Opening:	h
r:	1.00	r:	1.00
Co:	1.00	Co:	1.00
Perf or Segmented:	P	Perf or Segmented:	P
Blocked:	YES	Blocked:	YES
PLF required:	529.63	PLF required:	529.63
Framing:	SPF	Framing:	SPF
Required Spacing:	3 " OC	Required Spacing:	3 " OC
Tiedown:	4766.7 lb	Tiedown:	4766.7 lb

Strap:	2490	CS14 (lbs)
Sidewall interconnection:	6	"oc .131 Nails
Capacity:	130	lbs per nail
Total Capacity	2340	lbs

Summary:	Fastener	Edge Spacing	Tiedown Force	Perf/ Segment	# CS14 or equal	Corner Connection**
Left Endwall	15ga staple	6 "OC	863.5 lb	P	1	
Right Endwall	See connection below					
Top Sidewall	.131 nail	3 "OC	4766.7 lb	P	2	NO
Bottom Sidewall	.131 nail	3 "OC	4766.7 lb	P	2	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.

Franklin Structures, LLC
Model: 5078-64-3-47
Date: 8/6/2019

Diaphragm:

Max Force:	3304.7 lbs
Load:	103.3 plf
Sheathing:	7/16 in
Fastener:	15ga staple
Framing:	SPF
Unblocked Capacity:	172.2 plf
Blocked @ 6" edge:	188.6 plf
Blocking distance:	0.0 ft

0 ft blocked each end with 15ga staple

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

Connection to main unit:

Force:	2188 lb
Length:	30 ft
#10x4" screw	159 lb
Z: Spacing:	12 "oc

12 in oc #10x4 in screws from tag ceiling to main ceiling

Tag added for endwall vertical projection:

Pressure difference:	11.9 psf
Area per wall:	56.25 ft^2
Force:	667.92 lbs

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

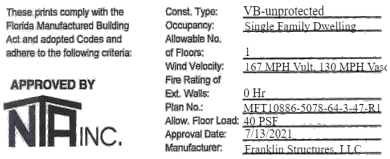
Connections

Truss to exterior wall uplift:

Uplift Force:	494	lb
H2.5A:	535	lb
MTS18:	1030	lb

Truss to exterior wall Lateral:

End:	50.7	psf
Int:	41.1	psf
Height:	9	ft
Spacing:	24	in oc
Load:		
End:	456.7	lb
Int:	370.0	lb
.131 nail:	114.84	lb
.131x3"Nails End:	4.0	
.131x3" Nails Int:	3.2	



Truss king post to Header:

Uplift:	697	lb
Gravity:	552	lb
.131 nail EG:	88.44	lb
.131 nail EG LL:	69.09	lb
# .131x3":	8.0	Nails

Or hanger rated for 552lb grav and 652lb uplift

Stud to Plate:

End:	50.75	psf
Int:	41.11	psf
Height:	9	ft
Spacing:	16	in oc
Load:		
End:	304.5	lb
Int:	246.7	lb
.131 nail:	88.44	lb
Nails End:	3.4	
Nails Int:	2.8	

End Zone: Use (4) .131x3" nails to connect studs to plates.

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

Plate to floor and plate interconnection (top plate):

End:	50.7	psf
Int:	41.1	psf
Height:	9	ft
Load:	228.37	plf
.131 Nailx3":	108	lb
Spacing of .131 nail:	5.7	" OC int and end zones
15gax2.5" staple:	72	lb
Spacing of 15ga:	3.78	" OC int and end zones

Sheathing Suction Connections (wall and roof)

	End	Int	
Wall:	-50.75	-41.11	psf
Roof:	-108.6	-63.6	psf
.131x2.5:	66	66	lbs
15gax2.5" staple:	56.8	56.8	lbs
Wall			
Member spacing:	16	16	" oc
Nail:	11.7	12.0	" oc
Staple:	10.1	12.0	" oc
Roof			
Member spacing:	24	24	" oc
Nail:	3.6	6.2	" oc
Staple:	3.1	5.4	" 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.

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Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Truss Kneewall Connection:

Tension:	687	lb	Compare to truss print,
Shear:	338	lb	Must be higher then truss.

Tension:

CS 22:	845	lb (8- .131 x2.5" nails each side)

Shear:

Rail to king post toed		
.131x3" nail:	93.31	lb
#:	3.6	Use 4
Rail to rail:		
.131x3" nail:	103.125	lbs
#:	3.3	Use 4 per bay

Location: Matewall

Matewall Girders Supporting Floor Load Only

Supporting: Roof & 1 Floor

Vertical Load

Dead Load:	76	plf	D
Live Load:	304	plf	.75(L+Lr)
Total Load:	380	plf	D+L
Uplift Load:	0	plf	

Cr: 1.15 LL defl L/ 360

Cd: 1 TL defl L/ 240

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

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	1	1.5	9.25	SYP	#1	Edge	1	1.0	1050	175	565	1600000	580000	1050	175	13.9	21.4	98.9
2	1.5	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							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
5							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
6							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
7							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
8							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
9							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	121	75	110	121
2	172	92	126	139
3	223	107	139	153
4	#N/A	#N/A	#N/A	#N/A
5	#N/A	#N/A	#N/A	#N/A
6	#N/A	#N/A	#N/A	#N/A
7	#N/A	#N/A	#N/A	#N/A
8	#N/A	#N/A	#N/A	#N/A
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

	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	106	in	1700	0	0.8
4	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
5	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
6	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
7	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
8	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
9	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
10	() 0x 0	#N/A	in	#N/A	#N/A	#N/A

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Location: Matewall

Matewall Girders Supporting Roof & 1 Floor

Supporting: Roof & 1 Floor

Vertical Load

Dead Load:	270 plf	D
Live Load:	321 plf	.75(L+Lr)
Total Load:	571 plf	D+L
Uplift Load:	-276 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							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
5							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
6							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
7							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
8							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
9							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	87	61	108	110
2	121	75	124	126
3	155	87	136	139
4	#N/A	#N/A	#N/A	#N/A
5	#N/A	#N/A	#N/A	#N/A
6	#N/A	#N/A	#N/A	#N/A
7	#N/A	#N/A	#N/A	#N/A
8	#N/A	#N/A	#N/A	#N/A
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

	Member	Max Span		Reactions (lbs) Gravity	Reactions (lbs) Uplift	Bearing (in)
1	(1) 2x 10 SYP #1	61	in	1500	-710	1.8
2	(1.5) 2x 10 SYP #1	75	in	1800	-870	1.2
3	(2) 2x 10 SYP #1	86	in	2100	-1000	0.9
4	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
5	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
6	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
7	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
8	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
9	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
10	() 0x 0	#N/A	in	#N/A	#N/A	#N/A

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

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																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

	Shear	Moment	LL def	TL def
1	603	180	197	217
2				
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					
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:

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Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Location: Matewall

Porch Headers matewall and sidewall

Supporting: Roof

Vertical Load

Dead Load:	150	plf	D
Live Load:	128	plf	Lr
Total Load:	334	plf	D+Lr
Uplift Load:	-341	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*1.33ft=572lb)

Cr: 1.15 LL defl L/ 240

Cd: 1.25 TL defl L/ 180

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

Vertical

	Qty.	B	D	Species	Grade	Direction	Cfu	Cfb	Fb	Fv	Fcperp	E	Emin	Fb'	Fv'	A	S	I
1	2	1.5	7.25	SYP	#1	Edge	1	1.0	1250	175	565	1600000	580000	1563	219	21.8	26.3	95.3
2	2	1.5	7.25	SPF	#2	Edge	1	1.2	875	135	425	1400000	510000	1313	169	21.8	26.3	95.3
3	1	1.5	11.25	SPF	#2	Edge	1	1.0	875	135	425	1400000	510000	1094	169	16.9	31.6	178.0
4	1	1.5	9.25	LVL		Edge	1	1.0	2750	285	750	2000000	1016411	3561	285	13.9	21.4	98.9
5	2	1.5	7.25	LVL		Edge	1	1.1	2750	285	750	2000000	1016411	3681	285	21.8	26.3	95.3
6							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
7							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
8							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
9							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0
10							#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.0	0.0	0.0

	Shear	Moment	LL def	TL def
1	243	109	166	157
2	191	100	159	150
3	159	100	196	185
4	208	148	181	171
5	312	167	179	169
6	#N/A	#N/A	#N/A	#N/A
7	#N/A	#N/A	#N/A	#N/A
8	#N/A	#N/A	#N/A	#N/A
9	#N/A	#N/A	#N/A	#N/A
10	#N/A	#N/A	#N/A	#N/A

	Member	Max Span		Reactions (lbs) Gravity	Uplift	Bearing (in)
1	(2) 2x 8 SYP #1	108	in	1600	-1540	1.0
2	(2) 2x 8 SPF #2	99	in	1400	-1410	1.3
3	(1) 2x 12 SPF #2	99	in	1400	-1410	2.6
4	(1) 2x 9.25 LVL	148	in	2100	-2110	1.5
5	(2) 2x 7.25 LVL	166	in	2400	-2360	0.8
6	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
7	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
8	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
9	() 0x 0	#N/A	in	#N/A	#N/A	#N/A
10	() 0x 0	#N/A	in	#N/A	#N/A	#N/A

Connections:

Connect truss to header with LTS18 strap: capacity 755lbs
Max truss reaction for header @ 16" oc is 465lb====> OK

Header to column corner:
RTC-44 Bracket: Capacity 1980lbs
Max reation for header @ 8' is 1860LB OK

Header to standard column:
(2) lsta18 straps:1105
BC4:605 uplift
Max reaction @ 8': 1860lb

Column to Floor:
BC-40 bracket: 510lbs
(2) lsta18 straps:1105
Total:2720lbs
Max reation for 8' span: 1860lb OK

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Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vasc
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Location: Matewall

Porch Column

Supporting: Roof

Vertical Load			Lateral Load			Combined Vert and Lat (max Lat)			Wall height:		
NDS Load:	336 plf	D+Lr	Lateral only			Vertical:	150 plf	0	Top/Btm Plate (tp):	4.5	in
Total Load:	336 plf	D+Lr	Stud area:	27.0 ft^2		Lateral:	5 psf	W	LVL:	Microllam	
Uplift Load:	-349 plf	.6D+Wn	Lateral:	5 psf	W	Combined Vert and Lat (max Vert)			LVL MOE (E):	2000000	psi
						Vertical:	336 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:	-349 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	96	3.5	3.5	SYP	#3	0.8	29.6	1.0	1.00	650	850	850	565	1300000	470000	442	400
									Cp		0.37	0.30					
	Header	1.5	inches						Allowable:	1040	395	407	565	1300000	470000		640

# of Studs	1
Properties	
Area in^2	12.3
Sx in^3	7.1
Ix in^4	12.5
Axial Loading	
Fc compression	173
Fc Perp compression	106
Tension	270
Fcperp	
Combined Loading	
Uplift/Lateral	270
Vert/Lateral max Lat	234
Vert/Lateral Max Vert	126
Deflection Check	L/ 338
	OK
	106

Max Span	Max Trib
1	106 in
2	
3	
4	
5	
6	
7	
8	

Max Side Opening	
112 in = 9 ft - 4 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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

WoodWorks® SOFTWARE FOR WOOD DESIGN	**COMPANY** Aug. 26, 2019 21:06	**PROJECT** Ryan W. Boring Franklin point load beam

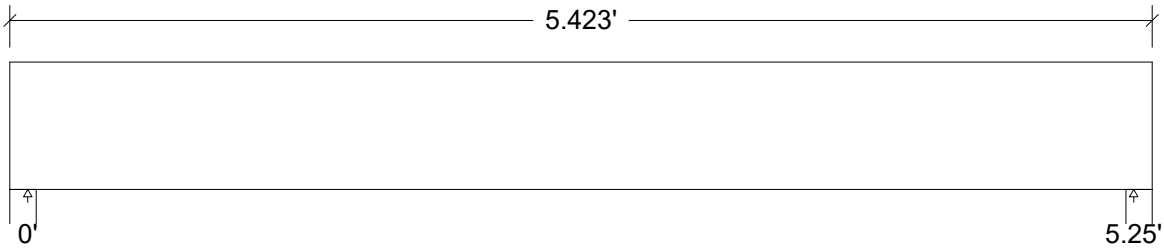
Design Check Calculation Sheet

WoodWorks Sizer 11.1

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start	End	Magnitude Start	End	Unit
Point Load	Roof live	Point		2.62		4140		lbs
Self-weight	Dead	Full UDL				6.3		plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	16		16
Roof Live	2141		1999
Factored:			
Total	2158		2015
Bearing:			
Capacity			
Beam	3375		3375
Support	5951		5951
Des ratio			
Beam	0.64		0.60
Support	0.36		0.34
Load comb	#2		#2
Length	1.50		1.50
Min req'd	0.96		0.90
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.00		1.00
Fc sup	1150		1150

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

LVL n-ply, 2.0E, 3100Fb, 1-1/2"x7-1/4", 2-ply (3"x7-1/4")

Supports: All - Lumber n-ply Column, S-P-F No.1/No.2

Total length: 5.25'; Clear span: 5.249'; volume = 0.8 cu.ft.

Lateral support: top= at supports, bottom= at supports;

Analysis vs. Allowable Stress and Deflection using NDS 2015 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	fv = 149	Fv' = 285	psi	fv/Fv' = 0.52
Bending(+)	fb = 2488	Fb' = 2535	psi	fb/Fb' = 0.98
Live Defl'n	0.11 = L/557	0.26 = L/240	in	0.43
Total Defl'n	0.11 = L/553	0.35 = L/180	in	0.33

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrt	Ci	Cn	LC#
Fv'	285	1.00	-	1.00	-	-	-	-	1.00	-	1.00	2
Fb'+	3100	1.00	-	1.00	0.818	1.00	-	1.00	1.00	-	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-	-
E'	2.0 million		-	1.00	-	-	-	-	1.00	-	-	2
Eminy'	1.04 million		-	1.00	-	-	-	-	1.00	-	-	2

CRITICAL LOAD COMBINATIONS:

```
 Shear     : LC #2  = D+Lr, V max =   2158, V design =   2154 lbs
 Bending(+): LC #2  = D+Lr, M =   5449 lbs-ft
 Deflection: LC #2  = D+Lr  (live)
             LC #2  = D+Lr  (total)
 D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake
 All LC's are listed in the Analysis output
 Load combinations: ASCE 7-10 / IBC 2015
```

CALCULATIONS:

```
 Deflection:  EI =   95.3e06 lb-in2/ply
 "Live" deflection = Deflection from all non-dead loads (live, wind, snow…)
 Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.
 Lateral stability(+):  Lu = 5.25'  Le = 10.38'  RB = 20.0; b = single ply width
```

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2015), the National Design Specification (NDS 2015), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.
3. SCL-BEAMS (Structural Composite Lumber): the attached SCL selection is for preliminary design only. For final member design contact your local SCL manufacturer.
4. Size factors vary from one manufacturer to another for SCL materials. They can be changed in the database editor.
5. BUILT-UP SCL-BEAMS: contact manufacturer for connection details when loads are not applied equally to all plys.
6. FIRE RATING: Joists, wall studs, and multi-ply members are not rated for fire endurance.

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

WoodWorks® SOFTWARE FOR WOOD DESIGN	**COMPANY** Aug. 26, 2019 21:10	**PROJECT** Ryan W. Boring Franklin Column1 Calc is for jack studs only, king studs per other calculations.

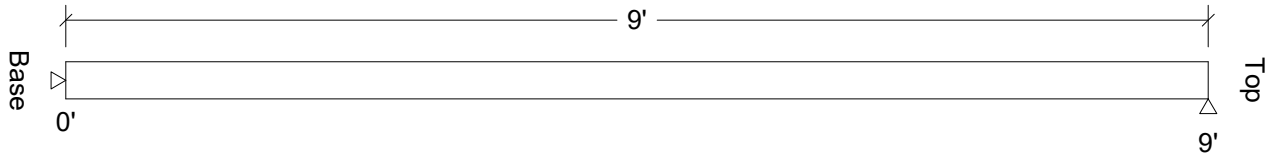
Design Check Calculation Sheet

WoodWorks Sizer 11.1

Loads:

Load	Type	Distribution	Location [ft] Start	End	Magnitude Start	End	Unit
Point Load	Roof live	Axial	(Ecc. = 0.58")		2158		lbs
Self-weight	Dead	Axial			24		lbs

Lateral Reactions (lbs):



Unfactored:			
Dead			
Roof Live	12		-12
Factored:			
R->L			-12
Load comb			#2
L->R	12		
Load comb	#2		#1

Point Load Jack Studs

Lumber n-ply, S. Pine, No.2, 2x4, 2-ply (3"x3-1/2")

2x4 ran since studs are ripped to 5", all ripped lumber must be regraded

Support: Lumber-soft Sill plate, S. Pine No.2; Bearing length = column width; continuous lower support

Total length: 9.0'; Clear span: 8.75'; volume = 0.7 cu.ft.

Pinned base; Load face = width(b); Built-up fastener: nails; Ke x Lb: 1.0 x 0.0 = 0.0 [ft]; Ke x Ld: 1.0 x 9.0 = 9.0 [ft];

Repetitive factor: applied where permitted (refer to online help);

Analysis vs. Allowable Stress and Deflection using NDS 2015 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	fv = 2	Fv' = 175	psi	fv/Fv' = 0.01
Bending(+)	fb = 206	Fb' = 1100	psi	fb/Fb' = 0.19
Axial	fc = 208	Fc' = 408	psi	fc/Fc' = 0.51
Combined (axial + eccentric moment)				Eq.15.4-3 = 0.65
Axial Bearing	fc = 208	Fc* = 1450	psi	fc/Fc* = 0.14
Support Bearing	fcp = 208	Fcp = 636	psi	fcp/Fcp = 0.33
Live Defl'n	0.06 = <L/999	0.90 = L/120	in	0.07
Total Defl'n	0.06 = <L/999	0.90 = L/120	in	0.07

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: 167 MPH Vult, 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Additional Data:

```
FACTORS:   F/E(psi)CD    CM    Ct   CL/CP   CF    Cfu    Cr   Cfrt   Ci    LC#
 Fv'       175    1.00  1.00  1.00    -      -     -      -    1.00  1.00    2
 Fb'+      750    1.00  1.00  1.00  1.000  1.467  1.00  1.00  1.00  1.00    2
 Fc'      1250    1.00  1.00  1.00  0.282  1.160   -     -    1.00  1.00    2
 E'        1.4 million  1.00  1.00    -      -     -      -    1.00  1.00    2
 Emin'    0.51 million  1.00  1.00    -      -     -      -    1.00  1.00    2
 Fc*      1250    1.00  1.00  1.00    -    1.160   -     -    1.00  1.00    2
 Fcp sup   565     -    1.00  1.00    -      -     -      -    1.00  1.00    2
CRITICAL LOAD COMBINATIONS:
 Shear     : LC #2  = D+Lr, V max =     12, V design =     12 lbs
 Bending(+): LC #2  = D+Lr, M =    105 lbs-ft
 Deflection: LC #2  = D+Lr  (live)
             LC #2  = D+Lr  (total)
 Axial     : LC #2  = D+Lr,  P =  2182 lbs   Kf = 1.00
 Eq.15.4-3 : LC #2  = D+Lr   Fb'= 1100
             FcE=  440     Pxe/S=fc(6xe/d)=  206
 Support   : LC #2  = D+Lr; R = 2182 lbs, Cap = 6674, Lb = 3.00", Cb = 1.13
 D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake
 All LC's are listed in the Analysis output
 Load combinations: ASCE 7-10 / IBC 2015
CALCULATIONS:
 Deflection:  EI =   7.50e06 lb-in2/ply
 "Live" deflection = Deflection from all non-dead loads (live, wind, snow…)
 Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.
```

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2015), the National Design Specification (NDS 2015), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.
3. BUILT-UP COLUMNS: nailed or bolted built-up columns shall conform to the provisions of NDS Clause 15.3.
4. FIRE RATING: Joists, wall studs, and multi-ply members are not rated for fire endurance.
5. Axial load eccentricity applied in direction of load face only. It is the designers responsibility to check for effect of eccentricity in the other direction.

ridgebeam to header

uplift- 4260lbs each side of tag
HTS16 strap=1310lbs each
(2)=2620lbs
CS20 strap 1030lbs
(2)= 2060lbs
total =4680
use (1) HTS16 strap AND (1) CS20 strap on each LVL header to header below

header to column
uplift-2158lbs
lsta18: 1115lbs
Use (2) lsta18 straps at the top and bottom of each column (2 per end of headers)

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Franklin Structures, LLC
On-frame floor joist

Home Properties:			Joist Properties:		
Unit Width:	180	in	Size:	2x8	
Overhang:	12	in	Species/Gr	SYP #1	
Roof Live Load:	20	psf	Fb:	1250	psi
Roof Dead Load:	20	psf	Cr:	1.15	
Wall Dead Load:	5	psf	Cf:	1	
Wall height:	9	ft	Fb':	1437.5	psi
Floor Live Load:	40	psf	Cd:	1.25	
Floor Dead Load:	10	psf	E:	1600000	psi
			Fv:	175	psi
			Spacing:	16	in
			Area:	10.875	in^2
Chassis Properties:			I:	47.63	in^4
I-beam spacing:	95.5	in	S:	13.14	in^3
I-beam height:	10	in			
Outrigger thick:	13	ga			
Outrigger thick:	0.0897	in			
Outrigger height:	9.5	in			
Outrigger width:	1.5	in			
Outrigger Str:	21780	psi			
Outrigger Fy:	33,000	psi			
Outrigger Fv:	13200	psi			
Outrigger Spacing:	96	in			
Outrigger setback:	0	in			
X-member thick:	13	ga			
X-member thick:	0.0897	in			
X-member width:	1.5	in			
X-member shape:	C				
X-member depth:	2	"			
PV=	513.3	lb			
Cantilever Moment:					
Ext wall thickness:	3.5				
B':	40.5	in			
Floor Loads:	5.56	lb/in			
M floor:	379.69	lb-ft			
M Joist:	1967.67	lb-ft			
M residual:	1587.98	lb-ft			
PV1:	470.5	lb			
Mid span moment:					
M:	-1439.9	lb-ft			
M allowable:	1967.7	lb-ft			
M:	**0.73**		**OK**		

crossmember properties		
A1:	0.135	in^2
A2:	0.135	in^2
A3:	0.163	in^2
C1:	0.75	in
C2:	0.75	in
C3C:	1.455	in
AC1:	0.101	in^3
AC2:	0.101	in^3
AC3:	0.238	in^3
Sum A:	0.432	in^2
Sum AC:	0.439	in^3
Cprime:	1.016	in
I1:	0.0252	in^4
I2:	0.0252	in^4
I3:	0.0001	in^4
y'1:	0.416	in
y'2:	0.416	in
y'3:	0.439	in
Ay21:	0.023	in^4
Ay22:	0.023	in^4
Ay23:	0.031	in^4
Sum I:	0.0506	in^4
Sum Ay2:	0.078	in^4
Iy-y:	0.129	in^4
r:	0.55	in

Determine Max PVL due to deflection:

PVL:	227	lb	
WL:	4.4	lb/in	
L/120:	0.23	in	
Max PVL @ L/180	150.67	lb	
Defl @ mid span:	0.10		
L\360:	0.27		**OK**
Live Load to frame:	76.00	lb	
PV2 due to moment:	42.8	lb	
PV2 due to deflection:	76.00	lb	
# joists:	6		
MO:	18467	lb-in	
V:	456	lb	
Actual PV1:	437	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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Franklin Structures, LLC
On-frame floor joist

Outrigger design:			
I:	12.48	in^4	
Sy:	2.63		
M allow:	57226	lb-in	
M:	18467	lb-in	**OK**
Area:	0.852	in^2	
Vallow:	11248.38	lbs	
V:	456	lb	**OK**
1/8" weld:			
Applied M:	1944	lb	
Weld Strength:	18	ksi	
Throat thick:	0.125	for 1/8" weld	
Load:	1590.75	lb/in	
L for moment:	1.22	in	
L for shear:	0.29	in	
Length needed:	**1.30**	**in**	

Crossmember design:			
k:	0.5	fixed	
kl/r:	87.5		
Fa:	15.3	ksi	
Allowable Comp:	6616	lbs	
PH=	1944	lbs	
Weld, L:	1.22	in	

Lateral design:			
# of Lags:	7		
Lag stregnth:	310	lb	(9mmx76mm Fastec or equal)
LDF:	1.25		
Lag stregnth:	387.5	lb	
Total:	2712.5	lb	
mu:	0.2		
Friction:	192.2	lb/joist	
Friction total:	1153	lb	
Total lateral:	3865	lb	
Lateral force:	1943.9	lb	**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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Short outrigger increased moment:

Moment:			
Short out M:	0.00	in-lb	
M:	22268.44	in-lb	
Total M:	22268.44	in-lb	
M Allowable:	23612.06	in-lb	
M/Mallow:	**0.94**	**ok**	

Note: all exterior doors must have piers under each side.

Franklin Structures, LLC
On-frame floor joist

Home Properties:			Joist Properties:		
Unit Width:	180	in	Size:	2x8	
Overhang:	12	in	Species/Gr	SYP #1	
Roof Live Load:	20	psf	Fb:	1250	psi
Roof Dead Load:	20	psf	Cr:	1.15	
Wall Dead Load:	5	psf	Cf:	1	
Wall height:	9	ft	Fb':	1437.5	psi
Floor Live Load:	40	psf	Cd:	1.25	
Floor Dead Load:	10	psf	E:	1600000	psi
			Fv:	175	psi
			Spacing:	16	in
			Area:	10.875	in^2
Chassis Properties:			I:	47.63	in^4
I-beam spacing:	95.5	in	S:	13.14	in^3
I-beam height:	10	in			
Outrigger thick:	13	ga			
Outrigger thick:	0.0897	in			
Outrigger height:	9.5	in			
Outrigger width:	1.5	in			
Outrigger Str:	21780	psi			
Outrigger Fy:	33,000	psi			
Outrigger Fv:	13200	psi			
Outrigger Spacing:	96	in			
Outrigger setback:	8	in			
X-member thick:	13	ga			
X-member thick:	0.0897	in			
X-member width:	1.5	in			
X-member shape:	C				
X-member depth:	2	"			
PV=	513.3	lb			
Cantilever Moment:					
Ext wall thickness:	3.5				
B':	40.5	in			
Floor Loads:	5.56	lb/in			
M floor:	379.69	lb-ft			
M Joist:	1967.67	lb-ft			
M residual:	1587.98	lb-ft			
PV1:	470.5	lb			
Mid span moment:					
M:	-1439.9	lb-ft			
M allowable:	1967.7	lb-ft			
M:	**0.73**		**OK**		

crossmember properties		
A1:	0.135	in^2
A2:	0.135	in^2
A3:	0.163	in^2
C1:	0.75	in
C2:	0.75	in
C3C:	1.455	in
AC1:	0.101	in^3
AC2:	0.101	in^3
AC3:	0.238	in^3
Sum A:	0.432	in^2
Sum AC:	0.439	in^3
Cprime:	1.016	in
I1:	0.0252	in^4
I2:	0.0252	in^4
I3:	0.0001	in^4
y'1:	0.416	in
y'2:	0.416	in
y'3:	0.439	in
Ay21:	0.023	in^4
Ay22:	0.023	in^4
Ay23:	0.031	in^4
Sum I:	0.0506	in^4
Sum Ay2:	0.078	in^4
Iy-y:	0.129	in^4
r:	0.55	in

Determine Max PVL due to deflection:

PVL:	227	lb	
WL:	4.4	lb/in	
L/120:	0.23	in	
Max PVL @ L/180	150.67	lb	
Defl @ mid span:	0.10		
L\360:	0.27		**OK**
Live Load to frame:	76.00	lb	
PV2 due to moment:	42.8	lb	
PV2 due to deflection:	76.00	lb	
# joists:	6		
MO:	18467	lb-in	
V:	456	lb	
Actual PV1:	437	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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Franklin Structures, LLC
On-frame floor joist

Outrigger design:			
I:	12.48	in^4	
Sy:	2.63		
M allow:	57226	lb-in	
M:	18467	lb-in	**OK**
Area:	0.852	in^2	
Vallow:	11248.38	lbs	
V:	456	lb	**OK**
1/8" weld:			
Applied M:	1944	lb	
Weld Strength:	18	ksi	
Throat thick:	0.125	for 1/8" weld	
Load:	1590.75	lb/in	
L for moment:	1.22	in	
L for shear:	0.29	in	
Length needed:	**1.30**	**in**	

Crossmember design:			
k:	0.5	fixed	
kl/r:	87.5		
Fa:	15.3	ksi	
Allowable Comp:	6616	lbs	
PH=	1944	lbs	
Weld, L:	1.22	in	

Lateral design:			
# of Lags:	7		
Lag stregnth:	310	lb	(9mmx76mm Fastec or equal)
LDF:	1.25		
Lag stregnth:	387.5	lb	
Total:	2712.5	lb	
mu:	0.2		
Friction:	192.2	lb/joist	
Friction total:	1153	lb	
Total lateral:	3865	lb	
Lateral force:	1943.9	lb	**OK**

Short outrigger increased moment:			
Moment:			
Short out M:	3647.78	in-lb	
M:	22268.44	in-lb	
Total M:	25916.22	in-lb	
M Allowable:	23612.06	in-lb	
M/Mallow:	**1.10**	**MUST DOUBLE JOIST OVER OUTRIGGER**	

Note: all exterior doors must have piers under each side.

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

WoodWorks® SOFTWARE FOR WOOD DESIGN	**COMPANY** Sep. 5, 2019 16:11	**PROJECT** Ryan W. Boring Franklin point load beam

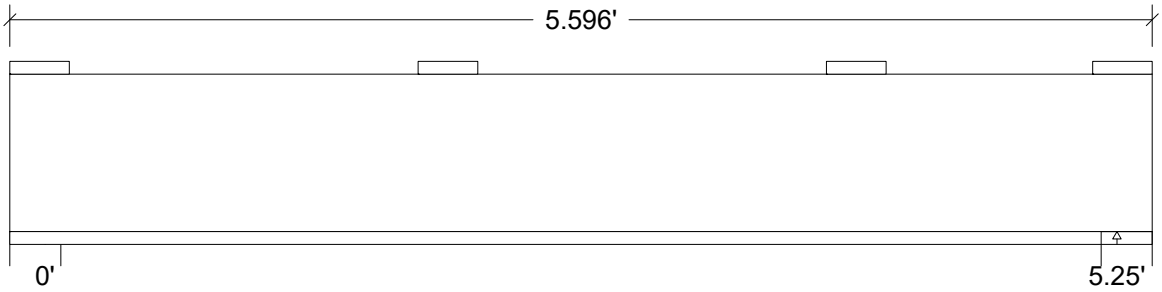
Design Check Calculation Sheet

WoodWorks Sizer 11.1

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start	End	Magnitude Start	End	Unit
Point Load	Roof live	Point		2.80		4140		lbs
Self-weight	Dead	Full UDL				4.0		plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	10		10
Roof Live	2070		2070
Factored:			
Total	2080		2080
Bearing:			
Capacity			
Beam	3375		3375
Support	5951		5951
Des ratio			
Beam	0.62		0.62
Support	0.35		0.35
Load comb	#2		#2
Length	3.00		3.00
Min req'd	1.85		1.85
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.00		1.00
Fc sup	1150		1150

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

Jul 12, 2021

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: 167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

LVL n-ply, 2.0E, 3100Fb, 1-1/2"x9-1/4", 1-ply

Supports: All - Lumber n-ply Column, S-P-F No.1/No.2

Total length: 5.25'; Clear span: 5.248'; volume = 0.5 cu.ft.

Lateral support: top= 24 bottom= full; [in]

This section FAILS the design check

WARNING: This section violates the following design criteria: Bending

ok w/in 5%

Analysis vs. Allowable Stress and Deflection using NDS 2015 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	fv = 225	Fv' = 285	psi	fv/Fv' = 0.79
Bending(+)	fb = 3056	Fb' = 2961	psi	fb/Fb' = 1.03
Live Defl'n	0.11 = L/577	0.26 = L/240	in	0.42
Total Defl'n	0.11 = L/575	0.35 = L/180	in	0.31

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrt	Ci	Cn	LC#
Fv'	285	1.00	-	1.00	-	-	-	-	1.00	-	1.00	2
Fb'+	3100	1.00	-	1.00	0.955	1.00	-	1.00	1.00	-	-	2
Fcp'	750	-	-	1.00	-	-	-	-	1.00	-	-	-
E'	2.0 million		-	1.00	-	-	-	-	1.00	-	-	2
Eminy'	1.04 million		-	1.00	-	-	-	-	1.00	-	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D+Lr, V max = 2077, V design = 2077 lbs

Bending(+): LC #2 = D+Lr, M = 5448 lbs-ft

Deflection: LC #2 = D+Lr (live)

LC #2 = D+Lr (total)

D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake

All LC's are listed in the Analysis output

Load combinations: ASCE 7-10 / IBC 2015

CALCULATIONS:

Deflection: EI = 198e06 lb-in2

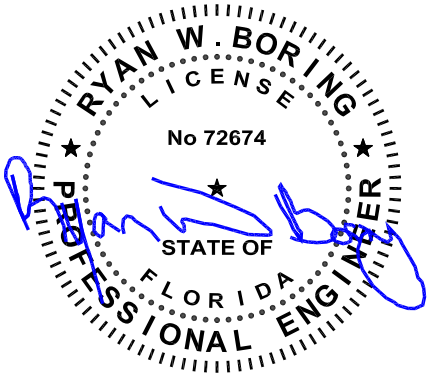
"Live" deflection = Deflection from all non-dead loads (live, wind, snow…)

Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.

Lateral stability(+): Lu = 2.00' Le = 4.13' RB = 14.3

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2015), the National Design Specification (NDS 2015), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.
3. SCL-BEAMS (Structural Composite Lumber): the attached SCL selection is for preliminary design only. For final member design contact your local SCL manufacturer.
4. Size factors vary from one manufacturer to another for SCL materials. They can be changed in the database editor.
5. BUILT-UP SCL-BEAMS: contact manufacturer for connection details when loads are not applied equally to all plys.
6. FIRE RATING: Joists, wall studs, and multi-ply members are not rated for fire endurance.



Jul 12, 2021

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

WoodWorks® SOFTWARE FOR WOOD DESIGN	**COMPANY** Sep. 5, 2019 16:02	**PROJECT** Ryan W. Boring Franklin point load beam

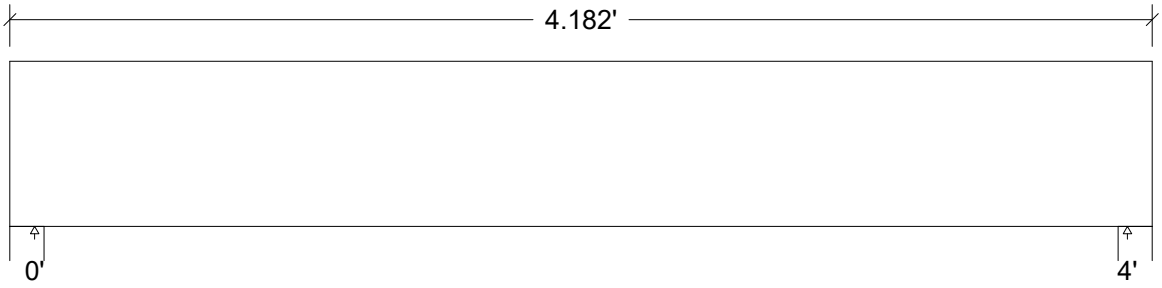
Design Check Calculation Sheet

WoodWorks Sizer 11.1

Loads:

Load	Type	Distribution	Pat-tern	Location [ft] Start	End	Magnitude Start	End	Unit
Point Load	Roof live	Point		2.09		4140		lbs
Self-weight	Dead	Full UDL				8.5		plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	17		17
Roof Live	2070		2070
Factored:			
Total	2087		2087
Bearing:			
Capacity			
Beam	3814		3814
Support	8539		8539
Des ratio			
Beam	0.55		0.55
Support	0.24		0.24
Load comb	#2		#2
Length	1.50		1.50
Min req'd	0.82		0.82
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.00		1.00
Fc sup	1150		1150

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

Jul 12, 2021

Lumber n-ply, S. Pine, No. 1, 2x8, 3-ply (4-1/2"x7-1/4")

Supports: All - Lumber n-ply Column, S-P-F No.1/No.2

Total length: 4.0'; Clear span: 3.999'; volume = 0.9 cu.ft.

Lateral support: top= at supports, bottom= at supports; Repetitive factor: applied where permitted (refer to online help);

Analysis vs. Allowable Stress and Deflection using NDS 2015 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	fv = 96	Fv' = 175	psi	fv/Fv' = 0.55
Bending(+)	fb = 1265	Fb' = 1333	psi	fb/Fb' = 0.95
Live Defl'n	0.04 = <L/999	0.20 = L/240	in	0.21
Total Defl'n	0.04 = <L/999	0.27 = L/180	in	0.16

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Additional Data:

FACTORS:	F/E(psi)	CD	CM	Ct	CL	CF	Cfu	Cr	Cfrt	Ci	Cn	LC#
Fv'	175	1.00	1.00	1.00	-	-	-	-	1.00	1.00	1.00	2
Fb'+	1000	1.00	1.00	1.00	0.927	1.250	1.00	1.15	1.00	1.00	-	2
Fcp'	565	-	1.00	1.00	-	-	-	-	1.00	1.00	-	-
E'	1.6 million		1.00	1.00	-	-	-	-	1.00	1.00	-	2
Emin'	0.58 million		1.00	1.00	-	-	-	-	1.00	1.00	-	2

CRITICAL LOAD COMBINATIONS:

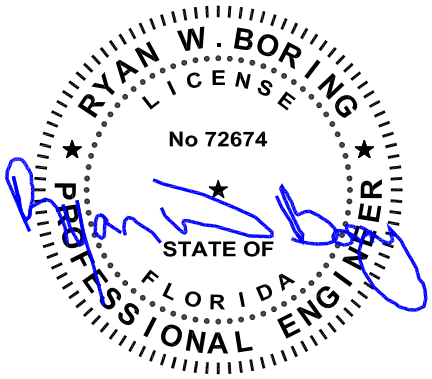
```
 Shear     : LC #2  = D+Lr, V max =   2082, V design =   2082 lbs
 Bending(+): LC #2  = D+Lr, M =   4157 lbs-ft
 Deflection: LC #2  = D+Lr  (live)
             LC #2  = D+Lr  (total)
 D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake
 All LC's are listed in the Analysis output
 Load combinations: ASCE 7-10 / IBC 2015
```

CALCULATIONS:

```
 Deflection:  EI =   76.2e06 lb-in2/ply
 "Live" deflection = Deflection from all non-dead loads (live, wind, snow…)
 Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.
 Lateral stability(+):  Lu = 4.00'  Le = 8.25'  RB = 17.8; b = single ply width
```

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2015), the National Design Specification (NDS 2015), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.
3. Sawn lumber bending members shall be laterally supported according to the provisions of NDS Clause 4.4.1.
4. BUILT-UP BEAMS: it is assumed that each ply is a single continuous member (that is, no butt joints are present) and that each ply is equally top-loaded. Where beams are side-loaded, special fastening details may be required.
5. FIRE RATING: Joists, wall studs, and multi-ply members are not rated for fire endurance.



Jul 12, 2021

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

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

	BUILDER: Michael E Powell
PROJECT NAMEAND ADDRESS: Coby Fincher 355 SE Kerce Glen LuLu Fl	PERMITTING OFFICE:
10886-5078-64-3-47	JURISDICTION NUMBER:
OWNER: ~~STOCK~~ XXXXX Fincher	PERMIT NUMBER:
PERMIT TYPE: **Residential**	NUMBER OF UNITS: **3**
WORST CASE?	CONDITIONED FLOOR AREA:**2136**

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

General Instructions:

1. **1.Fill in all the applicable spaces of the "INSTALLED" row in the INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT table with the information requested. All "INSTALLED" values must be equal to or more efficient than the required levels. "AVG" indicates an area weighted average is allowed; "LOWEST" indicates the lowest *R*-value to be installed must be entered.**
2. **2.Complete the tables for air infiltration and installed equipment.**
3. **3.Read the MANDATORY REQUIREMENTS table and check each box to indicate your intent to comply with all applicable items.**
4. **4.Read, sign and date the "Prepared By" certification statement at the bottom of this form. The owner or owner's agent must also sign and date the form.**

apps

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT[1]

REQUIREMENTS	FENESTRATION*U*-FACTOR[2, 3, 4]	SKYLIGHT[2] *U*-FACTOR	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		.21 for GRID/ .24 NO GRID	38	19		19			

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

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

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

apps

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

apps

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

APPROVED BY NTA INC.

Const. Type: VB-unprotected
Occupancy: Single Family Dwelling
Allowable No. of Floors: 1
Wind Velocity: 167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

FORM R402—continued

EQUIPMENT REQUIREMENTS AND INSTALLED VALUES

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

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

Equipment Efficiency—[PASS / FAIL]

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

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

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: 167 MPH Ult. 130 MPH Vas
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Air distribution system	R403.3.2R403.3.4	Ducts shall be tested as per Section R403.3.2 by either individualsas defined in Section 553.993(5) or (7), Florida Statutes, orindividuals licensed as set forth in Section 489.105(3) (f), (g) or (i),Florida Statutes. Air handling units are not allowed in attics.	ON SITE
Water heaters	R403.5	Comply with efficiencies in Table C404.2. Hot water pipes insulatedto ≥ R-3 to kitchen outlets, other cases. Circulating systems to havean automatic or accessible manual OFF switch. Heat trap requiredfor vertical pipe risers.	X
Cooling/heating equipment	R403.7	Sizing calculation performed & attached. Special occasion coolingor heating capacity requires separate system or variable capacitysystem.	X
Swimming pools & spas	R403.10	Spas and heated pools must have vapor-retardant covers or aliquid cover or other means proven to reduce heat loss except if70% of heat from site-recovered energy. Off/timer switch required.Gas heaters minimum thermal efficiency is 82%. Heat pump poolheaters minimum COP is 4.0.	NA
Lighting equipment	R404.1	Not less than 90% of the lamps in permanently installed luminairesshall have an efficacy of at least 45 lumens-per-watt or shall utilizelamps with an efficacy of not less than 65 lumens-per-watt.	ON SITE
I hereby certify that the plans and specifications covered by this form arein compliance with the Florida Building Code, Energy Conservation.PREPARED BY: Tracie Terry Date 2/25/21 I hereby certify that this building is in compliance with the Florida Building Code, Energy Conservation.OWNER/AGENT: Michael E Powell **Date:** 11/8/2021		**Review of plans and specifications covered by this form indicatecompliance with the Florida Building Code, Energy Conservation. Beforeconstruction is complete, this building will be inspected for compliance inaccordance with Section 553.908, F.S.CODE OFFICIAL: Date:**	

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

APPROVED BY
NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

wrightsoft®

Load Short Form
Entire House

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFTL0886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Job: 5078-64-3-47UFL-FL
Date: 8/6/19
By: AMS of Indiana, Inc.

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

Project Information

For: FRANKLIN HOMES, 5078-64-3-47UFL-FL

Design Information

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

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

HEATING EQUIPMENT

Make	Generic	
Trade		
Model	AFUE 100	
AHRI ref		
Efficiency	100 AFUE	
Heating input	8.5	kW
Heating output	29101	Btuh
Temperature rise	24	°F
Actual air flow	1112	cfm
Air flow factor	0.041	cfm/Btuh
Static pressure	0.30	in H2O
Space thermostat		

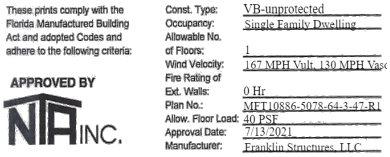
COOLING EQUIPMENT

Make	Generic	
Trade		
Cond	SEER 13.0	
Coil		
AHRI ref		
Efficiency	11.6 EER, 13 SEER	
Sensible cooling	25923	Btuh
Latent cooling	11110	Btuh
Total cooling	37033	Btuh
Actual air flow	1112	cfm
Air flow factor	0.045	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.75	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
UTILITY	108	1610	1019	66	46
PTY	33	0	0	0	0
M BA	187	2275	1341	93	60
TOILET	23	103	91	4	4
C1	79	2348	1472	96	66
M BED	296	3469	3957	141	178
B3	184	3241	3370	132	152
B2	191	3303	3020	134	136
BA	56	661	387	27	17
ALCOVE	22	0	0	0	0
ALCOV	21	0	0	0	0
KIT\DIN\LIV	784	10304	10023	419	452

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

Entire House	1984	27315	24680	1112	1112
Other equip loads		1787	885		
Equip. @ 1.01 RSM			25923		
Latent cooling			8415		
TOTALS	1984	29101	34339	1112	1112



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

wrightsoft®

Project Summary
Entire House

Job: 5078-64-3-47UFL-FL
Date: 8/6/19
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN HOMES, 5078-64-3-47UFL-FL

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Design Information

Weather: St Augustine, FL, US

Winter Design Conditions

Outside db	27	℉
Inside db	70	℉
Design TD	43	℉

Summer Design Conditions

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

Heating Summary

Structure	20296	Btuh
Ducts	7019	Btuh
Central vent (38 cfm)	1787	Btuh
Outside air		
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	29101	Btuh

Sensible Cooling Equipment Load Sizing

Structure	17926	Btuh
Ducts	6754	Btuh
Central vent (38 cfm)	885	Btuh
Outside air		
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	1.01	
Equipment sensible load	25923	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

	Heating	Cooling
Area (ft²)	1984	1984
Volume (ft³)	17854	17854
Air changes/hour	0.45	0.20
Equiv. AVF (cfm)	133	60

Latent Cooling Equipment Load Sizing

Structure	4140	Btuh
Ducts	2292	Btuh
Central vent (38 cfm)	1984	Btuh
Outside air		
Equipment latent load	8415	Btuh
Equipment Total Load (Sen+Lat)	34339	Btuh
Req. total capacity at 0.70 SHR	3.1	ton

Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	

Efficiency	100	AFUE
Heating input	8.5	kW
Heating output	29101	Btuh
Temperature rise	24	℉
Actual air flow	1112	cfm
Air flow factor	0.041	cfm/Btuh
Static pressure	0.30	in H2O
Space thermostat		

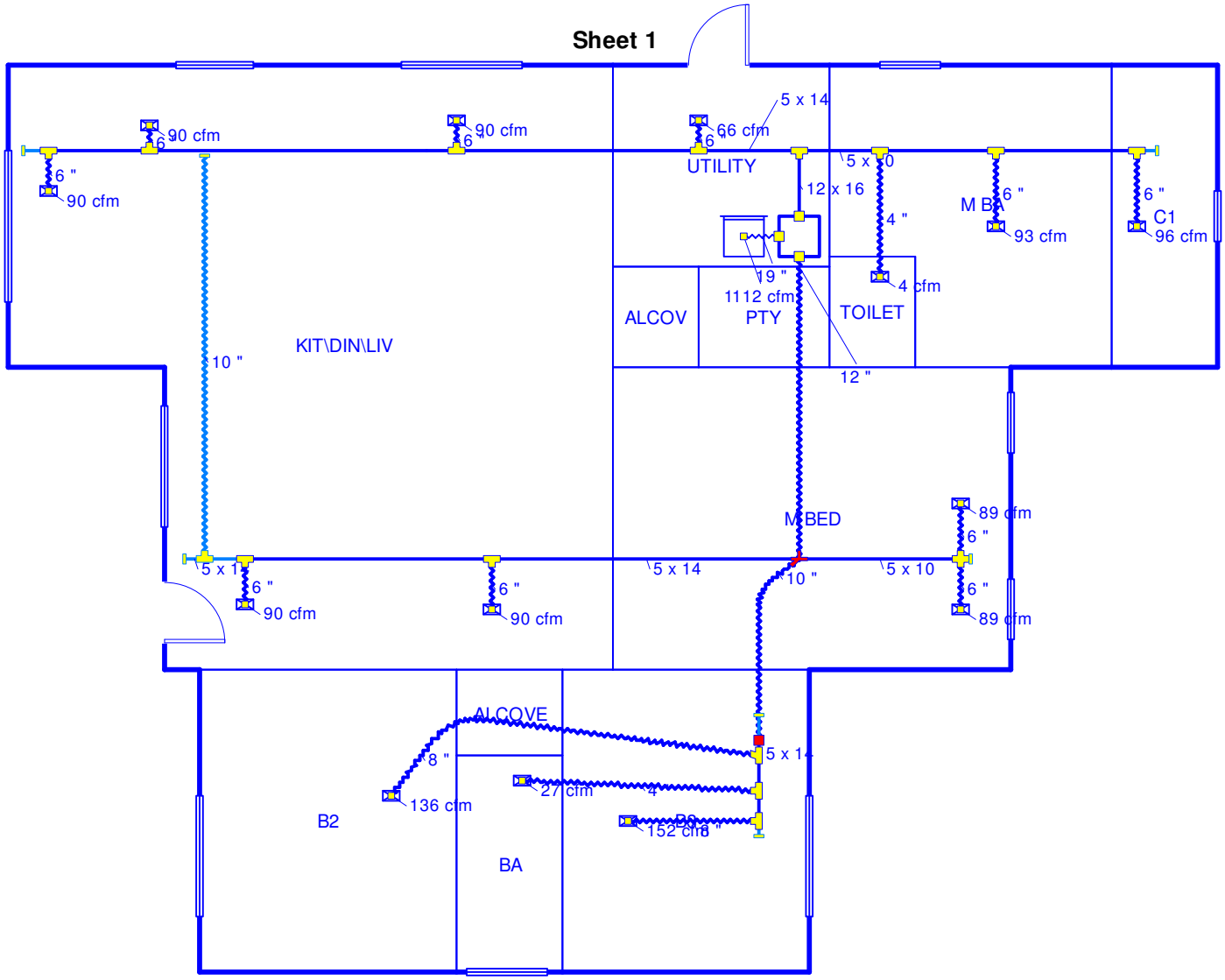
Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER 13.0
Coil	
AHRI ref	

Efficiency	11.6 EER, 13 SEER	
Sensible cooling	25923	Btuh
Latent cooling	11110	Btuh
Total cooling	37033	Btuh
Actual air flow	1112	cfm
Air flow factor	0.045	cfm/Btuh
Static pressure	0.30	in H2O
Load sensible heat ratio	0.75	

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

Sheet 1



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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFI10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Job #: 5078-64-3-47UFL-FL
Performed by AMS of Indiana, Inc. for:
FRANKLIN HOMES

Scale: 1 : 100

Right-Suite® Universal 2018
18.0.32 RSU02009
2019-Aug-06 13:22:55
...\Franklin\5078-64-3-47UFL-FL.rup

Duct System Summary
Entire House

Job: 5078-64-3-47UFL-FL
Date: 8/6/19
By: AMS of Indiana, Inc.

Project Information

For: FRANKLIN HOMES, 5078-64-3-47UFL-FL

	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	0.203 / 0.037 in H2O	0.203 / 0.037 in H2O
Lowest friction rate	0.060 in/100ft	0.060 in/100ft
Actual air flow	1112 cfm	1112 cfm
Total effective length (TEL)	398 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
B2	c	3020	134	136	0.060	8.0	0x 0	VlFx	46.1	290.0	st10
B3	c	3370	132	152	0.067	8.0	0x 0	VlFx	35.5	265.0	st10
BA	h	661	27	17	0.065	4.0	0x 0	VlFx	39.3	275.0	st10
C1	h	2348	96	66	0.093	6.0	0x 0	VlFx	23.8	195.0	st3
KIT\DIN\LIV	c	2005	84	90	0.084	6.0	0x 0	VlFx	36.8	205.0	st4
KIT\DIN\LIV-A	c	2005	84	90	0.086	6.0	0x 0	VlFx	21.8	215.0	st4
KIT\DIN\LIV-B	c	2005	84	90	0.081	6.0	0x 0	VlFx	44.8	205.0	st7
KIT\DIN\LIV-C	c	2005	84	90	0.082	6.0	0x 0	VlFx	32.8	215.0	st7
KIT\DIN\LIV-D	c	2005	84	90	0.085	6.0	0x 0	VlFx	42.5	195.0	st4
M BA	h	2275	93	60	0.091	6.0	0x 0	VlFx	16.8	205.0	st3
M BED	c	1979	71	89	0.092	6.0	0x 0	VlFx	25.8	195.0	st8
M BED-A	c	1979	71	89	0.092	6.0	0x 0	VlFx	25.5	195.0	st8
TOILET	c	103	4	4	0.089	4.0	0x 0	VlFx	13.5	215.0	st3
UTILITY	h	1610	66	46	0.086	6.0	0x 0	VlFx	9.8	225.0	st4

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: 167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st10	Peak AVF	293	305	0.060	628	9.8	14 x 5	ShtMetl	st9
st7	Peak AVF	168	181	0.081	372	***10.0***	***14*** x ***5***	ShtMetl	st2
st3	Peak AVF	192	131	0.089	554	7.6	10 x 5	ShtMetl	st1
st4	Peak AVF	317	317	0.084	653	***10.7***	***14*** x ***5***	ShtMetl	st1
st2	Peak AVF	602	664	0.060	846	***12.0***	***0*** x ***0***	VinlFlx	
st8	Peak AVF	141	178	0.092	513	***10.0***	***10*** x ***5***	ShtMetl	st2
st9	Peak AVF	293	305	0.060	560	***10.0***	***0*** x ***0***	VinlFlx	st2
st1	Peak AVF	510	448	0.084	382	***11.8***	***16*** x ***12***	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	1112	1112	61.8	0.060	565	19.0	0x 0		VlFx	

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

APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Bold/italic values have been manually overridden

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

RE: MH80182R10FL-20-167 -

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

Site Information:

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

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

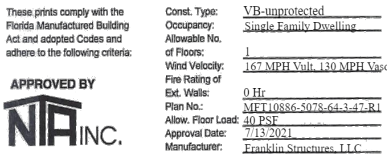
Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 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.

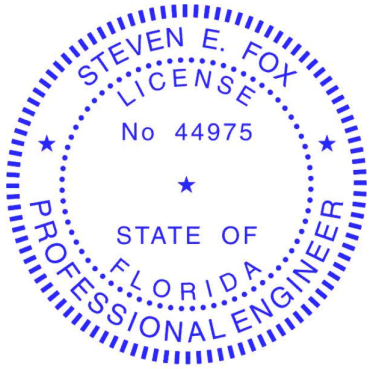
No.	Seal#	Truss Name	Date
1	I46079313	A3	5/12/21
2	I46079314	A3P	5/12/21



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

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

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



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

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

May 12,2021

Job	Truss	Truss Type	Qty	Ply	
MH80182R10FL-20-167	A3	HINGED COMMON	1	1	I46079313
					Job Reference (optional)

Franklin Structures, LLC., Russellville, AL - 35653, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 12 09:35:36 2021 Page 1
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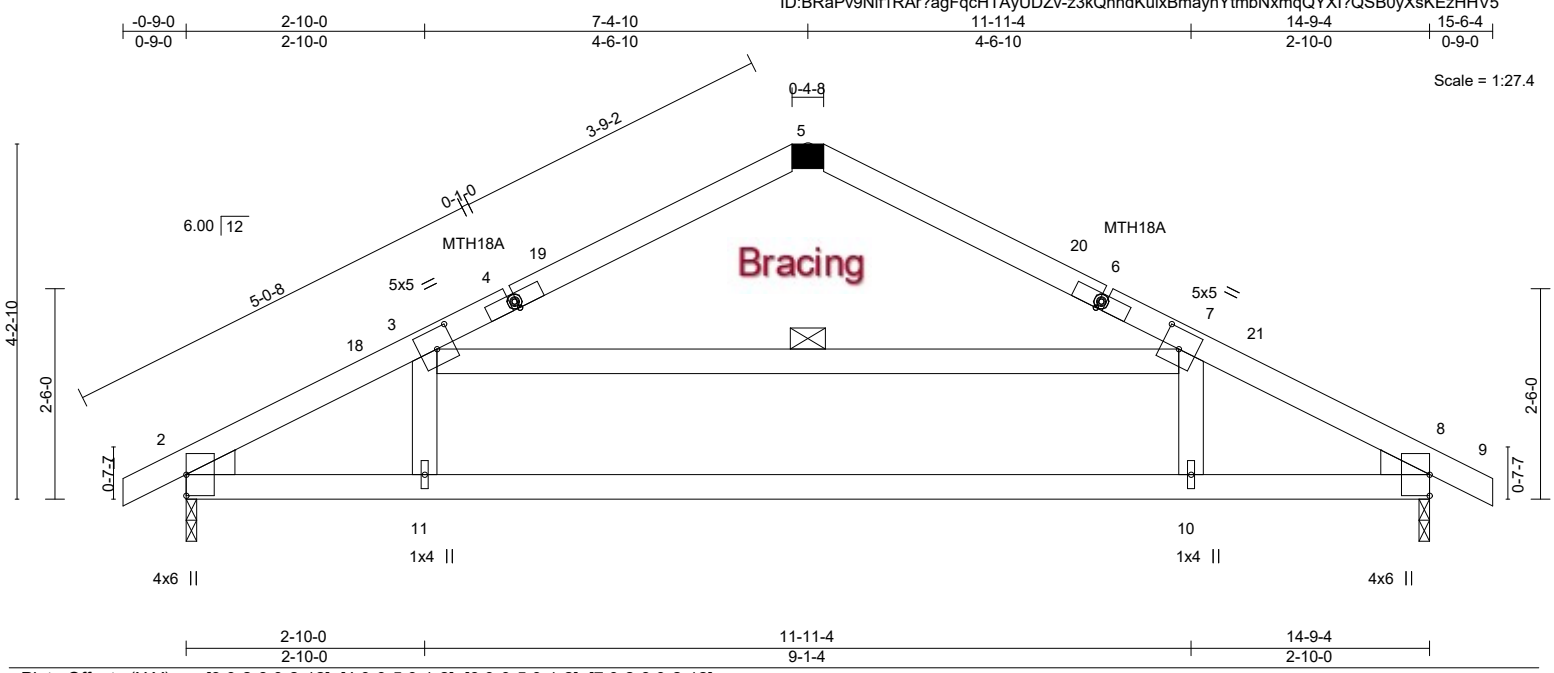

Plate Offsets (X,Y)-- [3:0-2-8,0-2-12], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-2-8,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.55	Vert(LL)	0.27	10-11	>663	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	-0.35	10-11	>511	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	-0.04	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MR							Weight: 53 lb	FT = 0%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-1-15 oc bracing.
WEBS 1 Row at midpt 3-7

REACTIONS. (size) 2=0-1-8, 8=0-1-8
Max Horz 2=149(LC 10)
Max Uplift 2=-412(LC 10), 8=-411(LC 11)
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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1050/1017, 3-5=-316/424, 5-7=-316/426, 7-8=-1050/1015
BOT CHORD 2-11=-811/921, 10-11=-801/927, 8-10=-811/921
WEBS 3-11=-11/331, 7-10=-11/330, 3-7=-793/769

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=209/428/213/0

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; 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(2E) -0-9-0 to 2-3-0, Interior(1) 2-3-0 to 4-5-1, Exterior(2R) 4-5-1 to 10-5-1, Interior(1) 10-5-1 to 12-6-4, Exterior(2E) 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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 412 lb uplift at joint 2 and 411 lb uplift at joint 8.

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

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

May 12,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
MH80182R10FL-20-167	A3P	HINGED COMMON	1	1	I46079314
					Job Reference (optional)

Franklin Structures, LLC., Russellville, AL - 35653, 8.500 s Feb 23 2021 MiTek Industries, Inc. Wed May 12 09:35:41 2021 Page 1
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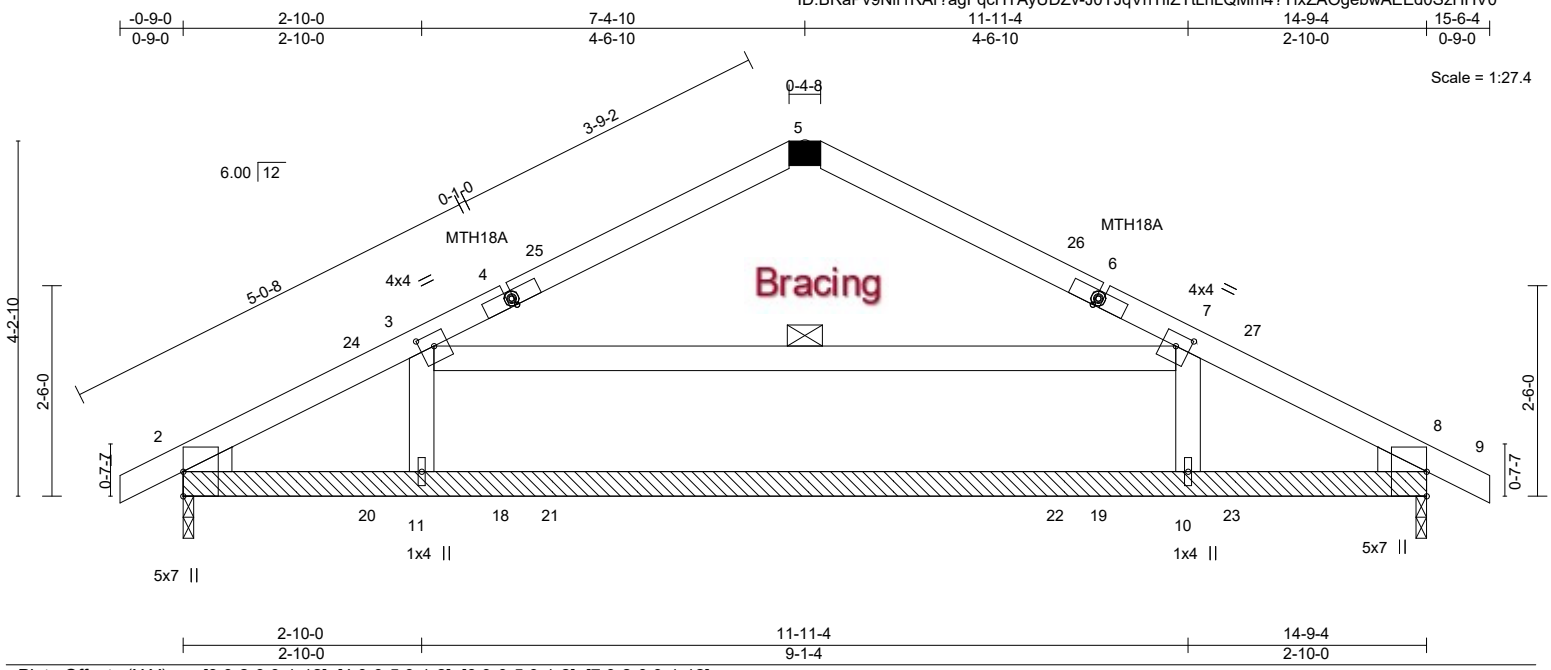


Plate Offsets (X,Y)-- [3:0-2-0,0-1-12], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-2-0,0-1-12]

LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.63	Vert(LL)	0.43	10-11	>408	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.25	BC	0.84	Vert(CT)	0.38	10-11	>460	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	-0.03	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MR							Weight: 69 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 SPF No.2 , Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-7

REACTIONS. (size) 2=0-1-8, 8=0-1-8
Max Horz 2=99(LC 10)
Max Uplift 2=-310(LC 7), 8=-310(LC 6)
Max Grav 2=424(LC 1), 8=424(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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-685/2133, 3-5=-210/283, 5-7=-210/284, 7-8=-685/2132
BOT CHORD 2-11=-1816/607, 10-11=-1848/610, 8-10=-1816/607
WEBS 3-11=-580/209, 7-10=-577/208, 3-7=-467/1827

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=140/286/142/0

NOTES-
1) Attached 14-9-4 scab 2 to 8, front face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 1-3-0 from end at joint 2, nail 1 row(s) at 4" o.c. for 4-2-1; starting at 9-5-1 from end at joint 2, nail 1 row(s) at 4" o.c. for 4-1-3.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; 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(2E) -0-9-0 to 2-3-0, Interior(1) 2-3-0 to 4-5-1, Exterior(2R) 4-5-1 to 10-5-1, Interior(1) 10-5-1 to 12-6-4, Exterior(2E) 12-6-4 to 15-6-4 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are MT20 plates unless otherwise indicated.
6) See HINGE PLATE DETAILS for plate placement.
7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
8) All additional member connections shall be provided by others for forces as indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 8.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 310 lb uplift at joint 2 and 310 lb uplift at joint 8.

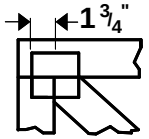
This item has been electronically signed and sealed by Fox, Steve, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Steven E. Fox PE No.44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:
May 12,2021

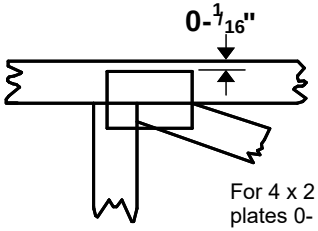
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

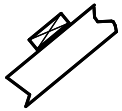
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

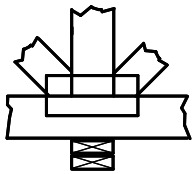
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

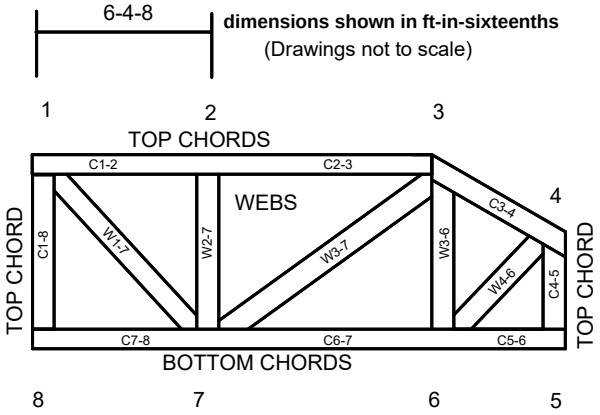


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988, ER-3907, ESR-2362, ESR-1397, ESR-3282

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

APPROVED BY

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-5078-64-8-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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

RE: MH7632R11 -

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

Site Information:

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

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

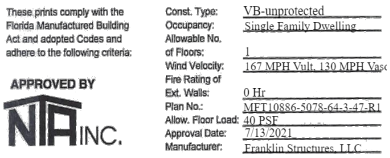
Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 168 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.

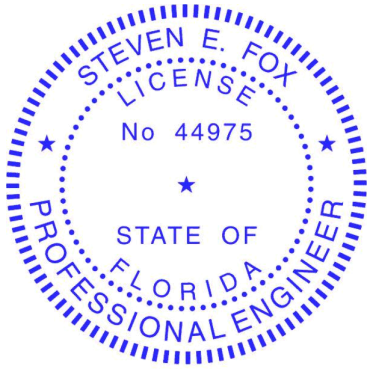
No.	Seal#	Truss Name	Date
1	I46576448	HP127-7	6/15/21
2	I46576449	HP127-7P	6/15/21



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

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

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



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

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

June 15,2021

Job	Truss	Truss Type	Qty	Ply	
MH7632R11	HP127-7	HINGED COMMON	1	1	I46576448
					Job Reference (optional)

Franklin Structures, LLC., Russelville, AL - 35653, 8.500 s Feb 23 2021 MiTek Industries, Inc. Tue Jun 15 08:21:45 2021 Page 1
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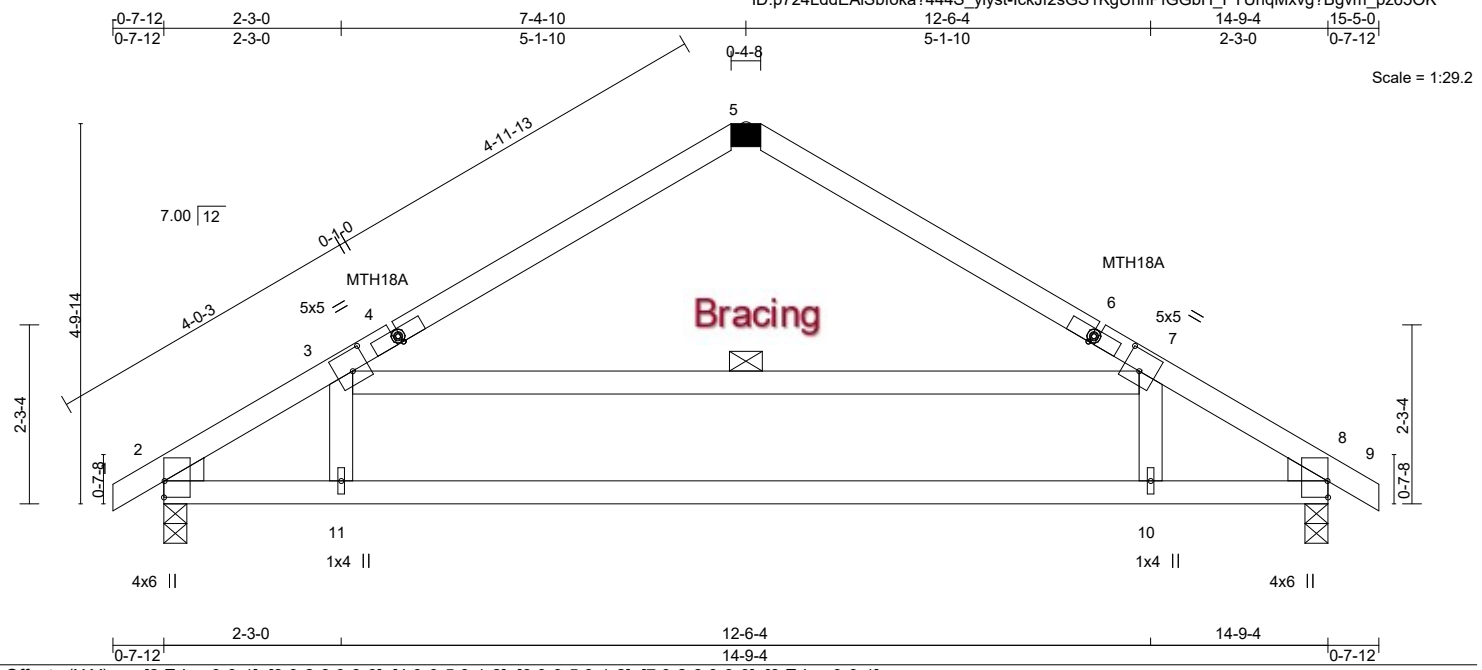


Plate Offsets (X,Y)-- [2:Edge,0-0-1], [3:0-2-8,0-3-0], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-2-8,0-3-0], [8:Edge,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.58	Vert(LL)	0.33	10-11	>545	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-0.47	10-11	>377	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MR							Weight: 54 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-7

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=270(LC 9)
Max Uplift 2=-433(LC 10), 8=-435(LC 11)
Max Grav 2=630(LC 1), 8=630(LC 18)

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1176/606, 3-5=-358/303, 5-7=-358/300, 7-8=-1176/602
BOT CHORD 2-11=-493/1000, 10-11=-470/1007, 8-10=-470/1000
WEBS 3-11=-131/432, 7-10=-131/431, 3-7=-869/389

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=305/306/211/0

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=168mph (3-second gust) Vasd=130mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) 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 capable of withstanding 433 lb uplift at joint 2 and 435 lb uplift at joint 8.

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

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

June 15,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
MH7632R11	HP127-7P	HINGED COMMON	1	1	I46576449
					Job Reference (optional)

Franklin Structures, LLC., Russelville, AL - 35653, 8.500 s Feb 23 2021 MiTek Industries, Inc. Tue Jun 15 08:21:50 2021 Page 1
ID:p724LddEAiSbfoka?444S_ylyst-fZYCilwPHZyzbYfMRpsm_2ySDodRcExkLydXf1z65OF

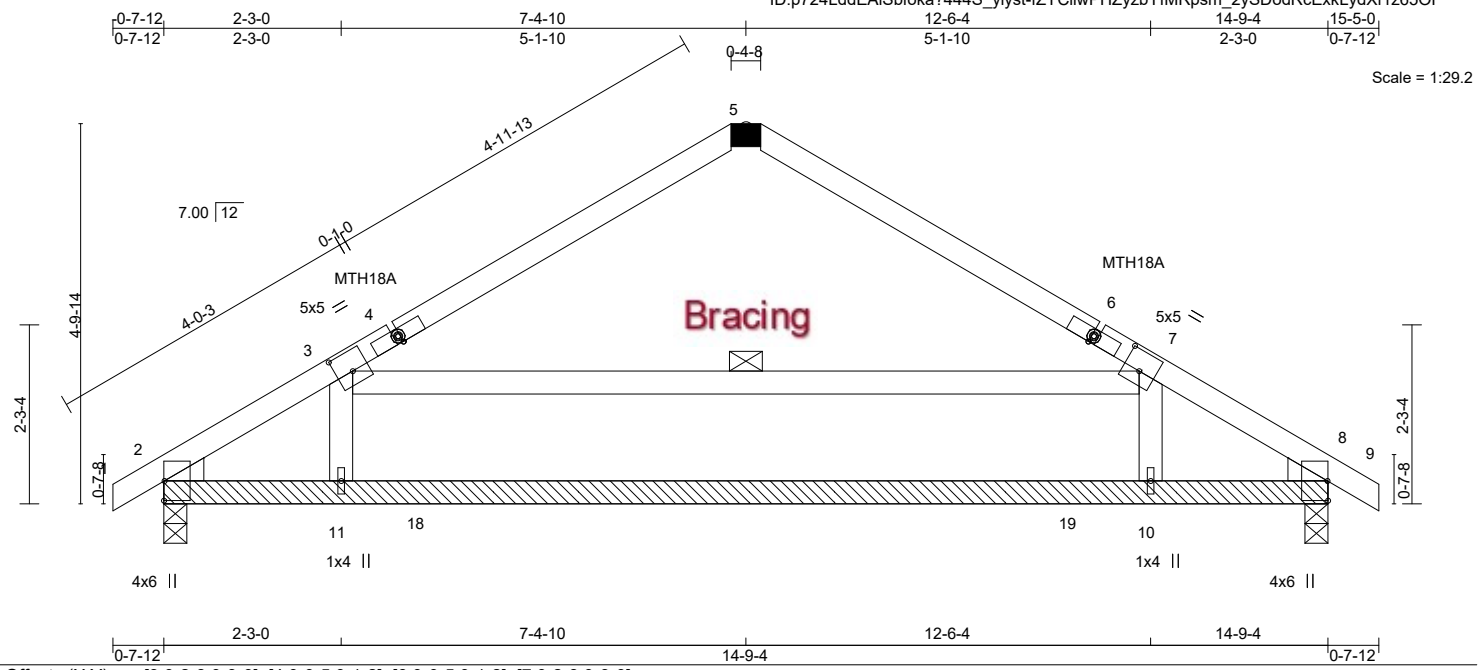


Plate Offsets (X,Y)-- [3:0-2-8,0-3-0], [4:0-0-5,0-1-2], [6:0-0-5,0-1-2], [7:0-2-8,0-3-0]

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	0.38	Vert(LL)	0.27	10-11	>666	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	0.22	10-11	>823	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	-0.03	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MR							Weight: 71 lb	FT = 20%

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 SPF No.2 , Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-7

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-180(LC 8)
Max Uplift 2=-289(LC 10), 8=-290(LC 11)
Max Grav 2=420(LC 1), 8=420(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-650/505, 7-8=-650/501
BOT CHORD 2-11=-413/557, 10-11=-414/561, 8-10=-393/557
WEBS 3-11=-329/250, 7-10=-329/250, 3-7=-429/358

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
5=203/204/141/0

NOTES-
1) Attached 14-9-4 scab 2 to 8, front face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 1-3-0 from end at joint 2, nail 1 row(s) at 3" o.c. for 3-0-0; starting at 10-6-4 from end at joint 2, nail 1 row(s) at 3" o.c. for 3-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=168mph (3-second gust) Vasd=130mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=1.33 plate grip DOL=1.33
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are MT20 plates unless otherwise indicated.
6) See HINGE PLATE DETAILS for plate placement.
7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
8) All additional member connections shall be provided by others for forces as indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 289 lb uplift at joint 2 and 290 lb uplift at joint 8.

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

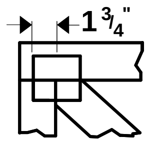
Steven E. Fox PE No.44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

June 15,2021

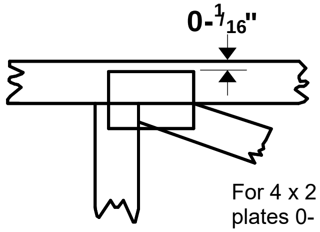
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

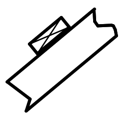
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

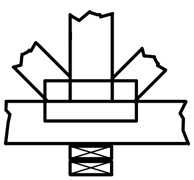
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

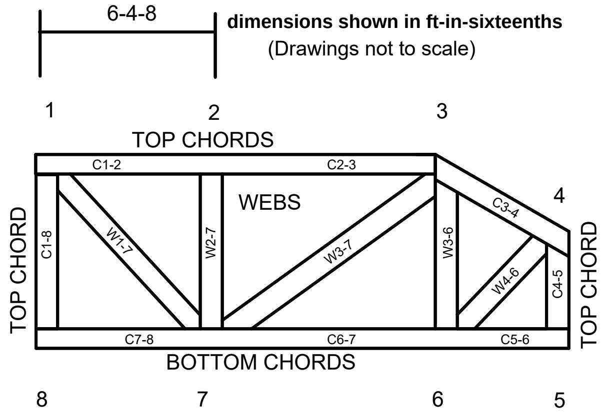


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ES[illegible]
ER-3907, ESR-2362, ES[illegible], ESR-3282

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: 167 MPH Vult, 130 MPH Vasc
Fire Rating of Ext. Walls: 0 Hr
Plan No.: MFT10886-5078-64-3-47-R1
Allow. Floor Load: 40 PSF
Approval Date: 7/13/2021
Manufacturer: Franklin Structures, LLC

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

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

MiTek®

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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

RE: MH7281R16-FL20 -

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

Site Information:

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

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

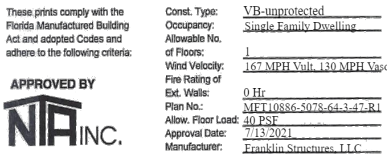
Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 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	I45076586	A1	3/5/21
2	I45076587	A1P	3/5/21

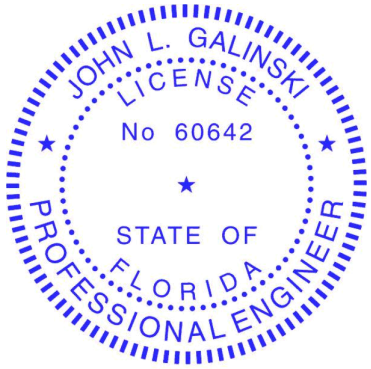


This item has been electronically signed and sealed by Galinski, John, PE using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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

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

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.



John L. Galinski PE No.60642
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:

March 5,2021

Job	Truss	Truss Type	Qty	Ply	
MH7281R16-FL20	A1	HINGED MONO	1	1	I45076586
					Job Reference (optional)

Franklin Structures, LLC., Russellville, AL - 35653, 8.430 e Nov 30 2020 MiTek Industries, Inc. Fri Mar 5 12:38:33 2021 Page 1
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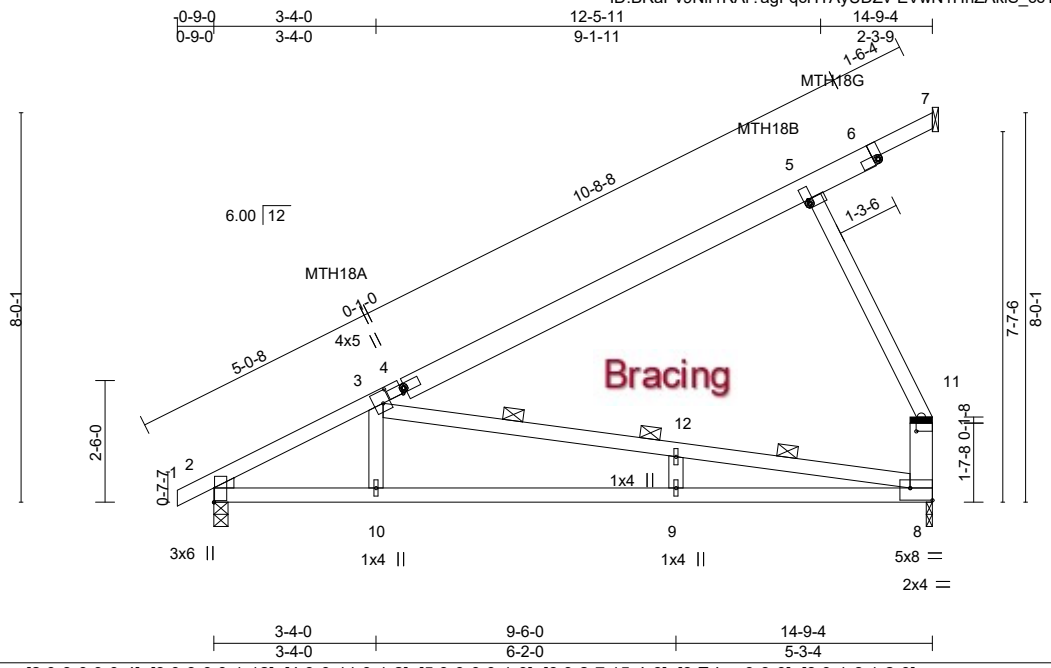

Scale = 1:47.4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.58	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 FBC2020/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 Structural wood sheathing directly applied or 5-2-4 oc purlins, except end verticals. [P]
BOT CHORD Rigid ceiling directly applied or 4-10-0 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=542(LC 6), 7=116(LC 6)
Max Uplift 2=-382(LC 6), 8=-568(LC 6)
Max Grav 2=667(LC 1), 8=552(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1130/416, 3-5=-341/70, 8-11=-299/477
BOT CHORD 2-10=-833/874, 9-10=-833/874, 8-9=-833/874
WEBS 3-10=0/384, 3-12=-740/618, 8-12=-745/609, 5-11=-332/529

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
11=332/529/229/0

NOTES-
1) Wind: ASCE 7-16; 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; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) All plates are MT20 plates unless otherwise indicated.
4) See HINGE PLATE DETAILS for plate placement.
5) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
6) All additional member connections shall be provided by others for forces as indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 382 lb uplift at joint 2 and 568 lb uplift at joint 8.

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

John L Galinski PE No.60642
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:
March 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
MH7281R16-FL20	A1P	HINGED MONO	1	1	I45076587
					Job Reference (optional)

Franklin Structures, LLC., Russelville, AL - 35653, 8.430 e Nov 30 2020 MiTek Industries, Inc. Fri Mar 5 12:44:08 2021 Page 1
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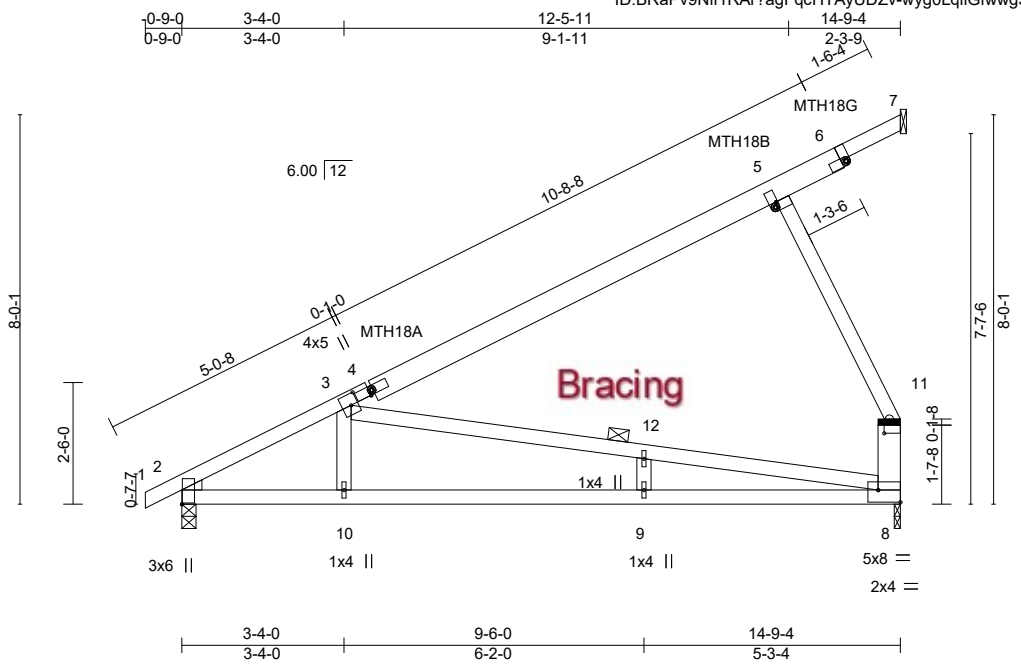


Plate Offsets (X,Y)-- [2:0-3-0,0-0-4], [3:0-2-12,0-1-12], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [6:0-2-7,15-4-6], [8:Edge,0-3-0], [8:0-1-8,1-2-0]

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	0.38	Vert(LL)	0.35	9-10	>506	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.36	9	>489	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	-0.02	8	n/a	n/a		
BCDL	10.0	Code FBC2020/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 1650F 1.6E
WEBS 2x4 SPF Stud *Except*
8-11: 2x6 SPF No.2, 3-8: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. [P]
BOT CHORD Rigid ceiling directly applied or 8-10-12 oc bracing.
WEBS 1 Row at midpt 3-8

REACTIONS. (size) 2=0-3-8, 8=0-1-8, 7=Mechanical
Max Horz 2=361(LC 6), 7=78(LC 6)
Max Uplift 2=-301(LC 5), 8=-385(LC 5)
Max Grav 2=444(LC 1), 8=368(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-753/525, 8-11=-200/318
BOT CHORD 2-10=-642/583, 9-10=-642/583, 8-9=-642/583
WEBS 3-10=-179/254, 3-12=-493/562, 8-12=-496/568, 5-11=-221/352

These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:
APPROVED BY NTA INC.

Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
11=221/352/152/0

NOTES-
1) Wind: ASCE 7-16; 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; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) All plates are MT20 plates unless otherwise indicated.
4) See HINGE PLATE DETAILS for plate placement.
5) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
6) All additional member connections shall be provided by others for forces as indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 301 lb uplift at joint 2 and 385 lb uplift at joint 8.

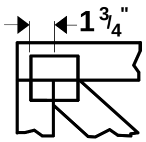
This item has been electronically signed and sealed by Galinski, John, PE using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

John L Galinski PE No.60642
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:
March 5,2021

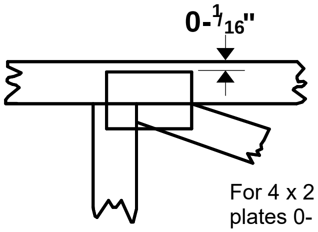
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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- $\frac{1}{16}$" from outside edge of truss.

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

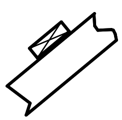
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

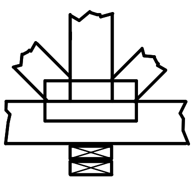
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

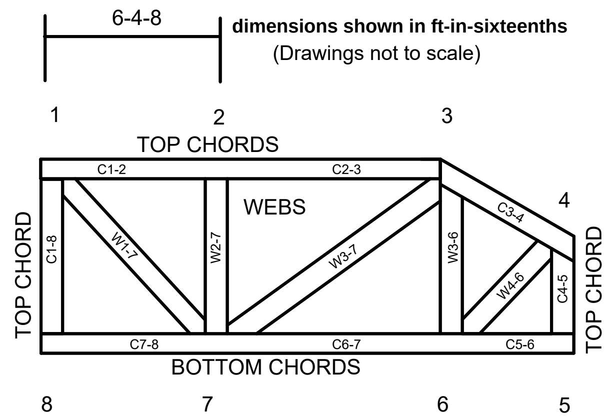


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.
Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

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

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

MiTek®

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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

RE: MH7303R29 -

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

Site Information:

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

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

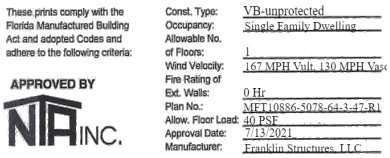
Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 168 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	I46576446	HM177-7	6/15/21
2	I46576447	HM177-7P	6/15/21

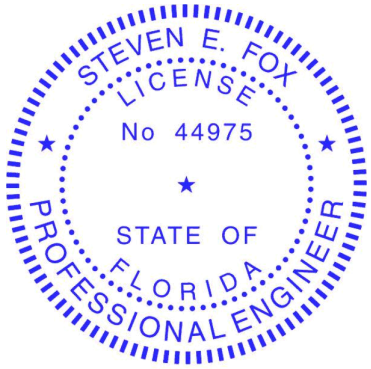


This item has been electronically signed and sealed by Fox, Steve, PE using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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

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

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.



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

June 15,2021

Job	Truss	Truss Type	Qty	Ply	
MH7303R29	HM177-7	HINGED MONO	1	1	I46576446
					Job Reference (optional)

Franklin Structures, LLC., Russelville, AL - 35653, 8.500 s Feb 23 2021 MiTek Industries, Inc. Tue Jun 15 08:23:07 2021 Page 1
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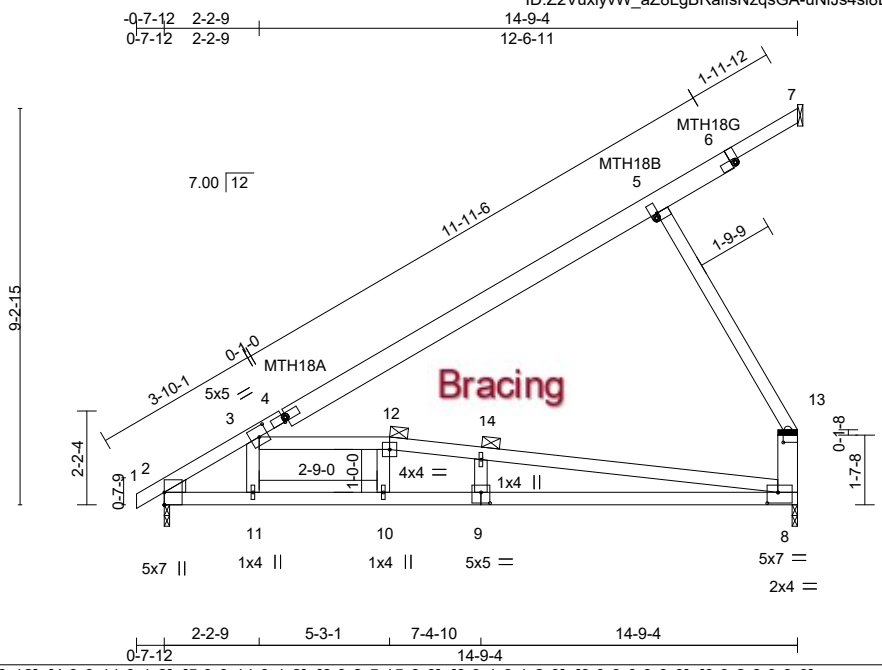


Plate Offsets (X,Y)-- [3:0-2-8,0-2-12], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [6:0-2-5,15-6-6], [8:0-1-8,1-2-0], [8:0-3-0,0-3-0], [9:0-2-8,0-3-0]

LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.52	Vert(LL)	-0.36	8-9	>480	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.25	BC	0.59	Vert(CT)	-0.47	8-9	>372	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	-0.02	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 80 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x6 SP No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
8-13: 2x6 SP 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 6-1-3 oc bracing.
JOINTS 1 Brace at Jt(s): 12, 13, 14

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of	
Ext. Walls:	0 Hr
Plan No.:	MET10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

REACTIONS. (size) 7=Mechanical, 8=0-1-8, 2=0-1-8
Max Horz 7=93(LC 10), 2=419(LC 10)
Max Uplift 8=-409(LC 10), 2=-230(LC 10)
Max Grav 8=457(LC 17), 2=483(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-732/140, 3-5=-284/57, 8-13=-313/370
BOT CHORD 2-11=-581/791, 10-11=-554/786, 9-10=-543/781, 8-9=-543/781
WEBS 3-11=-75/389, 12-14=-608/345, 8-14=-611/333, 3-12=-610/346, 5-13=-360/425

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
13=360/425/209/0

NOTES-
1) Wind: ASCE 7-16; Vult=168mph (3-second gust) Vasd=130mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) All plates are MT20 plates unless otherwise indicated.
4) See HINGE PLATE DETAILS for plate placement.See HINGE PLATE DETAILS for plate placement.
5) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
6) All additional member connections shall be provided by others for forces as indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8, 2.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 409 lb uplift at joint 8 and 230 lb uplift at joint 2.

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

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

June 15,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
MH7303R29	HM177-7P	HINGED MONO	1	1	I46576447
					Job Reference (optional)

Franklin Structures, LLC., Russellville, AL - 35653, 8.500 s Feb 23 2021 MiTek Industries, Inc. Tue Jun 15 08:23:27 2021 Page 1
ID:Z2VuxlyvW_aZ8LgBRaiIsNzqsGA-JEvt3w5FRNACjSa0dh5WPVTxbvgSr?x0eYdAYvz65Mk

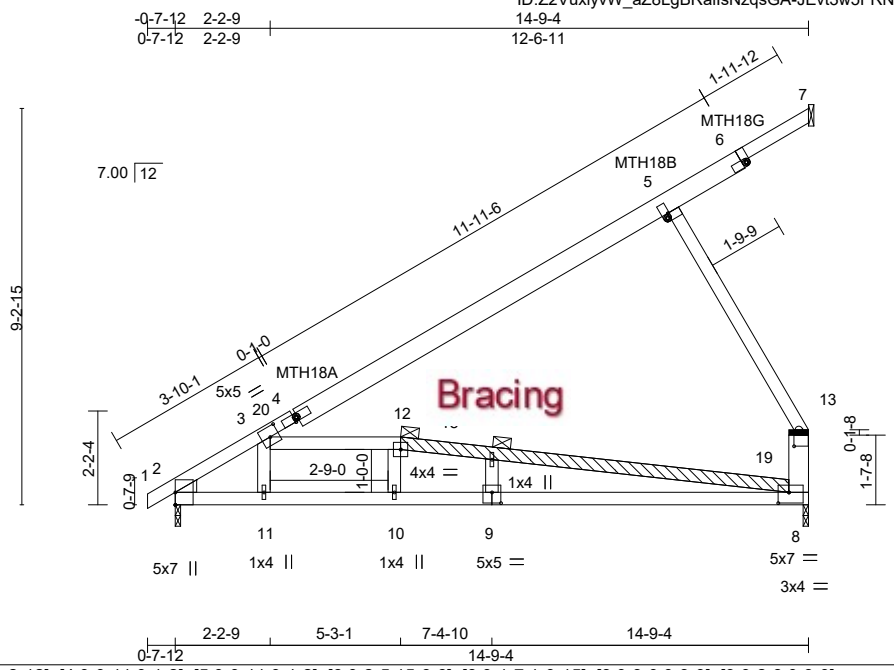


Plate Offsets (X,Y)-- [3:0-2-8,0-2-12], [4:0-0-11,0-1-2], [5:0-0-11,0-1-2], [6:0-2-5,15-6-6], [8:0-1-7,1-0-15], [8:0-3-0,0-3-0], [9:0-2-8,0-3-0]

LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.65	Vert(LL)	0.67	8-9	>259	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	0.58	8-9	>302	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	-0.03	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 90 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x6 SP No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
8-13: 2x6 SP No.2
OTHERS 2x4 SPF No.2
LBR SCAB 8-12 2x4 SPF No.2 one side
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 2-11-7 oc bracing.
JOINTS 1 Brace at Jt(s): 12, 13, 14

REACTIONS. (size) 7=Mechanical, 8=0-1-8, 2=0-1-8
Max Horz 7=93(LC 10), 2=419(LC 10)
Max Uplift 8=-409(LC 10), 2=-272(LC 7)
Max Grav 8=361(LC 1), 2=447(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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-698/1589, 3-5=-284/57, 8-13=-313/370
BOT CHORD 2-11=-1678/572, 10-11=-1722/571, 9-10=-1743/571, 8-9=-1743/571
WEBS 3-11=-645/368, 12-14=-492/1538, 8-14=-512/1587, 3-12=-493/1540, 9-14=-415/166, 5-13=-360/425

REQUIRED FIELD JOINT CONNECTIONS - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
13=360/425/209/0

NOTES-
1) Attached 9-1-12 scab 8 to 12, front face(s) 2x4 SPF No.2 with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 5-11-10 from end at joint 8, nail 1 row(s) at 7" o.c. for 3-1-11.
2) Wind: ASCE 7-16; Vult=168mph (3-second gust) Vasd=130mph; TCDL=6.0psf; BCDL=6.0psf; h=24ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-7-12 to 2-4-4, Interior(1) 2-4-4 to 14-8-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) All plates are MT20 plates unless otherwise indicated.
5) See HINGE PLATE DETAILS for plate placement.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) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8, 2.

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

Steven E. Fox PE No.44975
MiTek USA, Inc. FL Cert 6634
16023 Swingley Ridge Road, Chesterfield, MO 63017
Date:
June 15,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 409 lb uplift at joint 8 and 272 lb uplift at joint 2.

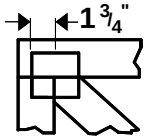
These prints comply with the Florida Manufactured Building Act and adopted Codes and adhere to the following criteria:

APPROVED BY NTA INC.

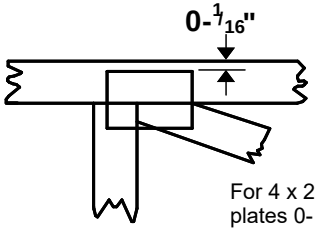
Const. Type:	VB-unprotected
Occupancy:	Single Family Dwelling
Allowable No. of Floors:	1
Wind Velocity:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MET10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

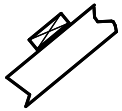
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

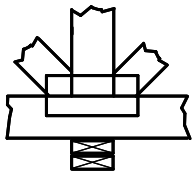
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

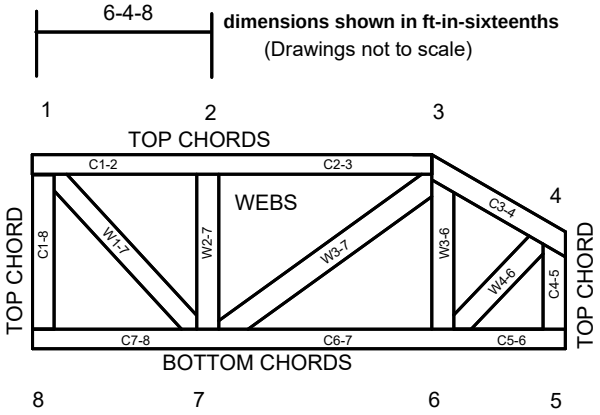


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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:	167 MPH Vult, 130 MPH Vasd
Fire Rating of Roof & Walls:	0 Hr
Plan No.:	MET10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

21.The design does not take into account any dynamic or other loads other than those expressly stated.

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:	167 MPH Vult, 130 MPH Vas
Fire Rating of Ext. Walls:	0 Hr
Plan No.:	MFT10886-5078-64-3-47-R1
Allow. Floor Load:	40 PSF
Approval Date:	7/13/2021
Manufacturer:	Franklin Structures, LLC

PRODUCT APPROVAL SPECIFICATION SHEET

Manufacturer: Franklin Structures, LLC. **Plan #:** **MFT10866-5078-64-3-47-R1**

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	FL-9231-R7
Sliding	Jeld-Wen	Sliding Glass Door	FL11109.2-R9
Swinging	Dunbarton	ATRUIM Frame	15362.1-R3
15362.1, 15362.3,15362.9, 15362.12,			
Sliding	VIWINCO	Sliding Glass Door	FL15590.1-R9
WINDOWS			
Single Hung	KINRO	WINDOWS	FL993.2/993.5 R-17
ROOFING PRODUCTS			
Asphalt Shingles	Tamko Shingles	Classic 3-Tab	FL18355-R6
Underlayments	Owens Corning	Oakridge	FL17420.1-R6
PANEL WALL			
Siding	ROYAL BUILDING PRODUCTS(D45DLSTD)		FL21069-R3
Soffits	HARDIESOFFIT		FL13265-R6
STRUCTURAL COMPONENTS			
Wood Connector / Anchor	Simpson	HDU11-11473.8	FL10441.-R6
Wood Connector / Anchor	Simpson	HD3B	FL11496-R5
Wood Connector / Anchor	Simpson	HDQ8	FL10441-R5
Wood Connector / Anchor	Simpson	CMSTC16	FL13872- R4
Wood Connector / Anchor	Simpson	STHD14	FL10441.12
Wood Connector / Anchor	Simpson	LSTA18	FL10456.15
Truss Plates	MiTek	MT18 & MT20	FL2197-R7
Engineered Lumber	Weyerhauser	Microllam LVL	FL6527.1- R11
Engineered Lumber	VERSA-LAM	Microllam LVL	FL1644-R9

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

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

CHRISTIE JACKSON CHRISTIE JACKSON 6/2/2021

Manufacturer's Authorized Agent Signature | Printed Name | Date