

Amendments to the 2021 Residential One-and Two-Family Dwelling Code

Section 4. **Adoption of One- and Two-Family Dwelling Code.**

Certain documents, two (2) copies of which are on file in the office of the County Clerk of Franklin County, Government Center, Union, Missouri, being marked and designated as the International Residential Code for One- and Two-Family Dwellings 2021 and the Appendix Chapters E and J are hereby referred to, adopted and made a part hereof, as if fully set out in this Order, with all future amendments, recommendations and deletions that are evaluated and approved by the Franklin County Building Commission, with the additions, deletion, and changes, if any, prescribed in other section of this Order.

Section 5. **Additions, Insertions, Deletions, and Changes.**

R101.1 **Title** is hereby amended by inserting the words “County of Franklin, State of Missouri January 1, 2024”.

R105.1 **Remove Demolish.**

R105.2 **Work exempt from permit.** Change the following:

Building:

1. One-story detached accessory structures provided the floor area does not exceed three hundred (300) square feet.

Exceptions:

- a. If a carport or prefab building is over 300 square feet and fastened to concrete, a permit is required.
- b. If the carport or prefab building is fastened to dirt, a permit is not required.
- c. If the carport or prefab building is fastened to concrete it can be built on a slab with no frost protection HOWEVER no

walls will be allowed inside the building and no bathrooms are allowed. The building must be of lightweight construction. The slab must be a minimum of 4 inches thick. No other building will be allowed to be built on this slab. No seal will be required on this building even though it is metal because it is pre-manufactured.

d. Plans required to permit must show size of slab and thickness. Also required will be the manufacturer's information on the building showing size and tie down spacing requirements.

2. Fences.
3. Retaining walls that are not over 4 feet in height on unbalanced fill.
6. Siding, re-roofing, painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.
10. Decks not more than 30" above grade at any point.
11. Docks on pond/lake accessory to SFD.
12. An Agricultural Building meeting the requirements of the "Agricultural Structure Exemption."

Mechanical:

9. Replacement of existing HVAC system.
10. Replacement of existing hot water heater.

Agricultural Structure Exemption

By signing this agreement, _____, hereby certifies that the structure intending to be built at (address) _____, tax parcel # _____, will be solely used for agricultural purposes only.

This document gives permission to the Franklin County Building Department to perform a site inspection during normal business hours to verify this structure is being used for agricultural use exclusively if a complaint is filed and on record at the Franklin County Building Department. The undersigned will notify the Franklin County Building Department whenever the use changes to something other than solely for agricultural use.

The definition of an AGRICULTURAL BUILDING contained in Section 202 of Chapter 2 of the International Building Code/2000 is defined as per amended by Commission Order no. 02-025 adopted October 30, 2003, as:

AGRICULTURAL BUILDING: A structure designed and constructed to house farm implements, hay, grain, poultry, livestock, or other horticultural products EXCLUSIVELY. This structure shall not be a place of human habitation or a place of employment where agricultural products are processed, treated, or packaged, nor shall it be a place used by the public.

Said Agricultural structure may not be constructed without first obtaining an on-site inspection by the Franklin County Building Department, for the purpose of determining the feasibility of agricultural use. Such structure must be located a minimum of 200 linear feet from any residence located on the subject property or neighboring properties. An agricultural structure does not require a building permit. If this structure is not used 100% for agricultural purposes, then a building permit must be obtained. If this structure is exclusively agricultural, please execute in front of a notary truly swearing and affirming that the statements contained herein are true, and return this original document, along with the attached plot plan to the Franklin County Building Department within thirty (30) days. If this building is built under this exemption and not used exclusively for agricultural use, a sealed "as built" plan by a Registered Design Professional per current code and a double permit fee will be required. Such use may also expose the property owner to further legal action, which may include seeking an injunction, criminal prosecution, fines and/or incarceration.

Will you be installing a *new driveway* or *modifying an existing driveway*? _ YES _ NO

PLOT PLAN FOR PROPOSED AGRICULTURE BUILDING

Draw a plot plan in the space below or attach letter size plot plan showing the location of the proposed building Show any existing structures and distance from lot lines as well as any easements or any utility easements.

Please describe the use of this building:

Property Owner(s)

Date

State of Missouri, County of Franklin

Subscribed and sworn before me this ____ day of _____, 20____.

Notary Public

Planning & Zoning Dept. ***Office Use ONLY*** Planning & Zoning Dept.

Front Yard Setback_____ Side Yard Setback_____ Rear Setback_____

Zoning Dist._____

Zoning Office Approval

By signing this agreement, the property owner hereby certifies that the structure intending to be built on said property with the following tax parcel # will be solely used for agricultural purposes only. This document gives permission to the Franklin County Building Department to perform random inspections to verify this structure is being used for agricultural use exclusively. The undersigned will notify the Franklin County Building Department whenever the use changes to something other than solely for agricultural use.

R108 **Fee schedule.** Refer to Commission Order No. _____, attached, as amended, and so ordered.

R110.4 **Temporary occupancy:** is only valid as long as permit is valid.

R113.1 **Unlawful acts.** It shall be unlawful for any person, firm, or corporation to erect, construct, alter, extend, repair, move, remove any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

R113.4 **Violation penalties.** Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair a building or structure in violation of an approved plan or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a Class A Misdemeanor, punishable by a fine of not more than \$1,000.00, or by imprisonment not exceeding 365 days; or in lieu of fine, shall be charged double the amount of gain preceding from the commission of such offense, not to exceed \$20,000.00. In case of a corporation, a fine may be imposed not to exceed \$5,000.00, or any higher amount not exceeding double the amount of the corporation's gain from the commission of the offense, as determined under Chapter 560.001 RSMo. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

R113.5 Unlawful Continuance. Any person who shall continue any work after having been served with a stop work order as that person is directed to perform to remove a violation of unsafe condition, shall be liable to a fine of not less than twenty-five dollars (\$25.00) nor more than (\$500.00).

SEC 115: Dangerous Structures

115.1 Conditions. Buildings, structures, or equipment that are or hereafter become dangerous, shall be taken down, removed, or made safe as the code official deems necessary and as provided for in this code.

115.2 Record. The code official shall cause a report to be filed on a dangerous condition. The report shall state the occupancy of the structure and the nature of the dangerous condition.

115.3 Notice. If a dangerous condition is found after a signed complaint is received, the code official shall serve on the owner, agent, or person in control of the structure a written notice that describes the condition deemed dangerous and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the dangerous building to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the code official acceptance or rejection of the terms of the order.

115.4 Method of service. Such notice shall be deemed properly served if a copy thereof is delivered to the owner personally, sent by certified or registered mail addressed to the owner at the last known address with the return receipt requested; or delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon owner.

115.5 Restoration. The building or equipment determined to be dangerous by the code official is permitted to be restored to a safe condition. To the extent that repairs, alterations, or additions are made, or a change of occupancy occurs during restoration of the building, such repairs, alterations, additions or change of occupancy shall comply with the requirements of this code.

Chapter 2 General Definitions – Dangerous Structures

Any building, structure, or portion thereof that meets any of the conditions described below shall be deemed dangerous:

1. The building or structure has collapsed, has partially collapsed, has moved off its foundation, or lacks the necessary support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgement of any portion, member, appurtenance or ornamentation of the building or structure under service loads.
4. The building, or any portion thereof, is likely to collapse Partially or completely because of dilapidation, deterioration, or decay; construction in violation of the International Residential Code; the removal, movement or instability of any portion of the ground necessary for the purpose of supporting such building; the deterioration, decay or inadequacy of its foundation; damage due to fire, earthquake, wind or flood; or any other similar cause.
5. The exterior walls or other vertical structural members list, lean, or buckle to such an extent that a plumb line passing through the center of gravity does not fall inside the middle one third of the base.
6. Any structure contaminated with chemical or other toxic substances.

Chapter 2 Bedroom. Add bedroom – Any room within a dwelling unit that is equipped with an egress window and closet in typical bedroom location or in manufactured homes bedroom(s) are as indicated by manufacturer’s floor plan and /or title.

Chapter 2 Accessory Structure

A structure that is accessory to and incidental to that of the dwelling(s) and that is located on the same lot. Accessory structure not greater than 5000 square foot in floor area.

Walking Surface – An area that is man-made or prepared to create a surface used for common pedestrian travel including stairs, ramps, landings, sidewalks, and driveways.

R301.2 Table. Insert the following:

<i>Ground Snow Load</i>	<i>20psf</i>
Roof Snow Load	20psf
Wind Speed	105 mph
Ice Shield Under-Layment	– Not required.
Seismic Design Category	C
Weathering	Severe
Frost Line Depth	30” (inches)
Termite	Moderate to Heavy
Decay	Slight to Moderate
Winter Design Temp.	0-degree F
Flood Hazards	Article 11 Appendix H Flood Plain Map

Mean Annual Temp 56 degrees

Air Freezing Index 1000

R302.5.1 DELETE Self closing door.

R302.13 DELETE Fire protection of floors

R302.6 Table. Change all 1/2” to 5/8” Type “X”.

R303.3 Bathrooms. Change Exception to:

Exception: The glazed window areas shall not be required where artificial light and mechanical ventilation system are provided. The minimum ventilation rates shall be 50 cfm (23.6L/s) for intermittent ventilation or 20 cfm (9.4L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside. (Outside will include as ridge vent, roof vent, gable vent, or soffit vent.)

R303.10 Required Heating. When the winter design temperature in Table R301.2 (1) is below 60 degrees F (16 degrees C), every dwelling unit shall be provided with heating facilities capable of maintaining a minimum room temperature of 68 degrees F (20 degrees C) at a point 3 feet (914 mm) above the floor and 2 feet (610 mm) from exterior walls in all habitable rooms at the design temperature. The installation of one or more portable space heaters shall not be used to achieve compliance with this section nor shall heat sources which are manually fueled be allowed to be the only source of heat.

R311.3 Floors and landings at exterior doors.

Exception #2: Exterior doors other than required egress door(s) may install guards per Section R312 and door must remain operable.

R311.3.2 Exception: A top landing is not required where a stairway of not more than three risers is located on the exterior side of the door, provided that the door does not swing over the stairway.

R312.1.1 Add sidewalk and driveway.

R312.2, 312.2.1 & 312.2.2 Delete window fall protection.

R313 Delete automatic fire sprinkler systems.

R 314.1 **Smoke Alarms.** Smoke alarms shall be installed in the following locations:

1. Outside each separate sleeping area in the immediate vicinity of the bedrooms within ten feet of door.

R318 Delete- protection against subterranean termites.

R402.1 **Wood foundations.** Delete and replace with: Wood foundations are not allowed. R402.1, R402.1.1 and R402.1.2.

R403.1 **General:** Delete wood foundations.

R403.1.1 **Minimum size.** Minimum sizes for concrete and masonry footings shall be as set forth in Table R403.1 per ordinance. The size of footings supporting piers and columns shall be based on the tributary and allowable soil pressure in accordance with Table R401.4.1.

Delete tables 403.1(1), 403.1(2), 403.1(3) and replace with table 403.1

Table 403.1

Minimum width and thickness of concrete or masonry footings.

Load-Bearing value of soil (psf) 1,500 to 12,000

1 - story	8" thick X 20" wide
2 - story	8" thick X 24" wide
3 - story	10" thick X 24" wide
Franklin County	10" thick X 40" wide (3) #4
Cover Design	rebar
9' – 10' Wall or Design by Registered Design Professional	

Reinforcement – Two (2) No. #4 rebar continuous and tied in place.

Note: All load bearing footings must be reinforced with a minimum of 2-#4 rebar continuous, spaced evenly and placed 3" minimum from bottom of footing. In addition, as a minimum 1-#4 vertical rebar shall be placed 2 feet on center, placed in the center of the footing/foundation wall. The vertical rebar shall have an 8" L-shaped hook, as measured from the outside edge of the hook to the end of the hook. The vertical bar hooked end shall be embedded in the footing 4" to 5", with 16" of rebar rising above the footing. All rebar shall be 40 grade.

Footnotes:

- a) W = 8" minimum
- b) Monolithic slabs allowed only on detached/uninhabitable structures.
- c) Monolithic slab minimum rebar (2) #4 horizontal, #4 vertical 2' on center bent in to slab and 2' by 2' grid in slab.
- d) Monolithic slab and footing must be poured at the same time.

R403.1.1 DELETE AND REPLACE WITH Minimum size.

Minimum sizes for concrete and masonry footings shall be as set forth in Table R403.1 and Figure R403.1 (1). The footing width, **W**, shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Spread footings shall be at least 8 inches (152mm) in thickness. Footing projections, **P**, shall be at least 2 inches (51 mm) and shall not exceed the thickness of the footing. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table 401.4.1 with a minimum dimension of 30" x 30" x 12" with #4 rebar 6" on center each way.

R403.1 (2) Permanent Wood Foundation Wall Section:

Delete in its entirety.

R403.1 (3) Permanent Wood Foundation Crawl Space Section:

Delete in its entirety.

R403.1.4.1 Frost Protection – Delete #3 in code and replace with:

3. Decks 36 square feet or less not supported by a dwelling need not be provided with footings that extend below the frost line but require no less than a 12" x 12" x 4" masonry pad under post below final grade.

R403.1.4.1 (1) All habitable spaces and any uninhabitable space with plumbing must have a continuous frost wall.

R404.1.1 (1) Delete. Replace with Table R404.1.1 see next page.

R404.1.1 (2) Delete. Replace with Table R404.1.1 see next page.

R404.1.1 (3) Delete. Replace with Table R404.1.1 see next page.

R404.1.1 (4) Delete. Replace with Table R404.1.1 see next page.

Table R404.1.1

Reinforced Concrete and Masonry Foundation Walls

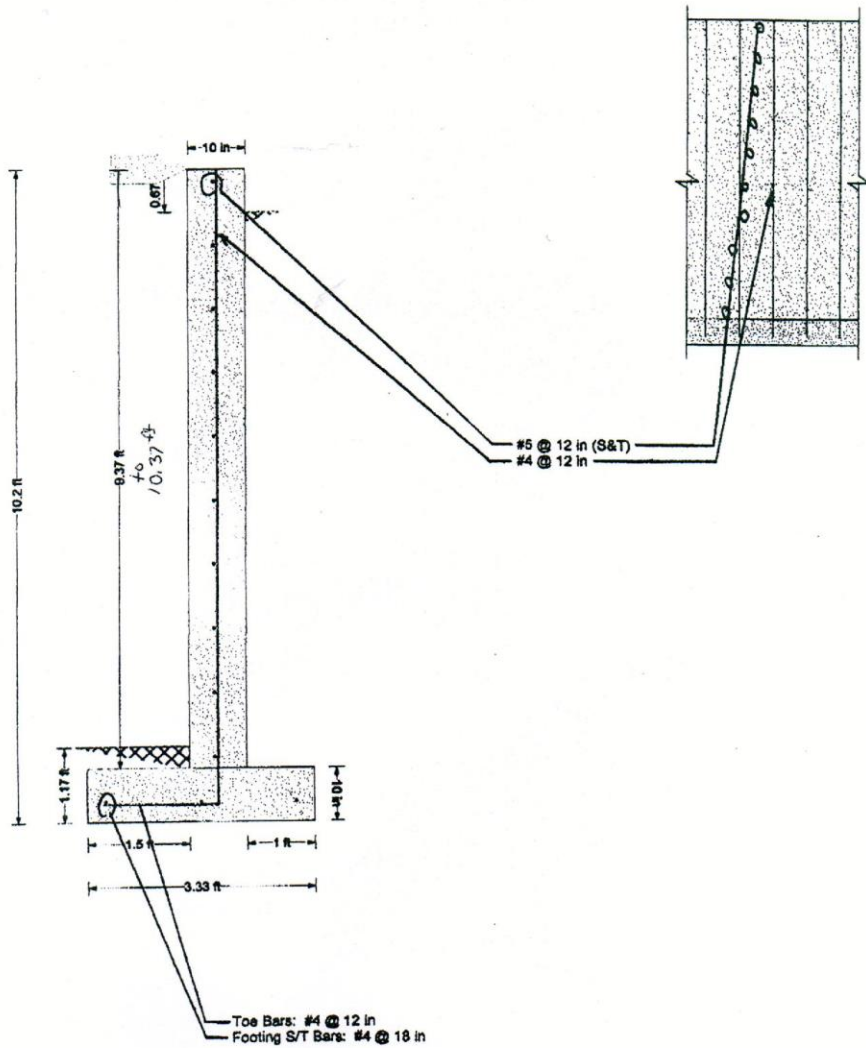
<u>Max. Wall Height</u>	<u>Min. Vertical / Horizontal Reinforcement size and spacing for 8", 10", and 12" Walls in All Soil Classes</u>
4 ft.	Vert.- #4 @ 4 ft. O.C. Horiz. - #4 @ 2 ft. O.C.
8 ft.	Vert.- #4 @ 2 ft. O.C. Horiz. - #4 @ 2 ft. O.C. (Min. 4)
9 ft.	Vert. - #4 @ 2 ft. O.C. Horiz. - #4 @ 2 ft. O.C.
9 ft. – 10 ft.	Design Required. – (Franklin County cover design for a 9' – 10' wall may be used or a Sealed Design from a "Missouri Registered Design Professional may be submitted.)
Over 10 ft.	Design Required.

- Note: a) Mortar shall be type M or S and masonry shall be laid in running bond.
b) Reinforcement shall be grade 40 min. Reinforcement shall be placed @ 3" from the inside face.
c) Vertical rebar shall extend to within 6" from the top of the foundation wall.
d) Wall height is measured from the top of balance fill to top wall.

FRANKLIN COUNTY COVER DESIGN FOR 9' - 10' WALL

FRANKLIN COUNTY COVER DESIGN FOR 9' - 10' WALL

Concrete $f_c = 3000$ psi
 Rebar $F_y = 60000$ psi
 Unit Weight = 150 lb/ft³



R404.2 Wood Foundation Walls: Delete

R405.2 Wood Foundations: Delete

R406.3 Damp proofing for Wood Foundations: Delete

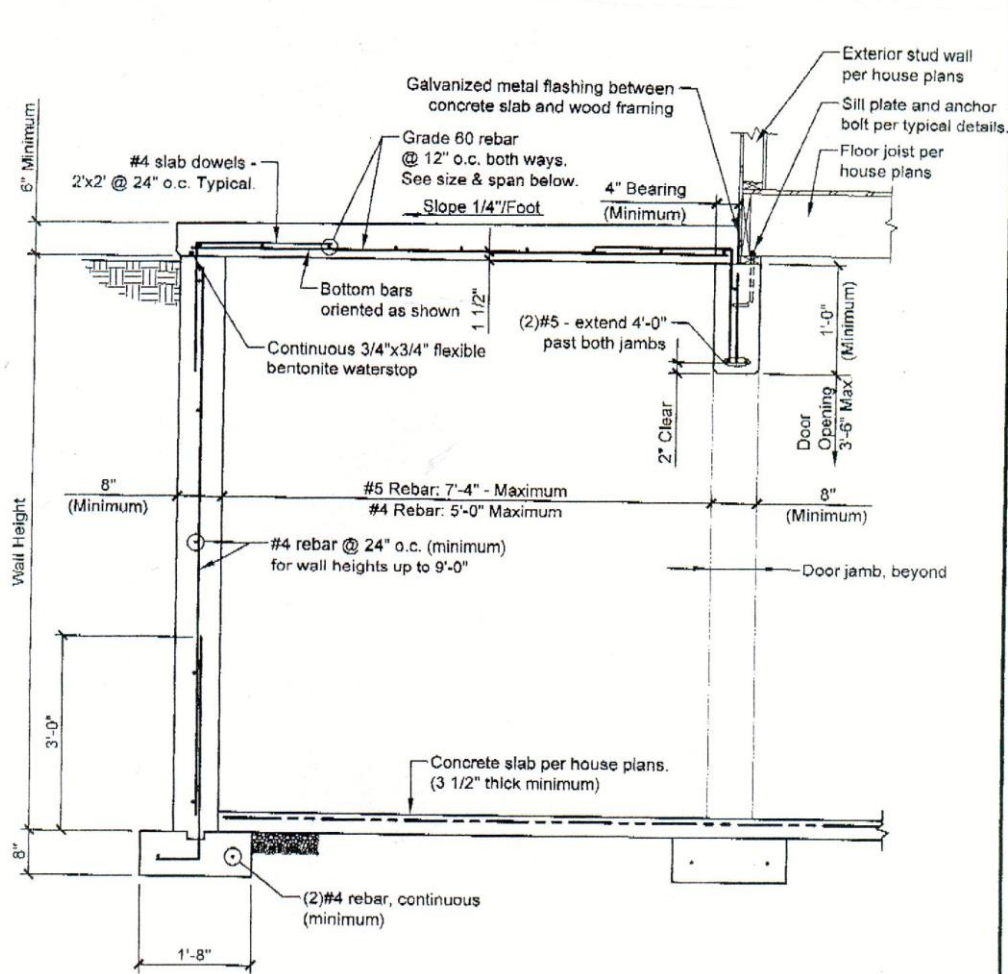
R502.1 General: add concrete behind wood based.

R502.1.8 Suspended concrete floors. Minimum requirements for suspended concrete floors not exceeding 7'4" clear span:

- 1) Maximum clear span width of seven (7) feet, four (4) inches or less.
- 2) Number four (4) steel rebar installed twelve (12) inches on center each way with 1 – 1 ½ inch clearance from the bottom. Note: All laps of rebar must be twenty-four (24) inches minimum.
- 3) Number four (4) dowels, twelve (12) inches on center, poured into the top of the foundation that supports the floor, a minimum of twenty-four (24) inches and bent into slab a minimum of twenty-four (24) inches so they can be tied to the reinforcing rebar mat.
- 4) Minimum, Four (4) inch bearing ledge.
- 5) Six (6) inch thick concrete slab minimum, using six (6) sack, 4,000 p.s.i. concrete minimum.
- 6) see figure 502.1.8(1) attached.

Figure R502.1.8(1)

TYPICAL SUSPENDED CONCRETE PORCH SLAB



TYPICAL SUSPENDED CONCRETE PORCH SLAB DETAIL

GENERAL NOTES:

1. All detailing, fabrication and placing of reinforcing bars shall comply with the A.C.I. "Manual of Standard Practice for Detailing Reinforced Concrete Structures" latest edition.
2. Reinforcing bars shall be Grade 40 minimum unless noted otherwise.
3. All concrete shall have a minimum compressive strength in 28 days of 4,000 psi. All concrete shall be air-entrained. Do not remove formwork until concrete strength reaches 4,000 psi.
4. Splices in reinforcing steel shall be 36 bar diameters or 1'-6" minimum, unless noted otherwise. Alternate splice locations in the suspended slab.
5. Slab reinforcing shall be inspected by the building inspector prior to pouring any concrete.

R502.1.9 Other Suspended Floors. All suspended floors that exceed the seven (7) foot, four (4) inch clear span width will require a sealed design stamped by a Registered Design Professional.

R502.3.1 Sleeping areas and attic joist. Delete.

R502.3.1 (1) Table for Floor Joist Spans. Delete.

R502.6.1 Floor Systems. Joists framing from opposite sides over a bearing support shall lap a minimum of 3 inches (76mm) and shall be nailed together with a minimum three 10d face nails. A wood or metal splice with strength equal to or greater than that provided by the nailed lap is permitted. There shall be a 3-inch maximum overhang beyond bearing point.

R503.2.1.1 (1) Plywood Sheathing Table. Delete 3/8 from Roof and 19/32 and 5/8 from Sub floor.

R507.3 Delete Figure 507.3 and Table 507.3.1 and replace with Figure R507.3

R507.3 Pier Detail

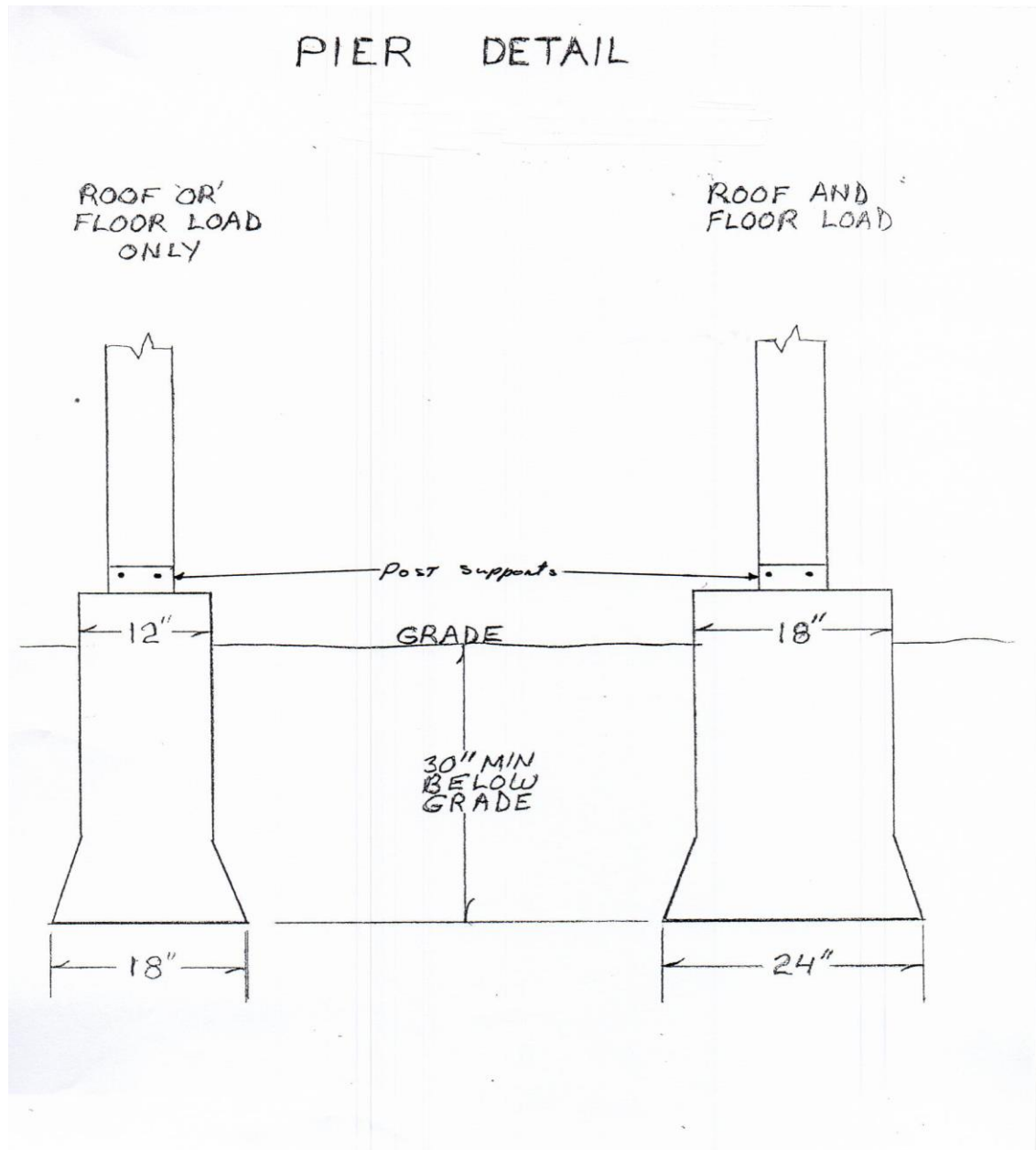


Table R602.3(5) Delete. Replace with table 602.3.1. See attached.

Delete Table R602.3(6) and replace with Table 602.3.1 from 2009 IRC attached.

Table R602.3.1
MAXIMUM ALLOWABLE LENGTH OF WOOD WALL STUDS EXPOSED TO
WIND SPEEDS OF 100 MPH OR LESS IN SEISMIC DESIGN CATEGORIES A, B, C,
D(0), D(1) AND D(2b,c)

HEIGHT (feet)	ON-CENTER SPACING (inches)			
	24	16	12	8
Supporting a roof only				
>10	2 x 4	2 x 4	2 x 4	2 x 4
12	2 x 6	2 x 4	2 x 4	2 x 4
14	2 x 6	2 x 6	2 x 6	2 x 4
16	2 x 6	2 x 6	2 x 6	2 x 4
18	NAa	2 x 6	2 x 6	2 x 6
20	NAa	NAa	2 x 6	2 x 6
24	NAa	NAa	NAa	2 x 6
Supporting one floor and a roof				
>10	2 x 6	2 x 4	2 x 4	2 x 4
12	2 x 6	2 x 6	2 x 6	2 x 4
14	2 x 6	2 x 6	2 x 6	2 x 6
16	NAa	2 x 6	2 x 6	2 x 6
18	NAa	2 x 6	2 x 6	2 x 6
20	NAa	NAa	2 x 6	2 x 6
24	NAa	NAa	NAa	2 x 6
Supporting second floor and roof				
>10	2 x 6	2 x 6	2 x 4	2 x 4
12	2 x 6	2 x 6	2 x 6	2 x 6
14	2 x 6	2 x 6	2 x 6	2 x 6
16	NAa	NAa	2 x 6	2 x 6
18	NAa	NAa	2 x 6	2 x 6
20	NAa	NAa	NAa	2 x 6
22	NAa	NAa	NAa	NAa
24	NAa	NAa	NAa	NAa

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479kPa,
1 pound per square inch = 6.895kPa, 1 mile per hour = 0.447 m/s.

- a. Design required.
 - b. Applicability of this table assumes the following: Snow load not exceeding 25 psf, fb not less than 1310 psi determined by multiplying the AF&PA NDS tabular base design value by the repetitive use factor, and by the size factor for all species except southern pine, E not less than 1.6 x 10⁶ psi, tributary dimensions for floors and roofs not exceeding 6 feet, maximum span for floors and roof not exceeding 12 feet, eaves not over 2 feet in dimension and exterior sheathing. Where the conditions are not within these parameters, design is required.
 - c. Utility, standard, stud and No. 3 grade lumber of any species are not permitted
- R802.11 Delete Exceptions 1 & 2

TABLE R602.7(1)

Post Height	8'	10'	12'	14'	16'	18'	20'	22'
4x6	7800	4800	3200	N/A	N/A	N/A	N/A	N/A
6x6, Utility Pole 3 ply x 6			7800	4800	3200	N/A	N/A	N/A
4 ply x 6			12800	9000	6400	4600	N/A	N/A
3 ply x 8			17600	13000	9400	6800	N/A	N/A
4 ply x 8			20600	15200	11200	8000	5800	4200
5 ply x 8						11000	9200	6000

Footnotes:

- A.) Utility pole must be 6" minimum on small end and structurally sound.
- B.) Live load 20# psf
- C.) Dead load 5# psf = purlin & tin
10# psf = sheathing & shingles OR per truss detail, whichever is greater.
- D.) Design by Registered Design Professional required for buildings over 5000 sq ft or exceeds chart specifications.
- E.) Roof purlins sized in accordance with table R802.4.1(1)2021IRC.

R602.7(1)(1) See table. For design of post frame accessory structures with purlin and metal siding, refer to Table 602.7(1)(1) and Table 602.7(1)

POLE BARN HEADER CHART TABLE R602.7(1)(1)
20# LIVE LOAD
5#DEAD LOAD
NO CEILING LOAD
PERLIN AND METAL ROOFING

Post spacing	20'	22'	24'	26'	28'	30'	32'	34'	36'	38'	40'
8' or less	(2)2x8 precast	(2)2x8 precast	(2)2x8 precast	(2)2x8 precast	(2)2x8 precast	(2)2x10 precast	(2)2x10 precast	(2)2x10 precast	(2)2x10 6x18	(2)2x12 6x18	(2)2x12 6x18
9'	(2)2x8 precast	(2)2x8 precast	(2)2x8 precast	(2)2x8 precast	(2)2x10 precast	(2)2x10 6x18	(2)2x10 6x18	(2)2x10 6x18	(2)2x12 6x18	(2)2x12 6x18	(2)2x12 6x18
10'	(2)2x8 precast	(2)2x8 precast	(2)2x10 precast	(2)2x10 precast	(2)2x10 6x18	(2)2x10 6x18	(2)2x12 6x18	(2)2x12 6x18	(2)2x12 6x18	(3)2x10 6x18	(3)2x10 6x18
11'	(2)2x10 precast	(2)2x10 precast	(2)2x10 precast	(2)2x10 6x18	(2)2x12 6x18	(2)2x12 6x18	(2)2x12 6x18	(3)2x10 6x18	(3)2x10 6x18	(3)2x10 6x18	(3)2x10 8x20
12'	(2)2x10 precast	(2)2x10 precast	(2)2x12 6x18	(2)2x12 6x18	(2)2x12 6x18	(2)2x12 6x18	(3)2x10 6x18	(3)2x10 6x18	(3)2x10 8x20	(3)2x12 8x20	(3)2x12 8x20
13'	(2)2x12 6x18	(2)2x12 6x18	(2)2x12 6x18	(2)2x12 6x18	(2)2x12 6x18	(3)2x10 6x18	(3)2x10 6x18	(3)2x10 8x20	(3)2x12 8x20	(3)2x12 8x20	(3)2x12 8x20
14'	(2)2x12 6x18	(2)2x12 6x18	(2)2x12 6x18	(3)2x10 6x18	(3)2x10 6x18	(3)2x12 6x18	(3)2x12 6x18	(3)2x12 6x18	(3)2x12 8x20	(3)2x12 10x24	(4)2x12 10x24
15'	(2)2x12 8x20	(3)2x10 8x20	(3)2x10 8x20	(3)2x12 8x20	(3)2x12 8x20	(3)2x12 8x20	(3)2x12 8x20	(3)2x12 8x20	(3)2x12 10x24	(4)2x12 10x24	(4)2x12 10x24
16'	(3)2x10 8x20	(3)2x10 8x20	(3)2x12 8x20	(3)2x12 8x20	(3)2x12 8x20	(3)2x12 8x20	(4)2x12 8x20	(4)2x12 10x24	(4)2x12 10x24	(4)2x12 10x24	(4)2x12 10x24

Foot notes:

1. All header #1 southern pine
2. All headers need to bear on post or bearing block minimum 20" long fastened vertically on post with minimum 2 bolts.
3. Header must be bolted or lagged to post ½ " minimum diameter
4. Bottom # is size and type of concrete footing under post precast is 4"x14" and other sizes are poured in place concrete.
- 5.

Post Height Above Grade	Minimum Amount Of Post In Ground
10'	30"
12'	36"
14' and above	48"

Chapter 11 – Delete

P2804.1 Water Heater Sizing Chart

P2804.1 Water Heater Sizing Chart													
Fuel		Gas	Elect	Oil	Gas	Elect	Oil	Gas	Elect	Oil	Gas	Elect	Oil
No. of bedrooms		1			2			3			-		
1 to 1 ½ baths	Storage (gal)	20	20	30	30	30	30	30	40	30	-	-	-
	Input (BTU/h or kw)	27k	2.5	70k	36k	3.5	70k	36k	4.5	70k	-	-	-
	Draw (gph)	43	30	89	60	44	89	60	58	89	-	-	-
	Recovery (gph)	23	10	59	30	14	59	30	18	59	-	-	-
No. of bedrooms		2			3			4			5		
2 to 2 ½ baths	Storage (gal)	30	40	30	40	50	30	40	50	30	50	50	30
	Input (BTU/h or kw)	36k	4.5	70k	36k	5.5	70k	38k	5.5	70k	47k	5.5	70k
	Draw (gph)	60	58	89	70	72	89	72	72	89	90	88	89
	Recovery (gph)	30	18	59	30	22	59	32	22	59	40	22	59
No. of bedrooms		3			4			5			6		
3 to 3 ½ baths	Storage (gal)	40	50	30	50	50	30	50	50	30	50	80	40
	Input (BTU/h or kw)	38k	5.5	70k	38k	5.5	70k	47k	5.5	70k	50k	5.5	70k
	Draw (gph)	72	72	89	82	88	89	90	88	89	92	102	99
	Recovery (gph)	32	22	59	32	22	59	40	22	59	42	22	59
For SI: 1 gallon = 3.785L, 1 gallon per hour = 1.05 mL/s, 1 BTU/h = 0.2931 W.EF= 1.8EC+32 NOTE: Storage capacity, input and the recovery requirements indicated in the table are typical and may vary with each individual manufacturer. Any combination of these requirements to produce the 1-hour draw stated will be satisfactory. Recovery is based on 100EF. Water temperature rise.													

Exception: #1 Other types of heaters than those listed above may be used if the recovery rate is equal to the above chart.

P2602.1.1 Public water or sewer. The water-distribution and drainage system of any building or premises where plumbing fixtures are installed and within an established District shall connect to those utilities. When either a public water supply or sewer system, or both, are not available, an individual water supply or individual (private) sewage disposal system or both shall be provided.

Exception: If service is not available or over 50 (fifty) feet from lot line per written proof from the utility or deemed feasible by Building Official and/or Utility District than an On-Site Water and or Sewer may be installed.

P2603.5.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be not less than 12 inches (mm) below finished grade at the point of septic tank connection. Building sewers shall be not less than 12 inches (mm) below grade.

P2903.5 Made on-site arresters allow 12” minimum above supply line.

P3001.1 Per the County of Franklin On-Site Sewage Disposal Systems Ordinance and Regulations

P3103.1 Roof extension. All open vent pipes, which extend through a roof shall be terminated at least twelve (12) inches except that where a roof is to be used for any purpose other than weather protection, the vent extension shall be run at least 7 feet above the roof.

P3113.1.1 Main vent stack. Every building shall have a main vent a minimum of three (3) inches in diameter that is either a vent stack or a stack vent. Such vent shall run undiminished in size and as directly as possible from the building drain through to the open air above the roof. All other vent extensions to the outside shall not be less than two (2) inches in diameter.

P3114.3 Where Permitted. Individual vents, branch vents, circuit vents and stack vents shall be permitted to terminate with a connection to an air admittance valve. Where a connection to the venting system of a structure is non-accessible, approval can be granted by the Building Official. This will be done on a case-by-case basis.

P3201.4.1 Floor drains in attached garages and accessory structure shall have no traps and discharge to day light. Any other fixtures are prohibited to discharge into floor drain.

E3605.5 Protection of service cables against damage.

Above-ground service-entrance cables shall be protected by one or more of the following: rigid metal conduit, intermediate metal conduit, rigid nonmetallic conduit suitable for the location, electrical metallic tubing, or other approved means.

E3608.1 Grounding Electrode System. All electrodes specified in Sections E3608.1.1, E3608.1.2, E3608.1.3, E3608.1.4, E3608.1.5, and E3608.1.6 that are present at each building or structure served shall be bonded together to form the grounding electrode system. Where none of these electrodes are present, two or more of the electrodes specified in Sections E3608.1.3, E3608.1.4, E3608.1.5, and E3608.1.6 shall be installed and used. (250.50)

E3803.3 Protection from damage. Add to end of subsection: No water lines or sewer piping shall be within 2 feet of electric service conductors or electric conduit. If electric service conductors or electric conduit cross over or under the water line or sewer piping, they must be encased with cement.

E3902.2 Garage and Accessory building receptacles: Add- Exception #1 Dedicated single receptacle.

E3902.5 Unfinished basement receptacle: Add- Exemption#2- Dedicated single receptacle.

E3902.9 Add exception #1 dedicated single 120-volt receptacle for washer.

E3902.11 Delete dishwasher outlet.

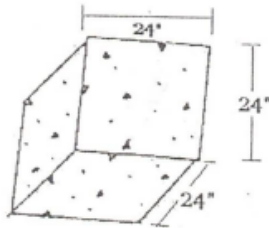
E3902.17 Delete- arc-fault circuit interrupter protection.

E3908.15 **Metal Boxes:** Add the following - #4 Approved grounding clips.

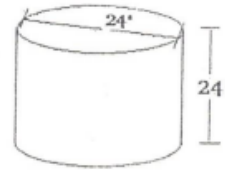
Appendix “E”. Manufactured Homes with same changes as “2000” code per Commission Order 04-115. See attached.

Mobile Home: Piers, Runners, Cross Runners, and Slab Specifications

PIER SPECIFICATIONS



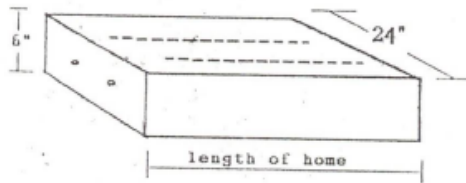
24" x 24" x 24" Minimum Piers



Round piers 24" diameter x 24" deep are allowed

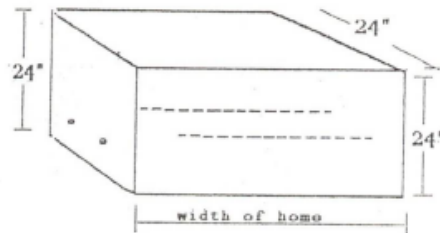
All perimeter blocking must also be at least 24" deep when using piers.

RUNNER SPECIFICATIONS



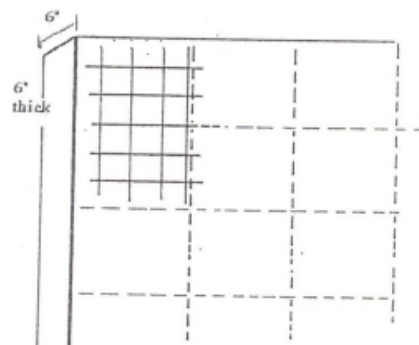
24" x 6" thick minimum with 2 rows #4 rebar continuous

CROSS RUNNER SPECIFICATIONS



24" x 24" thick minimum with 2 rows #4 rebar continuous

SLAB / PAD SPECIFICATIONS



6" thick minimum concrete slab with wire mesh or #4 rebar @ 24" OC on center each way

AE505 Building Service Equipment. AE505.1 General. The installation, alternation, repair, replacement, addition to or maintenance of the building service equipment within the manufactured home shall conform to regulations set forth in the Manufactured Home Standards. Such work which is located outside the manufactured home shall comply with the applicable codes adopted by this jurisdiction. Refer to NEC/2020, Section 550.32.

Appendix “J”. Existing Structures.