

Requirements for Sheds, Carports and Garages

Your guide to permitting and inspections

Per the USBC, EFFECTIVE 9-4-2018

Town of Tazewell 211 Central Ave Tazewell VA 24651 Phone:276-988-2501 Fax 276-988-2505

Email: tazbuildingoff@taztown.org

What is a shed?

The Virginia Uniform Statewide Building Code defines a shed as a structure that has all of the following characteristics:

1. It is detached, one story structure.
2. It is used for tool storage, playhouse or similar use.
3. It does not exceed 10 feet tall at the eave height.
4. The maximum distance that it can be off the ground is 18 inches.

The structure is made of light frame construction, with vertical and horizontal structural elements primarily formed by a repetitive wood or light-gauge metal framing members. New product technology has also introduced plastic panel products as an acceptable tool-storage solution.

A structure that does not comply with these criteria will be treated as any other **detached structure**.



What is a Carport?

A Carport is a structure open on at least two sides and used generally for vehicles. It may be attached to the house, or be free standing. The floor surface can be concrete, gravel or asphalt. If the structure does not open on at least two sides, it shall be considered a garage and will have to comply with all code requirements for garages.



What Permits do I need?

All accessory structures at the very least need a **Zoning Permit** before installation and best practice is to check even before ordering any building. Different areas in the Town of Tazewell have different Zoning ordinances for setbacks and height restrictions. Some subdivisions may not allow the accessory structures per certain deed restrictions. The definition of a **Building Accessory** structure per the Tazewell Town Code Sec. 23.-1) is: A subordinate structure customarily incidental to and located upon the same lot occupied by the main structure. No such accessory structure shall be used for housekeeping purposes.

The code makes no distinction between:

- A prefab structure that is delivered on-site completely assembled and a structure that is erected on-site.
- A metal, wood or panelized building.

The following permits are required:

- A **Zoning Permit** for all accessory structures.
- A **Building Permit** is all that is typically is required. **The person who assumes ultimate responsibility, either the homeowner or the contractor, must apply.**
- An **Electrical Permit** will be required if the structure will have electricity.
- A **Mechanical or Gas Permit** may be required if the structure will be heated mechanically.
- A **Plumbing Permit** will be required if the structure will have water.

What are the Code Requirements?

Structures up to 256 square feet (examples: 12' x 12' or 16' x 16')

A shed, carport or light framed structure up to 256 sq ft shall be built in accordance with the code and be anchored to the ground- typical anchorage systems include auger type or strap type tie-downs.

Structures 257 square feet and larger (examples: 20' x 20', 16' x 25' or 24' x 32')

All structures 257 square feet and larger shall have approved footings installed per section R403 of the VRC. The Foundation Code sections are listed below.

Foundations:

R403.1.4 Minimum Depth

Exterior footings shall be placed not less than 12 inches (305 mm) below the undisturbed ground surface. **Where applicable, the depth of footings shall also conform to Sections R403.1.4.1.(18 inches for Tazewell County)**

R403.1.4.1 Frost Protection

Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extended below the frost line specified in Table R301.2.(1).
2. Constructed in accordance with Section R403.3.
3. Constructed in accordance with ASCE 32.
4. Erected on solid rock.

Exceptions:

1. Protection of freestanding *accessory structures* with an area of 600 square feet (56 m²) or less, of light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
2. Protection of freestanding *accessory structures* with an area of 400 square feet (37 m²) or less, of other than light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
3. Decks not supported by a dwelling need not be provided with footings that extend below the frost line.

R403.1.6 Foundation anchorage. Wood sill plates and wood walls supported directly on continuous foundations shall be anchored to the foundation in accordance with this section. Cold-formed steel framing shall be anchored directly to the foundation or fastened to wood sill plates anchored to the foundation. Anchorage of cold-formed steel framing and sill plates supporting cold-formed steel framing shall be in accordance with this section and Section R505.3.1 or R603.3.1. Wood sole plates at all exterior walls on monolithic slabs, wood sole plates of braced wall panels at building interiors on monolithic slabs and all wood sill plates shall be anchored to the foundation with minimum 1/2-inch diameter (12.7 mm) anchor bolts spaced a maximum of 6 feet (1829 mm) on center or approved anchors or anchor straps spaced as required to provide equivalent anchorage to 1/2-inch diameter (12.7 mm) anchor bolts. Bolts shall extend a minimum of 7 inches (178 mm) into concrete or grouted cells of concrete masonry units. The bolts shall be located in the middle third of the width of the plate. A nut and washer shall be tightened on each anchor bolt. There shall be a minimum of two bolts per plate section with one bolt located not more than 12 inches (305 mm) or less than seven bolt diameters from each end of the plate section. Interior bearing wall sole plates on monolithic slab foundation that are not part of a braced wall panel shall be positively anchored with approved fasteners. Sill plates and sole plates shall be protected against decay and termites where required by Sections R317 and R318. Exceptions: 1. Walls 24 inches (610 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels at corners as shown in Item 9 of Table R602.3(1). 2. Connection of walls 12 inches (305 mm) total length or shorter connecting offset braced wall panels to the foundation without anchor bolts shall be permitted. The wall shall be attached to adjacent braced wall panels at corners as shown in Item 9 of Table R602.3 (1).

RMC 22-31 b (11) Structures and buildings constructed using continuous concrete footings/foundations shall have 1- # 4 rebar at the top and bottom of the footing or 1- # 5 rebar near the bottom or 2 #4 at 1/3 points in footing of "T" type footing and stem wall foundations. Reinforcement shall be installed per subsection (a) of this section. Slabs on ground not poured

monolithically with the footings, shall have #3 rebar dowels with standard hooks installed 48" on center per figure IRC R403.1.3 or similar as approved by the building official.

Special Considerations

For light framed metal structures, the manufacturer's literature shall clearly indicate the number, size and spacing of the anchors. The runners must be set on piers or be anchored directly into the earth—they may not be anchored directly to a 4-inch-thick concrete slab.

A "Pole Barn" is interpreted to mean a structure on a working farm used primarily in the handling of livestock or storage of agricultural products and/or related implements. Similar structures not on working farms will be considered detached structures.

Premanufactured wood structures are delivered to the site and off loaded. Typically, they have wood floor sheathing on pressure treated runners. The anchorage requirements vary by size (see previous requirements).

Any two-story building will automatically be treated as a detached structure and require a continuous footing per the Foundation Section above.

Construction Documents

Construction documents are required to be submitted to and reviewed by the Building Official except when no permit is required or when the Building Official determines the work is of a minor nature. Basic drawings showing a dimensioned floor plan, elevations, framing plans indicating structural member sizes and on center spacing and a foundation plan with anchorage details will generally suffice. Plans for prefabricated metal carports, metal garages and similar structures that are not designed prescriptively in accordance with the USBC, may be required to be sealed by a registered design professional and may require additional engineered details in accordance with VRC Section 109.3.

Anchorage

Anchoring of these structures is of paramount importance and required by the code regardless of the size, type of structure, or exemption from application for permit. For sheds that meet the exception criteria described above and are anchored directly to the ground, auger type or strap type anchors installed in accordance with the manufacturer's installation instructions are generally acceptable. In many cases, anchoring can be designed and installed prescriptively in accordance with VRC Section R403.1.6. For structures where alternative anchoring methods are utilized, there may be a need for wind loading and/or uplift analysis.