



Guidelines for Adding or Remodeling A Residential Bathroom

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This information packet contains information regarding adding or remodeling a bathroom. If you are making structural alterations or repairs, planning to add an addition, or otherwise enlarge your home, please refer to [Residential Plan Review Requirements](#) available at the Building Development Division or at www.pwcva.gov/BDD.

The selected sections of the Virginia Residential Code briefly summarized in this handout will be helpful in your bathroom project. They are not, however, all-inclusive and should not be considered a comprehensive set of instructions. The responsible party should consult the code book for complete information.

Four Facts You Should Know *Before Starting*

- All receptacles located in a bathroom require GFCI protection. GFCI outlets are required within 36 inches of the edge of each lavatory basin. Two basins may be served by a single duplex receptacle where the outlet is located within 36 inches of the edges of both basins. The feed for this/these outlets must be provided from one of the three following sources:
 - The receptacle may be fed from the existing 20 amp circuit serving the other bathroom receptacles in the dwelling.
 - The new bathroom may be fed entirely by a dedicated 20 amp receptacle serving the lights, fan and receptacle(s) in the individual bathroom.
 - The new receptacle may be fed via a dedicated 20 amp circuit.
- Bathrooms, water closet compartments, and similar rooms are required to be ventilated by a minimum 3 square foot window with insect screening with at least half of which is openable. In the absence of the required opening, an artificial light source and mechanical ventilation may be provided. The mechanical ventilation must exhaust directly to the exterior of the dwelling and have a minimum capacity of 50 cfm intermittent or 20 cfm continuous.
- Safety glazing is required in wet areas. Glazing in walls or enclosures containing or facing spas, whirlpools, saunas, steam rooms, bathtubs and showers shall be safety glazed if located less than 60 inches (1524 mm) measured horizontally, in a straight line, from the water's edge and the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface.
- Do I Need a Permit?
 - In an existing bathroom, where only fixtures such as a toilet or faucet are being replaced in their original positions or a new vanity cabinet is installed without relocating the shutoff valves, a permit is not required. Installing new finishes such as paint, tile or trim do not require a permit.
 - Replacement of a tub or shower basin requires a permit only if the location of the fixture, piping, or valves changes.
 - Modification or extension of any existing plumbing or electrical system requires a permit.



How to obtain your permit

All permits should be applied for using the ePortal at pwcgov.org/ePortal. Homeowner run projects can be applied for at the counter in 5 County Complex Ct. between 8:00a.m. and 4:00p.m.

What to Submit

- Layouts are only required if you are also finishing a basement or building an addition. Please see the Finishing a Basement Handout for more information.
- The Building Permit fee is based on the square footage of the area to be finished. The fee includes the permit and regular inspections. The fee is calculated per the approved [Building Development Fee Schedule](#). The Trade Permits (Electrical, Plumbing, Mechanical, and Gas) are priced separately based on the amount of equipment being installed.

Contractor Licenses, Business Licenses, Exemptions

- The homeowner may obtain the permits and perform the work, or the homeowner may hire a contractor to obtain the permits and perform the work. Please see further information on the ["Who Should Apply for a Permit?"](#) webpage.
 - If the homeowner is to obtain all permits and be the responsible party, a completed [Statement of Exemption](#) will be required.
 - If the contractor is to obtain all permits and be the responsible party, a copy of the Virginia State Contractor License and a copy of the contractor's Prince William County Business License are required.
 - Please read further information on [Hiring a Contractor](#).

Code Compliance

- All construction shall comply with current Virginia Residential Code (VRC). Please refer to the [Virginia Uniform Statewide Building Code](#) webpage for more information on the codes and code year which are applicable to your project.
- The VUSBC is available [online](#) or at the Virginia Department of Housing & Community Development: 600 East Main Street #300, Richmond, Virginia 23219. Phone 804-371-7000.

About Inspections

The most common *building problems* observed on bathroom projects are:

- Un-permitted work being performed.
- Structural work being performed without approved structural plans.
- Stud spacing not per code.



The most common *electrical problems* on bathroom projects are:

- Cables not supported within 8" of boxes without clamps, 12" with clamps, and every 4.5' thereafter.
- Cables not inside outlet boxes, stripped out, splices not made, equipment grounds not made up and pigtailed for the device. The switch or receptacle should not be installed for concealment inspection.
- Cables energized at concealment inspection creating a hazard for the Inspector and occupant.
- Metal boxes and bath exhaust fans not grounded.
- Protection (kick plates) not provided where cables are run closer than 1¼" to edge of framing and where holes for cables notched or drilled are closer than 1¼" to edge of stud or framing.
- Romex connectors or clamps not provided for cables entering metal boxes, recessed light junction boxes, and bath exhaust fans.
- Bathroom receptacle not wired with #12 conductors on a 20-amp dedicated circuit and GFCI protected.
- All receptacles within 6' of any sink, must be GFCI protected. Appliances or equipment may require additional circuits per the manufacturer's specifications (e.g. fan/light/heat units, sump pump, etc.). Check for amp and volt ratings.
- 14/2-gauge wire is rated for 15 amps and 12/2 is rated for 20 amps.

The most common *plumbing problems* on bathroom finish projects are:

- D.W.V. & Water piping not strapped properly.
- D.W.V. not graded properly.
- Kick plates not installed where required (within 1 ¼" of the nailing surface of framing members).
- Proper type of fittings and piping not used.
- Non-corrosive screws not used to secure shower head and toilet flange.
- Proper type tub/shower valve not used, not ASSE 1016 or 1070 compliant
- Shower pan not built to the minimum size.
- Drain piping too small for fixture connected.
- New piping not tested or not tested properly.
- Improper glue/primer used.
- Bathroom layout does not provide for minimum fixture clearances. See fig. 1

The most common *mechanical problems* on bathroom finish projects are:

- Bath exhaust fan is not vented to the outside.
- Bath fan/light located over tub/shower, not approved for location.

The most common *reasons for rejection at Final*:

- Work not completed; all electrical devices and plumbing fixtures not installed, secured, tested and working. Plumbing fixtures not caulked.
- All electrical breakers not installed, properly sized, and labeled.
- Tamper resistant receptacles not installed for all 125-volt, 15- and 20-amp receptacles.
- GFCI protection not provided for all receptacles within 6' of sinks, bathtubs, or showers.



Common Sections of the Virginia Residential Code

- Minimum required ceiling heights (Section R305) (Reference VRC 2018):
 - Must be measured from the finished floor to the lowest projection of the ceiling
 - Minimum Height - Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6' 8".
 - Exceptions:
 - The ceiling height above bathroom and toilet room fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or tub equipped with a showerhead shall have a ceiling height of not less than 6' 8" (2032 mm) above an area of not less than 30" (762 mm) by 30" (762 mm) at the showerhead.
 - Beams, girders, ducts, or other obstructions in basements containing habitable space shall be permitted to project to within 6' 4" (1931 mm) of the finished floor.
- Protection against decay (Section R317)
 - All lumber (sleepers, sills, plates, studs, joists, beams, etc.) that rest on concrete or masonry slabs, or exterior walls shall be pressure preservative treated unless separated from the ground by an impervious moisture barrier.

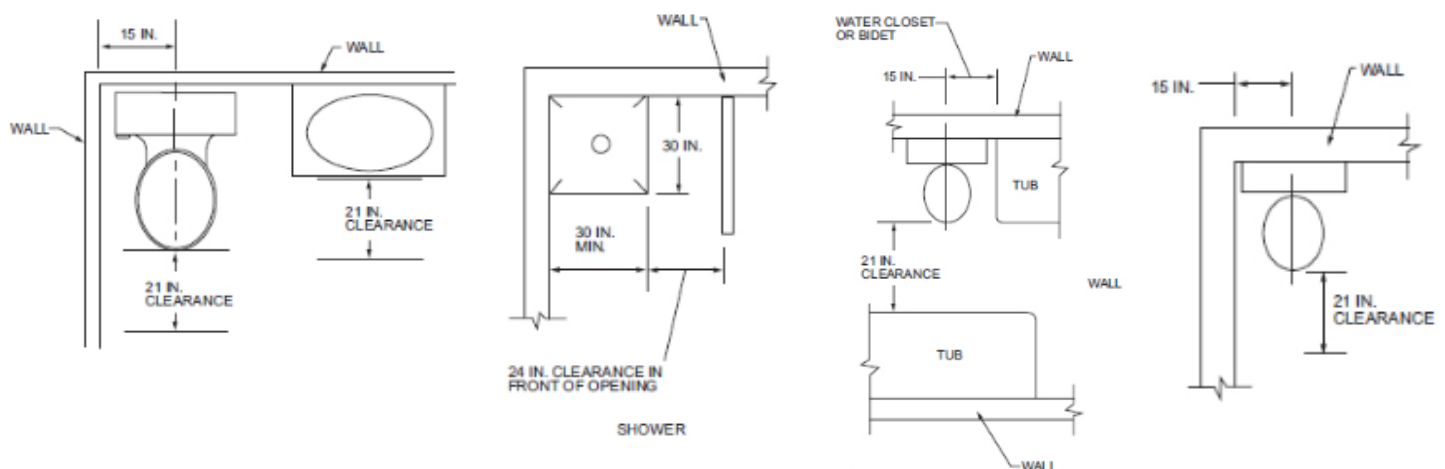


FIGURE 1: Bathroom Fixture Clearances

Scheduling Inspections

- Building inspections are conducted between 8:00 a.m. and 3:00 p.m. during the work week.
- The permit(s) must be affixed to the front window of the residence and the inspector must have reasonable and safe access to the work area.



- To schedule an inspection, go online to www.pwcgov.org/ePortal or call the automated phone system at 1-866-457-5280. The ePortal System will prompt for the permit number. The automated phone will prompt for the PIN Number. A complete list of inspection codes will be provided at the time of permit issuance. The inspections required may vary depending on the extent of the work. The most common inspection types and codes are:
 - CODE 401 - PLUMBING GROUNDWORK (Scheduled on plumbing permit)
 - CODE 198 - RESIDENTIAL COMBINATION CONCEALMENT
 - CODE 199 - RESIDENTIAL COMBINATION FINAL
- When adding plumbing for a bathroom, the Plumbing Groundwork inspection (401) is performed *before* replacing any of the slab or otherwise concealing within the floor system in a manner which will not allow for inspection during the 198 concealment.
- Schedule the 198 residential combo concealment inspection *before* the wall finishes are applied and electrical devices are connected. The framing, fireblocking, wiring, plumbing, and mechanical will be inspected at the same time during the 198 residential combo concealment inspection. Do not install the insulation until *after* the 198 is approved or the inspector allows.
- Schedule the 199 residential combo final inspection *after* the completion of work by all trades and the concealment inspection has been approved.
- For further information about *scheduling* inspections call 703-792-7006 or BDDInspections@pwcgov.org.
- Please refer to the [Residential Construction Inspections](#) webpage for more information.

Frequently Used Phone Numbers and Automated Systems

Technical Questions: Please call the Building Construction Inspections Branch at 703-792-7006 or email BDDInspections@pwcgov.org with any technical questions you may have on your bathroom project.

To Schedule an Inspection: Go online to your [ePortal](#) account or call 1-866-457-5280.

For Scheduling Inspections Issues/Questions: Please call Building Permitting Services at 703-792-6924 or email BDDPermits@pwcgov.org.

Daily Inspection Schedule: To see the order in which the Building Inspection Staff will arrive at their inspections for the day, please go online to your [ePortal](#) account or "[Today's Inspections](#)".