



# Typical Construction Specifications

Version 2009-06-17

1. All construction shall comply with:

- a. The Virginia Uniform Statewide Building Code;
- b. The International Residential Code - One and Two Family Dwellings;
- c. The International Energy Conservation Code; and
- d. All subsequent amendments.

Please see the [VUSBC webpage](#) for more information on codes and code years applicable to your project.

2. Those articles or materials specified by proprietary name or by name of vendor or manufacturer are expected to be furnished. Revisions for materials/construction are allowed provided Building Plan Review Section approves of these revisions.

3. Minimum design loads:

- a. Roof----- 30 psf (live) + 17 psf (dead)
- b. Floors----- 40 psf (live) + 10 psf (dead)
- c. Floors (sleeping areas)----- 30 psf (live) + 10 psf (dead)
- d. Decks----- 40 psf (live) + 10 psf (dead)
- e. Balconies----- 60 psf (live) + 10 (dead)
- f. Attic (limited storage)----- 20 psf (live) + 10 (dead)
- g. Design Wind Speed----- 90 mph / 3 second gust

4. Fire separations per section R309.2:

- a. Garage partitions and attics (common to house)--1/2" drywall
- b. Garage ceiling (under habitable space)----- 5/8" type "x" drywall
- c. Dry wall to be installed on the garage side

5. Presumptive soil bearing capacity is 1,500 psf on undisturbed soil per table R401.4.1.

6. Minimum footer depth 24" or until solid bearing soil is reached.

7. Maximum height of unbalanced backfill shall be 9'0" for 12" thick walls per table R404.1.(1) - (3) and if there is 9'0" or more of backfill the walls must be designed, sealed, and signed by a Virginia licensed Engineer/Architect.

8. Provide 4" continuous foundation drain tile around perimeter of foundations for habitable or useable spaces below grade per section R405.1.

9. Concrete not exposed to weather shall have a minimum compressive strength of 3,000 psi at 28 days per table R402.2.

10. Exposed exterior concrete shall be air entrained and have a minimum compressive strength of 3,500 psi per table R402.2.

11. Slabs on grade shall be 4" thick with 6 mil polyethylene vapor barrier. Provide 4" wash stone/gravel below slab per section R506.

12. All wood exposed to weather or within 18" of finish grade or bearing directly on concrete or masonry shall be pressure treated wood per section R319.

13. Anchor bolts shall be spaced 1'0" from corners and every 6'0" there after. Anchor bolts shall be ½" minimum and extend 7" into concrete or masonry less than 8" from grade.
14. Roof sheathing shall be a minimum of ½" exterior plywood or better.
15. Provide roofing materials, asphalt shingles, #15 felt and ice damming from the eave's edge to a minimum of 2'-0" past line of interior wall per section R905.2.7.
16. Flashing: Corrosion resistive flashing shall be provided on exterior window and door openings. Similar flashing shall be installed at the intersection of chimney or other masonry construction with frame walls, under and at the ends of masonry, wood or metal copings and sills, continuously above all projecting wood trim, at wall and roof intersections, at junctions of chimneys and roofs, at all roof valleys and at all roof openings per section R905.2.8.
17. Doors between house and garage shall be 1 3/8" solid wood or fire rated for 20 minutes per section R309.
18. All bathrooms, excluding those with openable operable windows, shall be mechanically vented to the exterior (minimum 50 cfm exhaust fan) per section R303.
19. All fixtures and accessories installed outdoors and exposed to the weather shall be weather proof.
20. Insulation values per International Energy Conservation Code:

	<b>2006 Code year**</b>	<b>2003 Code year**</b>
a. Ceiling/roof	R-38*	R-38*
b. Walls	R-13*	R-16*
c. Floor exposed to outside	R-19*	R-19*
d. Basement walls	R-10* (Continuous insulation on concrete wall) R-13* (Insulation between framing)	R-9*

\* *These minimum values are required unless a copy of REScheck ([www.energycodes.gov](http://www.energycodes.gov)) is supplied at the time of inspections.*

\*\* *Please see the [VUSBC webpage](#) for more information on codes and code years applicable to your project.*

21. Smoke detectors shall be installed in each bedroom, outside each bedroom in the immediate vicinity, and on each level of the house. Smoke detectors shall be hard wired and interconnected to each other and have battery back-up per section R313.
22. Crawl spaces will have vents located within 3'0" of corners and have an access crawl opening hole that is at least 18" x 24" in floors and 16" x 24" through perimeter walls above grade per section R408.
23. Attic access size and location shall be clearly marked on plans and have a minimum opening of 22" x 30" per section R807.
24. Basement areas shall have emergency egress by a window or door in the room leading directly to the outside. Egress windows shall have a net clear opening of 5.7 square feet. The minimum net clear opening height shall be 24" by a net clear opening width of 20" per section R310. Sill height shall not exceed 44" from the finished floor.
25. Glazing is required in doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs, and showers. Glazing in any part of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface shall be tempered or safety glass per Section R308.4.