

# RESIDENTIAL PLAN REVIEW CHECKLIST FOR FINISHED BASEMENTS

**FREDERICK COUNTY DEPARTMENT OF PERMITS AND INSPECTIONS**  
**30 NORTH MARKET ST., FREDERICK, MARYLAND 21701 (301-600-1086)**

Application No: \_\_\_\_\_

Date: \_\_\_\_\_

To: \_\_\_\_\_ (Applicant)

Plan Reviewer: \_\_\_\_\_

The plans submitted for the above referenced project have been reviewed for compliance with the Frederick County Building Code. The following marked ( ✓ ) items are noted as non-complying or are not found within the plans and are pointed out for your information.

**NOTE: STUDY THIS CAREFULLY. FAILURE TO COMPLY WITH THE BUILDING CODE WILL RESULT IN A NOTICE OF VIOLATION. THE FOLLOWING EXCERPTS DO NOT ENCOMPASS THE ENTIRE BUILDING CODE OF FREDERICK COUNTY, BUT ARE PROVIDED ONLY AS A SYNOPSIS OF CODE REQUIRMENTS FOR RESIDENTIAL CONSTRUCTION. APPROVED PLANS MUST BE MAINTAINED AT JOB SITE.**

| <u>Code Section</u>                                    | <u>Comment Number</u>                      | <u>Synopsis from International Residential Code 2015</u>  |
|--|--|---|
| Decay & Termite Prot. R317                             | 10a. _____                                 | Use decay-resistant or treated wood for any wood on concrete slabs which are in direct contact with earth and less than 8" from the exposed ground.   |
| Ceiling Height R305                                    | 15b. _____                                 | Habitable rooms, hallways, corridors, and basements shall have a ceiling height of not less than 7'; bathrooms, toilet rooms and laundry rooms a minimum of 6'-8" measured from the finish floor to the lowest projection from the ceiling.<br><b>EXCEPTION:</b> Beams, girders, ducts, or other obstructions may not project to within 6' - 4" of the finished floor.<br><b>EXCEPTION:</b> Not more than 50% of the required floor area of a room or space is permitted to have a sloped ceiling less than 7' in height with no portion of the required floor area less than 5' in height. (Spaces with ceiling heights of min. 7' or above are considered <b>habitable</b> .)   |
| Landings R311.3  | 16a. _____<br><br>b. _____                 | Every landing shall have a minimum dimension of 36" measured in the direction of travel. The width of each landing shall not be less than the door served. A landing shall be required on each side of an exterior door. The landing at the exterior side shall not be more than 7 3/4" below the top of the threshold. Max threshold height is 1 1/2".<br><br>There shall be a floor or landing at the top and bottom of each stairway. (Certain exceptions may apply.)  |
| Stairs, Guards, & Railings R303.7 R303.8 R311.7 R312.1 | 17f. _____<br><br>g. _____<br><br>h. _____ | All interior stairways shall be provided with a means to illuminate landing and treads.<br>Exterior stairways shall be provided with a means to illuminate at the top of the landing. Exterior stairways to basements require a means to illuminate at the bottom of the landing.<br><br>Handrail requirements:<br>1. One side of stairway with four or more risers continuous for full length (right side descending recommended).<br>2. Graspable per Section R311.7.8.3.<br>3. Between 34" - 38" above nosing. Projecting from wall min. 1 1/2" to inner edge and max. 4 1/2" to outer edge<br>4. Ends shall be returned to wall or shall terminate in newel posts or safety terminals.<br><br>Guardrail: Open side(s) of stair shall have a guardrail not less than 34" in height measured above tread nosing. Balusters/pickets, intermediate rails, and ornamental closures shall be installed so as not to allow the passage of a sphere 4" or more in diameter on level surfaces, and no more than a 4 3/8" sphere along a run of stairs. |
| Glazing R308   | 19. _____                                  | Safety glazing is required in the following areas: all glass doors, side lights, and windows to a height of 60" within 24" of a door frame, areas around showers, tubs, spas/pools, stair landings, railing/guardrails, and walking surfaces. Windows having a sill height of less than 18" to the floor <b>AND</b> greater than 9 sq. ft. in glazing area will require safety glazing. For further information see Section R308. <b>Note:</b> Laminated plastic glazing and safety film do not pass for safety glazing unless further documentation is provided and approved by Frederick County.  |
| Insulation IECC  | 20c. _____<br>g. _____                     | Floors over unheated spaces and stairwells shall have a minimum value of R-19.<br>Basement walls enclosing conditioned space require either R-10 continuous or R-13 within the framing cavities.  |

- Exits**  
R310  
R311  
R312.2
- 21b. \_\_\_\_\_ Minimum hall width is 3'.  
c. \_\_\_\_\_ Every sleeping room shall have an exterior door or an emergency egress window. Egress window requirements: -Net clear opening of 5.7 sq. ft.(5.0 sq. ft. if a grade floor window). -Min. net clear opening height of 24". -Min. net clear opening width of 20". -Max. height of 44" from finished floor to bottom of clear opening.  
e. \_\_\_\_\_ All new basements with ceiling heights of 7' or greater shall have at least one operable emergency egress window or exterior door. If window wells are required they too must meet egress requirements (3'x3' min. horizontal area).  
f. \_\_\_\_\_ If an existing basement is being finished without a means of egress to the outside, then the enclosed accessible space under the stair is required to have the walls and ceilings protected with ½" gypsum board.
- Light and Ventilation**  
R303
- 26a. \_\_\_\_\_ All habitable rooms shall be provided with a total glazing area of not less than 8% of the floor area of such rooms. One-half of required glazing shall be openable. **EXCEPTION:** The glazed areas need not be openable where an approved mechanical ventilation system is provided or is not required by Section 310. (Glazing not required if artificial light is provided.)  
b. \_\_\_\_\_ Bathrooms: 3 sq. ft. of glazing, 1/2 of which must be openable. **EXCEPTION:** Not required if artificial light and mechanical ventilation is provided. Vent must discharge directly outside of the building envelope.
- Fixture Clearance**  
R307.1  
R307.2  
R702.4.2
- 27a. \_\_\_\_\_ Each water closet and lavatory shall have a min. 15" clearance each side of center line and 21" clearance to front.  
b. \_\_\_\_\_ Clearance at shower stall is min. 24" in front of opening. Min. size for a shower is 30" x 30".  
c. \_\_\_\_\_ Wall surfaces around showers should be a nonabsorbent surface and shall extend to a height of not less than 6' above the drain. Cement board products, fiber-cement, or glass mat gypsum shall be used as backers for all tile in tub and shower areas and wall panels in shower areas.
- Smoke Alarms**  
R314  
**Carbon Monoxide Alarms**  
R315
- 28a. \_\_\_\_\_ Smoke alarms shall be installed in each sleeping room, outside the immediate vicinity of each separate sleeping area, minimum 3' from full bathroom openings, and on each additional story of the dwelling, including basements, cellars, and habitable attics, but not required in crawl spaces, uninhabitable attics, and garages. Smoke alarms shall be interconnected and hard wired with battery back-up.  
b. \_\_\_\_\_ An approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms within dwelling units where fuel-fired appliances are installed and in dwelling units that have attached garages. If there is fuel-fired appliance within a sleeping space, an additional carbon monoxide detector is required within that space.  
c. \_\_\_\_\_ Renovations require compliance with above. When not feasible the ten year sealed battery surface mounted devices are required. If not physically interconnected, listed wireless devices are acceptable.
- Sprinklers**  
(Ordinance)
- 29a. \_\_\_\_\_ Per Frederick County Ordinance all new dwelling units are required to be sprinklered. Sprinklers shall be a minimum of 4" and a maximum of 8' off any wall. Separate permit is required. Contact the Department of Life Safety for additional information at 301-600-3979.  
b. \_\_\_\_\_ For townhouses and single family homes that have existing sprinkler systems: Every altered area, except bathrooms less than 55 sq. ft. and small closets, shall have fire sprinkler protection.