

FREQUENTLY ASKED QUESTIONS

The State of Maryland has adopted the **2018 International Building Code** and the **2018 International Residential Code for One- and Two-Family Dwellings** as the Maryland Building Performance Standards, COMAR 05.02.07, with modifications effective March 25, 2019. Caroline County, Maryland has adopted the Maryland Building Performance Standards and incorporated additional modifications, Chapter 88 Code of Public Local Laws of Caroline County, that are in accordance with local conditions and requirements.

Work Exempt from Permit

[IRC, R105.2 modified CC, 88-11.A (14)(15) and 88-12.A (6)(7)]

- 1) One-Story Detached Accessory Structures under 200 sq ft (residential) under 120 sq ft (commercial).
- 2) Replacement or Repair of Roofing Shingles, Membranes and Flashings only if the work does not include any alteration or replacement of roof decking or other structural components.
- 3) Installation of a wheelchair ramp and/or entrance handrails for one- and two-family residences only.
- 4) Fences not over seven (7) feet high.
- 5) Retaining walls that are not over 4 feet in height (measured from the bottom of the footing to the top of the wall, unless supporting a surcharge).
- 6) Sidewalks and driveways.
- 7) Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 8) Prefabricated swimming pools that are less than 24 inches deep.
- 9) Swings and other playground equipment accessory to detached one- and two-family dwellings.
- 10) Window awnings supported by an exterior wall which do not project more than 54 inches from the exterior wall and do not require additional support.
- 11) Shade cloth structures constructed for nursery or agricultural purposes.
- 12) Decks not exceeding 200 square feet in area, that are not more than 30 inches above grade at any point, are not attached to a dwelling and do not serve the exit door.

Mobile Homes

A mobile home is considered a manufactured home and is defined as "a structure, transportable in one or more sections, at least 8 feet wide by 40 feet long, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities.

Use Permanent Foundations Guide for Manufactured Housing, HUD-007487, 1996.

Skirting or permanent perimeter enclosures shall be installed for all manufactured homes.

Agricultural Buildings

A permit is required for agricultural buildings, structures, or uses, but they are otherwise exempt from the building code.

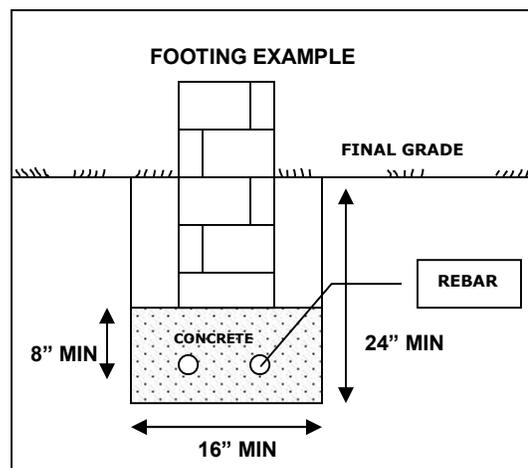
The building or structure must be used exclusively for agriculture including the housing of animals, farm equipment and farm storage, and not including any residential, commercial, or other use.

Footings and Frost Protection

The frost line depth for Caroline County, Maryland is established as being **24 inches below finished grade** for building footings (depth to the bottom of the footing).

Wood footings and/or wood foundation walls are not permitted. Treated-wood basement floors and floors on ground are not permitted.

All footings shall be poured concrete reinforced with a minimum of two continuous steel **rebar minimum No. 4 or 1/2-inch size**. The minimum width of any concrete footing shall be 16 inches. The minimum thickness of any concrete footing shall be 8 inches.



Finished Grade and Site Grading

There shall be a minimum distance of 24 inches from the top of the finished grade under floor to the bottom of the floor joists.

The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than 5-percent for a minimum distance of 10 feet measured perpendicular to the face of the wall. If physical obstructions or lot lines prohibit 10 feet of horizontal distance, a 5-percent slope shall be provided to an approved alternative method of diverting water away from the foundation. Swales used for this purpose shall be sloped a minimum of 2-percent where located within 10 feet of the building foundation. Impervious surfaces within 10 feet of the building foundation shall be sloped a minimum of 2-percent away from the building.

Emergency Escape & Rescue Windows

Basements, habitable attics and every sleeping room shall have at least one operable emergency escape and rescue opening for emergency escape and rescue. They shall have a **sill height of not more than 44 inches above the floor.**

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|-----------------------------------|-----------------|
| Minimum Opening Area: | 5.7 square feet |
| Minimum Grade Floor Opening Area: | 5 square feet |
| Minimum Opening Height: | 24 inches |
| Minimum Opening Width: | 20 inches |

Exits

Exit Door Required - not less than 1 exit door shall be provided from each dwelling unit and shall provide for direct access from the habitable portions of the dwelling to the exterior without requiring travel through a garage.

Type and Size – the required exit door shall be a side-hinged door not less than 3 feet in width and 6 feet 8 inches in height.

Hallways - the minimum width of a hallway shall be not less than 3 feet.

Minimum Room Areas

Every dwelling unit shall have at least one habitable room that shall have not less than 120 square feet of gross floor area. Other habitable rooms shall have a floor area of not less than 70 square feet. Every kitchen shall have not less than 50 square feet of gross floor area. Habitable rooms shall not be less than 7 feet in any horizontal dimension with the exception of kitchens.

Every dwelling unit shall be provided with a bathroom containing a water closet, lavatory, and a bathtub or shower. Every dwelling unit shall be provided with a kitchen area and sink.

Habitable Space is defined as “a space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

Garages and Carports

Garages - openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inch in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches thick, or 20-minute fire-rated doors, equipped with a self-closing or automatic-closing device.

The garage shall be separated from the residence and its attic area by not less than 1/2 inch gypsum board applied to the garage side. Habitable rooms above the garage shall be separated by not less than 5/8-inch Type X gypsum board or equivalent.

Carports - shall be open on a least two sides. Carports not open on at least two sides shall be considered a garage.

Sheds (prefabricated/movable)

MHIC License Requirement - A home improvement license is required if the shed will be permanently installed by the contractor on land adjacent to a residence. If the contractor just sells and delivers the shed and simply places it on the ground, or on a non-permanent foundation such as cinder blocks, the contractor is not required to hold an MHIC license. If the shed is larger than 200 square feet, a building permit will be required, and the shed must be permanently installed in accordance with the building code.

Stairways and Handrails

Stairways – stairways shall not be less than 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. All stairs shall be provided with illumination. Handrails shall not project more than 4.5 inches on either side of the stairway, and the minimum clear width of the stairway at and below the handrail height, including treads and landings, shall not be less than 31.5 inches where a handrail is installed on one side and 27 inches where handrails are provided on both sides.

Treads and Risers – The maximum riser height shall be 7¾ inches and the minimum tread depth shall be 10 inches.

Spiral Stairs – are permitted provided the minimum width is 26 inches with each tread having 7½ inch minimum tread width at 12 inches from the narrow edge. All treads shall be identical, and the rise shall be no more than 9½ inches.

Handrails – handrails shall be provided on at least one side of stairways. All required handrails shall be continuous the full length of the stairs with four or more risers from a point directly above the top riser of a flight to the point directly above the lowest riser of the flight. Handrails adjacent to a wall shall have a space of not less than 1.5 inches between the wall and the handrail. Ends shall be returned or shall terminate in newel posts or safety terminals.

Minimum Height: 34 inches
Maximum Height: 38 inches

Landings

There shall be a floor or landing at the top and bottom of each stairway unless it is at the top of an interior flight of stairs, provided a door does not swing over the stairs.

There shall be a floor or landing on each side of each exterior door except for sliding doors. The floor or landing at a door shall not be more than 1.5 inches lower than the top of the threshold and shall not be more than 8 inches below the top of the threshold, provided that the door, other than an exterior storm or screen door, does not swing over the landing.

Size – The width of each landing shall not be less than the stairway or door served. Every landing shall have a minimum dimension of 36 inches measured in the direction of travel.

Guards

Guards Required – porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height.

Openings - guards shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches in diameter. The triangular openings formed by the riser, tread and bottom rail of a guard are permitted to be of such a size that a sphere 6 inches in size cannot pass through.

Sunroom Addition

A one-story addition added to an existing building with a glazing area in excess of 40 percent of the gross floor area of the structure's exterior walls and roof.

Smoke Alarms Required

1. In each sleeping room
2. Outside of each separate sleeping area in the immediate vicinity of the bedrooms
3. On each additional story of the dwelling, including basements and habitable attics (not crawl spaces and uninhabitable attics)

When more than one smoke alarm is required to be installed the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Alterations, Repairs or Additions – When one or more sleeping rooms are added or created in existing dwellings, the dwelling shall be provided with smoke alarms located as required above for new dwellings; the smoke alarms shall be interconnected and hard wired.

Exceptions: Smoke alarms in existing areas shall not be required to be interconnected and hard wired where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space, or basement available which could provide access for hard wiring and interconnection without the removal of interior finishes. Repairs to the exterior surfaces of dwellings are exempt from the requirements of this section.

Carbon Monoxide Alarms Required

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

Where work requiring a permit occurs in existing dwellings that have attached garages or where fuel-fired appliances exist, carbon monoxide alarms shall be provided.

Climatic and Geographic Design Criteria

[IRC, Table R301.2(1) modified CC, 88-13.A (15)]

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| Flat-Roof Design Snow Load: | 25 lbs/sq ft |
| Wind Speed: | 100 mph |
| Seismic Design Category: | C |
| Subject to Damage from Weathering: | Severe |
| Subject to Damage from Frost Line Depth: | 24 inches |
| Subject to Damage from Termite: | Heavy |
| Subject to Damage from Decay: | Moderate |
| Winter Design Temperature: | 10° F |
| Flood Hazards: | FIRM/FBFM |

Insulation Requirements for Climatic Zone 4 (Caroline County)

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|--|-------------------------|
| Ceiling R-value | 49 |
| Wood Frame Wall R-value | 20 or 13+5 ^h |
| Mass Wall R-value ⁱ | 8/13 |
| Floor R-value | 19 |
| Basement Wall R-value ^c | 10/13 |
| Slab R-value ^d , Depth | 10, 2 ft |
| Crawlspace Wall R-value ^c | 10/13 |
| Fenestration U-Factor ^b | 0.32 |
| Skylight U-Factor ^b | 0.55 |
| Glazed fenestration SHGC ^{b, e} | 0.40 |

a. R-values are minimums. U-factors and SHG are Maximums. Where insulation is installed in a cavity that is less than the label or design thickness of the insulation. The insulated R-value of the insulation shall be not less than the R-value specified in the table.

b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.

c. "15/19" means R-15 continuous insulated sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "10/13" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in zones 1 through 3 for heated slabs.

e. There are no SHGC requirements in the Marine zone.

h. The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, "13+5" means R-13 Cavity insulation plus R-5 continuous insulation.

i. The second R-value applies when more than half the insulation is on the interior of the wall.