

Significant Code Changes

2009-2012

This information provided by Montgomery County Building and Codes Department is to highlight the significant changes between the 2009 and 2012 Code versions. This list is not all inclusive and absolute. You are advised to obtain a copy of the published code to use for a more in-depth understanding.

Code books may be purchased at <http://shop.iccsafe.org/>.

International Residential Code

1. R105.2 Fences Exempted from Permits

Change Type. Modification

Change Summary. Fences up to 7 feet high are now exempt from permit requirements.

2. R202 Definitions

Change Type. Addition

Change Summary. Definitions for structurally composite lumber have been added to Chapter 2.

3. R301.2.1.2 Protection of Openings in Windborne Debris Regions

Change Type. Modification

Change Summary. Windborne debris regions are now defined in a new map. Revisions to the text clarify that protection from windborne debris is required for all exterior glazing in a building, not just windows.

4. R301.5 Minimum Uniformly Distributed Live Loads

Change Type. Modification

Change Summary. The terminology related to live loads has been updated for consistency with ASCE 7-10. Footnotes b and g pertaining to attic live loads have been revised to clarify the application.

5. R302.1 Exterior Walls

Change Type. Modification

Change Summary. The minimum clearances to lot lines have been reduced from 5 feet to 3 feet for unrated exterior walls when the dwelling is protected with a fire sprinkler system. The code now permits construction of unrated exterior walls on the lot line when all dwellings in the subdivision are protected with automatic fire sprinkler systems and the opposing lot maintains a minimum 6-foot clearance from the common lot lines.

6. R302.5.1 Garage Opening Protection

Change Type. Modification

Change Summary. Doors between the garage and dwelling unit now require self-closing devices.

7. R303 Mechanical Ventilation

Change Type. Modification

Change Summary. When used for satisfying the ventilation requirements for dwellings, mechanical ventilation must now comply with new provisions in Section M1507 for whole house ventilation of habitable rooms and local exhaust of bathrooms. A whole-house mechanical ventilation system is now required for any dwelling that is tested with a blower test and determined to have an air infiltration rate of less than 5 air exchanges per hour. Definitions for whole house mechanical ventilation system and local exhaust have been added to Section R202.

8. R303.5 Ventilation Intake Opening

Change Type. Modification

Change Summary. The minimum vertical clearance between a contaminant source and an outdoor intake below has increased from 2 feet to 3 feet.

9. R308.4. Hazardous locations for Glazing

Change Type. Clarification

Change Summary. The provisions for hazardous locations related to the installation of the glazing have been reorganized for ease of use and consistent application. Each item in the numbered list of hazardous locations have been placed in a separate subsection and given a descriptive title.

10. R308.4.5 Glazing and Wet Surfaces

Change Type. Clarification

Change Summary. The separate provisions regulating glazing near tubs and swimming pools have been consolidated into one subsection titled *Glazing and Wet Surfaces*.

11. R308.4.6 Glazing Adjacent Stairs and Ramps

Change Type. Modification

Change Summary. For glazing that is not considered to be in a hazardous location, the rule for the minimum height above a tread at the side of a stairway is now 36 inches to correspond to the height of a guard as previously found in the exception. Other revisions to the text clarify the meaning and application of the glazing requirements at stairways.

12. R308.4.7 Glazing Adjacent to the Bottom Stair Landing

Change Type. Modification

Change Summary. The provisions for glazing installed near the landing at the bottom of a stairway have been revised to clarify the application. The threshold for the minimum height above the walking surface is now 36 inches for determining that the glazing is not in a hazardous location.

13. R310.2.2 Window Well Drainage

Change Type. Addition

Change Summary. Except for locations with well drained soils, window wells serving emergency escape and rescue openings now require a means to drain surface water to the foundation system.

14. R311.3.1 Floor Elevations at the Required Egress Door

Change Type. Clarification

Change Summary. The exception allowing a floor or landing to be 7-3/4 inches below the top of the threshold at the required egress door now applies to the exterior side of the door only.

15. R314 Smoke Alarms

Change Type. Modification

Change Summary. The code now specifically recognizes wireless technology in lieu of interconnection for smoke alarm installations in both new and existing dwelling units. The interconnection provisions have been moved out of the sections related to location and power source and place in a new Section R314.5.

16. R404.1.9 Isolated Masonry Piers

Change Type. Addition

Change Summary. The IRC now includes prescriptive provisions for the construction of isolated masonry pier foundations supporting raised floor system.

17. R405.1 Foundation Drainage

Change Type. Modification

Change Summary. A filter membrane is now required for perforated foundation drains.

18. R501.3 Fire Protection of Floors

Change Type. Addition

Change Summary. With some exceptions, the code now requires 1/2 inch gypsum board or equivalent material to be applied to the underside of the floor assemblies in buildings regulated by the IRC. See these exceptions.

19. R602.1.1 End Joint Lumber

Change Type. Modification

Change summary. End jointed lumber used in fire-rated assemblies must have HRA grade in the grade mark.

20. Table R602.3(1) Fastener Schedule for Structural Members

Change Type. Modification

Change summary. Table R602.3 (1) now includes requirements for nailing roof trusses to plates, abutting studs at intersecting wall corners, and connections of rim board to sill plates.

21. R602.7, Table R602.7.1 Single Header Members

Change Type. Addition

Change summary. The code now includes prescriptive provisions for single header members under limited conditions.

22. R602.10.1 Braced Wall Lines

Change Type. Modification

Change summary. This section has been reorganized to address braced wall lines only.

23. R602.10.1 Braced Wall Panels

Change Type. Modification

Change summary. Information on braced wall panels now may be located up to 10 feet from both ends of the wall line.

24. R602.10.3 Required Length of Bracing

Change Type. Modification

Change summary. Information on the required length of wall bracing is consolidated into one section. Wind wall bracing adjustments have been placed in a separate table from the bracing requirements based on wind speed.

25. R602.10.4 Construction Methods of Braced wall Panels

Change Type. Modification

Change summary. Bracing construction methods and the allowable mixing of bracing

26. R602.10.5 Construction Methods of Braced wall Panels

Change Type. Modification

Change summary. Braced wall panel minimums lengths are combined in Table R602.10.5. Other braced wall panel length information is also placed in this section.

27. R602.10.6 Construction of Methods of Braced ABW, PFH, PHG, CS-PF, and BV-WSP

Change Type. Modification

Change summary. This change places all of the alternate braced wall panel methods of the 2009 IRC into one section and adds a new Method BV-WSP. Wall Bracing for Dwellings with Stone and Masonry Veneer in Seismic Design Categories D₀, D₁ and D₂.

28. R602.10.7 Ends of Braced Wall Lines with Continuous Sheathing

Change Type. Modification

Change summary. Braced wall line end conditions for continuous sheathing have been placed in one section. A fifth end condition is defined for end panel connections. When a 48-inch braced wall panel is at the end of a wall line, the intersecting wall line does not require a return panel or hold down at the corner.

29. R602.10.9 Braced Wall Panel Support

Change Type. Modification

Change summary. Concrete stem walls 48 inches long or less that are less than 6 inches thick require reinforcement similar to narrow masonry stem wall

30. R602.12 Simplified Wall Bracing

Change Type. Addition

Change summary. This new section offers an alternative method to braced wall lines for detached dwellings located in SDC A, B, or C and townhouses located in SDC a, or B. The simplified bracing method is also limited to construction sites with a basic wind speed of 90 mph or less and Wind Exposure Category A or B.

31. R602.12.6 Narrow Panels for Simplified Wall Bracing

Change Type. Addition

Change summary. This new section provides an alternative for narrow braced panels to be used in place of bracing units when applying the simplified bracing methods of Section R606.12. Construction must comply with the applicable provisions of section R602.10.

32. R607.3 Installation of wall ties

Change Type. Modification

Change summary. This provision now includes the minimum mortar coverage for wall ties in exposed faces. Wall tie embedment length is clarified.

33. R703.7.3.2 Masonry Veneer Lintel

Change Type. Modification

Change Summary. Minimum and maximum heights of masonry veneer are established for masonry lintels spanning not greater than 18 feet 3 inches.

34. R703.7.4 Masonry Veneer Anchorage

Change Type. Modification

Change Summary. Tie fastener and air space requirements for anchored veneer have been placed in a new table for ease of use. The veneer tie spacing requirements have been modified for consistency with the Building Code requirements and specifications for Masonry Structures.

35. R703.7.4.2 Grout Fill behind Masonry Veneering

Change Type. Modification

Change Summary. Mortar is no longer permitted to fill the air space behind anchored masonry veneer.

36. R703.8 Flashing

Change Type. Modification

Change Summary. Pan flashing a newly defined term in the code, is now required for window and door openings when flashing details are not provided by the manufacture. Additional options include a design professional or another method approved by the Building Official.

37. R703.12 Adhered Masonry Veneer

Change Type. Addition

Change Summary. Minimum clearance and flashing requirements have been added to apply to the base of adhered masonry veneer on exterior walls.

38. R802.7 Cutting, Drilling, and Notching of Roof Members

Change Type. Clarification

Change Summary. Text in Section R802.7 has been deleted in favor of referencing Section R502.8.1 for provisions related to cutting, drilling, and notching of solid lumber. Provisions for notching of cantilevered rafters are placed in a new section, and the nominal dimension is replaced by the actual minimum dimension of 3-1/2 inches for the remaining portion of the rafter. Two new figures aid in determining the correct application of cantilevered rafters and ceiling joist taper cut requirements.

39. R802.11 Roof Uplift Resistance

Change Type. Modification

Change Summary. The provisions for roof connections to resist wind uplift forces have been updated to current standards and simplified for ease of use. Table R802.11 has been replaced to provide accurate values for both low- and high-slope roofs in Wind Exposure Categories B and C.

40. R806 Roof Ventilation

Change Type. Modification

Change Summary. The code now provides an option to omit attic ventilation where climate and experience demonstrate it is not necessary. The provisions for minimum vent area have been revised by placing two exceptions after the general rule of clarify the meaning. The exception for reducing the ventilation area when a vapor retarder is installed on the ceiling now only applies to cold-weather climates. The reduction in vent area based on cross ventilation now requires no less than 40% and no more than 50% (previously 50% and 80%) of the required ventilating area to be placed in the upper portion of the roof and no more than 3 feet below the ridge. The requirement for the upper vents to be at least 3 feet above the eave vents has been removed.

41. R806.5 Unvented Attic Assemblies

Change Type. Clarification

Change Summary. The added text clarifies that the unvented attic provisions also apply to rafter assemblies typically used for vaulted or cathedral ceilings. References to vapor retarders now specify the applicable class as defined in section R202. A new sentence clarifies that insulation board installed as an air impermeable barrier must have the edges sealed to provide a continuous barrier.

42. R903.2.1 Roof Flashing Locations

Change Type. Modification

Change Summary. The general flashing provisions of Chapter 9 now require a kick-out flashing where the eave of a roof intersects a wall to prevent water intrusion into the wall assembly.

43. R905.2.8.3 Sidewall Flashing

Change Type. Modification

Change Summary. For asphalt shingles, the IRC no longer recognizes both step and continuous base flashings where sloped roofs meet walls. Where the wall has anchored or adhered masonry veneer, or stucco, the provisions are clarified by referencing the applicable section of the code for counterflashing.

44. R905.2.8.5 Roof Drip Edge

Change Type. Addition

Change Summary. A roof drip edge is now required for asphalt shingles.

45. R1005.7 Factory-Built Chimney Offsets

Change Type. Addition

Change Summary. Factory-built chimney assemblies must be installed vertically with no offsets greater than 30 degrees. No more than four elbows are permitted within the entire length of the chimney assembly.

46. M1411.6 Locking Access Port Caps

Change Type. Modification

Change Summary. The code now recognizes any approved means to prevent unauthorized access to outdoor refrigerant ports.

47. M1502.4 Dryer Exhaust Duct

Change Type. Modification

Change Summary. The maximum support spacing for dryer exhaust ducts has increased from 4 feet to 12 feet. Dryer exhaust ducts now specifically require mechanical fastening. Screw fasteners are permitted to penetrate the exhaust duct no more than 1/8 inch. The maximum specified length of dryer exhaust duct has been increased from 25 to 35 feet and now matches the corresponding dryer exhaust provisions of the IMC, IFGC, and the IRC fuel-gas provisions.

48. M1506 Exhaust Openings

Change Type. Addition

Change Summary. Minimum clearances between air exhaust terminations and openings into the building have been introduced into the IRC.

49. R1507 Mechanical Ventilation

Change Type. Addition

Change Summary. Prescriptive design criteria for whole-house ventilation systems have been added to the mechanical ventilation provisions. Mechanical ventilations of kitchens and bathrooms is now described as local exhaust. New definitions for whole house ventilation and local exhaust have been added to section R202.

50. M1601.1 Above-Ground Duct Systems

Change Type. Modification

Change Summary. Stud cavities of exterior walls are no longer permitted to be used for return air plenums.

51. M1601.4.1 Duct Joints , seams and Connections

Change Type. Modification

Change Summary. The IRC provisions for duct connections have been replaced with language from the IMC and now reference the SMACNA HVAC *Duct Construction Standards*. Unlisted duct tape is not permitted for sealing joints or seams of ductwork.

52. M1602.2 Prohibited Sources of Outdoor Air and Return Air

Change Type. Clarification

Change Summary. The prohibition on taking return air from a garage does not apply to HVAC system that serves the garage only. Mechanical rooms are no longer listed as prohibited sources of return air. Modification of the 10-foot rule for separation of return inlets and fuel burning appliances clarifies that the requirement applies to the draft hood and open combustion chamber of the atmospheric burner appliances, not direct vent appliances with sealed combustion chambers.

53. M1901 Ranges and Ovens

Change Type. Modification

Change Summary. The provisions for kitchen ranges have been updated to match those for gas-fired ranges in Section G2447. References to Sections M1504.1 and M1505.1 alert the code user to specific provisions related to installation of cooking appliances above ranges and clearances for open-top broiler units. Mandatory code language now clarifies that cooking appliances used in dwellings must be listed and labeled for household use. Commercial cooking appliances are not permitted in dwelling units.

54. G2419.4 Sediment Trap

Change Type. Modification

Change Summary. A new figure illustrates the correct configuration of a sediment trap. Gas fired decorative vented appliances installed in vented fireplaces and gas fireplaces are not required to be equipped with a sediment trap.

55. P2503.5.1 Rough Plumbing Test

Change Type. Modification

Change Summary. The IRC no longer permits air testing of plastic piping in DWV systems.

56. P2503.5.1 Connections To Drainage Systems

Change Type. Modification

Change Summary. Waste water from lavatories, bathtubs, showers, clothes washers, and laundry trays is now defined as graywater and is permitted to be discharged to an approved gray water system.

57. P2606 Sealing of Angular Spaces

Change Type. Clarification

Change Summary. Provisions for sealing pipe penetrations of the building envelope have been placed in a new section and revised to more precisely prescribe the approved types of materials and their correct application. The new language also correlates with the provisions for sealing against air leakage in the International Energy Code (IECC).

58. P2702.1, P2706.1 Plumbing Fixtures

Change Type. Modification

Change Summary. The definition of plumbing fixture has been revised to include receptacles and devices that discharge to the drainage system but are not connected to a water supply, such as a floor drains and stand pipes. The requirement for strainers on plumbing fixture outlets has been classified by specifically excluding hub drains and standpipes. Attics and crawlspaces are now listed as prohibited locations for waste receptors and standpipes. Clothes washer standpipes are permitted to be installed in bathrooms.

59. P2709.1, P2709.2 Shower Receptors and linings

Change Type. Modification

Change Summary. The distance shower liners must extend above finished thresholds has been reduced from 3 inches to 2 inches. Minimum thickness requirements for PVC and CPE shower liners have been deleted in favor of requirements in the referenced standards.

60. P2709.2.4 Liquid- Type Shower Lining

Change Type. Addition

Change Summary. The IRC recognizes a new liquid-applied shower liner material.

61. P2801.5 Required Water heater Pan

Change Type. Clarification

Change Summary. The provisions for safety pans under water heaters have been clarified by prescribing such protection for water heaters with storage tanks only. Tankless water heaters do not require pans.

62. P3007.3.5 Ejector Connection to the Drainage System

Change Type. Modification

Change Summary. The discharge from the ejector pumps is now permitted to connect to soil stacks, and horizontal branch drains addition to building sewer building drains.

63. P3009 Gray Water Recycling Systems

Change Type. Addition

Change Summary. Provisions for gray-water recycling systems previously found in Appendix O, have been placed into the body of the code in a new section P3009. Waste water from lavatories, bathtubs, showers, clothes washers and laundry trays is now defined as gray water and is permitted to discharge to an approved gray-water system.

64. P3103.5 Location of Vent Terminals

Change Type. Modification

Change Summary. The minimum clearance for vent terminations above the openings within 10 feet has been increased from 2 feet to 3 feet.