



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive. 101 Monroe Street. Rockville, Maryland 20850

Subject: Adoption of the 2021 IBC, IECC, <u>IgCC</u>, IMC, IFGC, IRC, ISPSC, and IEBC	Number: 13-24
Originating Department: Department of Permitting Services	Effective Date: December 10, 2024

Energy”.

08.00.02.144

Section R408 Additional Efficiency Package Options. Add new Section “R408.3 Maryland Alternative Additional Energy Efficiency Package Options. The provisions of this Section shall be applied as part of the prescriptive compliance path of Section R402.1.3.1. Additional energy efficiencies from Table R408.3 must be selected to meet or exceed a minimum percentage increase of 6% for climate Zone 4.”; and add the following table:

Table R408.3 Additional Energy Features

	Energy Feature	Percentage Increase for Climate Zone 4
1	≥ 2.5% reduction in total UA5	1%
2	≥ 5% reduction in total UA5	2%
3	> 7.5% reduction in total UA5	2%
4	0.22 U-factor windows ⁵	3%
5	High performance cooling system (Greater than or equal to 18 SEER and 14 EER air conditioner) ²	3%
6	High performance cooling system (Greater than or equal to 16 SEER and 12 EER air conditioner) ²	3%
7	High performance gas furnace (Greater than or equal to 96 AFUE natural gas furnace) ²	5%
8	High performance gas furnace (Greater than or equal to 92 AFUE natural gas furnace) ²	4%
9	High performance heat pump system (Greater than or equal to 10 HSPF/18 SEER air source heat pump.) ²	6%
10	High performance heat pump system (Greater than or equal to 9 HSPF/16 SEER air source heat pump.) ²	5%
11	Ground source heat pump (Greater than or equal to 3.5 COP ground source heat pump.) ²	6%
12	Fossil fuel service water heating system (Greater than or equal to 82 EF fossil fuel service water- heating system.)	3%
13	High performance heat pump water heating system option (Greater than or equal to 2.9 UEF electric service water-heating system.)	8%



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14	High performance heat pump water heating system. (Greater than or equal to 3.2 UEF electric service water-heating system.)	8%
15	Solar hot water heating system (Greater than or equal to 0.4 solar fraction solar water-heating system.)	6%
16	More efficient HVAC distribution system. (100 percent of ductless thermal distribution system or hydronic thermal distribution system located completely inside the building thermal envelope.)	10%
17	100% of ducts in conditioned space. (100 percent of duct thermal distribution system located in conditioned space as defined by Section R403.3.2.)	12%
18	Reduced total duct leakage. (When ducts are located outside conditioned space, the total leakage of the ducts, measured in accordance with R403.3.5, shall be in accordance with one of the following: Where air handler is installed at the time of testing, 2.0 cubic feet per minute per 100 square feet of conditioned floor area. Where air handler is not installed at the time of testing, 1.75 cubic feet per minute per 100 square feet of conditioned floor area.)	1%
19	2 ACH50 air leakage rate with ERV or HRV installed. (Less than or equal to 2.0 ACH50, with either an Energy Recovery Ventilator (ERV) or Heat Recovery Ventilator (HRV) installed.) ³	10%
20	2 ACH50 air leakage rate with balanced ventilation. (Less than or equal to 2.0 ACH50, with balanced ventilation as defined in Section 202 of the 2021 International Mechanical Code.) ⁴	4%
21	1.5 ACH50 air leakage rate with ERV or HRV installed. (Less than or equal to 1.5 ACH50, with either an ERV or HRV installed.) ⁴	12%
22	1 ACH50 air leakage rate with ERV or HRV installed. (Less than equal to 1.0 ACH50, with either an ERV or HRV installed.) ⁴	14%
23	Energy Efficient Appliances (Minimum 3 appliances not to exceed 1 from each type with follow efficiencies. Refrigerator - Energy Star Program Requirements, Product Specification for Consumer Refrigeration Products, Version 5.1 (08/05/2021), Dishwasher - Energy Star Program Requirements for Residential Dishwashers, Version 6.0 (01/29/2016), Clothes Dryer - Energy Star Program Requirements, Product Specification for Clothes Dryers, Version 1.1 (05/05/2017) and Clothes Washer - Energy Star Program Requirements, Product Specification for Clothes Washers, Version 8.1 (02/05/2018)	7%