

## Worcester County

GOVERNMENT CENTER  
ONE WEST MARKET STREET, ROOM 1201  
SNOW HILL, MARYLAND 21863  
TEL: 410.632.1200 / FAX: 410.632.3008  
[www.co.worcester.md.us/departments/drp/code](http://www.co.worcester.md.us/departments/drp/code)

### Worcester County 2018 International Residential Energy Code

By adoption of the Maryland Building Performance Standards and specifically the International Energy Code 2018 Edition (IECC 2018), Worcester County and State of Maryland Building Code requires all new construction and additions to residential dwellings to meet IECC 2018. All new residential one and two family dwellings and additions to existing one and two family dwellings must comply with the residential provisions of the 2018 IECC.

#### Mandatory IECC 2018 Requirements:

1. Certificate of Compliance – R401.3 – Builder or Design Professional must post all energy compliance cert. on elect. Panel.
2. Thermal Envelope – R402 – Insulation, Fenestration, required prescriptive or performance – Exceptions below for alterations.
3. Air Leakage – R402.4 – Building Envelope must limit air exchanges 3 per hour (at 50 Pascals) by Certified Tightness Test. <sup>1</sup>
4. HVAC Controls – R403.1 – Programmable t-stat for furnaces and supplemental heat controls for heat pumps.
5. Duct Insulation – R 403.3.1 – Outside thermal envelope required. R-8 ducts > 3 inches, R-6 ducts 3 to 6 inches, R-4.2 < 3 inches.
6. Duct Sealing – R 403.3.2 – HVAC ducts must be sealed and tested – Test report is required. Max leakage 4 CFM/100 SF.
7. Building Cavities – R 403.3.5 – Cavities shall not be used as ducts or plenums.
8. Mechanical System Pipe Insulation – R403.4 – R-3 minimum if fluid above 105 degrees F.
9. Circulating Hot Water Systems – R403.5.1 – Controls and insulation required.
10. Mechanical Ventilation – R403.6 – Whole house ventilation is required per IRC – see section M 1505.
11. Equipment Sizing – R403.7 – HVAC equipment sized per Air Conditioning Contractors of America (ACCA) Standards.
12. Snow Melt System Controls – R403.9- Special controls required if system installed.
13. Pools and Spas – R403.10 – Controls to minimize energy usage required. Covers required on heated pools and spas.
- 14 – Lighting Equipment – R404.1 – 90 % of installed lighting shall utilize high efficacy lamps (CFL, T-8 fluorescent, LED)

#### Notes:

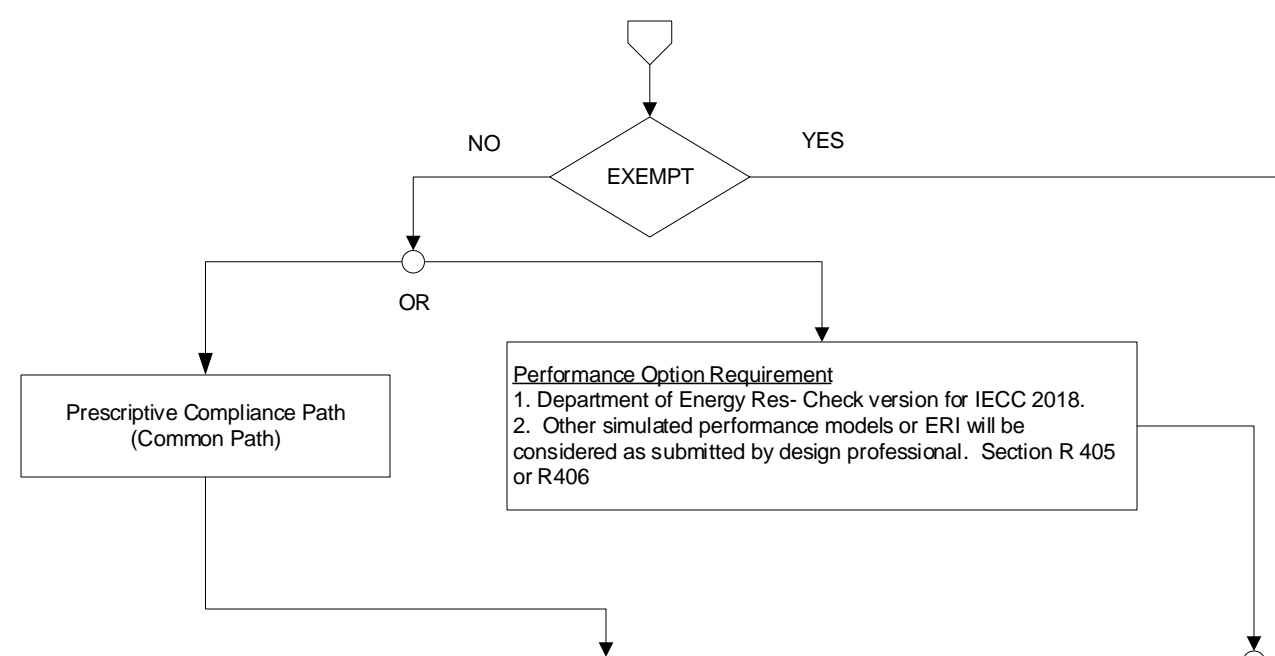
1. Attention must be given to sealing the entire building envelope during construction to attain certified passing results. Consult your Certified Building Envelope Test Contractor. A passing test report by a certified contractor/inspector must be provided to Worcester County to obtain final building Certificate of Occupancy.
2. Construction Documentation is required per R103.2 including Insulation, Fenestration and Mechanical Systems (sizes and efficiencies).

#### Building Envelope Exceptions - Alterations (only applies if building energy use is not increased by the repairs/renovations):

1. Storm Window installed over existing windows.
2. Existing ceiling, wall or floor cavities exposed provided these cavities are filled with insulation.
3. Construction where existing roof, wall or floor cavity is not exposed.
4. Roof re-cover.
5. Roofs without insulation in the cavity and where the sheathing or insulation exposed during re-roofing shall be insulated either above or below the sheathing.
6. Surface applied window film installed on existing single pane fenestration assemblies to reduce the solar heat gain performance provided the glazing is not replaced.
7. Repairs/Renovations will not increase the building energy use (e.g., NO HVAC, NO Lights, NO hot water) – NON- Conversion Agreement Required.

Note : If repairs/renovations are limited to items 1-7 above, then there is no building envelope specific requirements.

See  
Page 2



**Performance Option Requirement**  
 1. Department of Energy Res- Check version for IECC 2018.  
 2. Other simulated performance models or ERI will be considered as submitted by design professional. Section R 405 or R406

Prescriptive R and/or U value (Table R402.1.2)

Climate Zone 4

Fenestration U	Skylight U	Glazed Fenestration SHGC max	Ceiling R	Wood Frame Wall R	Mass Wall R	Floor R	Basement Wall R	Slab R-val,depth	Crawl Space Wall R
0.32	0.055	0.4	49	20 or 13+5	8/13	19	10/13	10, 2 ft	10/13

- Inspections:**
1. Insulation Building Envelope – Required during construction by Worcester County Inspector.
  2. Air Leakage – Blower Door Test by Certified Contractor/Inspector – Based on Building Performance Institute (BPI, Resnet) accreditation. Passing report due at final inspection and required for Certificate of Occupancy from Worcester County.
  3. Certificate of Compliance (By Builder or Design Professional with checks at final inspection by Local Jurisdiction)
    - A. HVAC Controls
    - B. Duct Insulation/Duct Sealing
    - C. Pipe Insulation/Circ. Hot Water Controls
    - D. Mechanical Ventilation
    - E. HVAC Equipment Sizing
    - F. Pools and Spas Controls/Covers
    - G. Lighting Equipment

Complete Application Information

**Owner/Contractor/Project Information:** Permit No. \_\_\_\_\_

Owner Name (print): \_\_\_\_\_ Date: \_\_\_\_\_ Owner Signature: \_\_\_\_\_

Contractor Name (print): \_\_\_\_\_ Date: \_\_\_\_\_ Contractor Signature: \_\_\_\_\_

Building Tightness Test Contractor: \_\_\_\_\_ Phone: \_\_\_\_\_

Building Reviewer ( DRP Office Use ): \_\_\_\_\_