



*Western Washtenaw Construction Authority
Building, Trade, and Soil Erosion and Sedimentation Control
Permits and Inspections*

2015 Energy Code Details

This handout is to answer questions about the 2015 energy code. This does not replace the code but is to assist in understanding what the code requires. If in doubt refer to the code or call your building inspector.

Where required: All new homes, additions, alterations, renovations, or repairs to existing homes. Unaltered portions of existing homes are exempt. One of three methods of compliance is required.

1. Prescriptive - Installing insulation that R values conform to the prescribed values in the code.
2. U factor alternative - Providing U values where the assembly conforms to the R value of the assembly of the component. This provides some latitude in how each assembly is done.
3. Total U value alternative - The total U value for the entire home shall meet or exceed the u value of the "code house" typically this is done with programs as the DOE Rescheck, Rem Rate, or other approved programs.

Prescriptive Component Insulation: (cavity insulation is where filling studded out walls)

Windows: .32 U factor

Skylights: .55 U factor

Ceiling: 38 R Value

Wood frame walls: R-20 or R13 cavity plus continuous R-5

Floor: R-30

Basement walls: R10 if continuous, R13 if cavity

Slab: (Walkout area's) R10 depth 2' R 5 at slab

Crawl space walls: R-15 continuous or R 19 cavity

Mandatory requirements: These items shall be met in projects requiring energy code compliance:

1. Air Barrier: a continuous air barrier shall be installed between inside and outside. All joints will be sealed. (See Air Barrier below)
2. Recessed Lighting in the building envelope shall be sealed to the air barrier and be IC rated.
3. 75% of lighting shall be high efficacy lighting.
4. Corners and headers shall be insulated.
5. Top and bottom plates shall be sealed.
6. Insulation shall reach to the outside of the top plate. There shall be no gap or opening at the top plate. Loose blown insulation shall be retained at the outside of the top plate.
7. All thermostats shall be programmable.
8. All ducts air handlers and filter boxes shall be sealed.
9. If there is ductwork outside of the thermal envelope leakage testing of the ductwork is required.
10. Hot water piping greater than $\frac{3}{4}$ ", all recirculating lines. Hot water to manifolds and piping under floor slabs shall be insulated with min R3.

Manchester, Bridgewater, Freedom Townships and City of Manchester

912 City Rd., Manchester, MI 48158

Phone 734-428-7001 Fax 734-428-1849

wwcabuild@gmail.com

Regardless of the method used to comply with the Energy Code, a label shall be affixed to or near the electrical panel stating the insulation values used in the house.

Blower door testing shall be done by a "certified" tester and results forwarded to this department.

Air Barrier shall be installed for in the following areas:

1. Between the bathtub-shower and outside wall insulation.
2. Attic access shall be sealed or gasket.
3. Under any insulated floor.
4. Walls between unheated spaces and heated spaces as between 2nd floor and 1st floor attic or cathedral ceilings walls and attic space.
5. Recessed lighting in the envelope shall be sealed.
6. Electrical boxes shall be sealed.
7. HVAC boots that extend into unconditioned space shall be sealed.