

Construction Address: _____

Date: _____



Department of Building Safety

PO Box 333, White Cloud, MI 49349-0333 Phone 231-224-3960 Fax 888-825-7654

Office Hours: White Cloud City Hall, 12 N Charles Street, M, W, F, 8:00am-10:00am

Garfield Township Hall, 7190 S Bingham Avenue, T, Th., 7:00am-9:00am

Newaygo City Hall, 28 N State Road, M, W, 1:00pm-3:00pm

MICHIGAN ENERGY CODE

**Table 402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT
(U-Factor and R-Value)**

Exterior Enclosure	Zone 6A Minimum	Proposed
Fenestration ^a	U-0.35	
Skylights ^a	U-0.60	
Ceiling	R-49	
Wood Framed Wall	R-20 or R-13 + R-5 ^c	
Mass Wall	R-15/R-19	
Floor	R-30 ^d	
Basement Wall ^b	R- 15/R-19 f	
Slab ^c	R-10, 4 feet	
Crawl Space Walls ^c	R-10/R-13 f	

Note: All R values are for the thermal resistance value of the insulation.

a. The fenestration U-factor column excludes skylights.

b. The first R-value applies to continuous insulation, the second to framing cavity insulation; either insulation meets the requirement.

c R-5 shall be added to the required slab edge R-values for heated slabs to a depth of 2 feet or the depth of the footing, whichever is less.

d. Or insulation sufficient to fill the framing cavity, R-19 minimum.

e. "13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, insulating sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25 percent of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.

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

Person Completing Form: Homeowner Contractor Other _____

Signature: _____

Date: _____

402.4 Air leakage (Mandatory).

402.4.1 Building thermal envelope. The *building thermal envelope* shall be durably sealed to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. The following shall be caulked, gasketed, weather-stripped or otherwise sealed with an air barrier material, suitable film or solid material:

1. All joints, seams and penetrations.
2. Site-built windows, doors and skylights.
3. Openings between window and door assemblies and their respective jambs and framing.
4. Utility penetrations.
5. Dropped ceilings or chases adjacent to the thermal envelope.
6. Knee walls.
7. Walls and ceilings separating a garage from conditioned spaces.
8. Behind tubs and showers on exterior walls.
9. Common walls between dwelling units.
10. Attic access openings.
11. Rim joist junction.
12. Other sources of infiltration.

402.4.2 Air sealing and insulation. Building envelope air tightness and insulation installation shall be demonstrated to comply with one of the following options given by Section 402.4.2.1 or 402.4.2.2:

402.4.2.1 Testing option. Building envelope tightness and insulation installation shall be considered acceptable when tested air leakage is less than seven air changes per hour (ACH) when tested with a blower door at a pressure of 33.5 psf (50 Pa). Testing shall occur after rough in and after installation of penetrations of the building envelope, including penetrations for utilities, plumbing, electrical, ventilation and combustion appliances.

402.4.2.2 Visual inspection option. Building envelope tightness and insulation installation shall be considered acceptable when the items listed in Table 402.4.2, applicable to the method of construction, are field verified. Where required by the *code official*, an *approved* party independent from the installer of the insulation shall inspect the air barrier and insulation.