

BENZIE COUNTY BUILDING SAFETY and CODE ENFORCEMENT DEPARTMENT

448 Court Place,
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Beulah, Michigan 49617
Fax. 231-882-0033

Building Owner: _____ Builder Name: _____
 Site Address _____ Township: _____
 _____ Permit # _____
 General Building Description _____ Parcel # _____
 _____ Phone _____ Date _____

MUEC PRESCRIPTIVE COMPLIANCE APPROACH WORK SHEET 2009 Code (ZONE 6A)

Rule	MINIMUM BUILDING ENVELOPE INSULATION CRITERIA	Cavity	Cont	YES	NO
402.1.1	WOOD FRAME WALL INSULATION	R-20	13+5 ^e		
402.2.4	MASS WALLS ^f	R-19	R-15		
402.2.1	ROOF / CEILING INSULATION Minimum over wall R-30 limited to 20% or 500 sq ft of assembly CONTINUOUS WITH ENERGY SEAL	R-49			
	SKYLIGHTS EQUAL U - .60		R-38		
402.3.1	PERCENT OF FENESTRATION (WINDOWS) FENESTRATION R-VALUE - 2.85 U-. 35 15% OR LESS OF GROSS WALL AREA*				
402.3.4	OPAQUE DOORS EXEMPTION – one door up to 24 sq ft OTHERWISE R-2.85 U - . 35				
FOUNDATION/BASEMENT INSULATION					
T402.1.1	FLOORS OVER UNCONDITIONED SPACES	R-30			
402.2.8	SLAB – ON – GRADE FLOORS ^c	R-10, 4 ft.			
402.2.9	CRAWL SPACE WALLS (NO VENTING & A CONTINUOUS VAPOR BARRIER)	R-13	R-10		
T402.1.1	UNCONDITIONED CRAWL SPACE (INSULATED FLOOR ABOVE)	R-30 R-15			
402.2.7	BASEMENT WALLS; CONTINUOUS INSULATION	R-15 exterior			
402.2.7	BASEMENT WALLS; CAVITY INSULATION	R-19			

Home owner/Builder Signature _____ License Number _____

- 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. Insulation depth shall be the depth of the footing or 2 feet, whichever is less, in zones 1-3 for heated slabs.
- 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% or less of the exterior, R-5 sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% 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.

**TABLE 402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT**

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT ^a U-FACTOR	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ^f	FLOOR R-VALUE	BASEMENT ^b WALL R-VALUE	SLAB ^c R-VALUE & DEPTH	CRAWL SPACE ^c WALL R-VALUE
6A	0.35	0.60	49	20 or 13+5 ^e	15/19	30 ^d	15/19	10, 4 ft	10/13

Cont = Continuous
T = Table