

Building Owner \_\_\_\_\_  
 Site Address \_\_\_\_\_

Builder Name \_\_\_\_\_  
 Township \_\_\_\_\_  
 Permit # \_\_\_\_\_  
 Phone \_\_\_\_\_ Date \_\_\_\_\_

General Building Description \_\_\_\_\_

**2009 MUEC PRESCRIPTIVE COMPLIANCE APPROACH**

**Form 402 (ver. 1.1)**

Section	MINIMUM BUILDING ENVELOPE INSULATION CRITERIA				YES	NO
		ZONE 5	ZONE 6	ZONE 7		
402.1	WALL INSULATION	R-20 <sup>1</sup>	R-20 <sup>1</sup>	R-21		
	ROOF / CEILING INSULATION	R-38	R-49	R-49		
	SKYLIGHTS R-VALUE	R-1.67 (U= 0.60)				
402.3.1	FENESTRATION R-VALUE <sup>2</sup>	R-2.85 (U= 0.35)				
402.2.6	FLOORS OVER UNCONDITIONED SPACES <sup>3</sup>	R-30	R-30	R-38		
402.2.8	SLAB-ON-GRADE FLOORS <sup>4</sup>	R-10/2	R-10/4	R-10/4		
402.2.9	CRAWL SPACE WALLS <sup>5</sup>	CONTINUOUS INSULATION	R-10	R-10	R-10	
		CAVITY INSULATION	R-13	R-13	R-13	
402.2.7	BASEMENT WALLS <sup>6</sup>	CONTINUOUS INSULATION	R-10	R-15	R-15	
		CAVITY INSULATION	R-13	R-19	R-19	
403.2.1	SUPPLY DUCTS IN ATTICS INSULATION <sup>7</sup>	R-8				
	ALL OTHER DUCT INSULATION <sup>7</sup>	R-6				
403.3	HVAC PIPING	R-3				
402.4	AIR LEAKAGE (Recessed fixtures Type IC air tight or enclosed) All joints/penetrations sealed.					

Applicant Signature \_\_\_\_\_ License Number \_\_\_\_\_

**CLARIFICATIONS:**

- 1) Alternate - 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.
- 2) Up to 15 ft<sup>2</sup> of glazed fenestration and 1 side hinged opaque door up to 24 ft<sup>2</sup> may be exempted. Area-weighted average:  $(A_1 \times U_1 + A_2 \times U_2 + \dots + A_n \times U_n) \div 0.35(A_1 + A_2 + \dots + A_n) \leq 1$   
 [402.5] Window maximum U-value = 0.48 (R-2.08). Skylight maximum U-Value = 0.75 (R-1.33)
- 3) Table value or insulation sufficient to fill the framing cavity. R-19 minimum. Insulation shall be installed to maintain contact with the underside of the subfloor decking.
- 4) Exterior exposed vertical surfaces shall be protected a minimum of 6" below grade. The insulation shall extend a minimum of 48 inches below grade or to the bottom of the slab and then horizontally to the interior or exterior for a total of 48 inches. (In Zone 5, insulation shall extend a combined total of 24 inches.) Add R-5 if heated slab.
- 5) Crawl space insulation shall extend from the top of the foundation wall to grade and continue to extend at least 24 inches below grade, or a combined vertical and horizontal distance of 24 inches.
- 6) Basement insulation: Interior or exterior application extending from top of wall to floor or 10 feet below grade whichever is less.
- 7) **Exception:** Ducts or portions thereof located completely inside the building thermal envelope.