# ENERGY CONSERVATION WORK SHEET FOR 1 & 2 FAMILY DWELLINGS

CHAPTER 11

2006 INTERNATIONAL ENERGY CONSERVATION CODE



Map & Parcel \_

Address

Lot Number \_\_\_\_\_

Building Application / Permit Number

**Building Permit Description** 

	Fenestration U-Factor	Skylight U-Factor	Glazed Fenestration SHGC	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement Wall R-Value	Slab R-Value & Depth	Crawl Space Wall R-Value
Factors required by 2006 IECC	0.40	0.60	NR	38	13	5	19	10/13	10,2 Ft	10/13
Factors provided for this Project										

## <u>Ceilings</u>

The required "Ceiling R-value" in table assumes standard truss or rafter construction, and shall apply to all roof/ceiling portions of the building thermal envelope, including cathedral ceilings.

## Exterior walls

The sum of the R-values of the insulation materials installed in framing cavities and insulating sheathing (where used) shall meet or exceed the minimum required "Wall R-value" in table . Framing, drywall, structural sheathing, or exterior siding materials shall not be considered as contributing, in any way, to the thermal performance of exterior walls. Insulation separated from the conditioned space by a vented space shall not be counted towards the required R-value.

## **Basement Walls**

Where the basement is considered a conditioned space, the basement walls shall be insulated in accordance with table. Where the basement is not considered a conditioned space, either the basement wall or the ceiling(s) separating the basement from conditioned space shall be insulated in accordance with table. Where basement walls are required to be insulated, the required R-value shall be applied from the top of the basement wall to a depth of 10 feet (3048 mm) below grade or to the top of the basement floor, whichever is less.

The energy code also has minimum requirements for HVAC equipment, duct insulation, water heaters, showers, and swimming pools.

## Crawl space walls

Where the floor above the crawl space is uninsulated, insulation shall be installed on crawl space walls when the crawl space is not vented to outside air. The required "Crawl space wall R-value" in table shall be applied inside of the crawl space wall, downward from the sill plate to the exterior finished grade level and then vertically or horizontally or both for 24 inches (610 mm). The exposed earth in all crawl space foundations shall be covered with a continuous vapor retarder having a maximum permeance rating of 1.0 perm (5.72 x 10^-8 g/Pa s m^2), when tested in accordance with ASTM E 96.

#### Slab-on-grade floors

For slabs with a top edge 12 inches (305 mm) or less below finished grade, the required "Slab perimeter R-value and depth" in table shall be applied to the outside of the foundation or the inside of the foundation wall. The insulation shall extend downward from the top of the slab or downward from the top of the slab to the bottom of the slab and then horizontally to the interior or exterior, until the distance listed in table is reached. Where installed between the exterior wall and the edge of the interior slab, the top edge of the insulation shall be permitted to be cut at a 45-degree (0.79 rad) angle away from the exterior wall. Insulation extending horizontally outside of the foundation shall be protected by pavement or by a minimum of 10 inches (254 mm) of soil.

#### **Floors**

The required R-value in table shall apply to all floors, except any individual floor assembly with over 25 percent of its conditioned floor area exposed directly to outside air shall meet the R-value requirement in table "Ceiling R-value."

COMPLIANCE CERTIFICATION This structure meets or exceeds the energy conservation requirements of the 2006 INTERNATIONAL ENERGY CONSERVATION CODE. This form must be presented at time of application or must be posted conspicuously inside the main entrance to the dwelling prior to framing inspection.											
Signature	Contractor			Date							
Reviewed by		, Inspector	Date								