



Humboldt County Building Department  
 City of Winnemucca  
 Prescriptive Energy Calculation Worksheet  
 2006 International Energy Conservation Code (IECC)

This worksheet may be used to show residential compliance with the 2006 IECC per Sections 402.1-402.3

**Building Envelope Requirements**

	Window U Factor	Skylight U-Factor	Window & Skylight 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
Climate Zone 5	0.035	0.060	NR	R-38	R-19 or 13+5	R-13	R-30*	R 10/13	R-10, 2 ft	R-10/13

\*Or insulation sufficient to fill the framing cavity, R-19 min.

This table applies to all new construction, as well as all additions and alterations and is based upon the building envelope requirements for Climate Zone 5, Table 402.1.1 in the 2006 IECC. This table applies to residential buildings as defined in the IECC, with wood framing and/or mass walls. For steel framed buildings, refer to Section 402.2.4 of the IECC

Verify all mandatory requirements have been met and are documented per IECC Sections 401, 402.4, 402.5, 402.6 and 403

**Air Leakage**

- Joints, penetrations, and all other such openings in the building envelope that are sources of air leakage are sealed
- Recessed lights are either 1) Type IC rated with enclosures sealed/gasketed against leaks to the ceiling or 2) Type IC rated E283 labeled, or 3) installed outside an air-tight assembly with a 0.5" clearance from combustible materials and a 3" clearance from insulation

**Materials Identification:**

- Materials and equipment are identified so that compliance can be determined.
- Manufacturer manuals for all installed heating & cooling equipment and service water heating equipment have been provided.
- Insulation R-values and glazing U-factors are clearly marked on the building plans or specifications
- Insulation is installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation. Vapor barrier on warm winter side.

**Duct Insulation**

- Duct in unconditioned space or outside the building are insulated at least R-8 min.
- Ducts in floor trusses above unconditioned spaces or above the outdoors are insulated to at least R-6

**Duct Construction**

- Air handlers, filter boxes, and duct connections to flanges of air distribution system equipment or sheet metal fitting are sealed and mechanically fastened
- All joints, seams, and connections are made substantially airtight with tapes, gasketing, mastics(adhesives) or other approved closure system. Tapes and mastics are rated UL 181A or UL 181B
- Building framing cavities shall not be used as supply ducts
- Automatic or gravity dampers are installed on all outdoor air intakes and exhausts that close when not operating
- Additional requirements for tape sealing and metal duct crimping are included by an inspection for compliance with the Uniform Mechanical Code

**Temperature Controls**

- Thermostats exist for each separate HVAC system  
A manual or automatic means to partially restrict or shut off the heating and/or cooling input to each zone or floor is provided

**Heating and Cooling Equipment Sizing**

- Additional requirements for equipment sizing are included by an inspection for compliance with the Uniform Mechanical Code

**Circulating Hot Water Systems**

- Circulating hot water pipes are insulated to R-2
- Circulating hot water systems include an automatic or accessible manual switch to turn off the circulating pump when the system is not in use