

2015 IECC

International Energy Conservation Code

Mandatory measures for all residential projects

- **R401.3** Certificate — Posted in electrical panel or approved location
- **Climate Zones Table R301.1**
 - Maricopa and Pinal counties are CZ 2B
 - Gila County is CZ 4B
- **Table R402.1.2** Insulation and Fenestration Requirements by component

Climate Zone	2B	4B
Crawl Space Wall R-value*	0	10/13*
Fenestration U-factor*	0.40	0.35
Skylight U-factor*	0.65	0.55
Glazed SHGC Fenestration*	0.25	0.40
Ceiling R-value	38	49
Wood Frame Wall R-value*	13	20 or (13+5)
Mass Wall R-value*	4/6	8/13
Floor R-value	13	19
Basement Wall R-value*	0	10/13
Slab R-value*	0	10 (15 heated*)
ERI	52	54

*See footnotes in 2015 IECC.

- **R402.4** Air Leakage
 - **R402.4.1.1** Installation — Per manufacturer specs
 - **R402.4.1.2** Testing and third-party verification
 - ♦ ≤ 5 ACH50 in CZ 2B
 - ♦ ≤ 3 ACH50 in CZ 4B
- **R402.4.2** Fireplaces – Tight-fitting dampers and outdoor combustion air (wood-burning only); listed and labeled doors, UL 127 or UL 907
- **R402.4.3** Fenestration Air Leakage — Listed and labeled
 - Windows ≤ 0.3 cfm/sf
 - Doors ≤ 0.5 cfm/sf
- **R402.4.4** Combustion Closets
 - Rooms containing fuel-burning appliances require special care (see code for details)
- **R402.4.5** Recessed Lighting
 - IC-rated and labeled, air leakage rate 2 cfm max
 - Gasketed or caulked at the ceiling
- **R402.5** Maximum Fenestration U-factor and SHGC
 - Area-weighted average maximums for total UA
 - Alternative or simulated performance approach
 - ♦ ≤ 0.50 for CZ 2B
 - ♦ ≤ 0.48 for CZ 4B
- **R403.1.1** Programmable Thermostats
 - ♦ Minimum one per each heating and cooling unit
 - Initially programmed no higher than 70°F heating set point and no lower than 78°F cooling set point
- **R403.3.2.1** Sealed Air Handler — Manufacturer’s designation of (max) 2% of design airflow rate

- **R403.3.2** Duct Sealing – Ducts, air handlers and filter boxes sealed per IRC/IMC **AND** tested **R403.3.3**:
 - Rough-in or post-construction testing must demonstrate ≤ 4 cfm/100 sf, or 4% CFA25
- **R403.3.5** Building Cavities — Shall not be used as ducts or plenums
- **R403.4** Mechanical System Piping Insulation — Carrying fluids > 105°F or < 55°F, insulate to R-3 min.
- **R403.5** Circulating or Demand Hot Water Systems – Automatic shutoffs, heat trace systems – temperature control for 104°F max pushed to cold side
- **R403.5.3** Hot Water Pipe Insulation R-3 (some exceptions)
- **R403.6** Mechanical Ventilation — Per IRC/IMC, with automatic or gravity dampers on outdoor air intake or exhaust
- **R403.7** Equipment Sizing — Per ACCA Manual S, based on loads calculated per ACCA Manual J
- **R403.8** Systems Serving Multiple Dwelling Units — Comply with C403 and C404
- **R403.9** Snowmelt Controls — Auto shutoff when pavement temperature > 50°F and air temperature > 40°F
- **R403.10** Pools and In-Ground Spas — Readily accessible shutoff switches for heaters (**R403.10.2**) and timers for pumps and heaters (**R403.10.3**), **AND** vapor-retardant covers for all pools (**R403.10.4**) and pool cover if heated (see exceptions)
- **R402.4.1.1** — The components of the **Building Thermal Envelope** as listed in Table R402.1.1 shall be installed in accordance with the manufacturer’s instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction
- **R404.1** Lighting — A minimum of 75% of permanently installed fixtures must have high-efficacy lamps
 - Defined as compact fluorescent lamps, T8 or smaller, or lamps with a minimum efficacy of:
 - ♦ 60 lm/W for > 40 W
 - ♦ 40 W > 50 lm/W > 15 W
 - ♦ 15 W > 40 lm/W
 - Low-voltage lighting exempt

Optional Amendments

R403.10.1 Removed in errata

R403.10.3 Covers, is amended to read as follows:

Exceptions — Covers or other vapor-retardant means shall not be required where:

1. More than 70% of the energy for heating, computed over an operation season, is from site-recovered energy, such as from a heat pump or solar energy source.
2. Pools are provided with a dual-speed or variable speed pool motors.

Table R406.4 Maximum Energy Rating Index:

For Climate Zone 2: when energy generated from on-site renewable sources is not included in the calculation of the Energy Rating Index, the ERI is allowed to be up to a maximum of ERI 59.