

- **R403.7** Systems Serving Multiple Dwelling Units — Comply with C403 and C404
- **R403.8** Snowmelt Controls — Auto shutoff when pavement temperature > 50 and air temperature > 40
- **R403.9** Pools and In-Ground Spas — Readily accessible shutoff switches for heaters (**R403.9.1**) and timers for pumps and heaters (**R403.9.2**), **AND** vapor-retardant covers for all pools (**R403.9.3**)
- **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

2012 IECC

International Energy Conservation Code

Mandatory measures for
all residential projects

- **R401.3** Certificate — Posted in electrical panel
- **IECC Table R402.1.1**
 - Maricopa and Pinal counties are CZ 2B
 - Gila County is CZ 4B

Insulation and Fenestration Requirements

by component:

Climate Zone		
Fenestration U-factor*		
Skylight U-factor*		
Glazed SHGC Fenestration*		
Ceiling R-value		
Wood Frame Wall R-value		
Mass Wall R-value*		
Floor R-value		
Basement Wall R-value*		
Slab R-value*		
Crawl Space Wall R-value*		

*See footnotes in 2012 IECC.

- **R402.4** Air Leakage
 - **R402.4.1** Installation — Per manufacturer specs
 - **R402.4.1.2** Testing
 - ♦ ≤ 5 ACH50 in CZ 2B
 - ♦ ≤ 3 ACH50 in CZ 4B
- **R402.4.2** Fireplaces – Tight-fitting dampers and outdoor combustion air (wood-burning only)
- **R402.4.3** Fenestration Air Leakage — Listed and labeled
 - Windows ≤ 0 at 0.3 cfm/sf
 - Doors ≤ 0.5 cfm/sf
- **R402.4.4** Recessed Lights
 - IC-rated and labeled at 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** Controls
 - R403.1.1 Programmable Thermostats
 - ♦ Minimum one per residence with forced-air furnace
 - R403.1.2 Heat Pump Supplementary Heat
- **R403.2.2** Duct Sealing – Ducts, air handlers, and filter boxes sealed per IRC/IMC **AND** tested
 - Rough-in or post-construction testing must demonstrate ≤ 4 cfm/100 sf, or 4% CFA25
- **R403.2.2.1** Sealed Air Handler — Manufacturer’s designation of (max) 2% of design airflow rate
- **R403.2.3** Building Cavities — Shall not be used as ducts or plenums
- **R403.3** Mechanical System Piping Insulation — Minimum of R-3 and protected from weather
- **R403.4.1** Circulating Hot Water Systems – Automatic or readily accessible manual switch
- **R403.5** Mechanical Ventilation — Per IRC/IMC, with automatic or gravity dampers on outdoor air intake or exhaust
- **R403.6** Equipment Sizing — Per ACCA Manual S, based on loads calculated per ACCA Manual J