

**CITY OF TEMPE AMENDMENTS TO THE
2012 INTERNATIONAL ENERGY CONSERVATION CODE
ARTICLE 2-900 OF THE
THE CODE OF THE CITY OF TEMPE, AZ**

Sec. C401.1 GENERAL

Section C401 is hereby amended as follows:

Section C401.1 Scope. The requirements contained in this chapter are applicable to commercial buildings, or portions of commercial buildings.

Exceptions:

1. Lighting and their controls that are required by the City of Tempe, Zoning and Development Code are not regulated by this code.
2. Evaporative coolers are not covered by this code.

Sec. C404 SERVICE WATER HEATING (Mandatory)

Section C404 is hereby amended as follows:

Section C404.7.3 Covers. Heated pools and in ground permanently installed spas shall be provided with a vapor retardant pool cover.

Exception:

1. Pools deriving over 70 percent of the energy for heating from site-recovered energy, such as a heat pump or solar energy source computed over an operating season.
2. Pools and spas equipped with pump motors with a total horsepower of one or more shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds. Residential pool pump motor controls that are sold for use with a two or more speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one twenty-four hour cycle without resetting to the default setting.

Sec. R202 GENERAL DEFINITIONS

Section R202 is hereby amended as follows:

RESIDENTIAL BUILDING. For this code, includes detached one-and two family dwellings, multiple single-family dwellings (townhouses), Group R-3 and R-4 buildings three stories or less in height above grade plane and Group R-2 buildings six stories or less in height above grade and where each dwelling unit has individual heating, cooling and hot water systems.

Sec. R401 GENERAL.

Section R401 is hereby amended as follows:

Section R401.1 Scope.

This chapter applies to residential buildings.

Exception: Evaporative coolers are not covered by this code.

Section R401.2 Compliance. Projects shall comply with Sections identified as “mandatory” and either section identified as “prescriptive” or the performance approach in Section R405.

As an alternative, additions, alterations, remodels, and repairs may comply with the department’s standard energy conservation details.

Sec. R402 BUILDING THERMAL ENVELOPE

Section R402 is hereby amended as follows:

Section R402.1 General (Prescriptive). The building thermal envelope shall meet the requirements of Sections R402.1.1 through R402.1.4.

Exception: In Group R-3 one and two family dwellings and multiple single family dwellings (townhouse) and Group R-2 buildings six stories or less in height above grade and have their own heating, cooling and hot water systems separate from other dwelling units, the Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections, shall be deemed to meet the requirements of Sections R402.4.1.1, R402.4.1.2 and R403.2.2. and shall meet the following conditions:

1. Third Party Testing and Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review procedures.
2. Sampling in accordance with Chapter 6 of the RESNET Standards shall be performed by Raters or Rating Field Inspectors working under a RESNET Accredited Sampling Provider.
3. Third Party Testing is required for the following items:
 - a) R402.4.1.1 –Building Envelope – Thermal and Air Barrier Checklist
 - b) R402.4.1.2 –Testing – Air Leakage Rate
 - c) R403.2.2 – Sealing – Duct Tightness
4. The other requirements identified as “mandatory” in IECC Chapter 4 RE shall be met.
5. Alternate testing and inspection programs and protocols may be allowed when approved by the building official in accordance with the Tempe Administrative Code, Section 103.12.

Sec. R403 SYSTEMS (Mandatory)

Section R403 is hereby amended as follows:

Section R403.2.1 Insulation. Supply ducts shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6.

Exceptions:

1. Ducts or portions thereof located completely inside the building thermal envelope.
2. Supply and return ducts may be insulated to a minimum of R-6 when one or more of the following conditions are met:
 - Minimum SEER rating of space heating/cooling system is 14.
 - Maximum U-factor is 0.64 and maximum SHGC is 0.35 for all fenestration products.
 - Wall insulation minimum R-value is R-19.
 - Residential buildings that meet the requirements of Section R405.

Section R403.9.3 Covers. Heated pools and in or above ground permanently installed spas shall be provided with a vapor retardant pool cover.

Exception:

1. Pools deriving over 70 percent of the energy for heating from site-recovered energy, such as a heat pump or solar energy source computed over an operating season.
2. Pools and spas equipped with pump motors with a total horsepower of one or more shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds. Residential pool pump motor controls that are sold for use with a two or more speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one twenty-four hour cycle without resetting to the default setting.