

# Residential Energy Code Information Sheet for Additions/Alterations

All work shall meet or exceed the 2012 IECC & 2012 IRC, including any applicable amendments, some of which are listed below.

MAXIMUM			MINIMUM R-VALUE						
Fenestration U-factor	Skylight U-factor	Glazed Fenestration SHGC	Ceiling	Wood Frame Wall	Mass Wall	Floor	Basement Wall	Slab R-value & Depth	Crawl Space Wall
.35	.55	.25	38	13	8/13	19	5/13	0	5/13

**101.4.3 Additions, alterations, renovations or repairs.** Additions, alterations, renovations or repairs to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with this code. Additions, alterations, renovations or repairs shall not create an unsafe or hazardous condition or overload existing building systems. An addition shall be deemed to comply with this code if the addition alone complies or if the existing building and addition comply with this code as a single building.

**101.4.5 Change in space conditioning.** Any nonconditioned space that is altered to become conditioned space shall be required to be brought into full compliance with this code.

**402.2.12 Thermally isolated conditioned sunroom insulation.** The minimum ceiling insulation R-value shall be R-19. The minimum wall R-value shall be R-13. New walls(s) separating a sunroom from conditioned space shall meet the building thermal envelope requirements.

**402.4.1 Building thermal envelope.** The building thermal envelope shall be durably sealed to limit infiltration. The following shall be caulked, gasketed, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material: all joints, seams and penetrations; site-built windows, doors and skylights; openings between window and door assemblies and their respective jambs and framing; utility penetrations; dropped ceilings or chases adjacent to the thermal envelope; knee walls; walls and ceilings separating a garage from conditioned spaces; behind tubs and showers on exterior walls; common walls between dwelling units; attic access openings; rim joist junction and other sources of infiltration.

**402.4.4 Recessed lighting.** Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate not more than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E 283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

**403.1 Controls.** At least one thermostat shall be provided for each separate heating and cooling system.

**403.2.1 Insulation (Prescriptive).** Supply ducts in attics shall be insulated to a minimum of R-8. All other ducts shall be insulated to a minimum of R-6. **Exception:** Ducts or portions thereof located completely inside the building thermal envelope.

**403.2.3 Building cavities.** Building framing cavities shall not be used as supply ducts.

**404.1 Lighting equipment.** A minimum of 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or a minimum of 75 percent of the permanently installed lighting fixtures shall contain only high efficacy lamps.

**PROVIDE INFORMATION FOR INSPECTION AND MAINTENANCE.** Materials and equipment must be identified so that compliance can be determined. Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment must be provided. Insulation R-values, glazing and door U-factors and SHGC values, and heating and cooling efficiency must be clearly marked.

This handout is for informational purposes only and should not be relied on in place of official regulations and/or policies. The CITY OF PLANO makes no representations, guarantees, or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the handout. Customers and citizens are personally responsible for complying with all local, state and federal laws pertaining to projects within the city. Copies of the CITY OF PLANO adopted codes and Zoning Ordinances can be found on the city website at [www.plano.gov](http://www.plano.gov) or at the CITY OF PLANO Municipal Center at 1520 K Avenue, Plano, Texas.

