Major Changes Included in the 2015 TX State Energy Code

Residential Provisions

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| Code Reference IECC | Title | Change |
| IRC/IECC | All | Beginning with the 2012 I-codes, the technical provisions of the IECC and Ch. 11 of the IRC are identical, minor variations continue to exist in Sections R101/N1101 General and in definitions  |
| Table R402.1.2\*  | Insulation and Fenestration Requirements by Component | Changes Window and door U and SHGC and attic insulation levels all climate zones, changes wall and floor insulation in CZ 3 & 4. Corresponding changes made to Table R402.1. Equivalent U-Factors |
| R402.4.1.2  | Testing (Air Leakage) |  Envelope testing is mandatory, no longer an option, 2015 air leakage thresholds changed to 5 ACH/50 in CZ 2 and 3 ACH/50 in CZ 3 & 4  |
| R403.3.3  | (Duct) Sealing (Mandatory) |  Duct Testing Required except when ducts and air handler are located entirely within thermal envelope |
| R403.3.4 | Duct Leakage(prescriptive) | Sets maximum duct leakage at rough in and post construction at 4cfm/100 sq ft conditioned area, 3 CFM/100 sq ft if air handler not installed.  |
| R403.6  | Mechanical Ventilation (Mandatory | This section combined with IRC and IMC require whole house ventilation to be installed |
| R405.3 | Compliance Report (Performance Path) |  Adds the requirement that the compliance report for the proposed building shall be submitted with the application for building permit, and a compliance report based on the as-built condition of the building shall be submitted before C of O. and adds new sections R405.4.2.1 and R405.2.2 which cover requirements for compliance report for permit application and compliance report for C of O. |
| R406 | Energy Rating Index | New Performance based compliance path. See SPEER ERI Guidance Document (link) |
| Chapter 5 (RE) | Existing Buildings | New chapter containing regulations for compliance in existing buildings, additions, renovations, alterations and historic buildings |

\* To convert to IRC Ch 11 references Change R4\_\_ to N11\_\_, example R401.2 - N1101.2

Commercial Provisions

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| IECC Code Reference  | Title | Change |
| Tables C402.1.3, 402.1.4 | Thermal Envelope Insulation tables | Increases insulation requirements for most assemblies in CZ 1-4 |
| C402.3 | Roof Solar Reflectance | Requires roofs directly above conditioned spaces to meet minimum roof reflectance and emittance requirements in CZ 1-3. |
| C402.4.1 | Maximum (Fenestration) Area | Reduces max vertical fenestration area from 40% in 2009 IECC to 30% |
| Table 402.4 | Fenestration Max U-Factor | Reduces Max U-Factor for windows |
| C403.1.2.15 -C403.2.17 | Walk-in Coolers-Refrigerated Display Cases | New sections setting requirements for walk-in coolers, freezers and refrigerated display cases |
| C404  | Service Water Heating |  Significant new requirements for water heating systems throughout section C404 |
| C405 | Electrical Power and Lighting Systems | Significant additional requirements for lighting controls, sensors and daylighting controls, new requirements for electrical motors and vertical and horizontal transportation systems.  |
| C406 | Additional Efficiency Package Options | New section requiring design teams to choose one of six above code options for additional efficiency |
| C408 | System Commissioning | Significant expansion of Commissioning requirements and documentation |
| Chapter 5 (CE) | Existing Buildings | New chapter containing regulations for compliance in existing buildings, additions, renovations, alterations and historic buildings |