

## AMENDMENTS TO THE INTERNATIONAL ENERGY CONSERVATION CODE

The International Energy Conservation Code, 2000 edition, and amendments, adopted by the Town of Talty, Texas, is amended as follows. All references to section numbers in the text of this section shall be construed as if followed by the words “of the Energy Conservation Code”, unless clearly indicated to the contrary.

1. Section 101.3; is amended to provide as follows:

**101.3 Compliance.** Compliance with this code shall be determined in accordance with Sections 101.3.1, 101.3.2, or 101.3.3.

2. Section 101.3 is amended to add a new definition to provide as follows:

**101.3.3. Alternative compliance.** A building certified through a voluntary energy performance testing program approved as meeting or exceeding the provisions of this code may be deemed to comply with the requirements of this code.

3. Section 302.1; is amended to replace blank Table 302.1 Exterior Design Conditions with the following:

CONDITION	VALUE
Winter <sup>a</sup> design dry build (•F) (99.6%)	17
Summer <sup>a</sup> design dry-bulb (•F) (0.4%)	100
Summer <sup>a</sup> design wet-bulb (•F) (0.4%)	78
Degree days heating <sup>b</sup>	2407
Degree days cooling <sup>b</sup>	2603
Climate zone <sup>c</sup>	5B

4. Delete note “a” and replace with the following:

a. These values are from ASHRAE Handbook of Fundamentals for Dallas/Ft. Worth International Airport 99.6% Winter DB. 0.4% Summer DB. and 0.4% Summer WB; and from Local Climatological Data for Dallas-Ft. Worth published by the National

Climatic Data Center, National Oceanic and Atmospheric Administration. These values are for the purpose of providing a uniform basis of requirements for North Central Texas. This will not preclude licensed professionals from submitting design analyses based on site measurements or published data more specific to the building site. Adjustments shall be permitted to reflect local climates which differ from the tabulated values, or local weather experience determined by the code official.

5. Section 302.1; is amended by deleting Figures 302.1 (1-43, 45-51).

6. Section 502.1.1; is amended by deleting exception #2 and substituting the following:

2. Buildings located in Climate Zones 1 through 9 as indicated in Table 302.1.

7. Section 502.1.5; is amended to add exceptions to provide as follows:

**Exceptions:**

1. Any glazing facing within 45 degrees of true north;
2. Any glazing facing within 45 degrees of true south which is shaded along its full width by a permanent overhang with a projection factor of 0.3 or greater.
3. Any fenestration with attached screens where the screens have a rated shading coefficient of .6 or less.

8. Section 502.2; is amended to replace blank Table 502.2 Heating & Cooling Criteria with the following:

**Table 502.2 a,g  
HEATING AND COOLING CRITERIA**

Element	Mode	Type A-1 Residential Buildings U <sub>o</sub>	Type A-2 Residential Buildings U <sub>o</sub>
Walls	Heating or cooling	0.15	0.22
Roof/ceiling	Heating or cooling	0.03	0.03
Floors over unheated spaces	Heating or cooling	0.05	0.05
Heated slab on grade	Heating	R-value = 6	R-value = 6
Unheated slab on grade	Heating	R-value = 0	R-value = 0

Basement wall	Heating or cooling	U-factor = 0.15	U-factor = 0.15
Crawl space wall	Heating or cooling	U-factor = 0.15	U-factor = 0.15

9. Note "a" amended to provide explanation for Table 502.2:

a. The above values have been determined for all counties in the North Central Texas Council of Governments region.

10. Note "g" is added to provide as follows:

g. These requirements apply only to the boundaries of conditioned space. Air conditioning equipment is recommended, but not required, to be located within the conditioned space in North Central Texas zones.

11. Section 502.2 is amended to delete Figures 502.2(1-6)

12. Section 502.2; is amended to add note to Fig 502.2(7) to provide as follows:

All counties within the North Central Texas Council of Governments region are designated as within the area of very heavy termite infestation probability for purpose of uniform interpretation of this requirement.

13. Section 502.2.4; is amended to delete prescriptive Tables 502.2.4(1-9) and substitute the following:

14. Replace Tables 502.2.4 (1-6) with:

**Table 502.2.4(1)  
Prescriptive Building Envelope Requirements,  
Type A-1 Residential Buildings, Based on Window  
Area as a Percent of Gross Exterior Wall Area (for zones 5b and 6b)**

	Maximum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
% Glazing	Glazing U-factor	Ceiling R-value	Exterior wall R-value	Floor R-value	Basement wall R-value	Slab perimeter R-value and depth	Crawl space wall R-value
≤ 8%	0.70	R-26	R-11	R-11	R-5	R-0	R-6
≤ 12%	0.65	R-26	R-13	R-11	R-5	R-0	R-5
≤ 15%	0.65	R-30	R-13	R-11	R-6	R-0	R-7

≤ 18%	0.52	R-30	R-13	R-19	R-6	R-0	R-7
≤ 20%	0.50	R-38	R-13	R-19	R-6	R-0	R-7
≤ 25%	0.46	R-38	R-16	R-19	R-6	R-0	R-7

15. Replace Tables 502.4(7-9) with:

**Table 502.2.4(2)**  
**Prescriptive Building Envelope Requirements,**  
**Type A-2 Residential Buildings, Based on Window**  
**Area as a Percent of Gross Exterior Wall Area**

	Maximum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
% Glazing	Glazing U-factor	Ceiling R-value	Exterior wall R-value	Floor R-value	Basement wall R-value	Slab perimeter R-value and depth	Crawl space wall R-value
≤ 20%	0.55	R-30	R-13	R-11	R-5	R-0	R-6
≤ 25%	0.55	R-30	R-13	R-11	R-5	R-0	R-5
≤ 30%	0.47	R-38	R-13	R-19	R-7	R-0	R-8

16. Section 503.3.3.3; is amended to provide as follows:

All supply and return-air ducts and plenums installed as part of an HVAC air-distribution system shall be thermally insulated in accordance with Table 503.3.3.3 or where such ducts or plenums operate at static pressures greater than 2 in. w.g. (500 Pa) in accordance with Section 503.3.3.4.1.

17. Section 503.3.3.4; is amended to provide as follows:

**503.3.3.4.1 High- and medium-pressure duct systems.**

All ducts and plenums operating at static pressures greater than 2 in. w.g. (500 Pa) shall be insulated and sealed in accordance with Section 803.2.8. Ducts operating at static pressures in excess of 3 in. w.g. (750 Pa) shall be leak tested in accordance with Section 803.3.6. Pressure classifications specific to the duct system shall be clearly indicated on the construction documents in accordance with the International Mechanical Code.

**503.3.3.4.2 Low pressure duct systems.** All longitudinal and transverse joints, seams and connections of supply and return ducts operating at static pressures less than or

equal to 2 in. w.g. (500 Pa) shall be securely fastened and sealed with welds gaskets, mastics (adhesives), mastic-plus- embedded fabric systems or tapes installed in accordance with the manufacturers installation instructions. Pressure classifications specific to the duct system shall be clearly indicated on the construction documents in accordance with the International Mechanical Code.

*{Exception is unchanged}*

18. Section 802.2; is amended to replace tables 802.2(1-4) with the completed tables provided on the following four pages and to delete tables 802.2(5-37):

**TABLE 802.2(1)**  
**BUILDING ENVELOPE REQUIREMENTS**



**TABLE 802.2(2)**  
**BUILDING ENVELOPE REQUIREMENTS**



**TABLE 802.2(3)**  
**BUILDING ENVELOPE REQUIREMENTS**



**TABLE 802.2(4)**  
**BUILDING ENVELOPE REQUIREMENTS**



19. Section 805.2.1; amended to provide consistency in energy conservation measures:

Large spaces shall have a separate switch or control for each 2500 square feet of floor area.

20. Chapter 9 is amended to provide updated reference to ASHRAE Standard 90.1:

ASHRAE/IES -- 99 Energy Efficient Design of New Buildings Except Low-Rise Residential Buildings -- 1999 Edition.