

TOWN OF ADDISON, TEXAS

ORDINANCE NO. 008-007

AN ORDINANCE OF THE TOWN OF ADDISON, TEXAS, AMENDING CHAPTER 18 ARTICLE II, OF THE CODE OF ORDINANCES OF THE TOWN OF ADDISON, TEXAS, TO PROVIDE MINIMUM STANDARDS TO SAFEGUARD LIFE OR LIMB, PROPERTY, AND PUBLIC WELFARE BY REGULATING THE DESIGN, CONSTRUCTION, QUALITY OF MATERIALS, USE AND OCCUPANCY, LOCATION AND MAINTENANCE OF BUILDINGS AND STRUCTURES. PROVIDING FOR A PENALTY CLAUSE; PROVIDING FOR A SEVERABILITY CLAUSE; AND PROVIDING FOR A REPEAL CLAUSE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS:

SECTION 1. That the Code of Ordinances of the Town of Addison be amended by deleting Sec. 18-51.1, adding Sec. 18-55.1, Sec. 18-55.2, Sec. 18-63.1.1, Sec. 18-63.5 and Sec. 18-67.1 and changing Sec. 18-31, Sec. 18-58, Sec. 18-63, Sec. 18-63.1, Sec. 18-67, Sec. 18-68, Sec. 18-69, Sec. 18-70, Sec. 18-72, Sec. 18-73 and Sec. 18-79 to read as follows:

BUILDING CODE  
DIVISION 1. GENERALLY

Sec. 18-31. Adopted.

For the purpose of providing minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials used, use and occupancy, location and maintenance of all buildings and structures within the city and certain equipment specifically regulated herein, the International Building Code, 2006 Edition, the and the International Energy Conservation Code, 2006 Edition, (copies of which, authenticated by the signature of the mayor and the city

secretary, and made a public record by ordinance, is on file in the city secretary's office), are hereby adopted as the building code of the city as fully as if copied at length in this article, but with the changes therein and additions thereto to provided in this article. Also, adopted are Appendices E, F, G, I and J of the 2006 Edition of the International Building Code.

Sec. 18-55.1 High Rise Buildings.

The International Building Code is amended by adding a definition to Section 202 to read as follows:

HIGH RISE BUILDING. A building having any floor for human occupancy located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

Sec. 18-55.2 Applicability.

The International Building Code is amended by changing 75 feet to read 55 feet and 22 860 mm to read 16 764 mm in the first paragraph of Section 403.1.

Sec. 18-58. Table 602.

The International Building code is amended by changing footnote b in Table 602 to read as follows:

- b. For special requirements for Group U see section 406.1.2. Group R-3 and Group U when used as accessory to Group R-3, as applicable in 101.2 shall not be required to have a fire resistive rating where fire separation distance is three feet or more. Group R-2 and Group U carport, as applicable in 406.1.4 item 4 shall not be required to have a fire resistance rating where the fire separation is 10 feet or more.

Sec. 18-63. Automatic fire-extinguishing systems.

The International Building Code is amended by changing Section 903.2 to read as follows:

903.2 Sprinklers required. An approved automatic fire sprinkler system shall be installed as follows:

- (1) In all buildings of any area, size or occupancy built or added to after December 8, 1992. In the case of an addition to an existing structure or space an approved automatic fire sprinkler system shall be installed in the addition and the existing building or space. Unless otherwise required in the code, the following exceptions apply:

*Exception 1:* Detached Group U occupancies that do not exceed 500 square feet in area and are located six feet from any other building.

*Exception 2:* Open parking garages of noncombustible construction that have no other types of occupancies located above the garage.

*Exception 3:* Existing, unsprinklered, single family detached dwellings which are added for the purpose of increasing livable area.

*Exception 4:* Covered walkways or open canopies above fuel dispensing pumps, bus stops or other similar structures intended only for the temporary protection of persons from inclement weather but not including covered patios attached to buildings.

*Exception 5:* Group S-2 occupancies used only for the storage or parking of aircraft. (NOTE: Aircraft hangars are subject to the provisions of NFPA 409.)

- (2) In any existing building or space, (except single family detached residences), remodeled or reconstructed after the effective date of this ordinance where work performed exceeds 33% of both the square footage and or the (DCAD assessed) dollar value of the building or space.
- (3) In the attic of any building required by this section to have a fire sprinkler system, except the attics of single

family detached dwellings.

- (4) In the occupancies and location as set forth in this section.

For provisions on special hazards and hazardous materials, see the fire code.

Sec. 18-63.1 NFPA 13 Sprinkler systems.

The International Building Code is amended by changing Section 903.3.1.1 to read as follows:

903.3.1.1 NFPA sprinkler systems. Where the provisions of this ordinance require that a building or portion thereof be equipped with an automatic fire sprinkler system, sprinklers shall be installed in accordance with NFPA-13, or other standards as appropriate for the occupancy type and, in addition, sprinkler coverage shall include any area, regardless of size or use, that contains an energy source except as provided in Sections 903.3.1.1.1 exceptions (1) & (2). Sprinkler will also be installed on covered balconies and porches.

Sec. 18-63.1.1 Group A-2.

The International Building Code is amended by changing Section 903.2.1.2 1. to read as follows:

1. The fire area exceeds 1500 square feet.

Sec. 18-63.5 High-rise buildings.

The International Building Code is amended by changing 75 feet to read 55 feet and 22 860 mm to read 16 764 mm in Section 907.2.12 and Section 907.8.2.

Sec. 18-67. Corridor Construction.

The International Building Code is amended by adding Exception 5 to Section 1017.1 to read as follows:

5. Non rated construction within a single tenant space in the following circumstances:

- (i) Smoke detectors are installed along the path of travel per manufacturer's instructions, but in no case more than sixty (60) feet.
- (ii) The actuation of the smoke detectors provides an alarm audible within the space.
- (iii) The smoke alarms are connected to the building's fire alarm system where such a system is provided.

Sec. 18-67.1 Smokeproof enclosures.

The International Building Code is amended by changing 75 feet to read 55 feet and 22 860 mm to read 16 674 mm in Section 1020.1.7.

Sec. 18-68. Design.

The International Building Code is amended by adding an exception to Section 1102.2 to read as follows:

Exception: Buildings regulated under State Law and built in accordance with State certified plans, including any differences and variances or waivers granted by the State, shall be deemed in compliance with the requirements of this chapter.

Sec. 18-69. Unisex toilet and bathing rooms.

The International Building Code is amended by changing the first sentence in Section 1109.2.1 to read as follows:

In assembly and mercantile occupancies, an accessible unisex toilet room shall be provided where an aggregate of six or more male or female water closets is required.

Sec. 18-70. Wood supporting masonry or concrete.

The International Building Code is amended by changing the exception in Section 2304.12 to read Exception 1 and adding Exception 2 to read as follows:

Exceptions:

1. Horizontal wood members supporting masonry or concrete nonstructural floor or roof surfacing not more than 4 inches (102 mm) thick need not be checked for long term loading.
2. When designed by an engineer licensed by the State of Texas to provide such services.

Sec. 18-72. Exterior insulation and finish systems (EIFS).

The International Building Code is amended by adding Section 1403.7 to read as follows:

1403.7 Exterior insulation and finish systems (EIFS). When these systems are used, the following requirements shall be complied with:

1. Plans submitted for permit shall specifically identify the EIFS assembly.
2. Only systems with an International Code Council (ICC) Evaluation Report will be allowed, and before the start of installation of the EIFS assembly, the holder of a building permit must submit for approval the International Code Council Evaluation Report on the specific system to be used.
3. The applicator to install the EIFS assembly must be approved by the manufacturer and must submit documentation to that effect before beginning work.
4. The architect or a special inspector must supervise and oversee the installation of EIFS assemblies.
5. Upon completion of the project, the architect and applicator must submit all pertinent documentation called

for in the ICC report and the manufacturer's recommendations for EIFS.

6. EIFS from six (6) feet and down on any building and where accessible to pedestrian and vehicular traffic shall be a "high impact" system.
7. EIFS assemblies shall not be used where the protection of openings is required.

Sec. 18-73. Minimum number of fixtures.

The International Building code is amended by changing Section 2902.1 to read as follows:

2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided for the type of occupancy and in the minimum number as follows:

1. Assembly occupancies: At least one drinking fountain shall be provided at each floor level in an approved location.

Exception: A drinking fountain need not be provided in a drinking or dining establishment.

2. Groups A, B, F, H, I, M and S occupancies: Buildings or portions thereof where persons are employed shall be provided with at least one water closet for each sex except as provided for in Subsection 2902.2.

3. Group E Occupancies: Shall be provided with fixtures as shown in Table 2902.1.

4. Group R Occupancies: Shall be provided with fixtures as shown in Table 2902.1.

It is recommended but not required that the minimum number of fixtures provided also comply with the number shown in Table 2902.1. Types of occupancies not shown in Table 2902.1 shall be considered individually by the code official. The number of occupants shall be determined by this code. Occupancy

classification shall be determined in accordance with Chapter 3.

Sec.18-79.Amendments to the International Energy Conservation Code.

The International Energy Conservation Code is amended to read as follows:

Amend Section 101.4.2 Historic Buildings to read as follows:

101.4.2 Historic Buildings. Any building or structure that is listed in the State or National Register of Historic Places; designated as a historic property under local or state designation law or survey; certified as a contributing resource with a National Register listed or locally designated historic district; or with an opinion or certification that the property is eligible to be listed on the National or State Registers of Historic Places either individually or as a contributing building to a historic district by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, shall comply with all the provisions of this code.

Exception: Whenever a provision or provisions shall invalidate or jeopardize the historical designation or listing, that provision or provisions may be exempted.

Amend Section 103.1.1 Above code programs to read as follows:

103.1.1 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance.

Amend SECTION 202 GENERAL DEFINITIONS by adding the following definition:

GLAZING AREA. Total area of the glazed fenestration measured using the rough opening and including sash, curbing or other framing elements that enclose the conditioned space. Glazing area includes the area of the glazed fenestration assemblies in walls bounding



conditioned basements. For doors where daylight opening is less than 50 percent of the door area, that glazing area is the daylight opening area. For all other doors, the glazing area is the rough opening area for the door including the door and the frame.

Amend Section 301.1 to read as follows:

301.1 General. Climate zones from Figure 301.1, Figure 301.2, Table 301.1(1), Table 301.2(1), or Table 301.3(3) shall be used in determining the applicable requirements from Chapters 4&5. Locations not in Table 301.1 (outside the US) shall be assigned climate zone based on Section 301.3.

Amend the code by inserting FIGURE 301.2-TEXAS CLIMATE ZONES immediately following Figure 301.1:

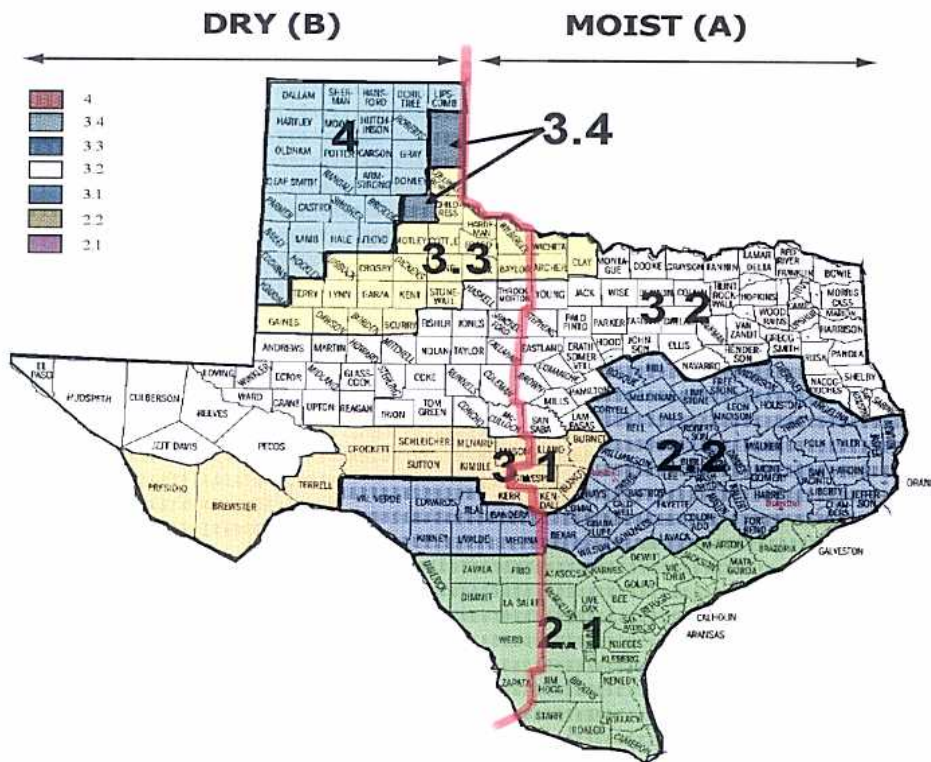


FIGURE 301.2: TEXAS CLIMATE ZONES

Amend TABLE 301.1 CLIMATE ZONES BY STATE, COUNTY AND TERRITORIES by deleting references to Texas and add TABLE 301.1(1) CLIMATE ZONES AND SUB CLIMATE ZONES FOR TEXAS:

**TABLE 301.1(1) CLIMATE ZONES AND SUB CLIMATE ZONES FOR TEXAS**

**Zone 2**

ANDERSON	2.2	DE WITT	2.1	JIM HOGG	2.1	ORANGE	2.2
ANGELINA	2.2	DIMITT	2.1	JIM WELLS	2.1	POLK	2.2
ARANSAS	2.1	DUVAL	2.1	KARNES	2.1	REAL	2.2
ATASCOSA	2.1	EDWARDS	2.2	KENEDY	2.1	REFUGIO	2.1
AUSTIN	2.2	FALLS	2.2	KINNEY	2.2	ROBERTSON	2.2
BANDERA	2.2	FAYETTE	2.2	KLEBERG	2.1	SAN JACINTO	2.2
BASTROP	2.2	FORT BEND	2.2	LA SALLE	2.1	SAN PATRICIO	2.1
BEE	2.1	FREESTONE	2.2	LAVACA	2.2	STARR	2.1
BELL	2.2	FRIO	2.1	LEE	2.2	TRAVIS	2.2
BEXAR	2.2	GALVESTON	2.1	LEON	2.2	TRINITY	2.2
BOSQUE	2.2	GOLIAD	2.1	LIBERTY	2.2	TYLER	2.2
BRAZORIA	2.1	GONZALES	2.2	LIMESTONE	2.2	UVALDE	2.2
BRAZOS	2.2	GRIMES	2.2	LIVE OAK	2.1	VAL VERDE	2.2
BROOKS	2.1	GUADALUPE	2.2	MADISON	2.2	VICTORIA	2.1
BURLESON	2.2	HARDIN	2.2	MATAGORDA	2.1	WALKER	2.2
CALDWELL	2.2	HARRIS	2.2	MAVERICK	2.1	WALLER	2.2
CALHOUN	2.1	HAYS	2.2	MCLENNAN	2.2	WASHINGTON	2.2
CAMERON	2.1	HIDALGO	2.1	MCMULLEN	2.1	WEBB	2.1
CHAMBERS	2.2	HILL	2.2	MEDINA	2.2	WHARTON	2.1
CHEROKEE	2.2	HOUSTON	2.2	MILAM	2.2	WILLACY	2.1
COLORADO	2.2	JACKSON	2.1	MONTGOMERY	2.2	WILLIAMSON	2.2
COMAL	2.2	JASPER	2.2	NEWTON	2.2	WILSON	2.2
CORYELL	2.2	JEFFERSON	2.2	NUECES	2.1	ZAPATA	2.1

**Zone 3**

ANDREWS	3.2	EL PASO	3.2	KERR	3.1	ROCKWALL	3.2
ARCHER	3.3	ELLIS	3.2	KIMBLE	3.1	RUNNELS	3.2
BAYLOR	3.3	ERATH	3.2	KING	3.3	RUSK	3.2
BLANCO	3.1	FANNIN	3.2	KNOX	3.3	SABINE	3.2
BORDEN	3.3	FISHER	3.2	LAMAR	3.2	SAN AUGUSTINE	3.2
BOWIE	3.2	FOARD	3.3	LAMPASAS	3.2	SAN SABA	3.2
BREWSTER	3.1	FRANKLIN	3.2	LLANO	3.1	SCHLEICHER	3.1
BROWN	3.2	GAINES	3.3	LOVING	3.2	SCURRY	3.3
BURNET	3.1	GARZA	3.3	LUBBOCK	3.3	SHACKELFORD	3.2
CALLAHAN	3.2	GILLESPIE	3.1	LYNN	3.3	SHELBY	3.2
CAMP	3.2	GLASSCOCK	3.2	MARION	3.2	SMITH	3.2
CASS	3.2	GRAYSON	3.2	MARTIN	3.2	SOMERVELL	3.2
CHILDRESS	3.3	GREGG	3.2	MASON	3.1	STEPHENS	3.2
CLAY	3.3	HALL	3.4	MCCULLOCH	3.2	STERLING	3.2
COKE	3.2	HAMILTON	3.2	MENARD	3.1	STONEWALL	3.3
COLEMAN	3.2	HARDEMAN	3.3	MIDLAND	3.2	SUTTON	3.1
COLLIN	3.2	HARRISON	3.2	MILLS	3.2	TARRANT	3.2
COLLINGSWORTH	3.3	HASKELL	3.2	MITCHELL	3.2	TAYLOR	3.2
COMANCHE	3.2	HEMPHILL	3.4	MONTAGUE	3.2	TERRELL	3.1
CONCHO	3.2	HENDERSON	3.2	MORRIS	3.2	TERRY	3.3
COOKE	3.2	HOOD	3.2	MOTLEY	3.3	THROCKMORTON	3.2

COTTLE	3.3	HOPKINS	3.2	NACOGDOCHES	3.2	TITUS	3.2
CRANE	3.2	HOWARD	3.2	NAVARRO	3.2	TOM GREEN	3.2
CROCKETT	3.1	HUDSPETH	3.2	NOLAN	3.2	UPSHUR	3.2
CROSBY	3.3	HUNT	3.2	PALO PINTO	3.2	UPTON	3.2
CULBERSON	3.2	IRION	3.2	PANOLA	3.2	VAN ZANDT	3.2
DALLAS	3.2	JACK	3.2	PARKER	3.2	WARD	3.2
DAWSON	3.3	JEFF DAVIS	3.2	PECOS	3.2	WHEELER	3.4
DELTA	3.2	JOHNSON	3.2	PRESIDIO	3.1	WICHITA	3.3
DENTON	3.2	JONES	3.2	RAINS	3.2	WILBARGER	3.3
DICKENS	3.3	KAUFMAN	3.2	REAGAN	3.2	WINKLER	3.2
EASTLAND	3.2	KENDALL	3.1	RED RIVER	3.2	WISE	3.2
ECTOR	3.2	KENT	3.3	REEVES	3.2	WOOD	3.2
						YOUNG	3.2

**Zone 4**

ARMSTRONG	DEAF SMITH	HOCKLEY	PARMER
BAILEY	DONLEY	HUTCHINSON	POTTER
BRISCOE	FLOYD	LAMB	RANDALL
CARSON	GRAY	LIPSCOMB	ROBERTS
CASTRO	HALE	MOORE	SHERMAN
COCHRAN	HANSFORD	OCHILTREE	SWISHER
DALLAM	HARTLEY	OLDHAM	YOAKUM

Amend TABLE 301.2 WARM HUMID COUNTIES AND TERRITORIES by deleting the references to Texas and add TABLE 301.2(1) WARM HUMID COUNTIES FOR TEXAS:

**TABLE 301.2(1) WARM HUMID COUNTIES FOR TEXAS**

ANDERSON	2.2	DUVAL	2.1	KAUFMAN	3.2	RED RIVER	3.2
ANGELINA	2.2	EDWARDS	2.2	KENDALL	3.1	REAL	2.2
ARANSAS	2.1	ELLIS	3.2	KENEDY	2.1	REFUGIO	2.1
ATASCOSA	2.1	ERATH	3.2	KINNEY	2.2	ROBERTSON	2.2
AUSTIN	2.2	FALLS	2.2	KLEBERG	2.1	ROCKWALL	3.2
BANDERA	2.2	FAYETTE	2.2	LA SALLE	2.1	RUSK	3.2
BASTROP	2.2	FORT BEND	2.2	LAMAR	3.2	SABINE	3.2
BEE	2.1	FRANKLIN	3.2	LAMPASAS	3.2	SAN AUGUSTINE	3.2
BELL	2.2	FREESTONE	2.2	LAVACA	2.2	SAN JACINTO	2.2
BEXAR	2.2	FRIO	2.1	LEE	2.2	SAN PATRICIO	2.1
BLANCO	3.1	GALVESTON	2.1	LEON	2.2	SAN SABA	3.2
BOSQUE	2.2	GILLESPIE	3.1	LLANO	3.1	SHELBY	3.2
BOWIE	3.2	GOLIAD	2.1	LIBERTY	2.2	SMITH	3.2
BRAZORIA	2.1	GONZALES	2.2	LIMESTONE	2.2	STARR	2.1
BROWN	3.2	GREGG	3.2	LIVE OAK	2.1	SOMMERVELL	3.2
BRAZOS	2.2	GRIMES	2.2	MADISON	2.2	TARRANT	3.2
BROOKS	2.1	GUADALUPE	2.2	MARION	3.2	TITUS	3.2
BURLESON	2.2	HAMILTON	3.2	MATAGORDA	2.1	TRAVIS	2.2
BURNET	3.1	HARDIN	2.2	MAVERICK	2.1	TRINITY	2.2
CALDWELL	2.2	HARRIS	2.2	MCLENNAN	2.2	TYLER	2.2
CALHOUN	2.1	HARRISON	3.2	MCMULLEN	2.1	UPSHUR	3.2
CAMERON	2.1	HAYS	2.2	MEDINA	2.2	UVALDE	2.2
CHAMBERS	2.2	HENDERSON	3.2	MILAM	2.2	VAL VERDE	2.2
CAMP	3.2	HIDALGO	2.1	MILLS	3.2	VAN ZANDT	3.2

CASS	3.2	HOOD	3.2	MONTGOMERY	2.2	VICTORIA	2.1
CHEROKEE	2.2	HOPKINS	3.2	MORRIS	3.2	WALKER	2.2
COLLIN	3.2	HILL	2.2	NACOGDOCHES	3.2	WALLER	2.2
COLORADO	2.2	HOUSTON	2.2	NAVARRO	3.2	WASHINGTON	2.2
COMAL	2.2	HUNT	3.2	NEWTON	2.2	WEBB	2.1
COMANCHE	3.2	JACKSON	2.1	NUECES	2.1	WHARTON	2.1
CORYELL	2.2	JASPER	2.2	ORANGE	2.2	WILLACY	2.1
DALLAS	3.2	JEFFERSON	2.2	PALO PINTO	3.2	WILLIAMSON	2.2
DELTA	3.2	JIM HOGG	2.1	PANOLA	3.2	WILSON	2.2
DENTON	3.2	JIM WELLS	2.1	PARKER	3.2	WOOD	3.2
DE WITT	2.1	JOHNSON	3.2	POLK	2.2	ZAPATA	2.1
DIMMIT	2.1	KARNES	2.1	RAINS	3.2	ZAVALA	2.1

Add Section 401.2.1. Compliance software tools. to read as follows:

401.2.1. Compliance software tools. Software tools may be used to demonstrate energy code compliance that and deemed acceptable by the building official. The PNL program REScheck is not acceptable for residential compliance.

Amend Section 402.1.1 Insulation and fenestration criteria; to read as follows:

402.1.1 Insulation and fenestration criteria. The building thermal envelope shall meet the requirements of Table 402.1.1 based on the climate zone specified in Chapter 3. The use of REScheck shall not be an acceptable means of demonstrating envelope compliance.

When compliance using Table 402.1.1 is demonstrated with a ceiling R-value of R30 or less, no more that 33% of the total projected ceiling area may be of cathedral type construction ( ceiling joist/roof rafter assembly) and the required insulation R-value may be reduced to a minimum of R22 insulation when the remaining area insulation is increased to R38.

Amend TABLE 402.1.1 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT to read as follows:

**TABLE 402.1.1**

**INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (TEXAS)<sup>a</sup>**

CLIMATE - SUB	MAX GLAZED	MAX GLAZED	MAX	MAX GLAZED FENESTRATION	MIN CEILING	MIN WOOD FRAME WALL	MASS	MIN FLOOR	MIN BASEMENT	MIN SLAB R-VALUE	MIN CRAWL SPACE
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CLIMATE ZONE	AREA TO WALL AREA RATIO	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR <sup>b</sup>	SHGC	R-VALUE	R-VALUE <sup>d</sup>	WALL R-VALUE	R-VALUE	WALL R-VALUE	& DEPTH <sup>f</sup>	WALL R-VALUE
2.1	15	0.75	0.75	0.38	19	13	6	19	0	0	5
	20	0.70	0.75	0.38	30	13	6	19	0	0	5
	25	0.65	0.75	0.35	30	13	6	19	0	0	5
	30	0.54	0.75	0.35	38	13	6	19	0	0	5
2.2	15	0.65	0.75	0.38	30	13	6	19	5	0	6
	20	0.65	0.75	0.38	38	13	6	19	6	0	6
	25	0.54	0.75	0.35	38	13	6	19	8	0	10
	30	0.46	0.75	0.35	38	16, 13 + 3.7 <sup>c</sup>	6	19	8	0	10
3.1	15	0.65	0.65	0.40	30	13	6	19	5	0	6
	20	0.55	0.65	0.40	38	13	6	19	5	0	6
	25	0.54	0.65	0.35	38	13	6	19	8	0	10
	30	0.46	0.65	0.35	38	16, 13 + 3.7 <sup>c</sup>	7	19	8	0	10
3.2	15	0.60	0.65	0.40	30	13	6	19	6	0	7
	20	0.54	0.65	0.40	38	13	6	19	6	0	7
	25	0.51	0.65	0.40	38	16, 13 + 3.7 <sup>e</sup>	7	19	6	0	7
	30	0.46	0.65	0.38	38	16, 13 + 3.7 <sup>c</sup>	7	19	6	0	7
3.3	15	0.51	0.65	0.40	30	13	6	19	7	0	8
	20	0.45	0.65	0.40	38	13	6	19	7	0	9
	25	0.40	0.65	0.40	38	16, 13 + 3.7 <sup>e</sup>	7	19	7	0	9
	30	0.40	0.65	0.40	38	19, 13 + 8.1 <sup>e</sup>	9	19	7	0	9
3.4	15	0.45	0.60	NR	38	13	6	19	8	5, 2 ft	11
	20	0.37	0.60	NR	38	13	6	19	8	6, 2 ft	13
	25	0.37	0.60	NR	38	19, 13 + 8.1 <sup>e</sup>	9	19	8	6, 2 ft	13
	30	0.37	0.60	NR	38	19, 13 + 8.1 <sup>e</sup>	9	30	8	6, 2 ft	13
4	15	0.45	0.60	NR	38	13	8	19	8	5, 2 ft	11
	20	0.37	0.60	NR	38	13	8	19	9	6, 2 ft	13
	25	0.37	0.60	NR	38	19, 13 + 8.1 <sup>e</sup>	10	19	9	6, 2 ft	13
	30	0.37	0.60	NR	38	19, 13 + 8.1 <sup>e</sup>	10	30	9	6, 2 ft	13

For SI: 1 foot = 304.8 mm.

- R-values are minimums. U-factors and SHGC are maximums. R-19 shall be permitted to be compressed into a 2 x 6 cavity.
- The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- R-5 shall be added to the required slab edge R-values for heated slabs.
- The total R-value may be achieved with a combination of cavity insulation and insulating sheathing that covers 100% of the exterior wall.
- The wall insulation may be the sum of the two values where the first value is the cavity insulation and the second value is insulating sheathing. The combination of cavity insulation plus insulating sheathing may be used where structural sheathing covers not more than 25% of the exterior wall area and insulating sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% of exterior wall area then the wall insulation requirement may only be satisfied with the single insulation value.

Amend TABLE 402.1.3 EQUIVALENT U-FACTORS to read as follows:

**TABLE 402.1.3  
EQUIVALENT U-FACTORS<sup>a</sup>**

CLIMATE -	MAX	MAX		MAX	MAX WOOD		MAX	MAX	MAX
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SUB CLIMATE ZONE	GLAZED AREA TO WALL AREA RATIO	GLAZED FENESTRATION U-FACTOR	MAX SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MAX MASS WALL U-FACTOR	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR
2.1	15	0.75	0.75	0.039	0.082	0.124	0.047	0.360	0.136
	20	0.70	0.75	0.034	0.082	0.124	0.047	0.360	0.136
	25	0.65	0.75	0.034	0.082	0.124	0.047	0.360	0.136
	30	0.54	0.75	0.030	0.082	0.124	0.047	0.360	0.136
2.2	15	0.65	0.75	0.034	0.082	0.124	0.047	0.210	0.100
	20	0.65	0.75	0.030	0.082	0.124	0.047	0.210	0.100
	25	0.54	0.75	0.030	0.082	0.124	0.047	0.119	0.065
	30	0.46	0.75	0.030	0.071	0.124	0.047	0.119	0.065
3.1	15	0.65	0.65	0.034	0.082	0.124	0.047	0.210	0.100
	20	0.55	0.65	0.030	0.082	0.124	0.047	0.210	0.100
	25	0.54	0.65	0.030	0.082	0.124	0.047	0.119	0.065
	30	0.46	0.65	0.030	0.071	0.112	0.047	0.119	0.065
3.2	15	0.60	0.65	0.034	0.082	0.124	0.047	0.179	0.075
	20	0.54	0.65	0.030	0.082	0.124	0.047	0.179	0.075
	25	0.51	0.65	0.030	0.071	0.112	0.047	0.179	0.075
	30	0.46	0.65	0.030	0.071	0.112	0.047	0.179	0.075
3.3	15	0.51	0.65	0.034	0.082	0.124	0.047	0.149	0.061
	20	0.45	0.65	0.030	0.082	0.124	0.047	0.149	0.058
	25	0.40	0.65	0.030	0.075	0.112	0.047	0.149	0.058
	30	0.40	0.65	0.030	0.061	0.094	0.047	0.149	0.058
3.4	15	0.45	0.60	0.030	0.082	0.124	0.047	0.119	0.083
	20	0.37	0.60	0.030	0.082	0.124	0.047	0.119	0.152
	25	0.37	0.60	0.030	0.061	0.094	0.047	0.119	0.152
	30	0.37	0.60	0.030	0.061	0.094	0.033	0.119	0.152
4	15	0.45	0.60	0.030	0.082	0.102	0.047	0.119	0.083
	20	0.37	0.60	0.030	0.082	0.102	0.047	0.089	0.152
	25	0.37	0.60	0.030	0.061	0.087	0.047	0.089	0.152
	30	0.37	0.60	0.030	0.061	0.087	0.033	0.089	0.152

a. Nonfenestration *U*-factors shall be obtained from measurement, calculation or an approved source.

Add section 402.2.11. Insulation installed in walls. to read as follows:

Section 402.2.11. Insulation installed in walls. Insulation batts installed in walls shall be totally surrounded by an enclosure on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing or other equivalent material approved by the building official.

Amend Section 402.3.2 Glazed fenestration SHGC.to read as follows:

402.3.2 Glazed fenestration SHGC. An area-weighted average of fenestration products more than 50 percent glazed shall be

permitted to satisfy the SHGC requirements. In sub climate zones 2.1, 2.2, 3.1, 3.2 and 3.3 the maximum area weighted average and the maximum SHGC shall not exceed 0.40.

Amend Section 402.3.3 Glazed fenestration exemption. to read as follows:

402.3.3 Glazed fenestration exemption. Up to 1 percent of glazed fenestration per dwelling unit shall be permitted to be exempt from U-factor and SHGC requirements in Section 402.1.

Amend Section 402.3.5 Thermally isolated sunroom U-factor. To read as follows:

Section 402.3.5 Thermally isolated sunroom. New windows and doors separating the sunroom from conditioned space shall meet the building thermal envelope requirements.

Amend Section 402.3.6 Replacement fenestration. To read as follows:

Section 402.3.6 Replacement fenestration. Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sashes and glazing, the replacement fenestration unit shall meet the applicable requirements for U-factor in Table 402.3.7.

Exceptions:

1. Replacement skylights shall have a minimum U-factor for 0.60 when installed in all sub climate zones except for 2.1.
2. For buildings constructed in accordance with an energy code as required by State of Texas Senate Bill Number 5, 77<sup>th</sup> Legislature, replacement fenestration units may comply with the original construction documents or applicable U-factor in Table 402.1.1.

Add Section 402.3.7 Prescriptive path for additions. to read as follows:

Section 402.3.7 Prescriptive path for additions. As an alternative for demonstrating compliance, additions with a conditioned floor

area less than 500 square feet (46.5 mm) to existing single-family residential buildings and structures shall meet the prescriptive envelope component criteria in Table 402.3.7 for the sub climate zone applicable to the location. The U-factor of each individual fenestration product (windows, doors and skylights) shall be used to calculate an area-weighted average fenestration product U-factor for the addition, which shall not exceed the applicable listed values in Table 402.3.7. For additions, other than sunroom additions, the total area of fenestration products shall not exceed 40 percent of the gross wall and roof area of the addition. The R-values for opaque thermal envelope components shall be equal to or greater than the applicable listed values in Table 402.3.7.

Conditioned sunroom additions shall maintain thermal isolation; shall not be used for kitchens or sleeping rooms.

In sub climate zones 2.1, 2.2, 3.1, 3.2 and 3.3 the combined solar heat gain coefficient (the area weighted average) of all glazed fenestration products used in additions and as replacement windows in accordance with this section shall not exceed 0.40.

Add Table 402.3.7 PRESCRIPTIVE ENVELOPE COMPONENT CRITERIA ADDITIONS TO AND REPLACEMENT WINDOWS FOR EXISTING DETACHED ONE-AND TWO-FAMILY DWELLINGS to read as follows:

**Table 402.3.7 PRESCRIPTIVE ENVELOPE COMPONENT CRITERIA  
ADDITIONS TO AND REPLACEMENT WINDOWS FOR EXISTING DETACHED  
ONE- AND TWO-FAMILY DWELLINGS<sup>d</sup>**



SUB CLIMATE ZONES	MAXIMUM	MINIMUM					
	Fenestration U-factor	Ceiling R-value <sup>a, e</sup>	Wall R-value <sup>e</sup>	Floor R-value	Basement wall R-value <sup>b</sup>	Slab perimeter R-value	Crawl space wall R-value
2.1	0.75	R-26	R-13	R-11	R-5	R-0	R-5
2.2, 3.1, 3.2, 3.3 and 3.4	0.50	R-30	R-13	R-19	R-8	R-0	R-10
4	0.50	R-38	R-13	R-21	R-10	R-0	R-19

- a. "Ceiling R-value" shall be required for flat or inclined (cathedral) ceilings. Floors over outside air shall meet "Ceiling R-value" requirements.
- b. Basement wall insulation to be installed in accordance with Section 402.2.6.
- c. "Crawl space wall R-value" shall apply to unventilated crawl spaces only. Crawl space insulation shall be installed in accordance with Section 402.2.8.
- d. Sunroom additions shall be required to have a maximum fenestration U-factor of 0.5. in all sub climate zones except sub climate zone 2.1. In all sub climate zones, the minimum ceiling R-value for sunroom additions shall be R-19 and the minimum wall R-value shall be R-13.

Amend the Exception to Section 403.2.1 Insulation; to read as follows:

Section 403.2.1. Insulation.

Exceptions:

1. Ducts or portions thereof located completely inside the building thermal envelope.
2. Supply and return ducts can be insulated to a minimum R-6, if the efficiency of the cooling equipment is upgraded to one SEER point above the NAECA (National Appliance Energy Conservation Act) Standard.

Add Section 501.3 Compliance software tools. to read as follows:

Section 501.3. Compliance software tools. Software tools used to demonstrate energy code compliance that are deemed acceptable by the building official may only utilize the energy chapter of the 2006 International Energy Conservation Code or the 2004 Edition of the AHSRAE 90.1 Energy Standard for the Buildings Except Low-rise Residential Buildings when code edition and/or standard selection is available.

Amend Section 505.2.1 Interior Lighting Controls. to read as follows:

505.2.1 Interior lighting controls. Each area enclosed by walls or floor-to-ceiling partitions shall have at least one manual control for the lighting serving that area. The required controls shall be located within the area served by the controls or be a remote switch that identifies the lights served and their status. Each control device shall control a maximum of 2,500 square feet (232.26 square meters) of floor area for a space 10,000 square feet (929.03 square meters) or less and a maximum of 10,000 square feet (929.03 square meters) for a space greater than 10,000 square feet (929.03 square meters)

SECTION 2. All other ordinances and parts of ordinances in conflict with this ordinance shall be, and the same is hereby repealed, but the repeal of such ordinances or parts of ordinances shall not affect any right, property or claim which was or is vested in the Town of Addison, Texas, or any act done, or right accruing or accrued, or established, or any suit, action or proceeding had or commenced before the time when this ordinance shall take effect; nor shall said repeals, amendments or changes effect any offense committed, or any penalty or forfeiture incurred, or any suit or prosecution pending at the time when this ordinance shall take effect under any of the ordinances or sections thereof so repealed.

SECTION 3. In the event that any section, paragraph, subdivision, clause, phrase, or provision of this ordinance or the International Building Code, 2006 Edition, or the International Energy Conservation Code, 2006 Edition or revisions thereof, adopted herein shall be adjudged invalid or held unconstitutional, the same shall not affect the validity of this ordinance or the International Building Code, 2006 Edition, or the International Energy Conservation Code, 2006 Edition or revisions thereof as a whole or any part of provision other than the part so decided to be invalid or unconstitutional.

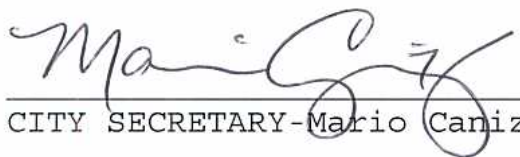
SECTION 4. Any person, firm or corporation violating any provision of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be fined an amount not to exceed five hundred dollars (\$500.00) and each and every day that the prohibited condition remains shall constitute a separate offense.

SECTION 5. That this ordinance shall become effective from and after its adoption.

PASSED AND APPROVED BY THE CITY COUNCIL OF THE TOWN OF ADDISON, TEXAS, this the 22nd day of April, 2008.

  
MAYOR-Joe Chow

ATTEST:

  
CITY SECRETARY-Mario Canizares

PUBLISHED:  
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