

**CITY OF SAN ANTONIO
INTERDEPARTMENTAL CORRESPONDENCE
DEVELOPMENT SERVICES DEPARTMENT**

TO: Mayor and City Council

FROM: Florencio Peña, Director Development Services

THROUGH: Terry M. Brechtel, City Manager

COPY: Christopher J. Brady, Assistant City Manager, File

SUBJECT: Chapter 6 Building City Code Amendments – International Residential Code

DATE: February 26, 2004

SUMMARY & RECOMMENDATION

An ordinance adopting the “2000 International Residential Code for One and Two Family Dwellings (IRC)” as published by the International Code Council, Inc. The provisions of this document shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one and two family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures. The Building and Fire Code Board of Appeals has reviewed the “2000 International Residential Code for One and Two Family Dwellings (IRC)” and has proposed amendments.

The Building and Fire Code Board of Appeals and staff recommend approval of the IRC and amendments.

BACKGROUND INFORMATION

The purpose of the “2000 International Residential Code (IRC) for One and Two Family Dwellings” is to provide minimum requirements to safeguard life or limb, health and public welfare. To this end, the State of Texas adopted the IRC as a municipal residential building code in this state, which became effective January 1, 2002. Municipalities may adopt local amendments to the International Building Code, as they determine appropriate.

There are two categories of amendments to the IRC. The first category is administrative. The administrative amendments to the IRC establish the Building and Fire Code Board of Appeals as the board having responsibility to hear appeals regarding this code. The second category is technical. The technical amendments are consistent with the amendments contained in the current Uniform Building Code (UBC), with the exception of the termite provision amendment. This code also has provisions for Electrical, Mechanical, and Plumbing systems as they pertain to residential construction. Electrical, Mechanical and Plumbing Boards are in the process of completing their review of other technical amendments to the IRC.

The IRC has a provision that provides protection against termite infestation, which the UBC did not address. This provision prescribes methods to protect new residential construction from termites. These methods of protection are, chemical soil treatment, pressure preservatively treated wood, naturally termite resistant wood or physical barriers or any combination of these methods. The Building and Fire Code Board of Appeals recommends that this section of the IRC be amended to provide homebuilders with another option. The option would require that the bottom plate of wood stud walls be pressure preservatively treated wood and the home builder will provide the home owner with a one year warranty.

The Building and Fire Board of Appeals, staff and the Urban Affairs Committee has conducted numerous public meetings on this matter and recommend approval of IRC and the amendments. Staff was requested by the Urban Affairs Committee to survey applicants for building permits on houses five years old and less to determine the work is related to termite damage. If the results of the survey warrant, the Urban Affairs Committee may consider future action to address termite protection. To date we have no actual knowledge of how prevalent termite infestation may be in San Antonio to warrant the additional costs associated with termite protection as originally prescribed.

POLICY ANALYSIS

The adoption of this code and amendments is consistent with the council policy to safeguard public health, safety and welfare.

FINANCIAL IMPACT

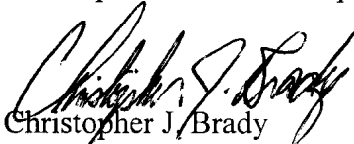
There is no anticipated financial impact. Enforcement of this ordinance will be accomplished with existing staffing.

COORDINATION

This ordinance has been coordinated with the Building and Fire Code Board of Appeals, the City Attorney's Office and the Urban Affairs Committee.



Florencio Peña, Director
Development Services Department



Christopher J. Brady
Assistant City Manager

APPROVED



Terry Brechtel
City Manager

AMENDMENTS TO THE
2000 EDITION OF THE
INTERNATIONAL RESIDENTIAL CODE
CITY OF SAN ANTONIO

Section R104.6 International Residential Code is amended by adding Section R104.6.1 to read as follows:

The building official shall examine or cause to be examined every building or structure or portion thereof reported as dangerous or damaged. If such is found to be an unsafe building as defined in this section, the building official shall give to the owner of such building or structure written notice stating the defects thereof. This notice shall require the owner or person in charge of the building or premise, within 48 hours to commence either the required repairs or improvements or demolition and removal of the building or structure or portions thereof. All such work shall be completed within 30 days from the date of notice, unless otherwise stipulated by the building official. Proper service of such notice shall be by certified mail made upon the owner or his agent. The designated period within which said owner or agent is required to comply with the order of the building official shall begin as of the date he received such notice.

Section R105.2 Items 2 and 5 of the International Residential Code are amended to read as follows:

2. Minor repairs to fences not over 6 feet high. Up to 25% of the overall contiguous length of a fence shall constitute minor repair.
5. Walks and driveways not more than 30 inches above grade, not constructed of concrete, and not over any basement or story below.

Section R105.3.1 of the International Residential Code is amended to read as follows:

R105.3.1 Action on Application. The application, plans, specifications, computations and other data filed by an applicant for a permit shall be reviewed by the building official within a reasonable time after filing. Such plans may be reviewed by other departments of this jurisdiction to verify compliance with any applicable laws under their jurisdiction. If the building official finds that the work described in an application or a permit and the plans, specifications and other data filed therewith conform to the requirements of this code and other pertinent laws and ordinances, and that the fees specified in Section R108 have been paid, the building official shall issue a permit therefore to the applicant. No permit shall be issued where there is not a supply of approved water for domestic or fire protection use and adequate to the purposes for which the property is intended to be used.

Section 105.3.1.1 of the International Residential Code is amended to read as follows:

R105.3.1.1 Substantially improved or substantially damaged existing buildings and structures. For applications for reconstruction, rehabilitation, addition, or other improvement of existing buildings or structures located in an area prone to flooding as established by Table R301.2(1), the proposed improvement shall be subject to the city's flood plain ordinance.

Section R108 of the International Residential Code is amended by adding Section R108.1.1 to read as follows:

R108.1.1 Preliminary Plan Review Fees. Preliminary plan reviews may be made when requested. A fee for such review shall be assessed in accordance with the fee schedule adopted by the City of San Antonio. Applicants shall submit written comments summarizing building code interpretations agreed upon in the preliminary plan review, as soon as reasonably possible following the review. The Development Services Department will approve or disapprove such comments and return to applicant as soon as reasonably possible.

Section R108 of the International Residential Code is amended by adding Section 108.6 to read as follows:

R108.6 Work requiring a permit shall not be commenced until the permit holder or his agent has posted the building permit in a conspicuous place on the premise or the Development Services Department has an approved permit on file. Where work for which a permit is required by this code is started, prior to obtaining said permit; the specified fees may be doubled. The payment of such double fee shall not relieve any person from fully complying with the requirements of this code in the execution of the work nor from any other penalties prescribed herein.

Section R108 of the International Residential Code is amended by adding Section R108.7 to read as follows:

R108.7 Buildings Being Moved. Inspection of structures located outside city limits. An inspection to determine compliance with city requirements shall be made of any building or structure that is located not more than five miles from the city limits and on which an application to move same into the city is pending before the Zoning Board of Adjustment. A fee shall be charged in accordance with the fee schedule adopted by the City of San Antonio.

Section R108 of the International Residential Code is amended by adding Section R108.8 to read as follows:

R108.8 Reinspection Fees. The reinspection fee charged shall be in accordance with the fee schedule adopted by the City of San Antonio.

In instances where reinspection fees have been assessed, all fees shall be paid before release of the utilities.

Section R109 of the International Residential Code is amended by adding Section R109.1.5.2 to read as follows:

R109.1.5.2 Insulation Inspection. To be made after plumbing, electrical rough in and the framing inspection has been approved and an approved insulating material has been installed. A certification from the installer on his/her letterhead is acceptable in lieu of an inspection.

Section R112.1 of the International Residential Code is amended to read as follows:

R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official and fire chief relative to the application and interpretation of the building and fire code, and to determine appeals regarding the suitability of alternate materials and types of construction, there shall be and is hereby created a building and fire code board of appeals consisting of eleven persons residing in the city. The findings of the board regarding appeals of modifications shall be advisory in nature. The board shall consist of two structural engineers, two architects, four builders, two lay persons and one person with expertise in fire prevention. The fire chief and building official shall be ex officio members. The building official shall be an ex officio member of and shall act as secretary to said board. But the building official or fire chief shall have no vote upon any matter before the board. The board of appeals shall be appointed by the city council. The term of office should not exceed two (2) years and shall be limited to three (3) consecutive two-year terms. All vacancies shall be filled for the unexpired portion of the term only. The board shall adopt reasonable rules and regulations for conducting its meetings and shall render all decisions and findings in writing to the appellant with a duplicate to the building official and fire chief. Each application to the board shall be accompanied by a filing fee as set forth in the fee schedule adopted by the City of San Antonio.

Section R112.2.1 of the International Residential Code, the first sentence is revised to read as follows:

R112.2.1 Determination of substantial improvement in areas prone to flooding. When the building official provides a finding required in Section R105.3.1.1, the proposed improvement shall be reviewed in accordance with the city's flood plain ordinance.

Section R112.2.2 of the International Residential Code, is amended to read as follows:

R112.2.2 Criteria for issuance of a variance for areas prone to flooding. Variance procedures shall be in accordance with the city's flood plain ordinance.

Section R112 of the International Residential Code is amended by adding Section R112.5 to read as follows:

R112.5 Quorums and Majority Vote

1. Six (6) members shall constitute a quorum.
2. The vote of a majority of the members present shall be necessary for adoption of any matter. Each member of the board of appeals shall have one (1) vote.

Section R113 of the International Residential Code is amended by adding Section R113.5 to read as follows:

Any person, firm or corporation, after being served with written notice by the building official, willfully violating any of the provisions of this code shall be deemed guilty of a misdemeanor. Each such person shall be deemed guilty of a separate offense for each day or portion thereof during which any violation of any of the provisions of this code is committed, continued or permitted. Each violation shall be punishable by a fine not to exceed five hundred (\$500.00) dollars.

Section R113 of the International Residential Code is amended by adding Section R113.6 to read as follows:

R113.6 Occupancy Violations. Whenever any building or structure or equipment therein regulated by this code or other ordinances which are enforced by the code enforcement agency is being used contrary to the provisions of this code or those ordinances, the building official may order such use discontinued and the structure, or portion thereof, vacated by notice served on any person causing such use to be continued. Such person shall discontinue the use within the time prescribed by the building official after receipt of such notice to make the structure, or portion thereof, comply with the requirements of this code, or other applicable ordinances.

Section R202 of the International Residential Code is amended by adding the following definition:

Structure is that which is built or constructed, an edifice or building or fixture, or any piece of construction of any kind of a permanent nature, including, but not limited to, reinforced concrete slabs and patios, fences, masonry barbecue pits and carports.

Section R309 of the International Residential Code is amended by adding a Section R309.6 to read as follows:

R309.6 Private garages which are constructed in conjunction with any Group R Divisions 1 through 4 occupancy shall be equipped with fixed louvers or screened openings or exhaust ventilation to the outside with exhaust openings located no higher than eighteen (18") inches of the floor. The clear area of the louver opening or of the openings into the exhaust ducts shall be not less than sixty (60 s.i.) square inches per car stored in such private garage.

Section R312.1.2 of the International Residential Code is amended to read as follows:

R312.1.2 Exception: The landing at an exterior doorway shall not be more than 8 inches below the top of the threshold, regardless of door swing.

Section R315.1 of the International Residential Code is amended by adding exception No. 3:

R315.1 Exception No. 3: Stairways having less than four risers and serving one individual dwelling unit need not have handrails.

Section R317 of the International Residential Code is amended by adding Section R317.3 to read as follows:

R317.3 One battery-operated smoke detector shall be installed adjacent to each group of sleeping rooms in every existing residential dwelling.

Section R324.3, 2nd sentence of the International Residential Code is amended to read as follows:

Pressure preservatively treated wood and naturally termite resistant wood may be used as a physical barrier. (Sole Plate) Builder shall provide a one year warranty from the time of closing or move-in for protection of the structure against termite infestation and/or damage. A subterranean termite treatment builders certification (form NPCA – 99-A) shall be submitted.

Section R325.1 of the International Residential Code is amended to read as follows:

R325.1 Premises Identification. Approved numbers or addresses shall be provided for all buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Said numbers shall contrast with their background. Numbers shall be a minimum 4" in height.

Section R327 of the International Residential Code is hereby deleted and replaced with the city's flood plain ordinance.

Section R403.1.1 of the International Residential Code is amended by adding another sentence to the first paragraph to read as follows:

Footings shall have a minimum depth as indicated in Table No. R403.2 unless another depth is recommended by a foundation investigation.

Section R403.1.1 of the International Residential Code is amended by adding the last sentence of the first paragraph to read as follows:

R403.1.1 Where design is not provided, the minimum foundation requirements for load-bearing wall shall be as set forth in Table No. R403.2

Chapter 4 of the International Residential Code is amended by adding Table R403.2 to read as follows:

Table R403.2 Pier Foundation Minimum Requirements (1)

Number of				Depth	
Floors				Below	
Supported	Min. cross section or diameter			Width	Thickness
by	Wood, Masonry or			of	of
the	Concrete Piers			Footing	Footing
Foundation(1)	Wood	Masonry	Concrete	(In.) (4)	(In.) (4)
1	6"	8"(2)	10"(3)	18	6
2	6"	8"(2)	10"(3)	24	10

1. Foundations may support a roof in addition to the stipulated number of floors. Foundations supporting roofs only shall be as required for supporting one floor.
2. Masonry units to be fully grouted with 1/2" reinforcing bar in each cavity.
3. Two (2)-5/8" reinforcing bar evenly spaced with the pier.
4. Footing to be reinforced by WWM 6x6-W2.9xW2.9 or minimum of four (4) 3/8" reinforcing bars. Should shimming be required between the pier and the sill,

shimming shall not exceed one and one half inches (1 1/2") and be of lumber strength equal to the sill.

Chapter 4 of the International Residential Code is amended by adding Section R409 to read as follows:

R409 - Locally Accepted Minimum Standards. The following are locally accepted minimum standards for concrete and reinforcement necessary for grade supported foundations, new residential and additions and detached accessory buildings over 600 square feet and less than 5,000 square feet for slab on grade foundation unless otherwise required to be designed by an engineer.

Slab on Grade Foundation Requirements

1. Residential minimum slab thickness 4 inches and concrete to be a minimum of 2500 psi. Commercial minimum slab thickness 5 inches and concrete to be a minimum of 3000 psi.
2. Residential minimum beam width 10 inches exterior, 8 inches interior. Commercial minimum beam width 12 inches exterior, 12 inches interior.
3. Minimum beam depth below natural grade - 6 inches exterior, interior to natural grade.
4. Residential minimum beam depth overall - 24 inches exterior, 18 inches interior, from top of slab (12" for commercial).
5. Concrete to be separated from the earth with no less than 6 mil polyethylene or other approved materials.
6. Base materials shall consist of 6 inches of sand, gravel, or other accepted granular materials and the sub grade shall be free of all growth or vegetation.
7. Additions shall be tied to the existing slab by bars of equal size and spacing with a minimum of four (4) - 3/4" diameter anchor bolts at each beam abutting existing slab and 1/2" diameter compression rods minimum of 24" on center.
8. Reinforcing steel in beams shall be placed at mid-height. Tension and compression of four (4) - 3/4" in diameter reinforcing bars, two at top and two at bottom continuous with corner bars. Stirrups 3/8" in diameter. Exterior and interior beams, stirrups shall be 18" on center or 3/4 of depth of beam, not to exceed 30 inches.
9. Reinforcing steel in slabs.

Bar Diameter	Spacing Each Way	Maximum Panel Size
3/8"	12"	10'
1/2"	12"	16'
1/2"	10"	20'

Maximum panel dimension for light weight concrete block or masonry veneer, 16 feet.

Porch slabs and concrete or masonry steps or stoops.

Detached Accessory Buildings Less Than 600 Square Feet

1. Minimum slab thickness 4 inches and concrete to be a minimum of 2500 psi.
2. Minimum reinforcement in slab WWM 4x4-W4.0x4.0 or 3/8" diameter reinforcing bars @ 14" on center, placed at mid-height.
3. Minimum reinforcement in beams for frame construction two (2)-1/2" diameter reinforcing bars, one at top and one at bottom well tied to the turned down mesh. For masonry or veneer construction, four (4)-1/2" diameter reinforcing bars, two at top and two at bottom with 3/8" diameter stirrups at 24" on center.
4. Beam width 8 inches. Beam depth below natural grade 6 inches. Minimum overall depth 12 inches.
5. Porch slabs and concrete masonry steps shall be supported at the intersection with the building by metal anchors, piers, or a supporting ledge on the foundation wall, or a beam completely around the slab.
6. Base material shall consist of a minimum of 2" sand, gravel or other accepted material.

Walks and Driveways

1. Minimum slab thickness 4 inches and concrete to be a minimum of 2500 psi.
2. Minimum reinforcement WWM 6x6-W2.9xW2.9 welded wire mesh or its equivalent, placed at mid-height.
3. Expansion joints shall be provided at 80 foot intervals.
4. A trowel cut at least 1/2 inch deep in the slab of walks at approximately 4 foot intervals and 20' for driveways.

5. Expansion joints shall be provided at garage aprons and between new and existing concrete.
6. Minimum of 2 inches of sand or gravel base.

Patios, Uncovered and Roofed

1. Minimum slab thickness 4 inches and concrete to be a minimum of 2500 psi.
2. Minimum reinforcing WWM 6x6-W2.9xW2.9 welded wire mesh or its equivalent.
3. Base material to be a minimum of 2 inches for uncovered patios and 6 inches for roofed patios.
4. Roofed patio foundations shall be the same as for detached garages.

Section R903 of the International Residential Code is amended by adding Subsections R903.4.2 and R903.4.3 to read as follows:

R903.4.2 On zero lot line development where roof projections are allowed by deed covenant or ingress/egress easements, adequate gutters and down spouts shall be provided to direct roof water away from adjacent property. Roof projections shall not extend beyond a point $\frac{1}{3}$ the width of the easement or a maximum of 24 inches.

R903.4.3 Any Group R, or Group U occupancy with roof edges less than 3 feet to any property line, shall be provided with gutters and down spouts to direct roof water from adjacent property.