Purpose

To provide improved security in residential dwellings, the Kansas City, Missouri City Council has amended the Kansas City Building & Rehabilitation Code (KCBRC), Code of Ordinances Chapter 18, Article III, 2018 International Residential Code (IRC) by the addition of a new Section R329, Physical Security. The IRC applies to single family dwellings, two-family dwellings (duplexes) and attached townhouses. The provisions primarily address unlawful entry due to door 'kick-ins'. *These provisions are effective for new permit applications beginning July 12, 2010 (original ordinance number 100346).*

These provisions are also applicable to exterior doors opening directly into a dwelling unit in a multifamily dwelling, by the addition of a new Section 430, Physical Security for Dwelling Units, amending the KCBRC, Code of Ordinances Chapter 18, Article II, 2018 International Building Code (IBC). *Effective for new permit applications made on or after November 29, 2010 (original ordinance number 100905).*

Following is the text as found in the IRC Section R329. See the KCBRC for the minor revisions found in IBC Section 430. The entire KCBRC is available on the Building and Rehabilitation Code Web Page.

Note: The requirement in Section R329.3, that the exterior door frames shall be installed prior to the rough-in inspection.

R329 Physical Security

R329.1 Purpose. The purpose of this Section is to establish minimum standards that incorporate physical security to make dwelling units resistant to unlawful entry.

R329.1.1 Scope. This section shall apply to all dwelling unit exterior doors.

Exceptions.

1. Vehicle access doors.
2. Storm or screen doors.

R329.2 Doors. Doors shall comply with Sections R329.2.1 through R329.2.3.

R329.2.1 Wood Doors. Wood doors shall be of solid core construction such as high-density particleboard, solid wood, or wood block core with a minimum nominal thickness of 1 ¾in at any point.

Exception: Solid wood panels shall be a minimum of 1in thick. The tapered portion of the panel that inserts into the groove of the door shall be a minimum of ¼in thick. The groove shall be a dado groove or applied molding construction. The groove shall be a minimum of ½in in depth.

R329.2.2 Steel Doors. Steel doors shall be a minimum nominal thickness of 1 ¾in and shall have a minimal skin thickness of 24 gauge.

R329.2.3 Fiberglass Doors. Fiberglass doors shall be a minimum nominal thickness of 1 ¾in and shall have a minimum skin thickness of 1/16in.

R329.3 Door Frames. Door frames shall comply with Sections R329.3.1 through R329.3.4 and shall be installed in accordance with the manufacturer's installation instructions. Door frames shall be installed prior to rough-in inspection.

R329.3.1 Wall Framing At Door Openings. Door frames shall be set in openings constructed with double studs on each side. Doors with sidelights shall have double stud construction on each side of the door and on each side of the sidelight(s). Horizontal blocking shall be placed between studs at the door lock height for three stud spaces on each side of the door opening.

Exception: Installations provided with alternative reinforcing methods as approved by the building official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

R329.3.2 Wood Frames. Door jambs shall be a minimum of nominal thickness of ¾in and shall be installed with solid backing in a manner so no void exists between the strike side of the jamb and the frame opening for a vertical distance of 12in each side of the strike. Filler material shall consist of solid wood blocking.

Exception: Installations provided with alternative reinforcing methods as approved by the building official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

R329.3.3 Steel Frames. Steel door frames shall be constructed of 18 gauge or heavier steel with reinforcement at the hinges and strikes. Steel frames shall be anchored to the wall in accordance with manufacturer specifications.

R329.3.4 Sliding Doors. Sliding door assemblies shall be installed to prevent the removal of the panels and the glazing from the exterior. Shims or screws shall be installed in the upper track of doors that slide on the bottom track or doors shall be provided with equivalent protection as approved by the building official.

R329.4 Door Hardware. Door hardware shall comply with Sections R329.4.1 through R329.4.7.

R329.4.1 Hinges. Hinges for swinging doors shall comply with the following:

A. A minimum of three 4in hinges shall be installed on each swinging door.
B. Each hinge shall be attached to the frame with at least two screws, not less than 3in in length and penetrating at least 1in into the nearest stud. Solid wood fillers or shims shall be used to eliminate any space between the wall structure and door frame behind each hinge.
   Exception: Installations provided with alternative reinforcing methods as approved by the building official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.
C. Hinges for out-swinging doors shall be equipped with mechanical interlock to preclude the removal of the door from the exterior.

R329.4.2 Locks. Swinging doors shall be provided with a single-cylinder deadbolt locking device (keyed on exterior only) with a minimum projection of 1in. The deadbolt shall penetrate at least ¾in into the strike receiving the projected bolt. The cylinder shall have a twist-resistant, tapered hardened steel cylinder guard. The cylinder shall have a minimum of five tumblers, shall be connected to the inner portion of the lock by

solid metal connecting screws at least ¼in in diameter and 2 ¼in in length. The bolt assembly (bolt housing) unit shall be of single piece construction. All deadbolts shall meet ANSI grade 2 specifications.

Exception: Doors with integral multi-point locking devices.

R329.4.3 Strike Plates. The deadbolt strike plate shall be a minimum of 18 gauge metal with four offset screw holes. The strike plate shall be attached to the door jamb with four screws not less than 3in in length and penetrating at least 1in into the nearest stud.

Exception. Installations provided with alternative reinforcing methods as approved by the building official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

R329.4.4 Door Edge Protector. A metal L-shaped or U-shaped door edge protector, or escutcheon plate, shall be installed around the bolt projection of the deadbolt to protect the door's edge.

R329.4.5 Double Doors. The inactive leaf of a double swinging door shall be provided with flush bolts having an engagement of not less than 1in into the head and threshold of the door frame.

R329.4.6 Sliding Doors. All sliding glass doors shall be equipped with a secondary locking device consisting of a metal pin, a surface mounted bolt assembly, or other equivalent device as approved by the building official. Where used, metal pins shall be installed at the intersection of the inner and outer panels of the inside door and shall not penetrate the frame's exterior surface.

R329.5 Entry Vision and Glazing. All main or front entry doors to dwelling units shall be arranged so that the occupant has a view of the area immediately outside the door without opening the door. The view may be provided by a door viewer having a field of view not less than 180 degrees or through windows or view ports.

R329.6 Exterior Lighting. In addition to the lighting outlet requirements of Section E3903.3, exterior lighting shall be provided in accordance with this section.

R329.6.1 Front and Streetside Exterior Lighting. All front and streetside door entrances shall be protected with a minimum of one lighting outlet providing a minimum of 60-watt lighting (or energy efficient equivalent).

R329.6.2 Rear Exterior Lighting. Dwelling units with windows or doors on the rear of the structure within 8ft of grade or adjacent walking surface accessible from grade shall be equipped at the rear with a minimum of one lighting outlet of the flood light type providing a minimum of 65-watt lighting (or energy efficient equivalent).

R329.6.3 Lighting Protection. Lighting outlets required by this section shall be located a minimum of 8ft above grade or adjacent walking surface accessible from grade or shall be of a type manufactured such that the light bulb is not readily accessible.

For any questions regarding interpretation or enforcement of this ordinance, please feel free to call the City Planning & Development Department, code question line at (816) 513-1511.