

Code Connection

The customer newsletter for the construction and development community.

CITY OF FOUNTAINS
HEART OF THE NATION



KANSAS CITY

MAY 2005

Holiday Schedule:

The Department of Codes Administration (DCA) offices will be closed on the following dates:

Monday, May 30, 2005
Memorial Day

Monday, July 4, 2005
Independence Day

In this issue:

-

CODE CONNECTION MARCH 2005



Published by the City of Kansas City,
Missouri, Department of Codes
Administration

Director

J. Barry Archer, P.E., C.B.O.
513-1472
FAX 513-1457
e-mail: barry_archer@kcmo.org

Deputy Director

Donald N. Booth, P.E., C.B.O.
513-1478
FAX 513-1505
e-mail: donald_booth@kcmo.org

Division Manager of Business Services

José Portuguez
513-1465
FAX 513-1457
e-mail: jose_portuguez@kcmo.org

Division Manager of Customer & Computer Services

Lynn Gant, OCP
513-1509
FAX 513-1485
e-mail: lynn_gant@kcmo.org

Division Manager of Inspections

Greg Franzen, P.E., M.C.P.
513-1538
FAX 513-1536
e-mail: greg_franzen@kcmo.org

Division Manager of Investigations

Wilson Winn, C.B.O.
513-1577
FAX 513-1536
e-mail: wilson_winn@kcmo.org

Division Manager of Permits

Rick Usher, C.B.O.
513-1468
FAX 513-1456
e-mail: richard_usher@kcmo.org

Division Manager of Plans Review

Gary Marker, R.A.
513-1493
FAX 513-1484
e-mail: gary_marker@kcmo.org

Subscriptions, Address Changes

Pat Williams
513-1472
e-mail: pat_williams@kcmo.org

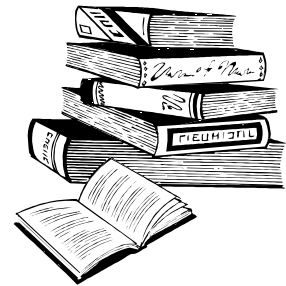
E-mail Code Questions

e-mail: gary_marker@kcmo.org



CODE CHAT

by Gary Marker, R.A.
Division Manager of Plans Review



WHAT'S NEW WITH... SMOKE AND HEAT VENTING?

The recently adopted 2003 International Building Code (IBC) has many similarities with the previously adopted 2000 IBC. However, in the interest of keeping the code current with the state of technology, some changes are made in each three-year code development cycle. This article will attempt to highlight some of those changes as they apply to the subject of smoke and heat venting.

Why is Smoke and Heat Venting Required?

For many years, automatic smoke and heat venting has been required in the model building codes for large factory and warehouse type occupancies for the purposes of maintaining a tenable environment for occupants during fire events and for assisting fire fighting personnel during rescue and cleanup operations.

Where is Smoke and Heat Venting Required?

As in the 2000 IBC, 2003 IBC Section 910.2.1 indicates that smoke and heat venting shall be provided in all Group F-1 and S-1 buildings, and portions of buildings used as Group F-1 and S-1 occupancies having more than 50,000 square feet in undivided area. Section 910.2.2 states that smoke and heat venting shall be provided in all Group H-2 or H-3 occupancies over 15,000 square feet in single floor area or those used for the storage of certain classes of materials. Section 910.2.3 states that smoke and heat venting shall be provided in all buildings and portions thereof containing high-piled combustible storage or rack storage in any occupancy in accordance with IBC Section 413 and the International Fire Code. Finally, smoke and heat venting is required for buildings of Groups F-1 and S-1 occupancy where exit travel distance is increased in accordance with IBC Section 1015.2.

As noted above, Section 910.2.3 references the 2003 International Fire Code for smoke and heat venting requirements in buildings having high-piled combustible stock or rack storage. An important change has been made to IFC Table 2306.2 in the form of a new footnote. Footnote "j" of this table permits the omission of smoke and heat venting where early suppression fast response sprinkler systems (ESFR) are installed. This change has been moved to the body of the IBC in the 2004 IBC Supplement and recognizes the detrimental effects of automatic venting on ESFR systems, as well as the extra protection afforded by ESFR systems. Based on these code changes DCA has created Interpretation Number CI2005-012 which permits the omission of smoke and heat venting for all occupancies where a ESFR sprinkler system has been installed, provided such buildings shall comply with all other requirements specific to the occupancy, i.e., high-piled storage requirements, etc.

Design and Installation

2003 IBC Section 910.3 (and Table 910.3) enumerate the design requirements for automatic smoke and heat vents as well as the associated required draft curtains. Draft curtains serve to collect and compartmentalize heat and products of combustion for more efficient operation of the automatic vents. In an important change from the 2000 IBC, Section 910.3.4, Exception, now recognizes that draft curtains have been shown to have a detrimental effect on the performance of ESFR sprinkler systems and are, therefore, no longer required where this type of system is installed, except at the separation of ESFR and regular sprinkler systems.

Mechanical Smoke Exhaust

As an alternate to automatic gravity vents, IBC Section 910.4 permits smoke exhaust to be accomplished by means of a mechanical system, sized in accordance with Section 910.4.2. IBC Section 910.4.3 requires that the smoke exhaust system be automatically activated by the automatic sprinkler system or by heat detectors, and further requires manual controls for each fan unit. However, in recognition of the detrimental effects of smoke and heat venting by mechanical systems on ESFR sprinkler systems, DCA permits mechanical smoke removal systems to be controlled by manual means only when requested through the Code Modification Request process.

DCA INTERPRETATIONS

#/CODE

QUESTION

ANSWER

QUESTION

ANSWER

QUESTION

CI2005-014

Chapter 18
Sec. 18-327(a)(10)

ANSWER

FROM THE FILES...
REAL CODE MODIFICATION REQUEST CASE HISTORIES
BATHROOM EXHAUST

By Gary Marker, R.A.,
Division Manager of Plans Review

The KCMO Code of Ordinances Section 18-6 states that “The details and actions of granting modifications (to code requirements) shall be recorded and entered in the files of the Department of Codes Administration.” Doing so permits one to rationalize any apparent code discrepancies by investigating the files for the building in question. In order to facilitate this, DCA employs the Code Modification Request process wherein the applicant submits a form stating the location of the property, the applicant name and the proposed code alternate. Once this form is submitted along with the required application fee, the request is reviewed and either approved, conditionally approved or denied. The Code Modification Request process is outlined in DCA Information Bulletin Number 101 (available on the web at www.kcmo.org). However, I am frequently asked, “What makes a “good” Code Modification Request?” This is another installment in a series of articles to attempt to answer that question by presenting actual case histories of CMR’s which have been APPROVED by DCA.

The subject of this request is a new, group b-2/a-3 baseball training facility. A portion of this work consisted of the installation of a fence around the site with locked gates. International Building Code Section 1002.1 states that the exit system from this building shall be continuous and unobstructed to the public way. The applicant proposes to employ the provisions of IBC Section 1003.3.2.2 which permits fences with locked gates around school grounds, provided there is a safe dispersal area within the fence not less than 50 feet from the building with an area of not less than 3 square feet per occupant. This request was determined to meet the intent of the code and was, therefore, approved

This approval recognized that the intent of the code is to permit egress from the building to a safe area and that such a concept can be effectively applied to occupancies of other than Group E. Be sure to watch future editions of the Code Connection for more informative and interesting tales from the CMR files.

Code Connection

Department of Codes Administration
5th Floor, City Hall
414 East 12th Street
Kansas City, Missouri 64106

ADDRESS CORRECTION REQUESTED

Visit DCA on the Internet at www.kcmo.org/codes/

DCA Telephone Numbers: Area Code 816

Director's Office	513-1472
Deputy Director's Office	513-1478
City Hall Permit Center	513-1500 (option 3)
Plans Review Permit Center	513-1500 (option 5)
Commercial Plans Review	513-1500 (option 5)
One- & Two-Family Plans Review	513-1500 (option 5)
Inspections Division	513-1500 (option 2)
Special Inspections	513-1500 (option 2)
Investigations Division	513-1500 (option 2)
Business Services Division	513-1500 (option 3)
Contractor Licensing & Registration	513-1500 (option 6)

FAX Services/Numbers:

FAX Permit Process	513-1456
FAX Inspection Requests	513-1536
FAX Publication Purchases	513-1456
FAX One- and Two-Family Plans Branch	513-1505
FAX Plans Review Comments Call to request your comments	513-1500 (option 4)

Code Information:

Zoning, Floodplain, Airport Height Zone, Permit Application Information	513-1500 (option 3)
Code Questions, Plans submittal Information, Plans Review Status	513-1500 (option 5)

Publication Ordering Information:

The following publications are available at either DCA office.

You may also call 513-1500 (option 3) and request a credit card authorization form and then place your order via Fax.

1. **Chapter 18, Kansas City Building and Rehabilitation Code** and related ordinances. (Chapter 18 adopts the model codes by reference and identifies local amendments to the model codes.) Price: \$6.00
2. **Special Inspections Program Manual.** Price: \$5.00
3. **Fee Schedule.** Price: \$2.50

The following publications are available from the City Planning and Development Department (513-2846).

1. **Chapter 80, Kansas City Zoning Ordinance** Price: \$25.00
2. **Chapter 66, Subdivision Regulations** Price: \$6.00

The following publications are available from the International Code Council Regional Office (455-3330).

1. **2003 International Building Code**
2. **2003 Uniform Plumbing Code**
3. **2003 International Mechanical Code**
4. **2002 National Electrical Code**
5. **2003 International Residential Code**