

ERRATA TO THE 2000 INTERNATIONAL MECHANICAL CODE
Fourth Printing, October 2002 and
Third Printing, October 2001
(Updated December 15, 2003)

Section 304.3 Elevation of ignition source.

Revise second sentence to delete the term “use” to read as follows:

“Such equipment and appliances shall not be installed in Group H occupancies or control areas where...”

Section 310 Revise section title to read “**EXPLOSION CONTROL**”

Section 311.1 Required.

Revise the first sentence to read “Approved smoke and heat vents...buildings where required by the International Fire Code.”

Table 403.3 REQUIRED OUTDOOR VENTILATION AIR

Revise the units in the SI footnote to read “1 cubic foot per minute=0.0004719 m³/s ...”

Section 607.3.2.1 Smoke Damper Activation Methods.

Change the first sentence to read “...installed in accordance with Section 907.10 of the International Building Code and one of the following...”

Section 1403.2 Flammable gases and liquids.

Revise the second sentence to delete the term “use “ to read as follows:

“The flash point of liquids used in occupancies classified in Group H or F shall not be lower unless approved.

Chapter 15 Referenced Standard

Delete the following UL referenced standard:

300—96 Fire Testing of Fire Extinguishing Systems for Protection of Restaurant
Cooking Areas 509.3

Second Printing, January 2001
(See also Third Printing, October 2001)

Section 101.2 Scope.

Add the following exception:

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with the *International Residential Code*.

Section [F] 502.8.5.3 Cleaning machines.

Revise to read as follows:

Areas in which machines used for parts cleaning are located in accordance with the International Fire Code shall be adequately ventilated to prevent accumulation of vapors.

Section [F] 502.8.5.5 Bulk plants or terminals.

Revise to read as follows:

Ventilation shall be provided for portions of properties where flammable and combustible liquids are received by tank vessels, pipelines, tank cars or tank vehicles and which are stored or blended in bulk for the purpose of distributing such liquids by tank vessels, pipelines, tanks cars, tank vehicles or containers, as required by Sections 502.8.5.5.1 through 502.8.5.5.3.

Section [B] 513.8.5

Change equation to read:

$$T_c = .60 (T_a + 460) Q_c^{2/3} Z^{-5/3} + T_a$$

For SI: $T_c = .08 T_a Q_c^{2/3} Z^{-5/3} + T_a$

First Printing, December 1999

(See also Second Printing, January 2001)

Section 202 Replace the entire definition of “**REGISTERED DESIGN PROFESSIONAL**” with the following:

REGISTERED DESIGN PROFESSIONAL. An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

Section 306.5 Equipment and appliances on roofs or elevated structures.

Add an exception as follows:

Exception: This section shall not apply to Group R-3 occupancies.

Section 306.6 Sloped roofs.

In last line change 304.8 to 304.9.

Section 307.2 Evaporators and cooling coils.

Revise last line to read Sections 307.2.1 through 307.2.4.

Section [B] 309.1 Space-heating systems.

In the second line, after the word “with”, insert “active or passive”.

Section 401.4 Exits.

Add [B] preceding Section number. This section was editorially revised and approved by the CCC (Code Correlation Committee) and is to be maintained by the Building Code development process.

Section 401.4 Exits.

Add the words “by the International Building Code” to item #3 of this section following the words “as required” (Editorial)

Section 401.5.1 Intake openings.

In the 1st sentence, relocate the phrase “such as vents, chimneys, plumbing vents, streets, alleys, parking lots and loading docks” to after the word “contaminant”. In other words, restore the sentence to the way it appeared in the 98 IMC.

Section 403.2

Add deletion arrow in margin following Section 403.2. (Exception has been deleted).

Section 403.2.2

Remove the first side bar (the shortest one) from Section 403.2.2.

Section 502.6.3 Spraying areas.

Revise last line to read Sections 502.6.3.1 through 502.6.3.7.

Section [F] 502.6.6 Powder coating.

Revise the third line to read:

“...atmosphere below one-half of the minimum explosive concentration for the material being applied.”

Section [F] 502.15.1 Design.

Revise the fifth line of item #1 to read:

“...gas concentration of 25 percent of the LFL. In all cases, the system...”

Section 504.4 Exhaust insulation.

Remove the word “gas” in the fourth sentence in both places.

Section 508.2

“and/or” omitted in final printing. Replace to proponents original language.

Section [B] 513.5 Smoke barrier construction.

Add new paragraph after “ A_w ” line as follows:

The leakage area ratios shown do not include openings due to doors, operable windows or similar gaps. These shall be included in calculating the total leakage area.

Section [B] 513.8.3 Balcony spill plumes.

Add the following to the list of variable identifications:

“ M = Plume mass flow rate, pounds per second (kg/s)”

Section [B] 513.12.2 Activation.

Change [B] to [F] in the section number.

Section [B] 513.12.3 Automatic control.

Change [B] to [F] in the section number, and revise the fourth line to read:

“.....automatic sprinkler system complying with Section 903.3.1.1 of the *International Fire Code* or from.....”

Add new subsection **Section 607.1.1 Ducts and air transfer openings without dampers.**

Ducts and air transfer openings that penetrate fire-resistant-rated assemblies and are not required to have dampers by this section shall comply with the requirements of Section 711 of the *International Building Code*.

Section 607.2.1 Smoke control system.

Revise the third line to read:

“..smoke control system in accordance with Section 513, approved...”

Section 607.3 Damper testing and ratings.

Before the last sentence add the following:

“Combination fire/smoke dampers shall comply with the requirements of both UL 555 and 555S.”

Section 607.3 Damper testing and ratings.

Revise the last sentence to read:

“Ceiling radiation dampers shall comply with the requirements of UL 555C.”

Add new subsection **Section 607.3.2.1 Smoke damper actuation methods.**

The smoke damper shall close upon actuation of a listed smoke detector or detectors installed in accordance with Section 907.10 and one of the following methods, as applicable:

1. Where a damper is installed within a duct, a smoke detector shall be installed in the duct within 5 feet (1524 mm) of the damper with no air outlets or inlets between the detector and the damper. The detector shall be listed for the air velocity, temperature and humidity anticipated at the point where it is installed. Other than in mechanical smoke control systems, dampers shall be closed upon fan shutdown where local smoke detectors require a minimum velocity to operate.
2. Where a damper is installed above smoke barrier doors in a smoke barrier, a spot-type detector listed for releasing service shall be installed on either side of the smoke barrier door opening.
3. Where a damper is installed within an unducted opening in a wall, a spot-type detector listed for releasing service shall be installed within 5 feet (1524 mm) horizontally of the damper.
4. Where a damper is installed in a corridor wall, the damper shall be permitted to be controlled by a smoke detection system installed in the corridor.
5. Where a total-coverage smoke detector system is provided within areas served by an HVAC system, dampers shall be permitted to be controlled by the smoke detection system.

Section 607.4 Access and identification.

Revise the first line to read:

“Fire and smoke dampers shall be provided...”

Section 607.5 Where required.

Revise the section to read:

Fire dampers, smoke dampers, combination fire/smoke dampers and ceiling radiation dampers shall be provided at the location prescribed in this section. Where an assembly is required to have both fire dampers and smoke dampers, combination fire/smoke dampers or a fire damper and a smoke damper shall be required.

Section 607.5.1 Fire walls.

Revise the section to read:

Ducts and air transfer openings permitted in fire walls in accordance with Section 705.11 of the *International Building Code* shall be protected with approved fire dampers installed in accordance with their listings.

Section 607.5.2 Fire barriers.

Revise the section to read:

Duct penetrations and air transfer openings in fire barriers shall be protected with approved fire dampers installed in accordance with their listing.

Exceptions: Fire dampers are not required at penetrations of fire barriers where any of the following apply:

1. Penetrations are tested in accordance with ASTM E 119 as part of the fire-resistance rated assembly.
2. Ducts are used as part of an approved smoke control system in accordance with Section 513.
3. Such walls are penetrated by ducted HVAC systems, have a required fire-resistance rating of 1 hour or less, are in areas of other than Group H and are in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code*.

Section 607.5.3 Fire partitions.

Revise the Exception and Exception #1 to read:

Exceptions: In occupancies other than Group H, fire dampers are not required where any of the following apply:

1. The partitions are tenant separation and corridor walls in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Building Code*.

Section 607.5.4 Smoke barriers.

Revise the title of the section to read:

“Corridors/smoke barriers.” Also, in **Exception 1**, revise the first line to read: “Smoke dampers are not required in corridor penetrations where the building...”

In **Exception 2** revise the first line to read: “Smoke dampers are not required in smoke barrier penetrations where the openings...”

Section 607.5.4.2 Combination fire/smoke damper.

Delete the entire section.

Add new subsection Section 607.5.5 Shaft enclosures.

Ducts and air transfer openings shall not penetrate a shaft serving as an exit enclosure except as permitted by Section 1005.3.4.1 of the *International Building Code*.

Add new subsection Section 607.5.5.1 Penetrations of shaft enclosures.

Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

Exceptions: Fire dampers are not required at penetrations of shafts where:

1. Steel exhaust subducts extend at least 22 inches (559 mm) vertically in exhaust shafts provided there is a continuous airflow upward to the outside.
2. Penetrations are tested in accordance with ASTM E 119 as part of the fire-resistance rated assembly.
3. Ducts are used as part of an approved smoke-control system in accordance with Section 909 of the *International Building Code*.
4. The penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.

Section 607.6.1 Through penetrations.

Replace the entire section with the following:

607.6.1 Through penetrations. In occupancies other than Groups I-2 and I-3, a duct and air transfer opening system constructed of approved materials in accordance with this code that penetrates a fire-resistance-rated floor/ceiling assembly that connects not more than two stories is permitted without shaft enclosure protection provided a fire damper is installed at the floor line.

Section 607.6.2 Membrane penetrations.

Replace the entire section with the following:

607.6.2 Membrane penetrations. Where duct systems constructed of approved materials in accordance with this code penetrate a ceiling of a fire-resistance-rated floor/ceiling or roof/ceiling assembly, shaft enclosure protection is not required provided an approved ceiling radiation damper is installed at the ceiling line. Where a duct is not attached to a diffuser that penetrates a ceiling of a fire-resistance-rated floor/ceiling or roof/ceiling assembly, shaft enclosure protection is not required provided an approved ceiling radiation damper is installed at the ceiling line. Ceiling radiation dampers shall be installed in accordance with UL 555C and constructed in accordance with the details listed in a fire-resistance-rated assembly or shall be labeled to function as a heat barrier for air-handling outlet/inlet penetrations in the ceiling of a fire-resistance-rated assembly. Ceiling radiation dampers shall not be required where ASTM E 119 fire tests have shown that ceiling radiation dampers are not necessary in order to maintain the fire-resistance rating of the assembly.

Section 607.6.3 Nonfire-resistance-rated assemblies.

Replace the entire section with the following:

607.6.3 Nonfire-resistance-rated assemblies. Duct systems constructed of approved materials in accordance with this code that penetrate nonfire-resistance-rated floor assemblies that connect not more than two stories are permitted without shaft enclosure protection provided that the annular space between the assembly and the penetrating duct is filled with an approved noncombustible material to resist the free passage of flame and the products of combustion. Duct systems constructed of approved materials in accordance with this code that penetrate non-rated floor assemblies that connect not more than three stories are permitted without shaft enclosure protection provided that the annular space between the assembly and the penetrating duct is filled with an approved noncombustible material to resist the free passage of flame and the products of combustion, and a fire damper is installed at each floor line.

Exception: Fire dampers are not required in ducts within individual residential dwelling units.

Section 804 Title.

Change the title of Section 804 to read as follows:

DIRECT-VENT, INTEGRAL VENT AND MECHANICAL DRAFT SYSTEMS

Section 916.1

Add "UL" prior to 726.

Chapter 15 under “ICC”,
Change the initials ” IEEC” to “IECC”.

Chapter 15 under “UL”,

Revise as follows:

555C—96	507.6.2	<u>607.6.2</u>
555S—96	507.3.1.1	<u>607.3.1.1</u>
1777—96	801.19.4	<u>801.18.4</u>

Chapter 15 under “UL”,

Delete— UL 795—94

Chapter 15 under “ICC”,

Revise code section references with additions and deletions as follows:

ICC Electrical Code—Administrative Provisions

301.7, 513.11, 513.12.1, 602.2.1.1

IBC

301.12, 301.15, 302.2, 304.9, 401.4, 513.2, 513.3, 513.4.3, 513.5.2, 513.12, 513.12.2, 601.2, 603.9, 607.1.1, 607.5.1, 607.5.4, 607.5.4.1, 607.5.5, 607.5.5.1, 701.4.1, 801.16.1, 801.18.4, 908.3, 908.4, 910.3, 1004.6, 1402.3, 1402.3.1,

IBC

~~301.17, 304.8, 306.2, 402.4, 604.5.4, 801.17.1, 801.19.4, 911.4, 913.3, 1106.5, 1401.2.2, 1502.3, 1502.3.1~~

IFC

502.6.2, 502.8.5.3, 513.12.1, 513.12.2, 1106.6

IFC

~~509.7, 513.1, 513.5.2, 513.12, 1006.6, 1301.2.1~~

IFGC

301.3, 901.1, 906.1, 1101.5

IPC

301.8, 908.5, 1002.3

IPC

~~301.9, 911.5,~~

Chapter 15 under ASTM,

Revise as follows:

B43—98 Table ~~1202.3~~ 1302.3