2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

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CHAPTER 3
GENERAL REGULATIONS

TABLE 305.4
PIPING SUPPORT SPACING[a]

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS pipe	4	10[c]
Aluminum pipe and tubing	10	15
Brass pipe	10	10
Brass tubing, $1^1/_4$-inch diameter and smaller	6	10
Brass tubing, $1^1/_2$-inch diameter and larger	10	10
Cast-iron pipe[b]	5	15
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing, $1^1/_4$-inch diameter and smaller	6	10
Copper or copper-alloy tubing, $1^1/_2$-inch diameter and larger	10	10
CPVC pipe or tubing, 1 inch and smaller	3	10[c]
CPVC pipe or tubing, $1^1/_4$-inch and larger	4	10[c]
Lead pipe	Continuous	4
PB pipe or tubing	$2^2/_3$ (32 inches)	4
PE-RT 1 inch and smaller	$2^2/_3$ (32 inches)	10[c]
PE-RT $1^1/_4$ inches and larger	4	10[c]
PEX tubing	$2^2/_3$ (32 inches)	10[c]
Polypropylene (PP) pipe or tubing, 1 inch or smaller	$2^2/_3$ (32 inches)	10[c]
Polypropylene (PP) pipe or tubing, $1^1/_4$ inches or larger	4	10[c]
PVC pipe	4	10[c]
Steel tubing	8	10
Steel pipe	12	15

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

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[BS] 301.16.1 ~~High velocity wave action~~ Coastal high hazard areas and coastal A zones. In ~~flood hazard areas subject to high velocity wave action~~ coastal high hazard areas and coastal A zones, mechanical systems and equipment shall not be mounted on or penetrate walls intended to break away under flood loads.

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

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403.3.2.1 Outdoor air for dwelling units. An outdoor air ventilation system consisting of a mechanical exhaust system, supply system, or combination thereof shall be installed for each dwelling unit. Local exhaust or supply systems, including outdoor air ducts connected to the return side of an air handler, are permitted to serve as such a system. The outdoor air ventilation system shall be designed to provide the required rate of outdoor air continuously during the period that the building is occupied. The minimum continuous outdoor airflow rate shall be determined in accordance with Equation 4-9.

$Q_{OA} = 0.03$ ~~3~~ $1\ A_{floor} + 7.5(N_{br} + 1)$ (Equation 4-9)

where Q_{OA} = outdoor airflow rate, cfm
A_{floor} = floor area, ft^2
N_{br} = number of bedrooms; not to be less than one.

Exception; (*unchanged)*

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

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Table 403.3.1.1
MINIMUM VENTILATION RATES

OCCUPANCY CLASSIFICATION	OCCUPANT DENSITY #/1000FT^{2} [a]	PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE, R_p CFM/Person	AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE, R_a CFM/FT^{2} [a]	EXHAUST AIRFLOW RATE CFM/FT^{2} [a]
Hotels, Motels, Resorts and Dormitories				
Bathrooms/toilet - private[g]	--			
Bedroom/Living Room	10			
Conference/Meeting	50			
Dormitory sleeping areas	20			
Gambling Casinos	120			
Lobbies/prefunction	30			
Multipurpose assembly	120			

404.3 Occupied spaces accessory to public garages. Connecting offices, waiting rooms, ticket booths and similar uses that are accessory to a public garage shall be maintained at a positive pressure and shall be provided with ventilation in accordance with Section 403.3.1

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

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CHAPTER 5
EXHAUST SYSTEMS

[F] 513.5.3.1 Group I-1 Condition 2; Group I-2 and ambulatory care facilities. In Group I-1 Condition 2; Group I-2 and *ambulatory care facilities*, where doors are installed across a *corridor*, the doors shall be automatic closing by smoke detection in accordance with Section 716.5.9.3 of the *International Building Code* and shall have a vision panel with fire-protection-rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested.

F] 513.11.1 Equipment room. The standby power source and its transfer switches shall be in a room separate from the normal power transformers and switch gear and ventilated directly to and from the exterior. The room shall be enclosed with not less than 1-hour fire-resistance-rated fire barriers constructed in accordance with Section 707 of the *International Building Code* or horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both. ~~Power distribution from the two sources shall be by independent routes.~~

513.5 Smoke barrier construction. Smoke barriers required for passive smoke control and a smoke control system using the pressurization method shall comply with Section 709 of the *International Building Code*. ~~Smoke barriers shall be constructed and sealed to limit leakage areas exclusive of protected openings.~~ The maximum allowable leakage area shall be the aggregate area calculated using the following leakage area ratios:

1. Walls: $A/A_w = 0.00100$
2. Interior exit stairways and ramps and exit passageways: $A/A_w = 0.00035$
3. Enclosed exit access stairways and ramps and all other shafts: $A/A_w = 0.00150$
4. Floors and roofs: $A/A_F = 0.00050$

where:

A = Total leakage area, square feet (m^2).

A_F = Unit floor or roof area of barrier, square feet (m^2).

A_w = Unit wall area of barrier, square feet (m^2).

The leakage area ratios shown do not include openings created by gaps around doors and operable windows. The total leakage area of the smoke barrier shall be determined in accordance with Section 513.5.1 and tested in accordance with Section 513.5.2.

2015 International Mechanical Code Errata

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1ST PRINTING (October 30, 2014)

[F] 513.5 Smoke barrier construction. Smoke barriers required for passive smoke control and a smoke control system using the pressurization method shall comply with the *International Building Code*. ~~Smoke barriers shall be constructed and sealed to limit leakage areas exclusive of protected openings~~. The maximum allowable leakage area shall be the aggregate area calculated using the following leakage area ratios:

1. Walls: $A/A_w = 0.00100$
2. Interior exit stairways and ramps and exit passageways: $A/A_w = 0.00035$
3. Enclosed exit access stairways and ramps and all other shafts: $A/A_w = 0.00150$
4. Floors and roofs: $A/A_F = 0.00050$

where:

A = Total leakage area, square feet (m^2).

A_F = Unit floor or roof area of barrier, square feet (m^2).

A_w = Unit wall area of barrier, square feet (m^2).

The leakage area ratios shown do not include openings created by gaps around doors and operable windows. The total leakage area of the smoke barrier shall be determined in accordance with Section 513.5.1 and tested in accordance with Section 513.5.2.

[F] 513.6.2 Maximum pressure difference. The maximum air pressure difference across a smoke barrier shall be determined by required door-opening or closing forces. The actual force required to open exit doors when the system is in the smoke control mode shall be in accordance with the *International Building Code*. Opening and closing forces for other doors shall be determined by standard engineering methods for the resolution of forces and reactions. The calculated force to set a side-hinged, swinging door in motion shall be determined by:

$F = F_{dc} + K(WA\square P)/2(W\text{-}d)$ **(Equation 5-1)**

where:

A = Door area, square feet (m^2).

d = Distance from door handle to latch edge of door, feet (m).

F = Total door opening force, pounds (N).

F_{dc} =Force required to overcome closing device, pounds (*N).*

K = Coefficient 5.2 (1.0).

W = Door width, feet (m).

$\square P$ =Design pressure difference, inches (Pa) water gage.

[F] 513.10.1 Exhaust fans. Components of exhaust fans shall be rated and certified by the manufacturer for the probable temperature rise to which the components will be exposed. This temperature rise shall be computed by:

$T_s = (Q_c/mc) + (T_a)$ **(Equation 5-2)**

where:

c = Specific heat of smoke at smoke-layer temperature, Btu/lb°F (kJ/kg $\square$ K).

m = Exhaust rate, pounds per second (kg/s).

Q_c = Convective heat output of fire, Btu/s (kW).

T_a = Ambient temperature, °F (K).

T_s = Smoke temperature, °F (K).

Exception: Reduced T_s as calculated based on the assurance of adequate dilution air.

[F] 513.11.1 Equipment room. The standby power source and its transfer switches shall be in a room separate from the normal power transformers and switch gear and ventilated directly to and from the exterior. The room shall be enclosed with not less than 1-hour fire-resistance-rated fire barriers constructed in accordance with Section 707 of the *International Building Code* or horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both. ~~Power distribution from the two sources shall be by independent routes.~~

[F] 502.4 Stationary storage battery systems. Stationary storage battery systems, as regulated by Section 608 of the *International Fire Code*, shall be provided with ventilation in accordance with this chapter and Section 502.4.1 or 502.4.2.

Exception: Lithium-ion and lithium metal polymer batteries shall not require additional ventilation beyond that which would normally be required for human occupancy of the space.

[F] 502.4.3 Supervision. Mechanical ventilation systems required by Section 502.4 shall be supervised by an approved central, proprietary or remote station service or shall initiate an audible and visual signal at a constantly attended on-site location.

[F] 502.5.3 Supervision. Mechanical ventilation systems required by Section 502.5 shall be supervised by an approved central, proprietary or remote station service or shall initiate an audible and visual signal at a constantly attended on-site location.

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

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CHAPTER 6
DUCT SYSTEMS

[BF] 607.1.1 Ducts between shafts ~~and air transfer openings~~. Ducts transitioning horizontally between shafts shall not require a shaft enclosure provided that the duct penetration into each associated shaft is protected with dampers complying with this section.

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

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[BF] 607.5.2 Fire barriers. Ducts and air transfer openings that penetrate fire barriers shall be protected with *listed* fire dampers installed in accordance with their listing. Ducts and air transfer openings shall not penetrate enclosures for interior exit stairways and ramps and exit passageways except as permitted by Sections 1023.5 and 1024.6, respectively, of the *International Building Code*.

Exception: 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 or UL 263 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 and where the fire damper would interfere with the operation of the smoke control system.
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*. For the purposes of this exception, a ducted HVAC system shall be a duct system for the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than 26 gage [0.0217 inch (0.55 mm)] thickness and shall be continuous from the air-handling *appliance* or *equipment* to the air outlet and inlet terminals.

2015 International Mechanical Code Errata

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805.7 Factory-built fireplaces. *Chimneys* for use with factory-built fireplaces shall comply with the requirements of UL 127.

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

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SECTION 1008
BOTTOM ~~STEAM~~ BLOWOFF VALVE

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

1ST PRINTING (October 30, 2014)

[F] 1109.1 Testing required. The following emergency devices and systems shall be periodically tested in accordance with the manufacturer's instructions and as required by the code official:

1. Treatment and flaring systems.
2. Valves and appurtenances necessary to the operation of emergency refrigeration control boxes.
3. Fans and associated *equipment* intended to operate emergency ~~pure~~ ventilation systems.
4. Detection and alarm systems.

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

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TABLE 1302.3
FUEL OIL PIPING

MATERIAL	STANDARD (see Chapter 15)
Copper or copper-alloy pipe	ASTM B 42; ASTM B 43; ASTM B 302
Copper or copper-alloy tubing (Type K, L or M)	ASME B16.51; ASTM B 75; ASTM B 88; ASTM B 135: ASTM B 280; ASME B 16.51
Labeled pipe	(See Section 1302.4)
Nonmetallic pipe	ASTM D 2996
Steel pipe	ASTM A 53; ASTM A 106
Steel tubing	ASTM A 254; ASTM A 539

1303.7 Copper or copper-alloy tubing. Joints between copper or copper-alloy tubing or fittings shall be brazed, ~~or~~ mechanical joints complying with Section 1303.3, press connect joints that conform to one of the standards in Table 1302.3 or flared joints. Flared joints shall be made by a tool designed for that operation.

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

1ST PRINTING (August 26, 2022)

SMACNA-~~10~~ 03 Fibrous Glass Duct Construction Standards 7th edition

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

1ST PRINTING (March 21, 2017)

CHAPTER 15
REFERENCED STANDARDS

ASME

CSD-1-~~2011~~ 2012 Controls and Safety Devices for Automatically Fired Boilers..... 1004.1

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

1ST PRINTING (October 27, 2015)

CHAPTER 15
REFERENCED STANDARDS

IIAR

2-2014 ~~Addendum A to Equipment, Design, and Installation of Ammonia Mechanical Refrigerating Systems~~ Standard for Safe Design of Closed-Circuit Ammonia Refrigeration Systems…….1101.6, 1105.6.3

NFPA

37-~~14~~ 15 Standard for Installation and Use of Stationary Combustion Engines and Gas Turbines……915.1, 915.2

NSF

NSF 14-2011 Plastic Piping System Components and Related Materials……301.4

SMACNA

SMACNA/ANSI- ~~2015~~ 2005 HVAC Duct Construction Standards-Metal and Flexible ~~4th~~ 3rd Edition……..

2015 International Mechanical Code Errata

(Portions of text and tables not shown are unaffected by the errata)

1ST PRINTING (September 1, 2015)

CHAPTER 15
REFERENCED STANDARDS

IIAR

2—2014 Standard for Safe Design of Closed-circuit Ammonia Refrigeration Systems..... 1101.6, 1105.6.3

NSF

NSF 358-1-2011 Polyethylene Pipe and Fittings for Water Based Ground Source "Geothermal" Heat Pump Systems…….. Table 1210.4, Table 1210.5

NSF 14-2011 Plastic Piping System Components and Related Materials……..301.4

SMACNA

SMACNA/ANSI—~~2015~~ 2005 HVAC Duct Construction Standards-Metal and Flexible 4th Edition (ANSI)..... 603.4, Table 603.4, 603.9, 603.10