International Mechanical Code (IMC) 2006 – 2012 Significant Changes

| Section /Topic | Туре | 2006 | 2009 | 2012 | Comments |
|--|---------|----------|---|---|----------|
| Int | ernatio | nal Mech | anical Code | | |
| 102.3 Maintenance | M | | | ASHREA/ACCA/ANSI Standard 180is now specified for maintenance of an HVAC system | |
| 103.2/103.3/103.4 Appointment, Deputies, Liability | M | | Clarifies the appointment of the code official and protects against liability uniformly through the I-Codes | | |
| 106.4.7 Previous Approvals | A | | A new or revised permit is not required for projects where the scope of work exceeds 180 days | | |
| 107.1/107.2/107.4/107.6 Inspection and Testing | A/M | | A number of changes have been made to the administrative provisions related to inspections | | |
| 110 Temporary Equipment, Systems, and Uses | A | | Provides provisions to deal with mechanical systems in temporary structures | | |
| 202 Environmental Air | С | | | The definition of <i>environmental</i> air has been expanded through the addition of parking garage exhaust | |
| 304.6 Public Garages | M | | In public garages the distance from appliance to floor is now determined by the height of the vehicle entry door | | |
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| 304.10 Clearance from Grade for Appliances | M | | A min. clearance has been established for ground supported equipment | | |
| 306.5 Equipment and Appliances on Roofs or Elevated Structures | C/M | | Clarifies how the height of the equipment is to be measured when access involves climbing over the parapet | Clarifies that a permanent access to equipment and appliances on roof or elevated structures | |

A = Addition

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D = Deletion

| 307.2.2/307.2.2 (Table) Condensate Drain Sizing | A | The code now specifies a specific pipe size based on the refrigeration capacity | |
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| 308.5 Labeled Assemblies | M | Allowable clearance reductions must now be based on listed and labeled reduced-clearance | |
| 404.1 & 501.1 Ventilation and Exhaust Systems - Scope | M | Clarifies the application of chapters 4 & 5 to ventilation and exhaust systems | |
| 404.1 Enclosed Parking Garages | | Mechanical ventilation systems in parking garages are now permitted to be operated automatically by carbon monoxide detectors | |
| 401.4 Intake Opening Location | M | Min. clearance between an air intake opening and any public way is measured from the opening to the lot line | |

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| International Mechanical Code | | | | | | | | | |
| 403 Mechanical Ventilation | M | | Substantial revisions that will alter airflow requirements and the way they are calculated | | | | | | |
| 403.3 (Table) Minimum Ventilation Rates for Nail Salons | M | | | Nail stations in nail salons must now each be provided with a source capture system | | | | | |
| 403.3.1 Zone Outdoor Airflow | M | | The method for calculating the min. outdoor airflow has been revised | | | | | | |
| 403.3/403.3 (Table) Outdoor Airflow Rate | M | | | The table has been revised to reflect the new airflow calculations | | | | | |

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| 403.3.2 System Outdoor Airflow 501.2/506.4 Independent Exhaust Systems | M | | When a single ventilation system serves more than 1 zone, the design parameters may result in overventilation of one zone. To compensate, the code allows outdoor air intake flow rate to average the outdoor air intake for all zones | Those locations where an | |
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| Required | | | | independent exhaust system is required are now established in a single code provision | |
| 501.3 Pressure Equalization | M | | This section will allow R-2 occupancies the same exemptions as R-3 in maintain a neutral or neg. pressure | | |
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| | | nal Mech | anical Code | T | |
| 504.6 Domestic Clothes Dryer Ducts | M | | Extensively revised this section. Dryer duct length was 25' and changed to 35', also clarifies duct material and installation | | |
| 504.8 Common Exhaust Systems for Clothes Dryer Multi-Story Structures | A | | Due to length limitations for dryer exhaust this new section provides specific requirements for multiple dryers to be gathered in a common shaft | | |
| 505.1 Domestic Kitchen Exhaust Systems | M | | | Domestic kitchen exhaust ducts are now required to be independent of all other exhaust | |
| 505.2 Domestic Kitchen Exhaust Makeup Air | A | | Establishes max. exhaust limit for domestic kitchen exhaust systems before makeup air is required | | |
| 506.3.7.1 Grease Reservoirs | A | | | Criteria are now provided for the construction of a grease reservoir in a grease duct system | |
| 506.3.8 Grease Duct Cleanouts and Other Openings | D/M | | Access doors may now be allowed the use of tools to open the access door | For grease duct cleanouts, gasket and sealing materials on grease duct doors must be rated at a min. of 1500°F | |

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| 506.3.9 Grease Duct Horizontal Cleanouts | M | | |
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| 506.3.10 Grease Duct Enclosures | M | | Clarifies the application of the provision for grease duct enclosure into 3 separate sections depending on the enclosure | | |
| 506.3.10 Underground Grease Duct Installations | A | | | Underground grease ducts are now regulated based on new provisions | |
| 506.3.11.2 Field-Applied Grease Duct Enclosures | C | | | Field-applied grease duct enclosure systems are specifically prohibited to reduce clearance from combustibles | |
| 506.4.2 Type II Terminations | A | | Provides a termination requirement for Type II commercial kitchen hood exhaust, which was previously not addressed | | |
| 507.2 Type I or Type II Hood Required | M | | | Type I or Type II commercial kitchen hoods are not required for appl. With integral downdraft exhaust systems | |
| 507.2.1 Type I Hoods | M | | | Type I hoods no longer required for complying electric appl. Are being used | |
| 507.2.1/507.2.2 Type I and Type II Hoods | M | | This revision eliminates the reference to specific appliances and replaces the by tying the provision to the defined term of light-, medium-, heavy-, and extra-heavy-duty cooking appliance | | |

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| 507.2.1.1 Operation of Type I Hoods | M | A method requiring the pilot burner to stay on a gas cooking appliance when the kitchen exhaust fan interlock shuts off |
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| 507.2.1.2 Exhaust Flow Rate Label of Type I Hoods | A | On listed Type I commercial cooking hoods are now required to provide a label with the min. exhaust air flow rate |
| 507.2.2 Type II Hoods | M | Type II hoods are required to be installed above appliances that produce products of combustion but not grease or smoke |
| 507.9 Clearance for Type I Hood | A | Cementitious wallboard has been added to the exception for clearances from Type I hood |
| 507.10 Hoods Penetrating a Ceiling | A | Field-applied grease duct enclosures are now prohibited from being used over the top of a Type I hoods |
| 510.7 Fire Suppression Required for Hazardous Exhaust Ducts | M | Automatic fire suppression is no longer required in exhaust ducts in semiconductor fabricated facilities |
| 601.4 Contamination Prevention in Plenums | M | Chimneys and vents are now permitted to pass through a plenum where in compliance with one of three new allowances |

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| 602.2.1 Materials within Plenums | С | | | Any material or assembly within a plenum must be noncombustible, gypsum board, or listed and labeled | | | | | |
| 603.4.1 Minimum Fasteners | A | | Adds a required method of joining round metal pipe with at least three screws | | | | | | |

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| 603.7 Rigid Duct Penetrations | M | Only those ducts that penetrate a wall or ceiling between the dwelling and adjacent private garage need to comply with Sec. 603.7 |
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| 603.9 Duct Joints, Seams, and Connections | С | Unlisted duct tape is no longer permitted as a sealant on nonmetallic ducts |
| 603.17/202 Air Dispersion Systems | A | Air dispersion systems are now permitted to be installed |
| 606.4.1 Smoke Detection System Supervision | С | Smoke detectors used for air distribution systems are only required to be connected to a fire alarm system if the alarm system is required by the IFC |
| 607.5 Dampers for Duct and Air Transfer Openings/Where Required | A/M | Changes in the IBC and carried over to the IMC to coordinate the requirements to address the damper requirements for certain locations that were not previously addressed |

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| 701.1 Combustion Air | M/D | | Sec. 701.2 through 710.1 and three definitions of sec. 202 have been | | |
| | | | deleted without substitution. The | | |
| | | | remaining sec. 701.1 references the | | |
| | | | combustion air requirements for | | |
| | | | solid fuel burning appliances and | | |
| | | | NFPA 31 for oil-fired appliances | | |
| 801.18.4/801.18.4.1/801.20 Chimneys and Vents | M | | Masonry chimneys that do not have required air space and clearance to combustibles, the use and application of the liner systems evaluated with UL 1777 have been clarified. | | |
| 805.3 Factory-Built Chimney Offsets | A | | | The max. offsets in a factory-built chimney is now specified and the number of offsets has been limited | |

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| 901.4 Fireplace Accessories | A | | Fireplace accessories must now comply with UL 907 | |
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| 918.6 Prohibited Sources of Outdoor or Return Air for Forced-Air Warm-Air Furnaces | M | Unconditioned attics and crawl spaces are now specifically prohibited as a source of outdoor or return air for forced-air heating systems | | |
| 928 Evaporative Cooling Equipment | A | | Requirements for the installation of evaporative coolers have been added to the IMC in a new Sec. 928 | |

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| 1101.10 Locking Access Port Caps | A/M | | Requires refrigerant access ports that are located outdoors to be equipped with a locking cap | Locking caps are no longer required on refrigerant access ports if the equipment is located in a secure location | | | | | |
| 1103.1 (Table) Refrigerant Classification | A/M | | The table was updated to include many new refrigerant types and to modify some of the values for the permitted types | | | | | | |
| 1104.2.2 Industrial Occupancies and Refrigerated Rooms | M | | Excludes electrical equipment and appliances in areas using ammonia refrigerants from having to comply with the "hazardous location" | | | | | | |
| 1105.6/1105.6.3 Machinery Room Ventilation | M | | | The min. ventilation rates in ammonia machinery rooms must now be in accordance with IIAR2 | | | | | |
| 1106.4 Flammable Refrigerants | M | | | The ventilation requirements for ammonia machinery rooms are now mandatory in order to be exempt from the Class 1 | | | | | |
| 1107.2 Refrigerant Piping Locations | A | | Provides guidance for the installation and location of refrigerant piping not previously addressed in the IMC | | | | | | |

| 1209.5 Thermal Barrier | A | Hydronic radiant floor heating | |
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| Required | | systems now require insulation installed below the piping or tubing | |
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