

2009 IMC Proposed Amendments

RBC304.1 SHORT TITLE. This section will be known and cited as the Mechanical Code.

RBC304.2 SCOPE. The Mechanical Code shall regulate the design, installation, maintenance and alteration of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This Code shall also regulate those mechanical systems, system components, equipment and appliance specifically addressed therein. The installation of fuel gas distribution piping and equipment, fuel gas-fired appliances and fuel gas-fired appliance venting systems shall be regulated by the *International Fuel Gas Code*.

RBC304.3 CODES ADOPTED BY REFERENCE.

There is hereby adopted by reference the International Mechanical Code of the International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, 2009 Edition. Three (3) copies of the Code are now filed in the office of the Clerk of the Jurisdiction and may be inspected during regular business hours. The above Code is being adopted as if set out at length, to include Appendix A, except the following sections which are declared to be inapplicable and are therefore expressly deleted:

1. Chapter 1, Administration
2. Chapter 13, Fuel Oil Piping and Storage
3. Appendix B, Recommended Permit Fee Schedule

RBC304.4 ADDITIONS AND MODIFICATIONS.

The adopted Code is subject to the following additions and modifications:

RBC304.4.1 Section 202. Delete the last sentence of the definition of "Commercial Cooking Appliances" and replace with the following:

For the purpose of this definition, a food service establishment shall include any building or a portion thereof used for the preparation and serving of food, requiring a license from the El Paso County Health Department.

RBC304.4.2 Section 303.3 Prohibited locations.

Delete exceptions 1, 2, 3 and replace with the following:

Exceptions:

1. Direct-vent appliances installed in accordance with the conditions of its listing and the manufacturer's instructions.
2. Vented room heaters, wall furnaces, vented gas fireplaces, vented gas fireplace heaters and vented decorative appliances for installation in vented solid fuel-burning fireplaces are installed in rooms that

meet the required volume criteria of Section 304.5 of the International Fuel Gas Code, 2009 edition.

3. Appliances installed in a room or space that opens only into a bedroom or bathroom, such room or space is used for no other purpose and is provided with a solid weather-stripped door equipped with an approved self-closing device. All combustion air shall be taken directly from the outdoors in accordance with Section 304.6 or other adjacent spaces meeting indoor combustion air requirements in Section 304.5 of the 2009 International Fuel Gas Code.
4. The appliance is installed in a room or space that opens only into a bedroom or bathroom, and such room or space is used for no other purpose, the door to the bedroom or bathroom is fully louvered, the door to the appliance room is fully louvered, all combustion air may be taken from indoors in accordance with Section 304.5 of the 2009 International Fuel Gas Code.

RBC304.4.3 Section 304.9 Clearance to combustible construction. Add an exception as follows:

Exception: A floor-mounted doorstop, permanently attached to the building structure, may be used to maintain clearance to a combustible door.

RBC304.4.4 Section 306.4 Appliances under floors. Add exception 3 as follows:

3. Access to appliances in under floor spaces shall not be through a garage unless the access is provided with a solid weather-stripped door equipped with an approved self-closing device, and all combustion air is taken from outdoors.

RBC304.4.5 Section Table 403.3 Minimum ventilation rate. Delete footnote "b" from occupancy classification,

Specialty Shops (Beauty and Nail Salons)

RBC304.4.6 Section 507.2.2 Type II hoods. Add an exception as follows:

Exception: Non-grease or smoke producing cooking appliances that do not exceed (5,860 W) input.

RBC304.4.7 Section 507.2.3.1 Domestic cooking appliances. Insert a new section as follows:

507.2.3.1 Non-food service establishment. Domestic cooking appliances used in non-food service establishments shall be provided with a Type II hood vented to the exterior.

RBC304.4.8 Section 512.1 Sub Soil Exhaust

Systems. Add an exception as follows:

Exception: Radon Systems.

RBC304.4.9 Section 601.4 Contamination prevention. Add exception 2 as follows:

2. Environmental air exhaust ducts may extend into or through ducts or plenums if the exhaust duct is constructed without joints; or the exhaust duct is serving a fan rated at 150 cfm (2,124 L/m) or less.

RBC304.4.10 Section 603.6 Flexible air ducts and flexible air connectors. Delete the last

sentence and replace with the following:

Flexible air connectors are prohibited.

RBC304.4.11 Section 604.8 Lining installation. Delete the last sentence and replace with the following:

Metal nosings or sleeves shall be installed over exposed duct liner edges that face opposite the direction of airflow immediately downstream of the equipment connection.

Exception: All other exposed edges that face opposite the direction of airflow may be covered with an approved finish.

RBC304.4.12 Section 801.10 Connection to fireplace. Delete and replace with the following:

Connection of appliances to chimney flues serving fireplaces shall not be permitted.

RBC304.4.13 Section 901.1 Solid Fuel Burning Equipment. Delete "and factory built fireplaces" from end of first sentence.

RBC304.4.14 Sections 901.3 through 905.2 Solid Fuel Burning Equipment. Delete

RBC304.4.15 Section 910 Floor Furnaces. Delete and replace with the following:

910 Floor furnaces. Floor furnaces are prohibited.

RBC304.4.16 Section 1001.1 Boilers Water Heaters And Pressure Vessels. Delete Exception 7.

RBC304.4.17 Section 1004.3 Working clearance.

Delete the last two sentences and replace with the following:

When boilers are installed or replaced, an 18 inch (457.2 mm) minimum clearance, or more as required by the mfg. shall be provided on all sides requiring inspection, maintenance and repair of the boiler.

RBC304.4.18 Section 1101.10 Locking access port caps. Delete

RBC304.4.19 Section 1108.1 Field Test. Add exception 4 as follows:

4. Refrigeration systems serving dwelling units, not exceeding 5 tons of refrigeration capacity, field piped using approved factory-charged line sets without joints concealed within building construction, and terminating within 5 feet (1,524 mm) of the coil/condenser.

RBC304.4.20 Section 1208.1 Tests. Delete the first sentence and replace with the following:

Hydronic piping systems, other than ground source heat pump loop systems, shall be tested with liquid or air to at least 50 pounds per square inch (345 kPa) greater than the operating pressure.

RBC304.4.21 Section 1208.1.1 Ground source heat pump loop systems. Delete the paragraph and replace with the following:

Before connection (header) trenches are backfilled, the assembled loop system shall be pressure tested with water or air at 100 psi (689 kPa) for 30 minutes with no observed leaks. Except for a dwelling, flow and pressure loss testing shall be performed by a certified test and balance contractor and the actual flow rates and pressure drops shall be compared to the calculated design values. If actual flow rate or pressure drop values differ from calculated design values by more than 10 percent, the problem shall be identified and corrected.

RBC109.2.4 Mechanical Inspections. The following inspections shall be completed by a mechanical inspector:

- 1. Vent.** After all the vents are installed and the roof is in place so that the structure is dried in and before the vents are concealed.
- 2. Gas Piping.** After all gas piping located in or on the structure has been installed and tested and before it is covered or concealed.
- 3. Hydronic Piping.** After all hydronic piping has been installed and tested and before it is covered or concealed.
- 4. Refrigeration Piping.** After all refrigeration piping, except for a single line set, has been installed and tested and before it is covered or concealed.
- 5. Process Steam and Water Piping.** After the steam and water piping systems that are a part of a heating or cooling system have been installed, tested and before it is covered and concealed.
- 6. Duct.** On all occupancies except one- and two- family dwellings and accessory structures, after the ductwork is in place and before it is concealed.
- 7. Residential Rough.** Encompasses all the rough mechanical work within a one- and two- family dwelling and accessory structures. Includes, but is not limited to all gas appliance vents as well as all supply, return and exhaust duct systems. To be accomplished after all work has been completed and the roof is in place so that the structure is dried in and before any work is concealed.
- 8. Outside Gas.** After all belowground piping has been installed and tested and prior to any of the piping being covered.
- 9. Construction Meter.** A special inspection that enables the gas meter to be set prior to the final inspection. All other required inspections must be complete.
- 10. Final.** This inspection is requested after all appliances are installed and are ready to become operational. If a gas meter is required, a meter will be ordered at this time.

