

AMENDMENTS TO THE INTERNATIONAL MECHANICAL CODE

The International Mechanical Code, 2000 edition, adopted by the International Code Council, including Appendix A, excluding Appendix B, with amendments contained therein, adopted by the Town of Talty, Texas, is amended as follows;

1. Section 102.8; is amended to provide as follows:

102.8 Referenced codes and standards. The codes and standards referenced herein shall be those that are listed in Chapter 5 and this chapter and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the ICC Electrical Code shall mean the Electrical Code as adopted.

2. Section 106.5.2 is amended to provide as follows:

106.5.2 Fee Schedule. The fees for mechanical work shall be as indicated in the Town's master fee schedule.

3. Section 106.5.3 is amended to delete subsections 2 and 3, leaving the remaining provisions as written.

4. Section 302.3; is amended to provide as follows:

302.3 Cutting, notching and boring in wood framing. When permitted by the International Building Code, the T49 cutting, notching and boring of wood framing members shall comply with Sections 302.3.1 through 302.3.3.

5. Section 304.5; is deleted.

6. Section 304.8; is amended to provide as follows:

304.8 Clearances from grade. Equipment and appliances installed at grade level shall be supported on a level concrete slab or other approved material extending above adjoining grade a minimum of 3 inches (76 mm) or shall be suspended a minimum of 6

inches (152 mm) above adjoining grade.

7. Section 304.11; is added to provide as follows:

304.11 Minimum burial depth. Under-ground fuel piping systems shall be installed a minimum depth of 18 inches (458 mm) below grade.

8. Section 306.3; is amended to provide as follows:

306.3 Appliances in attics. Attics containing appliances requiring access shall be provided ... {bulk of paragraph unchanged} ... side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions are not large enough to allow removal of the largest appliance. As a minimum, access to the attic space of residential uses shall be provided by one of the following:

1. A permanent stair.
2. A pull down stair.
3. An access door from an upper floor level.

Exception: The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening.

9. Section 306.3.1; is amended to provide as follows:

Low voltage wiring of 50 Volts or less shall be installed in a manner to prevent physical damage.

10. Section 306.4.1; is amended to provide as follows:

Low voltage wiring of 50 Volts or less shall be installed in a manner to prevent physical damage.

11. Section 306.5; is amended to provide as follows:

306.5 Equipment and appliances on roofs or elevated structures. Where equipment and appliances requiring access are installed on roofs or elevated structures at a height exceeding 16 feet (4877 mm), such access shall be provided by a permanent approved means of access. Permanent exterior ladders providing roof access need not extend closer than 8 feet (2438 mm) to the finish grade or floor level below and shall extend to the equipment and appliance's level service space. Such access shall ... {bulk of section to read the same}... on roofs having a slope greater than 4 units vertical in 12 units

horizontal (33-percent slope).

A receptacle outlet shall be provided at or near the equipment and appliance location in accordance with the National Electrical Code. Low voltage wiring of 50 Volts or less shall be installed in a manner to prevent physical damage.

12. Section 306.6; is amended to add a second paragraph to provide as follows:

A receptacle outlet shall be provided at or near the appliance location in accordance with the Electrical Code. Low voltage wiring of 50 Volts or less shall be installed in a manner to prevent physical damages

13. Section 306.6.1; is added to provide as follows:

306.6.1 Catwalk. On roofs having slopes greater than 4 units vertical in 12 units horizontal, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to the working platform at the appliance.

14. Section 306.7; is added to provide as follows:

306.7 Water heaters above ground or floor. When the mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the buildings

306.7.1 Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with Section 306.3.1.

15. Section 307.2.1; is amended to modify second sentence to provide as follows:

307.2.1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. Condensate shall not discharge in a publicly exposed area such as into a street, alley, sidewalk or other areas so as to cause a nuisance.

16. Section 307.2.2; is amended to add a second paragraph to provide as follows:

Condensate waste pipes from air-cooling coils may be sized in accordance with/ equipment capacity as follows:

**Equipment Capacity
in tons of refrigeration**

**Minimum Condensate Pipe
Inside Diameter**

Up to 20 tons	3/4 inch
Over 20 to 40 tons	1 inch
Over 40 to 90 tons	1 1/4 inch
Over 90 to 125 tons	1 1/2 inch
Over 125 to 250 tons	2 inch

The size of condensate waste pipes may be for one unit or a combination of units, or as recommended by the manufacturer. The capacity of waste pipes assumes a 1/8-inch-per-foot slope, with the pipe running three-quarters full.

17. Section 307.2.3; is amended to add item #4 to provide as follows:

4. Discharge, as noted, shall be to a conspicuous point of disposal to alert occupants in the event of a stoppage of the drain. However, the conspicuous point shall not create a hazard such as dripping over a walking surface or other areas so as to create a nuisance.

18. Section 401.5; is amended to add a second exception to provide as follows:

Exceptions:

1. {existing exception unchanged}
2. Toilet room exhaust ducts may terminate in a warehouse or shop area when infiltration of outside air is present.

19. Section 403.2; is amended to add an exception to provide as follows:

Exception: Where the design professional demonstrates that an engineered ventilation system is designed in accordance with ASHRAE 62, the minimum required rate of outdoor air shall be permitted to be as specified in such engineered system design.

20. Section 403.2.1; is amended to add an item #4 to provide as follows:

4. Toilet rooms within private dwellings that contain only a water closet, lavatory or combination thereof may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

21. Table 403.3, footnote g: is amended to provide as follows:

g. Transfer air permitted in accordance with Section 403.2.2. Toilet rooms within

private dwellings that contain only a water closet, lavatory or combination thereof may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

22. Section 501.3; is amended to add a second exception to provide as follows:

Exceptions:

1. {existing exception unchanged}
2. Toilet room exhaust ducts may terminate in a warehouse or shop area when infiltration of outside air is present.

23. Section 504.6; is amended to add a sentence to provide as follows:

The size of duct shall not be reduced along its developed length nor at the point of termination.

24. Section 504.6.1; is amended to provide as follows:

504.6.1 Maximum length. The maximum length of a clothes dryer exhaust duct shall not exceed 25 feet (7620 mm) from the dryer location to the outlet terminal with not more than two bends. When extra bends are installed, the maximum length of the duct shall be reduced 2.5 feet (762 mm) for each 45-degree (0.79 rad) bend and 5 feet (1 524 mm) for each 90-degree (1.6 rad) bend that occur after the first two bends, measuring in the direction of airflow.

{exception is unchanged}

25. Section 506.3.11; is amended to provide as follows:

506.3.11 Duct enclosure. A grease duct serving Type I hood that penetrates a ceiling, wall or floor shall be enclosed ... {bulk of paragraph unchanged}... through the use of weather-protected openings. The enclosure shall be separated from the duct by a minimum of 3 inches (76 mm) and a maximum of 12 inches (305 mm) and shall serve a single grease exhaust duct system.

{exceptions remain unchanged.}

26. Section 510.7; is amended to add a second exception to provide as follows:

Exceptions:

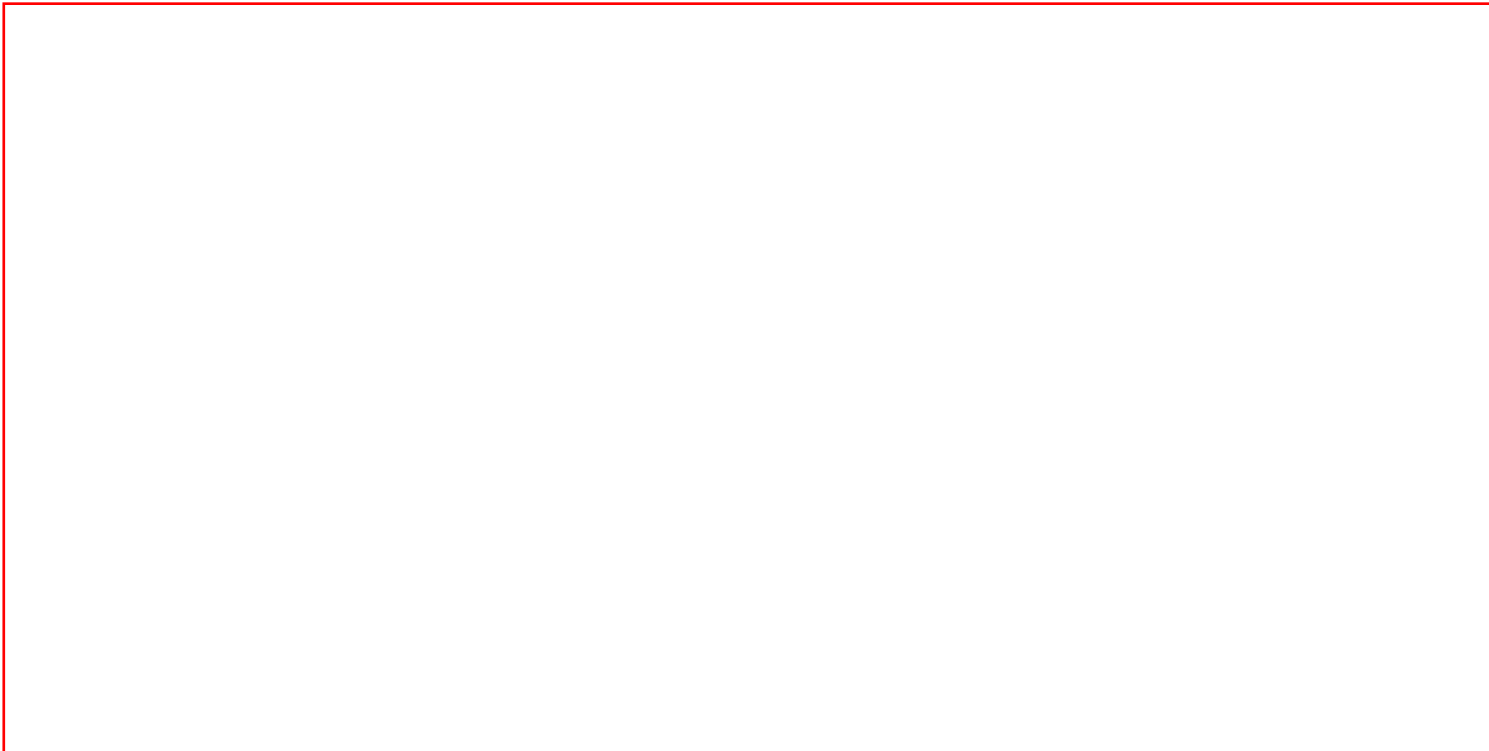
1. {existing exception unchanged}
2. Ducts where the largest cross-sectional diameter of the duct is less than 10 inches (254

mm).

27. Section 604.1; is amended to provide as follows:

604.1 General. Duct insulation shall conform to the requirements of Sections 604.2 through 604.13, Table 604.1 and the International Energy Conservation Code. Should there be any conflicts between this section and the energy code, the energy code shall take precedence.

28. Table No. 604.1; is added to provide as follows:



Note: Where ducts are used for both heating and cooling, the minimum insulation shall be as required for the most restrictive condition.

¹Heating Degree Days:

Zone I below 4,500 D.D.

Zone II 4,501 to 8,000 D.D.

Zone III over 8,000 D.D.

²Vapor retarders shall be installed on supply ducts in spaces vented to the outside in geographic areas where the summer dew point temperature based on the 2 1/2 percent column of dry-bulb and mean coincident wet-bulb temperature exceeds 600 F. (I 5.40 C).

³Insulation may be omitted on that portion of a duct which is located within a wall- or a floor-ceiling space where:

3.1 Both sides of the space are exposed to conditioned air.

3.2 The space is not ventilated.

3.3 The space is not used as a return plenum.

3.4 The space is not exposed to unconditioned air.

Ceilings which form plenums need not be insulated.

INSULATION TYPES⁴:

A -- A material with an installed conductance of 0.48 [2.72 W/(m²*K)] or the equivalent thermal resistance of 2.1 [0.367 (m²*K)/W].

Example of materials capable of meeting the above requirements:

1 -inch (25 mm), 0.60 lb./cu.ft. (9.6 kg/m³) mineral fiber, rock, slag or glass blankets.

1/2-inch (13 mm), 1.5 to 3 lb./cu.ft. (24 to 48 kg/m³) mineral fiber blanket duct liner.

1/2-inch (13 mm), 3 to 10 lb./cu.ft. (48 to 160 kg/m³) mineral fiber board.

B -- A material with an installed conductance of 0.24 [1.36 W/(m²*K)] or the equivalent thermal resistance of 4.2 [0.735 (m²*K)/W].

Example of materials capable of meeting the above requirements:

2-inch (51 mm), 0.60 lb./cu.ft. (9.6 kg/m³) mineral fiber blankets.

1 -inch (25 mm), 1.5 to 3 lb./cu.ft. (24 to 48 kg/m³) mineral fiber blanket duct liner.

1 -inch (25 mm), 3 to 10 lb./cu.ft. (48 to 160 kg/m³) mineral fiber board.

C -- A material with an installed conductance of 0.16 [0.9 W/(m²*K)] or the equivalent thermal resistance of 6.3 [1.1 (m²*K)/W].

Example of materials capable of meeting the above requirements:

3-inch (76 mm), 0.60 lb./cu.ft. (9.6 kg/m³) mineral fiber blankets.

1 1/2-inch (38 mm), 1.5 to 3 lb./cu.ft. (24 to 48 kg/m³) mineral fiber blanket duct liner.

1 1/2-inch (38 mm), 3 to 10 lb./cu.ft. (48 to 160 kg/m³) mineral fiber board.

V -- Vapor Retarders: Material with a perm rating not exceeding 0.05 perm [29 ng/Pa*s*m²]. All joints to be sealed.

W -Approved weatherproof barrier.

⁴The example of materials listed under each type is not meant to limit other available thickness and density combinations with the equivalent installed conductance or resistance based on the insulation only.

29. Section 604.11; is amended to provide as follows:

604.11 Vapor retarders. Where ducts used for cooling are externally insulated, the insulation shall be covered with a vapor retarder in accordance with Table 604.1 or aluminum foil having a minimum thickness of 2 mils'(0.051 mm).

Insulations having a permeance of 0.05 perms [2.87 ng/(Pa, S' m²)] or less shall not be required to be covered. All joints and seams shall be sealed to maintain the continuity of the vapor retarder.

30. Section 607.2.2; is amended to provide as follows:

607.2.2 Hazardous exhaust ducts. Hazardous exhaust duct systems shall extend directly to the exterior of the building and shall not extend into or through ducts and plenums. Penetration of structural elements shall conform to this section and the International Building Code except that fire dampers are not required at penetration of fire-resistance-rated assemblies.

31. Section 607.5.1; is amended to provide as follows:

607.5.1 Fire Walls. Ducts and 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 listing. Hazardous exhaust ducts shall not penetrate fire walls.

32. Section 607.6.1; is amended to provide as follows:

607.6.1 Through penetrations. In occupancies other than Groups 1-2 and 1-3, penetrations by an air duct through a fire-resistive-rated floor/ceiling assembly that connects not more than two stories are permitted without shaft enclosure protection where a fire damper is installed at the floor line.

33. Chapter 14; is deleted.
