

2003 Uniform Mechanical Code Errata

(soft cover - 1st printing)

CHAPTER 2

Section 210.0, insert the following definition for Hazardous Location:

Hazardous Location is any area or space where combustible dust, ignitable fibers or flammable, volatile liquids, gases, vapors or mixtures are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

CHAPTER 5

Section 504.1 Makeup and Exhaust-Air Ducts: Add the following text indicated in bold and italics to the third sentences.

Exhaust ducts ***under positive pressure and ventilating systems*** shall terminate outside the building and shall be equipped with back-draft dampers. Environmental air ducts.....

Section 506.5 Support: Delete the entire second paragraph. ~~The design of supports shall assume that fifty percent (50%) of the duct is full of the particulate being conveyed.~~

Section 506.7.1.2: Revise reference Figure 5-2 to read **Table 5-2**.

Table 5-3 footnote 9: Revise reference Table 810.7.4(d) to **Table 5-3**.

Section 510.8.3.1(E): Revise to read, An approved fan, provided it meets the requirements of **Section 510.8.31(c)** and **Section 511.1.1 or 511.1.3**.

Section 511.1.2.1: Delete reference (See Figure 5-6), The second reference of Figures 5-6 should be Figure 5-6(a).

Figure 5-6(a): Revise title to read, **Typical Section of Duct-to-Fan Connection – Butt Joint Method**.

Figure 5-6(b): Revise title to read, **Typical Section of Duct-to-Fan Connection – Overlapping Method**.

Figure 5-6(d): Revise title to read, **Typical Section of Duct-to-Fan Connection – Direct to Fan Inlet Cone Method**.

Section 511.1.5: Revise references to read, Openings for cleaning, servicing, and inspection shall conform to the requirements of 510.3.3. Clearances shall conform to the requirements of 507.2 **or 510.7.2.3** if installed within an enclosure.

Section 511.5 Solid-Fuel Air Movement Requirements: Revise reference 514.0 to read **517.0**.

Section 512.3.3: Revise reference 513.0 to read **516.0**.

Section 513.11 Solid-Fuel Fire-Extinguishing Equipment: Revise section reference 514.0 to read **517.0**.

Section 514.3.1.1: Revise reference 511.3 to read **514.0**.

Section 514.3.1: Revise reference at the end of the paragraph to read **Table 5-4**.

Section 514.3.4 Exception: Revise reference 511.2 to read **514.2**.

Section 516.2 Design Restrictions: Revise reference 516.2.7 at the end of the paragraph to read **516.2**.

Section 516.2.3, add “not” in the second sentence of the paragraph between shall and show. It should read, A recirculating system shall use cooking equipment that exceeds....The listing label shall **not** show the type(s) of cooking equipment tested and....

Delete Sections 517.8 through 517.9.3.7. Revise sections 517.9.4, 517.9.4.1, 517.9.4.2, 517.9.4.3, and 517.9.4.4 to read **517.8, 517.8.1, 517.8.2, 517.8.3, and 517.8.4** respectively.

Revise Table 5-6 Vent Selection Chart to read **Table 5-7** Vent Selection Chart.

CHAPTER 6

Section 602.5 Metal. Every duct, plenum, or fitting of metal shall comply with Table 6-1 or **6-8**.

Exception:

(1) Ducts, plenums, and fittings for systems serving single-dwelling units may comply with Table **6-9**.

Section 603.0 Quality of Material, revise reference from UMC Standard No. 6-2 to UMC Standard No. **2-2**.

CHAPTER 7

Add **Section 701.0 Air for Combustion and Ventilation** before Section 701.1 General.

Section 701.1 (A) should read as followed: Air for combustion, ventilation, and dilution of flue gases for gas utilization equipment installed in buildings shall be obtained by application of one of the methods covered in 701.2.1 through ~~701.7~~ **701.8.3**. Gas utilization equipment of other than natural draft and Category I vented appliances shall be...Where infiltration does not provide the necessary air, outdoor air shall be introduced accordance with methods covered in 701.4.2, ~~701.5.3, 701.6,~~ **through 701.8.3**.

Section 701.1 Exception (2): revise section 504.3.2 to read **905.3**.

Section 701.2 Indoor Combustion Air. Change references as shown below: The required volume of indoor air shall be determined in accordance with method ~~(a) or (b)~~ **in section 701.2.1 or 701.2.1.1** except that where the air infiltration...less than 0.40 ACH, method ~~(b)~~ **in section 701.2.1.1** shall be used.

Section 701.2.2: insert an additional text at the end of the third paragraph shown here:

For fan-assisted combustion system appliances: calculate using equation 701.2.1.1(b) but no smaller than 25 cubic feet per 1000 Btu/hour (2.4 m³/kW). [NFPA 54: 8.3.2.2]

For purpose of this calculation, an infiltration rate greater than 0.60 ACH shall not be used in the equations.

Add **Section 701.3 Reserved** before 701.3.1 Indoor Opening Size and Location.

Section 701.4 Outdoor Combustion Air: Change references to read as follow:

Outdoor combustion air shall be provided through opening(s) to be outdoors in accordance with methods ~~(a) or (b)~~ **Sections 701.4.1 or 701.4.2**. The minimum dimension....

Add **Section 701.8 Reserved** before Section 701.8.1.

CHAPTER 8

Table 8.1 Type of Venting System to be used

Gas Utilization Equipment	Type of Venting System
Listed Category I equipment	Type B gas vent (802.6)
Listed equipment equipped with draft hood	Chimney (802.5)
Equipment listed for use with Type B gas vent	Single-wall metal pipe (802.7)
	Listed chimney lining system for gas venting (802.5.1e) 802.2.1.3
	Special gas vent listed for this equipment (802.4.3)
Listed vented wall furnaces	Type B-W gas vent (802.6, 8-28) 928.0
Category II equipment	As specified or furnished by manufacturers of listed equipment (802.4.2, 802.4.3)
Category III equipment	Single-wall metal pipe (802.7, 802.7.3) 802.7.3.3
Category IV equipment	Chimney (802.5)
Incinerators, outdoors	
Equipment that can be converted to use of solid fuel	
Unlisted combination gas-and oil-burning equipment	
Combination gas-and solid-fuel-burning equipment	
Equipment listed for use with chimneys only	
Unlisted equipment	
Listed combination gas-and oil-burning equipment	Type L vent (802.6) or chimney (802.5)
Decorative appliance in vented fireplace	Chimney (516.6.2(2)) [907(3)]
Gas-fired toilets	Single-wall metal pipe
(510.7, 9-26.3) 802.7, 926.3	
Direct-vent equipment	See 802.2.5
Equipment with integral vent	See 802.2.6
[NFPA 54: Table 10.4.1]	

Section 802.2.3 Ventilating Hoods: Delete reference, (See 817.0) at the end of the paragraph.

Section 802.5.8 Exception: delete second sentence of the paragraph: The insertion of another liner or vent within the chimney as provided in this code and the liner or vent manufacturer's instructions. ~~The remaining space surrounding a chimney liner, gas vent, special gas vent, or plastic piping installed within a masonry chimney flue shall not be used to supply combustion air, unless it is listed and shown in the manufacturer's installation instructions. [NFPA 54:10.5]~~

Section 802.6.4 Gas Vent Serving Equipment on More Than One Floor: Change reference in the third paragraph shown below:

The size of the connectors and common segments of multistory venting systems for gas...Type B double-wall gas vent shall be in accordance with ~~Table 8-5~~ **Table 8-10**, provided:

Section 802.7.3.3: The reference at the end of the paragraph should be as follow: (Also see 802.7.4.3)

Section 802.7.5.1 (3): Revise as shown below:

Other approved engineering methods: ~~Where a single wall metal pipe is used and has a shape other than round, it shall have an equivalent effective area equal to the effective area of the round pipe for that it is substituted and the minimum internal dimension of the pipe shall be 2 in. (50 mm).~~

Section 802.7.7 Marking: Revise NFPA reference to read **[NFPA 54:10.7]**.

Section 802.8.4: Revise NFPA reference to read **[NFPA 54:10.8]**.

Section 802.9.2: Revise NFPA reference to read **[NFPA 54:10.9]**.

Table 8-2 Clearances for Connectors: Revise NFPA reference to read **[NFPA 54: Table 10.7.4.4]**.

Section 802.10.14.3: Revise NFPA reference to read **[NFPA 54:10.10.14.3]**.

Section 802.12.7 Clearances: Revise NFPA reference to read **[NFPA 54:10.12]**.

Section 802.13 Manually Operated Dampers: Revise NFPA reference to read **[NFPA 54:10.13]**.

Section 802.14 Automatically Operated Vent Dampers: Revise NFPA reference to read **[NFPA 54:10.14]**.

Section 802.15 (4): Revise reference Section 803.1.1 to **803.1**.

Section 80.1.1: Revise this Section to read **803.1**.

Section 803.1.2: Revise this Section to read **803.1.1**.

Section 803.1.3: Revise this Section to read **803.1.2**.

Section 803.1.4: Revise this Section to read **803.1.3**.

Section 803.1.5: Revise this Section to read **803.1.4**.

Section 803.1.6: Revise this Section to read **803.1.5**.

Section 803.1.7: Revise this Section to read **803.1.6**; Change reference 803.1.3 to **803.1.2**.

Section 803.1.8: Revise this Section to read **803.1.7**.

Section 803.1.9: Revise this Section to read **803.1.8**.

Section 803.1.10: Revise this Section to read **803.1.9**.

Section 803.1.11: Revise this Section to read **803.1.10**.

Section 803.1.12: Revise this Section to read **803.1.11**.

Section 803.1.13: Revise this Section to read **803.1.12**.

Section 803.1.14: Revise this Section to read **803.1.13**.

Section 803.1.15: Revise this Section to read **803.1.14**; add reference **[NFPA 54:13.1]** at the end of the paragraph.

Section 803.2.25: Add reference **[NFPA 54:13.2]** at the end of the paragraph.

Table 8-9: Change *Category I* to **Draft Hood - Equipped**; Change *Connected Directly to Vent* to **Connected Directly to Pipe or Vent**.

CHAPTER 9

Section 901.1 Scope: Revise this Section to **901.0**.

Section 902.0 (C): Add reference **[NFPA 54:9.1]** at the end of the paragraph.

Section 903.3 (A): Add reference **(See Table 9-1)** at the end of the paragraph.

Section 904.1 Location: Delete NFPA reference at the end of the paragraph.

Section 904.2 (J): Revise NFPA reference to read **[NFPA 54:9.3.2]**.

Section 907.2 (3): Add NFPA reference at the end of the paragraph to read **[NFPA 54.9.6.2]**.

Section 907.3 Fireplace Screens: Revise NFPA reference to read **[NFPA 54.9.6.3]**.

Section 908.1 Exception: Delete NFPA reference.

Section 908.3 Combustion and Circulating Air: Revise Section 701.1 to read **701.0**.

Section 910.3 (D): Revise NFPA reference to read **[NFPA 54:9.9.3]**.

Section 911.1 (A): Revise Section 701.1 to read **701.0**.

Section 911.8.2 Exception 2: Add NFPA reference **[NFPA 54.8.1.11]** at the end of the paragraph.

Section 911.9 Installation in Aircraft Hangars: Add NFPA reference **[NFPA 54:8.1.12]** at the end of the paragraph.

Sections 912.3 and 912.11: Revise Section 701.1 to read **701.0**.

Section 916.2 (A): insert additional missing language shown here:
(A) Installation. Listed built-in household cooking appliances shall be installed in accordance with their listing and the manufacturer's instructions. **The installation should not interfere with combustion air, accessibility for operation, and servicing. Unlisted built-in household looking appliances shall not be installed in, or adjacent to combustible material.** **[NFPA 54.9.15.2.1]**

Section 919.1 Support: Revise NFPA reference to read **[NFPA 54:9.18.1]**.

Section 923.2 Venting or Ventilating Kits Approved for Use with a Refrigerator: Revise NFPA reference to read **[NFPA 54:9.22.2]**.

Section 926.2: Revise section title Installation to **Mounting**.

Section 926.3 Installation: Add NFPA reference **[NFPA 54:9.25]** at the end of the paragraph.

Section 927.1 Support: Revise NFPA reference to read **[NFPA 54:9.26.1]**.

Section 927.3 Combustion and Circulating Air: Revise Section 701.1 to **701.0**; revise NFPA reference to read **[NFPA 54:6.26.3]**.

Section 927.4 Ductwork: Revise NFPA reference to read **[NFPA 54:6.26.4]**.

Section 927.5 Installation in Commercial Garages and Aircraft Hangars: Revise NFPA reference to read **[NFPA 54:9.26.5]**.

Section 928.1 (E): Revise reference chapter 8 and **[NFPA 54:8.27.1]** to read **Section 802.0** and **[NFPA 54:9.27.1]** respectively.

Section 928.3 Combustion and Circulating Air: The reference in this section should be as follow:
Combustion and circulating air shall be provided in accordance with **Section 701.0 [NFPA 54:9.27.3]**.

Section 929.0 Appliances for Installation in Manufactured Housing: Revise reference Section 701.1 to **701.0**.

CHAPTER 10

Section 1007.4 Minimum Capacity of Closed-Type Tank: Revise the layout of the Equation to look as follow:

$$V_t = \frac{(0.00041t - 0.0466) v_s}{\frac{P_a - P_a}{P_f - P_o}}$$

CHAPTER 13

Section 1309.7.5 (A)(1): Revise reference Section 1321.12 to read **[NFPA 54:5.9.7]**.

Insert extracted language from NFPA 54 after Section 1309.7.5 (A)(1) Exception:

The following references were extracted from NFPA 54:

5.9.7 Vents. The discharge stacks, vents or outlet parts of all pressure-relieving and pressure-limiting devices shall be located so that gas is safely discharged in to the outside atmosphere. Discharge stacks or vents shall be designed to prevent the entry of water, insects, or any other foreign material that could cause blockage. The discharge stack or vent line shall be at least the same size as the outlet of the pressure-relieving device.

Insert a new Section 1311.2.4.1 after Section 1311.2.4. The language is as follows:

1311.2.4.1 Ceiling Locations. Gas piping shall be permitted to be installed in accessible spaces between a fixed ceiling and a dropped ceiling, whether or not such spaces are used as a plenum. Valves shall not be located in such spaces.

Exception: Equipment shutoff valves required by this code shall be permitted to be installed in accessible spaces containing vented gas utilization equipment.

Section 1311.2.7 Removal of Pipe: Revise reference See Section **1314.7.1**.

Section 1311.4 Piping in Vertical Chases (**see Section 1302.0**) should read as follows: Where gas piping exceeding 5 psi (34 kPa) is located within vertical chases in accordance with **NFPA Section 5.5.1(2)**, the requirements of Sections 1311.4.1 through 1311.4.3 shall apply.

The following references were extracted from NFPA 54:

5.5.1 Maximum Design Operating Pressure. The maximum design operating pressure for piping systems located inside buildings shall not exceed 5 psi (34 kPa) unless one or more of the following conditions are met:

(1) The piping system is welded.

(2) The piping is located in a ventilated chase or otherwise enclosed for protection against accidental gas accumulation.

(3) The piping is located inside buildings or separate areas of buildings used exclusively for one of the following:

(a) Industrial processing or heating

(b) Research

(c) Warehousing

(d) Boiler or mechanical equipment rooms

(4) The piping is a temporary installation for building under construction.

Section 1311.4.1 Pressure Reduction (**see Section 1302.0**) should have the following corrected references: Where pressure reduction is required in branch connections for compliance with NFPA 54 and Section **5.5.6**, such reduction shall take place either inside the chase or immediately adjacent to the outside wall of the chase. Regulator venting and downstream overpressure protection shall comply with Sections 1309.7.5 and **NFPA 54 Section 5.9**. The regulator shall be accessible for service and repair and vented in....

Section 1311.6.3 Sediment Traps: revise reference to read (see Section **1312.7**).

Section 1311.7.1 (6): Revise reference to read Section 1311.7.1(4) and (5).

Section 1311.9 Manual Gas Shutoff Valves: Revise reference to read **See 1312.4**.

Section 1311.16.2 Tables for Sizing Gas Piping Systems: Delete reference ~~Table 13-4 and~~

Section 1314.7.2 Placing in Operation: Revise both references Table 1314.3.2 to read **13-6**.

Section 1316.3.1: Revise both unit (W) to read **Watt-Hour**.

Section 1317.2: Revise reference Table 13-3 to read **Table 13-7**.

Section 1317.2 (2) and (4): Revise reference Table 13-3 to **Table 13-7**.

Section 1317.4: Revise references table 13-7, Table 13-19, Table 13-11, and Table 13-12 to read **Table 13-11, Table 13-23, Table 13-15, and Table 13-16**.

Delete Sections 1318.0 through 1331.0.

CHAPTER 13 PART II—FUEL SUPPLY: MANUFACTURED/MOBILE HOME PARKS AND RECREATIONAL VEHICLE PARKS

Section 1332.0 General: Revise this Section number to read 1318.0.

Section 1333.0 Gas Supply Connections: Revise this Section number to read 1319.0.

Section 1333.1 Location of Gas Supply Connection: Revise this Section number to read 1319.1.

Section 1334.0 Single and Multiple Manufactured Homesite Fuel Supply Systems: Revise this section number to read 1320.0.

Section 1334.1 Gas Piping Installations: Revise this section number to read 1321.0.

Section 1334.1.1 Gas Supply Connections – Underground Gas Piping: Revise this section number to read 1321.1.

Section 1334.1.2: Revise this section number to read 1321.1.2.

Section 1334.1.2.1: Revise this section number to read 1321.1.2.1.

Section 1334.1.2.2: Revise this section number to read 1321.1.2.2.

Section 1335.0 Manufactured Homesite Gas Shutoff Valve: revise this section number to read 1322.0.

Section 1336.0 Gas Meters: Revise this section number to read 1323.0.

Section 1336.1 Support of Meters: Revise this section number to read 1323.1

Section 1336.2 Location of Meters: Revise this section number to 1323.2.

Section 1336.3 Meter Shutoff Valve or Cock: Revise this section number to read 1323.3.

Section 1337.0 Multiple Manufactured Homesite Fuel Distribution and Supply Systems: Revise this section to read 1324.0.

Section 1338.0 Manufactured Home Community Natural Gas Distribution Systems: Revise this section to read 1325.0.

Section 1339.0 Manufactured Home Community LP-Gas Supply Systems: Revise this section to read 1326.0.

Section 1340.0 Installation of Cathodic Protection Systems: Revise this section to read 1327.0.

Section 1341.0 Required Gas Supply: Revise this section to read 1328.0.

Section 1342.0 Gas Pipe Sizing and Pressure: Revise this section to read 1329.0

Section 1342.1: Revise this section number to read 1329.1.

Section 1342.2: Revise this section number to read 1329.2.

Section 1343.0 Gas Piping Materials: Revise this section number to read 1330.0.

Section 1343.1 Metal: Revise this section number to read 1330.1.

Section 1343.2 Protection Coatings for Metal Gas Piping: Revise this section to read 1330.2.

Section 1343.3 Plastic: Revise this section number to read 1330.3.

Section 1344.0 Gas– Piping Installation: Revise this section to read 1331.0

Section 1344.1 Minimum Burial below Ground Level and Clearances: Revise section number to read 1331.1.

Section 1344.2 Metallic Gas Piping: Revise this section to read 1331.2

Section 1344.2.1: Revise this section to read 1331.2.1.

Section 1344.2.2: Revise this section to read 1331.2.1.2.

Section 1344.2.3: Revise this section to read 1331.2.1.3.

Section 1344.3 Plastic Gas Piping: Revise this section to read 1331.3.

Section 1344.4 Gas piping System Shutoff Valve: Revise this section to read 1331.4.

Section 1345.0 Liquefied Petroleum Gas Equipment: Revise this section to read 1332.0.

Section 1346.0 Oil Supply: Revise this section number to read 1333.0.

Section 1346.1 Minimum Oil Supply Tank Size: Revise this section number to read 1333.1.

Section 1346.2 Oil Supply Connections – General: Revise this section number to read 1333.2.

Section 1347.0 Fuel Supply System Installation: Revise this section number to read 1334.0.

Section 1347.1 Flexible Gas Connector: Revise this section number to read 1334.1.

Section 1347.2 Use of Approved Pipe and Fittings of Extension: Revise this section number to read 1334.2.

Section 1347.3 Mechanical Protection: Revise this section number to read 1334.3.

Section 1347.4 Special Rules on Atmospherically Controlled Regulators: Revise section number to read 1334.4.

Section 1347.5 Fuel Gas Piping Test: Revise section number to read 1334.5.

Section 1347.5.1: Revise section number to read 1334.5.1.

Section 1347.5.2: Revise section number to read 1334.5.2.

Section 1347.6 Oil Tanks: Revise section number to read 1334.6.

Section 1347.6.1: Revise section number to read 1334.6.1.

Section 1347.6.2: Revise section number to read 1334.6.2.

Section 1347.6.3: Revise section number to read 1334.6.3.

Section 1347.6.4: Revise section number to read 1334.6.4.

Section 1347.6.5: Revise section number to read 1334.6.5.

Section 1347.6.6: Revise section number to read 1334.6.6.

Section 1348.0 Manufactured Home Accessory Building Fuel Supply Systems: Revise section number to read 1335.0.

Section 1349.0 Community Building Fuel Supply Systems in Manufactured Home Communities: Revise section number to read 1336.0.

Section 1349.1 Fuel Gas Piping and Equipment Installations: Revise section number to read 1336.1.

Section 1349.2 Oil Supply Systems in Manufactured Home Communities: Revise section number to read 1336.2.

Section 1349.3 Oil-Burning Equipment and Installation: Revise section number to read 1336.3.

Section 1350.0 Recreational Vehicle Park Fuel Gas Equipment and Installations: Revise section number to read 1337.0.

Section 1350.1: Revise section number to read 1337.1.