

SOUTHERN NEVADA

2000 MECHANICAL CODE AMENDMENTS

February 12, 2003

By

JURISDICTIONS

Clark County

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Las Vegas, Nevada 89155
(702) 455-3000
Inspections 455-8040

City of Las Vegas

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Inspections 229-2071

City of Henderson

240 Water Street
Henderson, NV. 89015
(702) 565-2332
Inspections 565-2090

Boulder City

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Boulder City, NV. 89005
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North Las Vegas, NV 89030
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City of Mesquite

11 East 100 South
Mesquite, NV. 89024
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PREFACE

This document comprises the Southern Nevada Mechanical Code Amendments to the 2000 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials. It was developed by the jurisdictions listed on the cover page as a document to be adopted by reference. These provisions are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternate has been approved and its use authorized by the building official. This document is available to be adopted as code by any jurisdiction without permission or approval from the jurisdictions listed on the cover page.

Chapter 1 Administration

Delete Chapter 1 except for sections 102 and 103.

103. Scope

Section 103 is amended to read:

103.0 Scope

The provisions of this code shall apply to the erection, installation, alteration, repair, relocation, replacement, addition to, use or maintenance of any heating, ventilating, cooling, refrigeration systems, incinerators or other miscellaneous heat-producing appliances within this jurisdiction.

Additions, alteration, repairs and replacement of equipment or systems shall comply with the provisions for new equipment and systems, except as otherwise provided in Section 104.0 of this code.

Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

The design and testing of equipment regulated by this code shall be subject to the approval of the Administrative Authority.

The standards contained in Appendix A shall be considered as part of this code. Appendix B contains recommended practices which shall not apply unless specifically adopted. Appendix C contains gas venting tables and is intended to serve only as a guide. Appendix D contains conversion tables and a table for determining the appropriate minimum thickness for carbon sheet metal. Appendix B Chapter 13 is specifically adopted.

205- Definitions - C

Add a new definition to be placed in alphabetical order to read:

Combustible Construction - Combustible construction shall mean work within any building or structure classified as Type 111-A, Type 111-B; Type IV- Heavy Timber; Type V-A; or Type V-B as defined in the Building Code.

217- Definitions – O

Section 217.0 Occupancy Classification

Section 217-O- is amended by replacing the first sentence of section 217.0 -O- to read as follows:

OCCUPANCY CLASSIFICATION. When specific occupancies are referenced in this code, refer to the locally adopted building code for equivalent occupancy classifications.

304.6 LPG Appliances

Delete Section 304.6 in its entirety.

304.8- Plastic Pipe Use

Add a new section 304.8 to read:

304.8 Plastic Pipe Use. Plastic materials listed for use in mechanical equipment are acceptable as an alternate to other approved materials for use in installations in combustible construction only.

EXCEPTION:

- (1) Approved plastic control tubing of mechanical equipment may be used in buildings or structures of all construction classifications when installed in accordance with their listings.
- (2) When restricted by other sections of this code.

504.3.1- Moisture Exhaust Ducts.

Section 504.3.1 is amended by the addition of an exception to read:

504.3.1 Moisture Exhaust Ducts. Moisture exhaust ducts shall terminate on the outside of the building and shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination. Ducts for exhausting clothes dryers shall not be connected or installed with sheet metal screws or other fasteners which will obstruct the flow. Clothes dryer moisture-exhaust ducts shall not be connected to a gas vent connector, gas vent or chimney. Clothes dryer moisture exhaust ducts shall not extend into or through ducts or plenums.

Exception: When exhaust ducts terminate on a roof, backdraft dampers are not required.

504.3.2.2-Length Limitation

Section 504.3.2.2 is amended to read:

504.3.2.2 Length Limitation. Unless otherwise permitted or required by the dryer manufacturer's installation instructions and approved by the Administrative Authority, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of

fourteen (14) feet (4263 mm), including two (2) ninety degree (90°). (1.57 rad) elbow in excess of two.

Exception: Lengths may be increased when justified by calculations prepared by a Nevada Licensed Mechanical Engineer.

508.4- Duct Enclosures

Section 508.4 is amended to read:

508.4- Duct Enclosures. A grease duct serving a Type I hood which penetrates a ceiling, wall or floor shall be enclosed in a duct enclosure from the point of penetration. A duct may only penetrate exterior walls at locations where unprotected openings are permitted by the Building Code. Duct enclosures shall be constructed as the Building Code requires shaft enclosures to be constructed. Duct enclosures shall be of at least one-hour fire-resistive construction in all buildings and shall be of two-hour fire-resistive construction in Types I & II fire-resistive buildings. The duct enclosure shall be sealed around the duct at the point of penetration and vented to the exterior through weather-protected openings. The enclosure shall be separated from the duct by at least three (3) inches (76 mm) and not more than twelve (12) inches (305 mm) and shall serve a single grease exhaust duct system. The structural supports for a duct enclosure shall be outside the enclosure.

509.11- Performance Test

Section 509.11 is amended to read:

509.11 Performance Test. Upon completion and before final approval of the installation of a ventilation system serving commercial food heat-processing equipment, a performance test shall be performed to verify the rate of airflow and proper operation as specified in this chapter. The permittee shall furnish the necessary test equipment and devices required to perform the tests and shall provide the jurisdiction with an accurate, completed, and signed test report. The report shall be on a form supplied by the jurisdiction or on a form containing equivalent information. At the discretion of the building official, the performance test may be required to be witnessed by a Building Department representative, performed by an approved third party testing agency.

609- Automatic Shutoffs

Section 609 is amended by the addition of a new paragraph following the exceptions to read:

Upon completion and before final approval of the air-moving system provided with the required smoke detectors, a performance test shall be performed to verify compliance of detector installation to manufacturer's instructions and system compatibility as specified in this chapter. The

permittee shall furnish the necessary test equipment and devices required to perform the tests and shall provide the jurisdiction with an accurate, completed, and signed test report. The report shall be on a form supplied by the jurisdiction or on a form containing equivalent information. At the discretion of the building official, the performance test may be required to be witnessed by a Building Department representative, performed by an approved third party testing agency.

806.4-Vent Terminations/Type B or BW Gas Vents

Section 806.4 is amended to read:

806.4 Type B or BW Gas Vents. Type B or BW gas vents with listed vent caps 12 inches (305 mm) in size or smaller shall be permitted to be terminated in accordance with Table 8-1, provided they are at least 4 feet (1219 mm) from a vertical wall or similar obstruction. All other Type B gas vents shall terminate not less than 2 feet (610 mm) above the highest point where they pass through the roof and at least 2 feet (610 mm) higher than any portion of the building within 10 feet (3048 mm) of the vent.

910.1 General

Section 910.1 is amended to read:

910.1 General. A roof or exterior building wall supporting a furnace shall comply with the requirements for roof and wall structures specified in the Building Code, and the equipment shall be listed or approved for such use. The requirements of this section shall apply to air moving systems as defined by this code.

910.8 Access

Section 910.8, exception 2 is amended to read:

Exception 2: A portable ladder may be used for access for furnaces on Group R, Division 3 and Division 4 occupancies and Group U, garages and carports.

910.8 Access

Section 910.8, is amended by adding a new Exception 4 to read:

Exception 4: Furnaces installed on a roof not exceeding 16 feet in height above grade may be accessed by a portable ladder.

Chapter 10- Boiler/Water Heaters

Chapter 10 is deleted in its entirety except Section 1001.1

1001- Scope/Applicability (Boiler/Water Heaters)

Section 1001.1 is amended to read:

1001.1 Applicability. For boilers and water heaters less than 120 gallon capacity, or a BTU input rating less than 200,000, or less than 160 pounds per square inch of pressure, see Chapter 5 of the Uniform Plumbing Code. For all other units, contact the Mechanical Section of the Nevada Division of Occupational Safety and Health, part of the Office of Business and Industrial Relations

Table 11-1 Refrigerant Groups, Properties and Allowable Quantities

Table 11-1 is amended by adding footnote 14 applicable to the entire Table.

Footnote 14- For occupancy Group I Division 1 and Division 2, the quantity of refrigerant in each system is limited to 50 percent of the respective amount listed in this table. Exceptions: Kitchens, laboratories and mortuaries.

Table 11-2- Permissible Refrigeration Systems

Table 11-2 is amended to read as follows:

Occupancy Group And Division	High Probability System	Low Probability System	Machine Room
I-1.1	Group A1 only 3	Any	Any

Footnote 3- For occupancy Group I Division 1 and Division 2, the quantity of refrigerant in each system is limited to 50 percent of the respective amount listed in Table 11-1. Exceptions: Kitchens, laboratories and mortuaries.

Table A6-2-E-1- Duct Gage Selection For Galvanized Steel

Add a new appendix table A6-2-E-1 to read:

TABLE A6-2-E-1 DUCT GAGE SELECTION FOR GALVANIZED STEEL ¹

Maximum 1" W.G. Static Positive and Negative		
Duct Diameter (inches)	Minimum Thickness Galvanized Iron (U.S. gauge/inches)	Minimum Thickness Aluminum (inches)

Less than 12	30/ .016	.016
12-16	28/ .019	.020
17-20 ²	26/ .022	.025

Footnotes:

¹ Heating and Air Conditioning Units not exceeding 2000 cfm or one inch Water Gauge (WG) positive or negative pressure. Duct fittings shall be constructed of material not less than the gauge of the duct.

- 2 Duct work and fittings larger than twenty inches shall be constructed to the gauging requirements of Table A6-1-E in Appendix A of the Uniform Mechanical Code.