ORDINANCE NO. 3598

AN ORDINANCE REPEALING ARTICLE II OF CHAPTER 15.12, IN ITS ENTIRETY, OF THE RAPID CITY MUNICIPAL CODE, ENTITLED MECHANICAL CODE, AND REPEALING ARTICLE III OF CHAPTER 15.12, IN ITS ENTIRETY, OF THE RAPID CITY MUNICIPAL CODE, ENTITLED MECHANICAL INSPECTOR—MECHANICAL BOARD—LICENSES AND PERMITS, AND ADOPTING A NEW CHAPTER 15.26, ENTITLED MECHANICAL CODE.

BE IT ORDAINED by the City of Rapid City that Article II and Article III of Chapter 15.12 of the Rapid City Municipal Code, entitled Mechanical Code and Mechanical Inspector–Mechanical Board – Licenses and Permits, be repealed in their entirety.

BE IT FURTHER ORDAINED by the City of Rapid City that a new Chapter 15.26 of the Rapid City Municipal Code, entitled Mechanical Code, be adopted as follows:

15.26. 010 Adoption

There is adopted by the City of Rapid City, for the purpose of regulating the design construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use of maintenance of heating, ventilation, cooling, incinerators or other miscellaneous heat producing appliances, that certain code known as the Uniform Mechanical Code, published by the International Association of Plumbing and Mechanical Officials, specifically the 2000 edition thereof, including Appendix A, B, C and D, and excluding Chapter 12, 13, 14, and 15, providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, conditions and terms of such "Uniform Mechanical Code", 2000 edition, published by the International Association of Plumbing and Mechanical Officials is on file in the office of the city finance officer.

BE IT FURTHER ORDAINED that the Uniform Mechanical Code, as adopted, be hereinafter amended as follows:

15.26.015 UMC Chapter 1, Section 110.0, Board of Appeals – Amended.

UMC, Chapter 1, Section 110.0, Board of Appeals, is deleted in its entirety and replaced with the Rapid City Mechanical Board, to read as follows:

110.0 Rapid City Mechanical Board.

There is established the Rapid City Mechanical Board which shall consist of the Mechanical Inspector, three mechanical contractors licensed by the City, two mechanical installers licensed by the City, a representative from a related wholesale business, a natural gas supplier, a propane gas supplier, and a representative from the mechanical engineering profession. The Building Official shall serve at the board meetings in the absence of the Mechanical Inspector. The members of such board shall be appointed by the Mayor, subject to the approval of the Council to two-year terms. The members of the board, except for the Mechanical Inspector, shall serve without compensation for such service.

110.1 Purpose.

The purpose of the Board is to protect the public health, safety, and welfare, and to guard against unsafe, unstable, or short-lived products or services related to installation of heating, ventilating, cooling systems, and other heat-producing appliances within this jurisdiction. The Board shall also insure new or small volume contractors are able to obtain a license without hardship.

110.2 Powers and Duties of the Board.

- A. The Board is authorized to adopt such rules and regulations as shall become necessary with the approval of the Council. The board shall notify all license holders of such proposed rules and regulations within 30 days prior to the delivery of such rules and regulations to the Council.
- B. The Board shall hold meetings as necessary for transaction of business; for examination of applicants, to determine the qualifications and fitness of all applicants as to their knowledge of the rules and regulations governing mechanical work; and to grant licenses and renewals to applicants who show proper qualifications.
- C. The Board shall annually review all licenses issued hereunder and make recommendations to the Council concerning renewal and issuance.
- D. The Board may hear appeals from determination of the Public Works Director on interpretation and application of licensing ordinances. All decisions of the Board shall be eligible for final review by the Council.

110.3 Violations and Penalties.

- A. The Board may revoke any license if the holder thereof is doing work without a permit. The Board may revoke any contractor's license if the Board determines the contractor's work has been consistently substandard, the contractor has violated any applicable stature, ordinance, rule or regulation promulgated by the Board, or the contractor has demonstrated inability or unfitness to perform the work for which he has been licensed.
- B. Should any applicant or licensee be aggrieved by a decision of the Board, he may, within 10 days, provide written notice of his intent to appeal such decision to the Council. The Council may affirm, modify or reverse the action of the mechanical board. All decisions of the Council shall be final.
- C. Any person violating this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine, not to exceed \$100, or by imprisonment in the county jail, not to exceed 30 days, or by both fine and imprisonment. Each day shall be deemed to constitute a separate offense.
- D. Any licensee subject to investigation by the Board shall cooperate fully with the Board.

15.26.017 UMC Chapter 1, Section 111.0, Violations – Amended.

UMC, Chapter 1, Section 111.0, Violations is hereby amended to read as follows:

111.0 License – Requirements, Fees and Violations.

111.1 License Required.

- A. Mechanical Contractor. It shall be unlawful for any person or persons representing or operating under the auspices of a proprietorship, partnership, firm, or corporation to conduct, carry on, or engage in the business of mechanical work or act in the capacity of a mechanical contractor, without first being approved by the Rapid City Mechanical Board, and having had issued to them a valid mechanical contractor's license by the City Finance Officer.
 - 1. Mechanical Contractor means a proprietorship, partnership, firm, or corporation, who for compensation undertakes or offers to undertake mechanical contracting. As a proprietorship, partnership, firm, or corporation, the owner shall be qualified in the mechanical trade as a mechanical contractor, or have employed as a supervisor a person with said qualifications and license. The mechanical contractor's license shall be issued in the name of an individual, DBA (Doing business As) company name. The individual licensed as a contractor under a proprietorship, partnership, firm, or corporation, shall have six years experience and be qualified in planning, superintending, and the practical installation of mechanical system. A written exam is required in addition to work record and proof of insurance.
 - 2. Mechanical Contracting means the enlargement, alteration, improvement, conversion, or installation of mechanical systems; including the planning, superintending and the practical installation; and being familiar with the laws, rules and regulations governing the same.
- B. Mechanical Installer. It shall be unlawful for any person to labor at the trade or in the capacity of a mechanical installer without first being approved by the Rapid City Mechanical Board and having had issued to him a valid mechanical installer's license by the City Finance Officer.
 - 1. Mechanical Installer means any person with four years experience in the installation of mechanical equipment, who as his principal occupation, is engaged as an employee of, or otherwise working under, the direction of a mechanical contractor, and who is lawfully qualified and licensed as a mechanical installer pursuant to the provisions of this chapter. A written exam is required in addition to work record.
- C. Mechanical Apprentice. It shall be unlawful for any person to labor at the trade or in the capacity of a mechanical apprentice without first being approved by the Rapid City Mechanical Board and having had issued to him a valid mechanical apprentice license by the City Finance Officer.
 - 1. Mechanical apprentice means any person other than a mechanical installer who is engaged in working as an employee of a mechanical contractor under the immediate and personal supervision of a mechanical installer learning and assisting in the installation of mechanical systems. No apprentice shall be in charge of any phase of work.

111.2 License – Issuance.

A mechanical license shall be issued to every person who makes application for such license, pays the required fee and successfully passes the examination conducted by the Rapid City Mechanical Board; however, the board may approve the issuance of such license to any person who makes application therefor, pays the required fee and presents to the board a valid, current mechanical license issued to him by any other governmental agency giving the examination the scope and character of which, in the opinion of the board, is at least equal to that given by the Rapid City Mechanical Board. A "Certificate of Insurance" shall be required of every mechanical contractor and shall be on file with the Rapid City Building Inspection Department.

All licenses shall be issued by the City Finance Officer in accordance with this chapter.

111.3 License – Expiration.

Every license issued pursuant to this chapter shall remain in force and effect until February 28 of the succeeding year unless cancelled or revoked prior to that date. Any person failing to renew the license on or before the close of business on February 28, or if that day be a weekend or a non-business day, then before the close of business on the next business day, shall be required to retest, and pay the initial license fee.

111.4 Examinations.

A written examination is required for a mechanical contractor and mechanical installer license.

Any person who fails to pass the examination may apply for re-examination after the expiration of 30 days. Should such person fail to pass the second time, the board may refuse a third application until after the expiration of 6 months.

111.5 License Fees.

Every person applying for a license shall pay to the City Finance Officer the following fees:

	<u>Initial Fee</u>	<u> Renewal Fee</u>
Mechanical Contractor	\$200.00	\$50.00
Mechanical Installer	25.00	25.00
Mechanical Apprentice	<u>10.00</u>	<u>10.00</u>

111.6 License Violations.

It shall be unlawful for a person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use of maintain mechanical systems or equipment or cause or permit the same to be done in violation of this code.

Any person who violates this section shall, in addition to any criminal proceedings instituted therefor, be subject to license revocation by the Mechanical Board.

15.26.020 UMC Chapter 1, Section 115.0 Fees, Subsections 115.1, 115.2 and 115.3 – Amended.

UMC, Chapter 1, Section 115.0, Subsections 115.1, 115.2 and 115.3 are amended to read as follows:

115.0 Fees

- **115.1 General.** Fees shall be assessed in accordance with the provisions of this section and as set forth in the fee schedule, <u>determined and adopted by this jurisdiction.</u> The fees are to be determined and adopted by this jurisdiction.
- **115.2 Permit Fees.** The fee for each permit shall be as set forth in Table 1-1. The fee for each permit shall be as set forth in the fee schedule adopted by this jurisdiction.

<u>115.3 Plan Review Fees.</u> When plans or other data are required to be submitted by Section 113.2, a plan review fee shall be paid at the time of submitting plans and specifications for review. The plan review fees for mechanical work shall be determined and adopted by this jurisdiction.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 15.2 and are in addition to the permit fees.

When plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in Table 1-1. established by this jurisdiction.

15.26.025 UMC Chapter 1, Table 1-1, Mechanical Permit Fees – Deleted.

UMC Chapter 1, Table 1-1, Mechanical Permit Fees, is hereby deleted.

15.26.030 UMC Chapter 3, Subsection 304.6, LPG Appliances – Amended.

UMC, Chapter 3, Subsection 304.6, LPG Appliances, is amended to read as follows:

304.6 LPG Appliances. Liquefied petroleum gas-burning appliances shall not be installed in a pit or crawl space, basement or similar location where heavier-than-air gas might collect. Liquefied petroleum gas-burning appliances may be installed in a basement, if approved by the manufacturer for such installation. Appliances so fueled shall not be installed in an above grade under floor space or basement unless such location is provided with an approved means for removal of unburned gas.

15.26.033 UMC Chapter 3, Section 310.0 Condensate Wastes and Control – Amended.

UMC, Chapter 3, Section 310.0, Condensate Wastes and Control, is amended to read as follows:

310.0 Condensate Wastes and Control

- **310.1 Condensate Disposal.** Condensate from air washers, air cooling coils, fuel-burning condensing appliances, the overflow from evaporative coolers and similar water supplied equipment or similar air conditioning equipment shall be collected and discharged to an approved plumbing fixture or disposal area. If discharged into the drainage system, equipment shall drain by means of an indirect waste pipe. The waste pipe shall have a slope of not less than 1/8 inch per foot (10.5mm/m) or one percent slop and shall be of approved corrosion-resistance material not smaller than the outlet size as required in either Section 310.3 or 310.4 below for air-cooling coils or condensing fuel-burning appliances, respectively. Condensate or waste water shall not drain over a public way.
- **310.2** Condensate Control. When a cooling coil or cooling unit is located in an attic or furred space where damage may result from condensate overflow, an additional water-tight pan of corrosion-resistant metal shall be installed beneath the cooling coil or unit top to catch the overflow condensate due to a clogged primary condensate drain, or one pan with a standing overflow and a separate secondary drain may be provided in lieu of the secondary drain pan. The additional pan or the standing overflow shall be provided with a drain pipe, minimum ³/₄ inch (19.1 mm) nominal pipe size, discharging at a point which can be readily observed.

A listed and tested electric float switch is an acceptable alternative to the auxiliary drain pan.

This requirement is in addition to the requirements in Sections 310.3 and 310.4.

15.26.040 UMC Chapter 5, Section 509.0 Hoods, Subsection 509.1 Where Required – Amended.

UMC, Chapter 5, Section 509.0 Hoods is amended by adding the following exception to 509.1 Where Required:

509.0 Hoods

509.1 Where Required. Hoods shall be installed at or above all commercial-type deep fat fryers, broiler, fry grills, steam-jacketed kettles, hot-top ranges, ovens barbecues, rotisseries, dishwashing machines and similar equipment which produce comparable amounts of steam, smoke, grease or heat in a food-processing establishment. For the purpose of this section, a food-processing establishment shall include any building or portion thereof used for the processing of food, but shall not include a dwelling unit.

Exceptions: A Class II hood is not required when the following conditions are met:

- 1. The unit is to be used for cookies, strudel, and bread. Bread being limited to loaves, rolls and croissants that have no ingredients other than flour, sprouted grains, butter, margarine, lard, vegetable oil, sugar, yeast, salt, spices, water, appropriate food additives (enrichment, dough conditioners, leavening agents, etc.) and eggs.
- 2. Each establishment is limited to one unit unless an adequate mechanical exhaust hood is appropriately installed or there is an individual establishment exemption for additional units granted by the local health agency or jurisdiction.
- 3. The unit may only be operated in a well ventilated area approved for foot preparation. This area must be appropriately constructed and maintained to be sanitary at all times.
- 4. Each unit must be installed, serviced, and cleaned per factory specifications.
- 5. The oven must be totally electric and not produce a temperature which exceeds 130 degrees Fahrenheit six (6) inches from the external surface of the oven. This must be verified by the manufacturers specifications or manual.
- <u>6</u>. The building ventilation equipment will be adequate and verified by a licensed mechanical contractor as to its adequacy.

15.26.045 UMC Chapter 6, Section 604. 2 Factory-Made Air Ducts – Amended.

UMC, Chapter 6, Section 604.2 Factory-Made Air Ducts, is hereby amended to read as follows:

604.2 Factory-Made Air Ducts. Approved Class 0 or Class 1 factory-made air ducts may be installed in any occupancy covered by this code.

Factory-made air ducts shall not be used for vertical risers in air-duct systems serving more than two stories. Such ducts shall not penetrate construction where fire dampers are required.

Factory-made air ducts shall be installed with at least four (4) inches (102 mm) of separation from earth, except when installed as a liner inside of concrete, tile or metal pipe; they shall be protected from physical damage.

<u>Factory-made flexible air ducts, installed within this jurisdiction shall not exceed seven (7) feet in length.</u>

The temperature of the air to be conveyed in any of these classes of ducts shall be less than 251 F (122 C).

15.26.050 UMC Chapter 8, Section 813.2 Gas Venting into Existing Masonry Chimneys, Subsection 813.2.1 – Amended.

UMC, Chapter 8, Subsection 813.2.1 of Section 813.2 Gas Venting into Existing Masonry Chimneys, is hereby amended to read as follows:

813.2.1 An approved liner shall be installed in an existing unlined masonry chimney when deemed necessary the Administrative Authority considering local problems of vent gas condensate. All gas venting systems installed within this jurisdiction, entering a masonry chimney, whether interior, exterior, or what is commonly referred to as a van packer stack, shall be lined with an approved liner, or Type B gas vent, sized to conform with Gama Tables.

15.26.055 UMC Chapter 9, Section 910.8 Access – Amended.

UMC, Chapter 9, Section 910.8 Access, is hereby amended to read as follows:

910.8 Access. Every furnace installed in or on an exterior wall of a building, which is designed so that the burners or controls must be serviced from outside the building, shall be readily accessible.

Furnaces located on the roof of a building shall be readily accessible.

Exceptions:

- 1. Permanent exterior ladders providing roof access need not extend closer than eight (8) twelve (12) feet to the finish grade. The requirement for a permanent exterior ladder shall begin when the roof line is at 12 feet.
- 2. A portable ladder may be used for access for furnaces on the single-story portion of a Group R or U Occupancy.
- 3. Permanent ladders for equipment access need not be provided at parapets or walls less than thirty (30) inches (762 mm) in height.

Permanent ladders providing roof access shall:

- **910.8.1** Have side railings which extend at least thirty (30) inches (762mm) above the roof edge or parapet wall.
- **910.8.2** Have landings less than eighteen (18) feet (5486 mm) apart measured from the finished grade.
- **910.8.3** Be at least fourteen (14) inches (356 mm) in width.
- **910.8.4** Have rungs not more than fourteen (14) inches (356mm) on center.

910.8.5 Have a minimum of six (6) inch (152 mm) toe space.

15.26.060 UMC Chapter 10, Steam and Hot-Water Boilers – Amended.

UMC, Chapter 10, Steam and Hot-Water Boilers, is hereby deleted, in its entirety, and replaced with Chapter 10, entitled: "Commercial Water Heaters and Hot-Water Boilers", to read as follows:

CHAPTER 10 COMMERCIAL WATER HEATERS AND HOT-WATER BOILERS

1001.0 Purpose

The purpose of this chapter is to establish and provide minimum standards for the protection of public welfare, health, safety and property by regulating and controlling the quality, location and installation of commercial water heaters and hot water boilers.

1002.0 Scope

- 1002.1 All boiler installations, within the Rapid City jurisdiction, shall be reported to and inspected by the State Boiler Inspector's office in Pierre, SD. The address is Division of Commercial Inspection and Regulation, Public Safety Building, 118 W. Capitol Avenue, Pierre, SD 57501. (605) 773-3562.
- 1002.2 All commercial water heaters and boiler venting and combustion air shall require permits and inspections, per Chapter 1 of this code. All commercial water heaters, boiler venting and combustion air shall be installed per Chapters 7 and 8 of this code and manufacturer's specifications.

15.26.065 UMC Chapter 11 Refrigeration – Amended.

UMC Chapter 11 Refrigeration is hereby deleted in its entirety and replaced with Chapter 11, entitled: "Cooling", to read as follows:

CHAPER 11 COOLING

1101.0 General

- **1101.1 Scope.** Cooling systems and cooling units shall conform to the requirements of this chapter and to the applicable requirements of Chapter's 3, 7 and 9.
- 1101.2 Cooling Coils with Furnaces. Cooling coils installed as a portion of or in connection with a warm-air furnace shall also be arranged to comply with the provisions of Chapter's 3, 7 and 9.
- <u>1101.3</u> Use of Group 2 Refrigerants. Direct refrigerating systems containing Group 2 refrigerants shall not serve an air-cooling or air-conditioning system used for human comfort.
- 1101.4 Clearance from Ground Under Floors. When cooling equipment other than ducts and piping is suspended from the under-floor construction, a clearance of at least 6 inches shall be provided between the base of the equipment and the ground.

1102.0 Access

1102.1 Cooling Units. Except for piping, ducts and similar equipment that does not require servicing or adjusting, an unobstructed access and passageway not less than 2 feet in width by 6 feet 6 inches in height shall be provided to cooling units.

Exception: The access opening to a cooling unit located in an attic space may be reduced to 30 inches in length and width, provided the unit can be replaced from this opening or another opening into this space or area.

<u>1102.2 Filters, Fuel Valves and Air Handlers.</u> An unobstructed access space not less than 24 inches in width and 30 inches in height shall be provided to filters, fuel-control valves and air-handling units. Refrigerant and brine piping control valves shall be accessible.

Exception: An access opening from the unobstructed access space which opens directly to such equipment may be reduced to 15 inches in the least dimension if the equipment can be serviced, repaired and replaced from this opening without removing permanent construction.

- <u>1102.3 Refrigeration Machinery Room Installations.</u> Access to equipment located in a refrigeration machinery room shall comply with Chapter's 3, 7 and 9.
- 1102.4 Roof or Exterior Wall Installations. In addition to the applicable provisions of this section, access to a cooling unit or cooling system compressor located on a roof or on an exterior wall of a building shall be provided as required for furnaces in Chapter's 3, 7 and 9 of this code.
- <u>1102.5 Attic or Furred Space Installations.</u> Access to and working platforms for cooling units or cooling system compressors located in an attic or furred space shall be provided as for furnaces in Chapter's 3, 7 and 9 of this code.

1103.0 Lighting in Concealed Spaces.

When access is required to equipment located in an under-floor space, attic or furred space, a permanent electric light outlet and lighting fixture shall be installed at or near the equipment. The light shall be controlled by a switch located at the required passageway opening.

Exception: Light fixtures need not be installed when the fixed lighting for the building will provide sufficient light for safe servicing of the equipment.

1104.0 Working Space.

Equipment requiring access thereto, as specified in Section 305, shall be provided with an unobstructed space on the control or servicing side of the equipment of not less than 30 inches in depth and 6 feet 6 inches in height. (Note: See the Electrical Code for working space requirements about electrical equipment.)

Exception: The height of the working space may be reduced to 30 inches for an air-handling unit, air filter or refrigerant and brine-piping control valves. Working space for equipment located in a machinery room shall comply with Chapter's 3, 7 and 9.

1105.0 Condensate Control.

When a cooling coil or cooling unit is located in an attic or furred space where damage may result from condensate overflow, an additional water tight pan of corrosion-resistant metal shall be installed beneath the cooling coil or unit to catch the overflow condensate due to a clogged primary condensate drain, or one pan with a standing overflow and a separate secondary drain may be proved in lieu of the secondary drain pan. The additional pan or the standing overflow shall be provided with a drain pipe, minimum ³/₄ inch nominal pipe size, discharging at a point which can be readily observed. This equipment is in addition to the requirements for condensate waste piping set forth in Section 310 of this code.

A listed and tested electric float switch is an acceptable alternative to the auxiliary drain pan.

1106.0 Return Air and Outside Air.

1106.1 Source. A cooling unit shall be provided with outside air, return air, or both. Cooling systems regulated by this code and designed to replace required ventilation shall be arranged to discharge into the conditioned space not less than the amount of outside air specified in the Building Code.

1106.2 Prohibited Sources. The outside and return air for a cooling system or cooling unit shall not be taken from the locations specified in Section 906 as a prohibited source of air for a heating system.

1106.3 Return-Air Limination. Return air from one dwelling unit shall not be discharged into another dwelling unit through the cooling system.

1106.4 Air Velocity. Cooling systems shall be designed and constructed so that air velocity through filters does not exceed the filter manufacturer's recommendation. Filters shall be installed in all equipment, other than portable cooling units.

1106.5 Screen. Requied outside air inlets shall be covered with screen have ½ inch openings.

Exception: An outside air inlet serving a nonresidential portion of a building may be covered with screen having openings larger than ¼ inch, but not larger than 1 inch.

15.26.070 UMC Chapter 12 Hydronics – Deleted.

UMC Chapter 12 Hydonics is hereby deleted in its entirety.

15.26.073 UMC Chapter 13 Fuel Gas Piping – Deleted.

UMC Chapter 13 Fuel Gas Piping is hereby deleted in its entirety.

15.25.075 UMC Chapter 14 Process Piping – Deleted.

UMC Chapter 14 Process Piping is hereby deleted in its entirety.

15.25.077 UMC Chapter 15 Solar Systems – Deleted.

UMC Chapter 15 Solar Systems is hereby deleted in its entirety.

15.25.080 UMC Appendix B, Chapter's 12, 13, 14, and 15 – Deleted.

15.25.065 UMC Appendix B, Chapter's 12, 13, 14, and 15 are hereby deleted in their entirety.

	CITY OF RAPID CITY	
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	Mayor	
ATTEST:		
Finance Officer		
(SEAL)		
First Reading:		
Second Reading:		
Published:		
Effective:		