

**INTERNATIONAL MECHANICAL CODE AND
THE INTERNATIONAL FUEL GAS CODE**

§ 150.030 ADOPTED.

- (a) The *International Mechanical Code*, 2018 edition, including Appendix A, and the *International Fuel Gas Code* including Appendix A, B, and C, 2018 edition, as amended, are hereby adopted for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use, or maintenance of heating, ventilation, cooling, refrigeration, incinerators, or other miscellaneous heat producing appliances in the city, and for providing for performance of inspections and collection of fees therefor.
- (b) The adoption of the 2018 *International Mechanical Code* and the 2018 *International Fuel Gas Code* will become effective June 1, 2019. The minimum mechanical standards referenced in the *International Mechanical Code* and the *International Fuel Gas Code* shall be applied to any permit issued after May 31, 2019.
- (c) The city shall publish this ordinance, without attachments, after its passage. The attachments are on file and available for inspection at the office of the city clerk.

**§ 150.031 AMENDMENTS, ADDITIONS, AND DELETIONS TO THE 2018
INTERNATIONAL MECHANICAL CODE.**

The following sections and subsections of the 2018 *International Mechanical Code* adopted in this article shall be amended, added, or deleted as follows. All other sections or subsections of the 2018 *International Mechanical Code* shall remain the same.

[A] **101.1 Title.** These regulations shall be known as the *Mechanical Code* of [the City of Sioux Falls](#), hereinafter as “this code.”

Commentary: *This simply inserts that these local modifications are applicable to the “City of Sioux Falls.”*

[A] **101.2 Scope.** This code shall regulate the design, installation, *alteration* and inspection 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 appliances specifically addressed herein. 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*.

Exceptions:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their structures shall comply with the *International Residential Code*.
2. Mechanical systems in existing buildings undergoing repair, alterations or additions, and change in occupancy shall be permitted to comply with the *International Existing Building Code*.

Commentary: *This section establishes when the provisions of the mechanical code apply, whether all or in part. The amendment is to clarify that instead of only using the provision of the IMC for repairs, remodels, alterations, changes of use, etc., that the designer or building owner has the ability to use the scoping provisions of the International Existing Building Code as an alternate.*

[A] **103.2 Appointment.** ~~The code official shall be appointed by the chief appointing authority of the jurisdiction.~~ Not adopted by the city.

Commentary: *This is eliminated because the code official is not an appointed position.*

[A] **103.4 Liability.** The ~~code~~-building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

This code shall not be construed to relieve or lessen the responsibility of any person owning, operating, or controlling any building or structure for any damages to persons or property caused by defects, nor shall the city, or its officers and employees, be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

Commentary: *This last paragraph was added in order to be consistent with the other I-Codes. This paragraph maintains language as it relates to assuming liability in the enforcement of the minimum standards of the code.*

[A] **103.4.1 Legal defense.** Any suit or criminal complaint instituted against any officer or employee because an act or omission performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the protection provided by the city's insurance pool and immunities and defenses provided by other applicable state and federal laws and be defended by the legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

Commentary: *This amendment inserts that an employee who enforces the code is protected from liability within the limitations of the City's insurance pool or any other applicable state*

or federal law. The second paragraph maintains language from the legacy codes as it relates to assuming liability in the enforcement of the minimum mechanical standards of the code.

[A] 106.1 Where required. An owner, owner’s authorized agent or contractor who desires to erect, install, enlarge, alter, repair, remove, convert or replace a mechanical system, the installation of which is regulated by this code, or to cause such work to be performed, shall first make application to the code official and obtain the required permit for the work. A permit is not required by a licensed mechanical contractor if an inspection as specified in Section 107 is requested and obtained for any mechanical work.

Exception: Where *equipment* and *appliance* replacements or repairs must be performed in an emergency situation, ~~the permit application shall be submitted within the next working business day of the department of mechanical inspection~~the inspection request shall be submitted within 48 hours after the replacement work is completed and before any portion of the appliance is concealed by any permanent portion of the structure.

Commentary: *Currently, this maintains that an issued building permit is not required where the mechanical contractor is acting as a general contractor by the installation of only mechanical systems. It is the licensed contractor’s responsibility to request an inspection which acts as the permit. Where work is installed such as the replacement of a furnace in the winter, such work is deemed as an emergency situation and requires that the mechanical contractor request an inspection within 48 hours of installation.*

[A] 106.5.1 Work commencing before permit issuance. Any person who commences work on a mechanical system before obtaining the necessary permits shall be subject to ~~100 percent of the usual permit~~ a \$250 administrative fee in addition to the required permit fees.

Commentary: *This maintains the penalty for the failure to request an inspection for the installation of mechanical systems.*

[A] 106.5.2 Fee schedule. The fees for mechanical work shall be as indicated in the following schedule.

<u>Table No. 1-A. Mechanical Permit Fees</u>	
<u>Permit Issuance</u>	
<u>Homeowner’s permit (plus the unit fee costs for the work to be inspected)</u>	<u>\$20</u>
<u>Unit Fee Schedule (Inspections)</u>	
<u>1. Minimum inspection fee</u>	<u>\$19</u>
<u>2. For the installation or relocation of each forced-air or gravity-type furnace or burner, including ducts and vents attached to such appliance</u>	<u>\$12</u>
<u>3. For the installation or relocation of each floor furnace, including vent</u>	<u>\$12</u>
<u>4. For the installation or relocation of each suspended heater, recessed wall heater, or floor-mounted unit heater</u>	<u>\$12</u>

5.	<u>For the installation, relocation, or replacement of each appliance vent installed and not included in an appliance permit</u>	<u>\$6</u>
6.	<u>For the repair of, alteration of, or addition to each heating appliance, refrigeration unit, cooling unit, absorption unit, or each heating, cooling, absorption, or evaporative cooling system, including installation of controls regulated by this code</u>	<u>\$12</u>
7.	<u>For the installation or relocation of each boiler or compressor or each absorption system</u>	<u>\$12</u>
8.	<u>For each air-handling unit to and including 10,000 cubic feet per minute (4,720 L/S), including ducts attached thereto</u>	<u>\$12</u>
9.	<u>For each air-handling unit over 10,000 cfm (4,720 L/S)</u>	<u>\$15</u>
10.	<u>For each evaporative cooler other than portable type</u>	<u>\$10</u>
11.	<u>For each ventilating fan connected to a single duct</u>	<u>\$6</u>
12.	<u>For each ventilation system which is not a portion of any heating or air-conditioning system authorized by a permit</u>	<u>\$10</u>
13.	<u>For the installation of each commercial hood which is served by mechanical exhaust, including the ducts for such hood</u>	<u>\$15</u>
14.	<u>For the installation or relocation of each commercial, industrial, or domestic-type incinerator</u>	<u>\$20</u>
15.	<u>For each appliance or piece of equipment regulated by this code but not classed in other appliance categories, or for which no other fee is listed in this code</u>	<u>\$12</u>
16.	<u>For each fire damper, smoke damper, or combination fire/smoke damper</u>	<u>\$1</u>
17.	<u>Variable air volume (VAV) terminals</u>	<u>\$1</u>
<i>Other Inspections and Fees</i>		
1.	<u>Inspections outside of normal business hours (minimum charge-one hour), per hour*</u>	<u>\$70</u>
2.	<u>Reinspection fees assessed under provisions of Section 107 (minimum charge-one hour), per hour*</u>	<u>\$70</u>
3.	<u>Inspections for which no fee is specifically indicated (minimum charge-one hour), per hour*</u>	<u>\$70</u>
4.	<u>Additional plan review required by changes, additions, or revisions to approved plans (minimum charge-one hour), per hour*</u>	<u>\$70</u>
5.	<u>Appeals. Before the board takes any action, the party or parties requesting such hearing shall deposit with the secretary of the board, or his or her authorized agent, the sum of \$65 to cover the approximate cost of the procedure. Under no condition shall the sum or any portion thereof be refunded for failure of the request to be approved.</u>	

6.	<u>Examination Fee. All classes per examination</u>	<u>\$75</u>
7.	<u>A mileage fee based on the current rate per mile authorized by the Internal Revenue Service shall be charged for any inspection occurring outside the city limits.</u>	
8.	<u>When a plan or other data is required to be submitted by SDCL 36-18 or when the building official requires submittal of plans, computations, or specifications in accordance with Section 106.3, a plan review fee shall be charged. The plan review fee shall be 25 percent of the mechanical portion of the building permit fee as shown on Table 1-B, Commercial Building Permit Fees, of § 150.017 of the Revised Ordinances of the City of Sioux Falls.</u>	
9.	<u>Bond Claims. An administrative fee shall be charged to cover the administrative filing a claim.</u>	
10.	<u>Delinquent Accounts. The administrative authority may refuse inspections or may deny credit on accounts receivables that are delinquent.</u>	
11.	<u>Fee for late corrections. A \$100 administrative fee may be charged for failure to correct violations within the time specified on a contractor's correction report.</u>	
12.	<u>Fee for failure to request a required inspection. Where mechanical work is completed without a request for an inspection, an administrative fee of \$250 may be charged.</u>	
*	<u>Or the total hourly cost to the city, whichever is greater. This cost shall include supervision, overhead, equipment, hourly wages, and fringe benefits of the employees involved.</u>	

Commentary: This inserts those fees to cover the costs of the work expended by Building Services staff which includes plan review, inspections, administering permit issuance and department overhead. No fee increases are included for this code cycle.

[A] 106.5.3 Fee refunds. The code official shall authorize the refunding of fees as follows.

1. The full amount of any fee paid hereunder that was erroneously paid or collected.
2. Not more than ~~[SPECIFY PERCENTAGE]~~80 percent of the permit fee paid where work has not been done under a permit issued in accordance with this code.
3. Not more than ~~[SPECIFY PERCENTAGE]~~80 percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

The code official shall not authorize the refunding of any fee paid, ~~except upon written application filed by the original permittee not~~ later than 180 days after the date of fee payment.

Commentary: This maintains the policy of refunds for permits that are issued where work is either cancelled or is not commenced.

[A] 107.2 Required inspections and testing. It shall be the duty of the licensed mechanical contractor, or his designated mechanic doing the work authorized by a permit, or the homeowner holding the homeowner's mechanical permit to notify the mechanical inspector that such work is ready for inspection. The building official may require that every request for inspection be filed at least one working day before such inspection is desired.

The code official, upon notification from the permit holder or the permit holder's agent, shall make the following inspections and other such inspections as necessary, and shall either release that portion of the construction or shall notify the permit holder or the permit holder's agent of violations that must be corrected. The holder of the permit shall be responsible for the scheduling of such inspections.

1. Underground inspection shall be made after trenches or ditches are excavated and bedded, piping installed, and before backfill is put in place. Where excavated soil contains rocks, broken concrete, frozen chunks and other rubble that would damage or break the piping or cause corrosive action, clean backfill shall be on the job site.
2. Rough-in inspection shall be made after the roof, framing, fire blocking and bracing are in place and all ducting and other components to be concealed are complete, and prior to the installation of wall or ceiling membranes.
3. Final inspection shall be made upon completion of the mechanical system.

Exception: Ground-source heat pump loop systems tested in accordance with Section 1210.10 shall be permitted to be backfilled prior to inspection.

The requirements of this section shall not be considered to prohibit the operation of any heating *equipment* or appliances installed to replace existing heating *equipment* or appliances serving an occupied portion of a structure provided that a request for inspection of such heating *equipment* or appliances has been filed with the department not more than 48 hours after such replacement work is placed into operation or substantially completed, and before any portion of such *equipment* or appliances is concealed by any permanent portion of the structure.

Commentary: This clarifies that it is the responsibility of the licensed mechanical contractor or his/her designated installer or the homeowner holding the homeowner's mechanical permit to notify the mechanical inspector when an inspection is required for the installation of mechanical equipment. To accommodate the scheduling for an inspection, one day's notice is referenced. The replacement of a heating appliance requires that an inspection be requested within 48 hours of the equipment being placed into operation or is substantially completed.

[A] 108.3 Prosecution of violation. If the notice of violation is not complied with promptly, the code official shall request the legal counsel of the jurisdiction to deem the violation as a strict liability offense and institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful *occupancy* of the structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

Commentary: The reference to strict liability offense is referenced in only one of the I-Codes but is legally applicable to any violation of a building or mechanical code provision.

[A] **108.4 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the *approved construction documents* or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of ~~a~~ **[SPECIFY OFFENSE]** an ordinance violation and be subject to administrative citations through the code enforcement process. ~~, punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.~~

Commentary: This references that a violation of a mechanical provision of this code is subject to the citations through the administrative code enforcement process.

[A] **108.5 Stop work orders.** Upon notice from the code official that mechanical work is being performed contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's authorized agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be guilty of an ordinance violation and be subject to administrative citations through the code enforcement process. ~~liable for a fine of not less than [AMOUNT] dollars or more than [AMOUNT] dollars.~~

Commentary: This references that a violation of a mechanical provision of this code is subject to the citations through the administrative code enforcement process.

[A] **109.1 Mechanical board of appeals and examiners.** There is hereby created a mechanical board of appeals and examiners to hear and decide appeals of orders, decisions, or determinations made by the building official relative to the application and interpretation of the *International Mechanical Code*, *International Fuel Gas Code*, including Part V—Mechanical and Part VI—Fuel Gas of the *International Residential Code*, to determine that the provisions of these codes do not fully apply, to determine if an equally or better construction is proposed as an alternative, to review all prospective changes to the mechanical and fuel gas codes and to submit recommendations to the responsible official and the city council, to review licensing and test application determinations and to examine applicants for licensing, and to investigate matters brought to the board. It shall consist of five members qualified by experience and training to pass upon matters pertaining to mechanical design, construction, and maintenance and the public health aspects of mechanical systems referenced in the *International Mechanical Code* and the *International Fuel Gas Code*. Members shall be appointed by the mayor with the advice and consent of the council and shall hold office for a term of three years. The board shall adopt rules and procedures for conducting its business. All decisions and findings shall be provided in writing to the appellant with a duplicate copy provided to the building services

~~division. **Applications for appeal.** A person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.~~

[A] 109.1.1 Limitation of authority. The mechanical board of appeals and examiners shall not have authority relative to interpretation of the administration of this code nor shall such board be empowered to waive requirements of this code.

~~**[A] 109.2 Membership of board.** The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years; one for 4 years; one for 3 years; one for 2 years; and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed. Not adopted by the city.~~

~~**[A] 109.2.1 Qualifications.** The board of appeals shall consist of five individuals, one from each of the following professions or disciplines:~~

- ~~1.—*Registered design professional* who is a registered architect; or a builder or superintendent of building construction with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.~~
- ~~2.—*Registered design professional* with structural engineering or architectural experience.~~
- ~~3.—*Registered design professional* with mechanical and plumbing engineering experience; or a mechanical contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.~~
- ~~4.—*Registered design professional* with electrical engineering experience; or an electrical contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.~~
- ~~5. *Registered design professional* with fire protection engineering experience; or a fire protection contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work. Not adopted by the city.~~

~~**[A] 109.2.2 Alternate members.** The chief appointing authority shall appoint two alternate members who shall be called by the board chairman to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership and shall be appointed for 5 years, or until a successor has been appointed. Not adopted by the city.~~

~~**[A] 109.2.3 Chairman.** The board shall annually select one of its members to serve as chairman. Not adopted by the city.~~

~~**[A] 109.2.4 Disqualification of member.** A member shall not hear an appeal in which that member has a professional or financial interest. Not adopted by the city.~~

~~[A] 109.2.5 Secretary. The chief administrative officer shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer.~~[Not adopted by the city.](#)

~~[A] 109.2.6 Compensation of members. Compensation of members shall be determined by law.~~[Not adopted by the city.](#)

~~[A] 109.3 Notice of meeting. The board shall meet upon notice from the chairman within 10 days of the filing of an appeal, or at stated periodic meetings.~~[Not adopted by the city.](#)

~~[A] 109.4 Open hearing. Hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.~~[Not adopted by the city.](#)

~~[A] 109.4.1 Procedure. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.~~[Not adopted by the city.](#)

~~[A] 109.5 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.~~[Not adopted by the city.](#)

~~[A] 109.6 Board decision. The board shall modify or reverse the decision of the code of vote of three members.~~[Not adopted by the city.](#)

~~[A] 109.6.1 Resolution. The decision of the board shall be by resolution. Certified copies shall be furnished to the appellant and to the code official.~~[Not adopted by the city.](#)

~~[A] 109.6.2 Administration. The code official shall take immediate action in accordance with the decision of the board.~~[Not adopted by the city.](#)

~~[A] 109.7 Court review. Any person whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.~~[Not adopted by the city.](#)

Commentary: Whereas the primary purpose of the Mechanical Board of Appeals and Examiners is to review interpretations of the Mechanical Code Official, these modifications include the additional responsibilities of the Board, which relates to review of ordinances and review of mechanical licensure. The purpose of the Board is to review technical determinations by the Mechanical Code Official, not administrative provisions. This also clarifies that the members are appointed by the Mayor with the advice and consent of the Council and that any findings are referred to the appellant in writing. Those sections that are not adopted are defined in the rules and procedures approved by the Board. This maintains the symmetry to the IBC, IRC and the IEBC.

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the *International Building Code*, *International Residential Code*, *International Existing Building Code*, *NFPA 70*, *International Fire Code*, *International Fuel Gas Code*, or the *International Uniform Plumbing Code*, such terms shall have meanings ascribed to them as in those codes.

Commentary: This section references those codes that are adopted accessory to the Mechanical Code, including the International Residential Code and the International Existing Building Code. Because the City does not utilize the International Plumbing Code, the references are eliminated and instead simply refer to the plumbing ordinance, which adopts the Uniform Plumbing Code mandated by the State Plumbing Commission.

Section 202—General Definitions. Add the following definition:

STRICT LIABILITY OFFENSE. An offense in which the prosecution in a legal proceeding is not required to prove criminal intent as a part of its case. It is enough to prove that the defendant either did an act which was prohibited or failed to do an act which the defendant was legally required to do.

Commentary: This term brings the code in line with the current legal terminology used in other codes with regard to the prosecution of violations. With this term, the prosecutor is not required to prove that code violations were intended by a defendant or were even due to negligence. It is difficult to prove such intentions or negligence in a court of law. This provision is located only in the Property Maintenance Code but is inserted into all of the adopted Building Services codes.

301.2 Energy utilization. Heating, ventilating, and air-conditioning systems of all structures ~~shall~~ may be designed and installed for efficient utilization of energy in accordance with the *International Energy Conservation Code*.

Commentary: This takes away the mandatory requirements of total compliance with all of the technical requirements of the International Energy Conservation Code.

301.11 Plumbing connections. Potable water supply and building drainage system connections to *equipment* and appliances regulated by this code shall be in accordance with the *International Plumbing Code*.

Commentary: The State Plumbing Commission mandates the use of the Uniform Plumbing Code which the City adopts in lieu of the International Plumbing Code the IMC references.

304.10 Clearances from grade. Equipment and *appliances* installed at grade level shall be supported on a level concrete slab or other *approved* material extending not less than ~~3~~ 1 1/2 inches (~~76~~ 38 mm) above adjoining grade or shall be suspended not less than 6 inches (152 mm) above adjoining grade. Such support shall be in accordance with the manufacturer's installation instructions.

Commentary: This carries over an appliance support slab at 1 1/2 inches in height to be consistent with pre-manufactured products that are available locally.

[BE] 304.11 Guards. Guards shall be provided where various components that require service and roof hatch openings are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of components that require service. The top of the guard shall be located not less than 42 inches (1067 mm) above the elevated surface adjacent to the guard. The guard shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*.

~~**Exception:** Guards are not required where fall arrest/ restraint anchorage connector devices that comply with ANSI/ASSE Z-359.1 are installed.~~

Commentary: *The exception would allow fall restraint/anchorage connector devices as an alternate to a guard. The Mechanical Boards consensus was that such fall restraint devices are impractical use at rooftop HVAC equipment and that the nature of the servicing makes it impractical to utilize a restraining harness.*

306.2 Appliances in rooms. Rooms containing appliances shall be provided with a door and an unobstructed passageway [to the service area of the appliance](#) measuring not less than 36 inches (914 mm) wide and 80 inches (2032 mm) high.

Exception: Within a *dwelling unit*, appliances installed in a compartment, alcove, basement or similar space shall be accessed by an opening or door and an unobstructed passageway measuring not less than 24 inches (610 mm) wide and large enough to allow removal of the largest *appliance* in the space, provided that a level service space of not less than 30 inches (762 mm) deep and the height of the *appliance*, but not less than 30 inches (762 mm), is present at the front or service side of the *appliance* with the door open.

Commentary: *This local amendment clarifies that the passageway to the appliance must extend to the actual service area of the appliance, not just to the appliance.*

306.5 Equipment and appliances on roofs or elevated structures. Where *equipment* requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4,877 mm) above grade [or floor level](#) to access such equipment or appliances, an interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than four units vertical in 12 units horizontal (33-percent slope). Such access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall. Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center. The uppermost rung shall be not greater than 24 inches (610 mm) below the upper edge of the roof hatch, roof or parapet, as applicable.

3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
4. There shall be not less than 18 inches (457 mm) between rails.
5. Rungs shall have a diameter not less than 0.75-inch (19.1 mm) and be capable of withstanding a 300- pound (136 kg) load.
6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot (488 kg/m²). Landing dimensions shall be not less than 18 inches (457 mm) and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing.
7. Climbing clearance. The distance from the centerline of the rungs to the nearest permanent object on the climbing side of the ladder shall be not less than 30 inches (762 mm) measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches (381 mm) shall be provided on both sides of the ladder measured from the midpoint of and parallel with the rungs except where cages or wells are installed.
8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches (762 mm) by 30 inches (762 mm) centered in front of the ladder.
9. Ladders shall be protected against corrosion by *approved* means.
10. Access to ladders shall be provided at all times.
11. Exterior access may be by means of a ladder which need not extend closer than 8 feet (2,438 mm) to finished grade.
12. When a new hatch is being used to access equipment or appliances on a roof or elevated structure, the handle or release must be on the same side of the roof hatch as the ladder or within 18 inches of the ladder.

Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

Exception: This section shall not apply to Group R-3 occupancies.

Commentary: This has been modified for the safety of personnel to gain access to the roof. Item 11 carries over a provision to not require a ladder to extend to grade for security purposes. Item 12 prevents a ladder to terminate at the hinge side of the hatch.

306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope of greater than three units vertical in 12 units horizontal (25-percent slope) ~~or greater~~ and having an edge more than 30 inches (762 mm) above grade at such edge, a level platform shall be provided on each side of the *appliance* or *equipment* to which access is required for service, repair or maintenance. The platform shall be not less than

30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*. Access shall not require walking on roofs having a slope greater than four units vertical in 12 units horizontal (33-percent slope). Where access involves obstructions greater than 30 inches (762 mm) in height, such obstructions shall be provided with ladders installed in accordance with Section 306.5 or stairways installed in accordance with the requirements specified in the *International Building Code* in the path of travel to and from appliances, fans or *equipment* requiring service.

Commentary: This does not require service platforms for roofs with a slope of 3:12 or less in order to give the contractors the ability to use a standard slope without installing a level platform.

312.1 Load calculations. When deemed necessary by the mechanical inspector, Heating and cooling system design loads for the purpose of sizing systems, appliances and *equipment* shall be determined in accordance with the procedures described in the ASHRAE/ACCA Standard 183. Alternatively, design loads shall be determined by an *approved* equivalent computation procedure, using the design parameters specified in Chapter 3 [CE] of the *International Energy Conservation Code*.

Commentary: Instead of mandatory load calculations on all mechanical systems, load calculations are required at the discretion of the mechanical inspector.

401.4 Intake opening location. Air intake openings shall comply with all of the following:

1. Intake openings shall be located not less than 10 feet (3048 mm) from lot lines or buildings on the same lot.
2. Mechanical and gravity outdoor air intake openings shall be located not less than 10 feet (3048 mm) horizontally from any hazardous or noxious contaminant source, such as vents, streets, alleys, parking lots and loading docks, except as specified in Item 3 or Section 501.3.1. Outdoor air intake openings shall be permitted to be located less than 10 feet (3048 mm) horizontally from streets, alleys, parking lots and loading docks provided that the openings are located not less than 25 feet (7620 mm) vertically above such locations. Where openings front on a street or public way, the distance shall be measured from the closest edge centerline of the street or public way.
3. Intake openings shall be located not less than 3 feet (914 mm) below contaminant sources where such sources are located within 10 feet (3048 mm) of the opening.
4. Intake openings on structures in flood hazard areas shall be at or above the elevation required by Section 1612 of the *International Building Code* for utilities and attendant equipment.

Commentary: This code provision would have made it extremely difficult to bring fresh air into a building specifically in a downtown building. This continues the same make up air location as previous codes.

403.3.2.1.1 Outside air supplied direct to habitable spaces. When outdoor air is supplied directly to habitable spaces, it shall be tempered to a minimum of 40°F at the local ASHRAE 99.6 percent heating design temperature.

403.3.2.1.2 Outdoor air supplied to forced air supply systems. When outdoor air is supplied to a forced air system, the mixed air temperature shall not be less than allowed by the heating equipment manufacturer's installation instructions. The system's blower shall be in operation whenever the whole-house ventilation system is in operation. No interlock with an exhaust fan is required when outdoor air is supplied to a forced air system.

403.3.2.1.3 Passive outdoor air. Outdoor air shall be allowed to be transferred into a dwelling when the outdoor air and exhaust terminations are separated with one on the uppermost level and one on the lowest level of the dwelling. For single level dwellings, the outdoor air and exhaust terminations shall be separated by one-half the diagonal dimension of the largest room. Such outdoor air shall circulate through the dwelling from the outdoor air termination to the exhaust termination through permanent openings. Supply, return, and transfer ducts, open stairwells, or wall openings shall be considered permanent openings. The outdoor air intake duct shall be sized in accordance with Table 403.3.2.1 and air shall not be required to be tempered.

403.3.2.1.4 Fans. Fans used as part of the whole-house ventilation system shall be certified by the equipment manufacturer to be capable of continuous operation at the maximum fan-rated CFM. Surface-mounted fans shall have a sound rating of 1.0 sone or less. Fans used as whole-house ventilation fans shall be clearly marked at rough-in inspection as such.

403.3.2.1.5 Motorized dampers. Motorized dampers shall be installed in outdoor intake ducts and shall be interlocked with whole-house ventilation fan(s). Gravity or motorized dampers shall be installed in exhaust ducts.

403.3.2.1.6 System controls. The whole-house mechanical ventilation system shall be provided with controls that enable manual override. The controls shall be labeled "Whole-House Ventilation System" and shall be located near the thermostat or in the mechanical room. For whole-house ventilation fans which also function as bathroom exhaust fans, a local control switch shall be required in the bathroom to allow operation of the fan when the whole-house ventilation system is switched off.

Exception: Listed HRV/ERV systems shall be installed in accordance with the manufacturer's installation instructions. The distance between the exhaust and inlet termination of an individual system shall be allowed to be in accordance with the equipment manufacturer's instructions. HRV/ERVs shall be capable of balanced airflow operation at the ASHRAE 99.6 percent heating design temperature. Unit cycling for defrost is allowed.

TABLE 403.3.2.1
PASSIVE MAKEUP AIR DUCT SIZE

<u>PASSIVE DUCT SIZE</u>	<u>EXHAUST FAN CFM</u>
<u>4 INCH</u>	<u>35</u>

<u>5 INCH</u>	<u>50</u>
<u>6 INCH</u>	<u>80</u>
<u>7 INCH</u>	<u>110</u>
<u>8 INCH</u>	<u>130</u>
<u>9 INCH</u>	<u>165</u>

**TABLE 403.3.2.3
MINIMUM REQUIRED LOCAL EXHAUST RATES FOR
GROUP R-2, R-3 AND R-4 OCCUPANCIES**

AREA TO BE EXHAUSTED	EXHAUST RATES
Kitchens	100 cfm intermittent or 25 cfm continuous
Bathrooms—Toilet Rooms	Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous

Commentary: This is a local amendment for whole house ventilation that was requested by the HBA to leave as is. Table 403.3.2.3 has had the kitchen exhaust deleted this time around.

501.3.1 Location of exhaust outlets. The termination point of exhaust outlets and ducts discharging to the outdoors shall be located with the following minimum distances:

1. For ducts conveying explosive or flammable vapors, fumes or dusts: 30 feet (9144 mm) from property lines; 10 feet (3048 mm) from operable openings into buildings; 6 feet (1829 mm) from exterior walls and roofs; 30 feet (9144 mm) from combustible walls and operable openings into buildings that are in the direction of the exhaust discharge; 10 feet (3048 mm) above adjoining grade.
2. For other product-conveying outlets: 10 feet (3048 mm) from the property lines; 3 feet (914 mm) from exterior walls and roofs; 10 feet (3048 mm) from operable openings into buildings; 10 feet (3048 mm) above adjoining grade.
3. For all *environmental air* exhaust: 3 feet (914 mm) from property lines; 3 feet (914 mm) from operable openings into buildings for all occupancies other than Group U, and 10 feet (3048 mm) from mechanical air intakes. Such exhaust shall not be considered hazardous or noxious.

Exceptions:

1. Bathroom exhaust fans serving individual dwelling units or sleeping units in Group R occupancies may be 3 feet from property lines, operable openings, and mechanical air intakes.
2. Minimum clearances between the exhaust and intake openings of an HRV/ERV system shall be in accordance with the manufacturer's installation instructions.
43. Exhaust outlets serving structures in flood hazard areas shall be installed at or above the elevation required by Section 1612 of the *International Building Code* for utilities and attendant equipment.
54. For specific systems, see the following sections:
 - 54.1. Clothes dryer exhaust, Section 504.4.
 - 54.2. Kitchen hoods and other kitchen exhaust *equipment*, Sections 506.3.13, 506.4, and 506.5.
 - 54.3. Dust, stock, and refuse conveying systems, Section 511.2.
 - 54.4. Subslab soil exhaust systems, Section 512.4.
 - 54.5. Smoke control systems, Section 513.10.3.
 - 54.6. Refrigerant discharge, Section 1105.7.
 - 54.7. Machinery room discharge, Section 1105.6.1.

Commentary: *A 10-foot distance for a bathroom exhaust fan from a mechanical air intake made compliance extremely difficult in an apartment or hotel. A 3-foot distance matched previous codes for air intakes. For clarification, where a heat recovery ventilator (HRV) or an energy recovery ventilator (ERV) is installed, the manufacturer's installation instructions, not a general provision of the mechanical code, defines the location of the intake and exhaust outlets based on the UL listing, and the engineered tested and designed pieces of equipment.*

504.4 Exhaust installation. Dryer exhaust ducts for clothes dryers shall terminate on the outside of the building not less than 5 feet (1524 mm) from any intake opening and shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination. Ducts shall not be connected or installed with sheet metal screws or other fasteners that will obstruct the exhaust flow. Clothes dryer exhaust ducts shall not be connected to a vent connector, vent or *chimney*. Clothes dryer exhaust ducts shall not extend into or through ducts or plenums. Clothes dryer exhaust ducts shall be sealed in accordance with Section 603.9.

Commentary: *A 10-foot distance for a domestic electric dryer exhaust from a mechanical air intake made compliance difficult in an apartment or hotel. This was not changed in the IFGC as it is to be specific to an electric dryer. It was also not changed in the IRC as it is intended to give relief in crowded apartment situations.*

508.1.1 Makeup air temperature. The temperature ~~differential between~~ of makeup air and the air in the conditioned space shall not ~~exceed~~ be more than 10°F (6°C 12°C) ~~except where the added heating and cooling loads of the makeup air do not exceed the capacity of the HVAC system~~ below the temperature of the air in the conditioned space.

Exceptions:

1. Makeup air that is part of the air-conditioning system.
2. Makeup air that does not decrease the comfort conditions of the occupied space.

Commentary: *This allows for the use of make-up air for a commercial kitchen without the requirement of air conditioning of that make-up air.*

512.2 Materials. Subslab soil exhaust system duct material shall be air duct material *listed and labeled* to the requirements of UL 181 for Class 0 air ducts, or any of the following piping materials that comply with the ~~International Plumbing Code~~ as building sanitary drainage and vent pipe: cast iron; galvanized steel; copper or copper-alloy pipe and tube of a weight not less than type DWV; and plastic piping.

Commentary: *This eliminates the reference to the International Plumbing Code which as mandated by the State Plumbing Commission adopts the Uniform Plumbing Code.*

602.2.1.1 Wiring. Combustible electrical wires and cables and optical fiber cables exposed within a plenum shall be listed and labeled as having a peak optical density not greater than 0.50, an average optical density not greater than 0.15, and a flame spread distance not greater than 5 feet (1524 mm) when tested in accordance with NFPA 262, or shall be installed in metal raceways or metal sheathed cable. Combustible optical fiber and communication raceways exposed within a plenum shall be listed and labeled as having a peak optical density not greater than 0.5, an average optical density not greater than 0.15, and a flame spread distance not greater than 5 feet (1524 mm) when tested in accordance with UL 2024. Only plenum-rated wires and cables shall be installed in plenum-rated raceways.

Exception: Alternate wiring systems located within a plenum serving an information technology equipment room are allowed per NFPA 70.

Commentary: *This eliminates the more restrictive requirements of the Mechanical Code and refers those wiring systems that are located in information technology plenums to the National Electrical Code, which is NFPA 70.*

603.2 Duct sizing. Ducts installed within a single dwelling unit shall be sized in accordance with ACCA Manual D, the appliance manufacturer's installation instructions or other approved methods. Ducts installed within all other buildings ~~shall~~ may be sized in accordance with the ASHRAE *Handbook of Fundamentals* or other equivalent computation procedure.

Commentary: *Instead of mandatory duct design on all mechanical systems, the referenced standards are utilized as guidelines.*

603.6.1.1 Duct length. Flexible air ducts shall ~~not~~ be limited to 14 feet (4.3 m) in length.

Commentary: *Due to air flow restrictions inherent in flexible air ducts, this material has been limited locally to a maximum length of 14 feet.*

603.6.2 Flexible air connectors. ~~Flexible air connectors, both metallic and nonmetallic, shall be tested in accordance with UL 181. Such connectors shall be listed and labeled as Class 0 or Class 1 flexible air connectors and shall be installed in accordance with Section 304.1.~~ Not adopted by the city.

603.6.2.1 Connector length. ~~Flexible air connectors shall be limited in length to 14 feet (4267 mm).~~ Not adopted by the city.

603.6.2.2 Connector penetration limitations. ~~Flexible air connectors shall not pass through any wall, floor or ceiling.~~ Not adopted by the city.

603.6.3 Air temperature. The design temperature of air to be conveyed in flexible air ducts ~~and flexible air connectors~~ shall be less than 250°F (121°C).

603.6.4 Flexible air duct ~~and air connector~~ clearance. Flexible air ducts ~~and air connectors~~ shall be installed with a minimum *clearance* to an *appliance* as specified in the *appliance* manufacturer's installation instructions.

Commentary: *These types of flexible air ducts and connectors are an inefficient means of moving air in a duct system and have been excluded locally since the adoption of the mechanical code in 1994.*

603.8.2 Sealing. Ducts shall be sealed, secured and tested prior to concrete encasement or direct burial. ~~Ducts shall be leak tested as required by Section C403 of the International Energy Conservation Code.~~

Commentary: *The last sentence was added in this code. It is not our intent to mandate a leak test of all underground duct.*

603.9 Joints, seams and connections. Longitudinal and transverse joints, seams and connections in metallic and nonmetallic ducts shall be constructed as specified in SMACNA *HVAC Duct Construction Standards—Metal and Flexible* and NAIMA *Fibrous Glass Duct Construction Standards*. Joints, longitudinal and transverse seams and connections in ductwork outside the building thermal envelope, all return ducts located within 10 feet (3.05 m) of any appliance or all return ducts within a mechanical room, and all supply main trunk ducts and branch duct connections to the main trunk ducts shall be securely fastened and sealed with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric systems, liquid sealants or tapes. Tapes and mastics used to seal fibrous glass ductwork shall be listed and labeled in accordance with UL 181A and shall be marked “181 A-P” for pressure-sensitive tape, “181 A-M” for mastic or “181 A-H” for heat-sensitive tape. Tapes and mastics used to seal metallic and flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked “181 B-FX” for pressure-sensitive tape or “181 B-M” for mastic. Duct connections to flanges of air distribution system equipment shall be sealed and mechanically fastened. Mechanical fasteners

for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked “181 B-C.” Closure systems used to seal all ductwork shall be installed in accordance with the manufacturer's instructions.

Exception: For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams and locking-type joints and seams. This exception shall not apply to snap lock and button-lock type joints and seams located outside of conditioned spaces.

Commentary: *Instead of the mandatory sealing of all ducts, this requirement for sealing has been limited locally to the main trunk ducts which would have the most potential for leakage.*

[F] **606.4.1 Supervision.** The duct smoke detectors shall be connected to a fire alarm system where a fire alarm system is required by Section 907.2 of the *International Fire Code*. The actuation of a duct smoke detector shall activate a visible and audible supervisory signal at a constantly attended location. In facilities that are required to be monitored by a supervising station, duct smoke detectors shall report only as a supervisory signal, not as a fire alarm. Duct smoke detectors installed more than 10 feet (3.1 m) above a finished floor, above a ceiling, or on a rooftop shall be installed with remote test/indicators in an approved location below and in proximity to the unit served.

Exceptions:

1. The supervisory signal at a constantly attended location is not required where the duct smoke detector activates the building's alarm-indicating appliances.
2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and audible signal in an *approved* location. Duct smoke detector trouble conditions shall activate a visible or audible signal in an *approved* location and shall be identified as air duct detector trouble.

Commentary: *This is placed in the Mechanical Code to be consistent with the Fire Code to allow test indicators where a duct smoke detector is not accessible.*

§ 150.032 AMENDMENTS, ADDITIONS, AND DELETIONS TO THE INTERNATIONAL FUEL GAS CODE.

The following sections of the 2018 *International Fuel Gas Code* shall be amended, added, or deleted as follows. All other sections or subsections of the 2018 *International Fuel Gas Code* as published shall remain the same.

[A] **101.1 Title.** These regulations shall be known as the *Fuel Gas Code* of ~~[NAME-OF JURISDICTION]~~the city of Sioux Falls, hereinafter referred to as “this code.”

Commentary: *This simply inserts that these local modifications are applicable to the “City of Sioux Falls.”*

[A] **101.2 Scope.** This code shall apply to the installation of fuel-gas *pip*ing systems, fuel gas appliances, gaseous hydrogen systems and related accessories in accordance with Sections 101.2.1 through 101.2.5.

Exception~~s~~:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with the *International Residential Code*.
2. Fuel gas systems in existing buildings undergoing repair, alterations or additions, and change of occupancy shall be permitted to comply with the *International Existing Building Code*.

Commentary: *This section establishes when the provisions of the fuel gas code apply, whether all or in part. The amendment is to clarify that instead of only using the provision of the IFGC for repairs, remodels, alterations, changes of use, etc., that the designer or building owner has the ability to use the scoping provisions of the International Existing Building Code as an alternate.*

[A] **103.2 Appointment.** ~~The code official shall be appointed by the chief appointing authority of the jurisdiction.~~ Not adopted by the city.

Commentary: *This is eliminated because the code official is not an appointed position.*

[A] **103.4 Liability.** The ~~code~~-building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

This code shall not be construed to relieve or lessen the responsibility of any person owning, operating, or controlling any building or structure for any damages to persons or property caused by defects, nor shall the city, or its officers and employees, be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

Commentary: *This last paragraph was added in order to be consistent with the other I-Codes. This maintains language as it relates to assuming liability in the enforcement of the minimum standards of the code.*

[A] **103.4.1 Legal defense.** Any suit or criminal complaint instituted against any officer or employee because an act or omission performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the protection provided by the city's insurance pool and immunities and defenses provided by other applicable state and federal laws and be defended by the legal representatives of the jurisdiction until the

final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

Commentary: *This amendment inserts that an employee who enforces the code is protected from liability within the limitations of the City's insurance pool or any other applicable state or federal law. The second paragraph maintains language from the legacy codes as it relates to assuming liability in the enforcement of the minimum mechanical standards of the code.*

[A] 106.1 Where required. An owner, owner's authorized agent or contractor who desires to erect, install, enlarge, alter, repair, remove, convert or replace a mechanical system, the installation of which is regulated by this code, or to cause such work to be performed, shall first make application to the code official and obtain the required permit for the work. A permit is not required by a licensed mechanical contractor if an inspection as specified in Section 107 is requested and obtained for any mechanical work.

Exception: Where *appliance* and *equipment* replacements and repairs must be performed in an emergency situation, ~~the permit application shall be submitted within the next working business day of the department of mechanical inspection~~ the inspection request shall be submitted within 48 hours after the replacement work is completed and before any portion of the appliance is concealed by any permanent portion of the structure.

Commentary: *Currently, this maintains that an issued building permit is not required where the mechanical contractor is acting as a general contractor by the installation of only mechanical systems. It is the licensed contractor's responsibility to request an inspection which acts as the permit. Where work is installed such as the replacement of a furnace in the winter, such work is deemed as an emergency situation and requires that the mechanical contractor request an inspection within 48 hours of installation.*

[A] 106.6.1 Work commencing before permit issuance. Any person who commences work on a mechanical system before obtaining the necessary permits shall be subject to ~~100 percent of the usual permit~~ a \$250 administrative fee in addition to the required permit fees.

Commentary: *This maintains the penalty for the failure to request an inspection for the installation of mechanical systems.*

[A] 106.6.2 Fee schedule. The fees for work shall be as indicated in ~~the following schedule.~~ Table No. 1-A, Mechanical Fees in this code.

Commentary: *This references Table No. 1-A of the Mechanical Code for the fee schedule referenced in the IFGC.*

[A] 106.6.3 Fee refunds. The code official shall authorize the refunding of fees as follows.

1. The full amount of any fee paid hereunder that was erroneously paid or collected.
2. Not more than ~~[SPECIFY PERCENTAGE]~~ 80 percent of the permit fee paid where work has not been done under a permit issued in accordance with this code.

3. Not more than ~~[SPECIFY PERCENTAGE]~~80 percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

The code official shall not authorize the refunding of any fee paid, ~~except upon written application filed by the original permittee not~~ later than 180 days after the date of fee payment.

Commentary: This maintains the policy of refunds for permits that are issued where work is either cancelled or is not commenced.

[A] 107.2 Required inspections and testing. It shall be the duty of the licensed mechanical contractor, or his designated mechanic doing the work authorized by a permit, or the homeowner holding the homeowner's mechanical permit to notify the mechanical inspector that such work is ready for inspection. The building official may require that every request for inspection be filed at least one working day before such inspection is desired.

The code official, upon notification from the permit holder or the permit holder's agent, shall make the following inspections and other such inspections as necessary, and shall either release that portion of the construction or shall notify the permit holder or the permit holder's agent of violations that must be corrected. The holder of the permit shall be responsible for the scheduling of such inspections.

1. Underground inspection shall be made after trenches or ditches are excavated and bedded, piping installed, and before backfill is put in place. Where excavated soil contains rocks, broken concrete, frozen chunks and other rubble that would damage or break the piping or cause corrosive action, clean backfill shall be on the job site.
2. Rough-in inspection shall be made after the roof, framing, fireblocking and bracing are in place and all ducting and other components to be concealed are complete, and prior to the installation of wall or ceiling membranes.
3. Final inspection shall be made upon completion of the mechanical system.

The requirements of this section shall not be considered to prohibit the operation of any heating appliance installed to replace existing heating appliance serving an occupied portion of a structure provided that a request for inspection of such heating *equipment* or appliances has been filed with the department not more than 48 hours after such replacement work is placed into operations or substantially completed, and before any portion of such *equipment* or appliances is concealed by any permanent portion of the structure.

Commentary: This clarifies that it is the responsibility of the licensed mechanical contractor or his/her designated installer to notify the mechanical inspector when an inspection is required for the installation of fuel gas equipment. To accommodate the scheduling for an inspection, one day's notice is referenced. The replacement of a heating appliance requires that an inspection be requested within 48 hours of the equipment being placed into operation or is substantially completed.

[A] **108.3 Prosecution of violation.** If the notice of violation is not complied with promptly, the code official shall request the legal counsel of the jurisdiction to deem the violation as a strict liability offense and institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful *occupancy* of the structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

Commentary: The reference to strict liability offense is referenced in only one of the I-Codes but is legally applicable to any violation of a building or mechanical code provision.

[A] **108.4 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the *approved construction documents* or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a **[SPECIFY OFFENSE]**~~an ordinance violation and be subject to administrative citations through the code enforcement process. , punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.~~

Commentary: This references that a violation of a mechanical provision of this code is subject to the citations through the administrative code enforcement process.

[A] **108.5 Stop work orders.** Upon notice from the code official that mechanical work is being performed contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's authorized agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be guilty of an ordinance violation and be subject to administrative citations through the code enforcement process. ~~liable for a fine of not less than [AMOUNT] dollars or more than [AMOUNT] dollars.~~

Commentary: This references that a violation of a mechanical provision of this code is subject to the citations through the administrative code enforcement process.

[A] **109.1 Mechanical board of appeals and examiners.** There is hereby created a mechanical board of appeals and examiners to hear and decide appeals of orders, decisions, or determinations made by the building official relative to the application and interpretation of the International Mechanical Code, International Fuel Gas Code, including Part V—Mechanical and Part VI—Fuel Gas of the International Residential Code, to determine that the provisions of these codes do not fully apply, to determine if an equally or better construction is proposed as an alternative, to review all prospective changes to the mechanical and fuel gas codes and to submit recommendations to the responsible official and the city council, to review licensing and test application determinations and to examine applicants for licensing, and to investigate matters

brought to the board. It shall consist of five members qualified by experience and training to pass upon matters pertaining to mechanical design, construction, and maintenance and the public health aspects of mechanical systems referenced in the *International Mechanical Code* and the *International Fuel Gas Code*. Members shall be appointed by the mayor with the advice and consent of the council and shall hold office for a term of three years. The board shall adopt rules and procedures for conducting its business. All decisions and findings shall be provided in writing to the appellant with a duplicate copy provided to the building services division.~~Applications for appeal. A person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.~~

[A] 109.1.1 Limitation of authority. The mechanical board of appeals and examiners shall not have authority relative to interpretation of the administration of this code nor shall such board be empowered to waive requirements of this code.

~~[A] 109.2 Membership of board. The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years; one for 4 years; one for 3 years; one for 2 years; and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed. Not adopted by the city.~~

~~[A] 109.2.1 Qualifications. The board of appeals shall consist of five individuals, one from each of the following professions or disciplines:~~

~~6. — Registered design professional who is a registered architect; or a builder or superintendent of building construction with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.~~

~~7. — Registered design professional with structural engineering or architectural experience.~~

~~8. — Registered design professional with mechanical and plumbing engineering experience; or a mechanical contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.~~

~~9. — Registered design professional with electrical engineering experience; or an electrical contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.~~

~~10. Registered design professional with fire protection engineering experience; or a fire protection contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work. Not adopted by the city.~~

~~[A] 109.2.2 Alternate members. The chief appointing authority shall appoint two alternate members who shall be called by the board chairman to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for~~

~~board membership and shall be appointed for 5 years, or until a successor has been appointed.~~
~~Not adopted by the city.~~

[A] **109.2.3 Chairman.** ~~The board shall annually select one of its members to serve as chairman.~~
~~Not adopted by the city.~~

[A] **109.2.4 Disqualification of member.** ~~A member shall not hear an appeal in which that member has a professional or financial interest.~~
~~Not adopted by the city.~~

[A] **109.2.5 Secretary.** ~~The chief administrative officer shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer.~~
~~Not adopted by the city.~~

[A] **109.2.6 Compensation of members.** ~~Compensation of members shall be determined by law.~~
~~Not adopted by the city.~~

[A] **109.3 Notice of meeting.** ~~The board shall meet upon notice from the chairman within 10 days of the filing of an appeal, or at stated periodic meetings.~~
~~Not adopted by the city.~~

[A] **109.4 Open hearing.** ~~Hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.~~
~~Not adopted by the city.~~

[A] **109.4.1 Procedure.** ~~The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.~~
~~Not adopted by the city.~~

[A] **109.5 Postponed hearing.** ~~When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.~~
~~Not adopted by the city.~~

[A] **109.6 Board decision.** ~~The board shall modify or reverse the decision of the code of vote of three members.~~
~~Not adopted by the city.~~

[A] **109.6.1 Resolution.** ~~The decision of the board shall be by resolution. Certified copies shall be furnished to the appellant and to the code official.~~
~~Not adopted by the city.~~

[A] **109.6.2 Administration.** ~~The code official shall take immediate action in accordance with the decision of the board.~~
~~Not adopted by the city.~~

[A] **109.7 Court review.** ~~Any person whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.~~
~~Not adopted by the city.~~

Commentary: Whereas the primary purpose of the Mechanical Board of Appeals and Examiners is to review interpretations of the Mechanical Code Official, these modifications

include the additional responsibilities of the Board, which relates to review of ordinances and review of mechanical licensure. The purpose of the Board is to review technical determinations by the Mechanical Code Official, not administrative provisions. This also clarifies that the members are appointed by the Mayor with the advice and consent of the Council and that any findings are referred to the appellant in writing. Those sections that are not adopted are defined in the rules and procedures approved by the Board. This maintains the symmetry to the IBC, IRC and the IEBC.

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined *International Building Code, International Residential Code, International Existing Building Code, NFPA 70, International Fire Code, International Fuel Gas Code* or the *International Uniform Plumbing Code*, such terms shall have meanings ascribed to them as in those codes.

Commentary: This section references those codes that are adopted accessory to the mechanical code, including the International Residential Code and the International Existing Building Code. Because the City does not utilize the International Plumbing Code the references are eliminated and instead simply refer to the plumbing ordinance, which adopts the Uniform Plumbing Code mandated by the State Plumbing Commission.

Section 202—General Definitions. Add the following definition:

STRICT LIABILITY OFFENSE. An offense in which the prosecution in a legal proceeding is not required to prove criminal intent as a part of its case. It is enough to prove that the defendant either did an act which was prohibited or failed to do an act which the defendant was legally required to do.

Commentary: This term brings the code in line with the current legal terminology used in other codes with regard to the prosecution of violations. With this term, the prosecutor is not required to prove that code violations were intended by a defendant or were even due to negligence. It is difficult to prove such intentions or negligence in a court of law. This provision is located only in the Property Maintenance Code but is inserted into all of the adopted Building Services codes.

301.6 Plumbing connections. Potable water supply and building drainage system connections to appliances regulated by this code shall be in accordance with the *International Plumbing Code*.

Commentary: The State Plumbing Commission mandates the use of the Uniform Plumbing Code which the City adopts in lieu of the International Plumbing Code the IFGC references.

304.6 Outdoor combustion air. Outdoor *combustion air* shall be provided through opening(s) to the outdoors in accordance with Section 304.6.1, ~~or~~ 304.6.2 or 304.6.3. The minimum dimension of air openings shall be not less than 3 inches (76 mm).

304.6.3 Alternate combustion air sizing (IFGC). As an alternate, the net free area of openings, ducts, or plenums supplying air to an area containing gas- and oil-burning appliances shall be in accordance with B149.1-10, Natural Gas and Propane Installation Code, published by the Canadian Standards Association (CSA).

The combustion air duct is required to be upsized one diameter size when a dryer is installed in the same room as the combustion air.

Commentary: These provisions locally accept a Canadian Standard for the design, sizing, and installation of combustion air serving fuel-fired appliances which provides for more flexibility than the IFGC.

305.1 General. *Equipment* and appliances shall be installed as required by the terms of their approval, in accordance with the conditions of listing, the manufacturer's instructions and this code. Manufacturers' installation instructions shall be available on the job site at the time of inspection. Where a code provision is less restrictive than the conditions of the listing of the *equipment* or *appliance* or the manufacturer's installation instructions, the conditions of the listing and the manufacturer's installation instructions shall apply.

After completion of the installation, all safety and operating controls and venting shall be tested before placing the burner in service in accordance with the manufacturer's installation instructions. The following requirements need to be recorded and affixed to the inside of the gas train access panel:

1. The rate of flow of the gas or fuel shall be adjusted to within plus or minus 5 percent of the required Btu/hr rating at the manifold pressure specified by the manufacturer. When the prevailing pressure is less than the manifold pressure specified, the rates shall be adjusted at the prevailing pressure.
2. The gas inlet pressure per the manufacturer's installation settings.
3. The temperature rise across the heat exchanger per the manufacturer's installation settings.
4. The static pressure of the supply and return ducts per the manufacturer's installation settings.

Unlisted appliances *approved* in accordance with Section 301.3 shall be limited to uses recommended by the manufacturer and shall be installed in accordance with the manufacturer's instructions, the provisions of this code and the requirements determined by the code official.

Commentary: This is a requirement to ensure that all gas appliances are installed per the manufacturer's installation settings, specifically to require the installer to follow start-up procedures.

[M] 306.2 Appliances in rooms. Rooms containing appliances shall be provided with a door and an unobstructed passageway to the service area of the appliance measuring not less than 36 inches (914 mm) wide and 80 inches (2032 mm) high.

Exception: Within a *dwelling unit*, appliances installed in a compartment, alcove, basement or similar space shall be provided with *access* by an opening or door and an unobstructed passageway measuring not less than 24 inches (610 mm) wide and large enough to allow removal of the largest *appliance* in the space, provided that a level service space of not less

than 30 inches (762 mm) deep and the height of the *appliance*, but not less than 30 inches (762 mm), is present at the front or service side of the *appliance* with the door open.

Commentary: This clarifies that the passageway to the appliance must extend to the actual service area of the appliance, not just to the appliance.

306.5 Equipment and appliances on roofs or elevated structures. Where *equipment* requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade or floor level to access such equipment or appliances, an interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than four units vertical in 12 units horizontal (33-percent slope). Such access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall. Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center. The uppermost rung shall be not greater than 24 inches (610 mm) below the upper edge of the roof hatch, roof or parapet, as applicable.
3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
4. There shall be not less than 18 inches (457 mm) between rails.
5. Rungs shall have a diameter not less than 0.75-inch (19.1 mm) and be capable of withstanding a 300- pound (136 kg) load.
6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot (488 kg/m²). Landing dimensions shall be not less than 18 inches (457 mm) and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing.
7. Climbing clearance. The distance from the centerline of the rungs to the nearest permanent object on the climbing side of the ladder shall be not less than 30 inches (762 mm) measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches (381 mm) shall be provided on both sides of the ladder measured from the midpoint of and parallel with the rungs except where cages or wells are installed.
8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches (762 mm) by 30 inches (762 mm) centered in front of the ladder.
9. Ladders shall be protected against corrosion by *approved* means.

10. Access to ladders shall be provided at all times.
11. Exterior access may be by means of a ladder which need not extend closer than 8 feet (2,438 mm) to finished grade.
12. When a new hatch is being used to access equipment or appliances on a roof or elevated structure, the handle or release must be on the same side of the roof hatch as the ladder or within 18 inches of the ladder.

Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

Exception: This section shall not apply to Group R-3 occupancies.

Commentary: *This has been modified for the safety of personnel to gain access to the roof. Item 11 carries over a provision to not require a ladder to extend to grade for security purposes. Item 12 prevents a ladder to terminate at the hinge side of the hatch.*

[M] 306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope of greater than 3 units vertical in 12 units horizontal (25-percent slope) ~~or greater~~ and having an edge more than 30 inches (762 mm) above grade at such edge, a level platform shall be provided on each side of the *appliance* or *equipment* to which *access* is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*. *Access* shall not require walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Where *access* involves obstructions greater than 30 inches (762 mm) in height, such obstructions shall be provided with ladders installed in accordance with Section 306.5 or stairways installed in accordance with the requirements specified in the *International Building Code* in the path of travel to and from appliances, fans or *equipment* requiring service.

Commentary: *This was added to maintain consistency between the IMC and the IFGC.*

[M] 306.6 Guards. Guards shall be provided where various components that require service and roof hatch openings are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of components that require service. The top of the guard shall be located not less than 42 inches (1067 mm) above the elevated surface adjacent to the guard. The guard shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*.

Exception: ~~Guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire lifetime of the roof covering. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center~~

along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of walking surfaces.

Commentary: *The exception would allow fall restraint/anchorage connector devices as an alternate to a guard. The Mechanical Boards consensus was that such fall restraint devices are impractical use at rooftop HVAC equipment and that the nature of the servicing makes it impractical to utilize a restraining harness.*

404.3 Prohibited locations. *Piping* shall not be installed in or through a ducted supply, return or exhaust, or a clothes chute, chimney or gas vent, dumbwaiter or elevator shaft. ~~*Piping installed downstream of the point of delivery shall not extend through any townhouse unit other than the unit served by such piping.*~~

Commentary: *This modification again eliminates the differences between the IFGC and the Plumbing Code as it relates to gas piping installed in town house units.*

§ 150.033 DEFINITIONS.

For the purposes of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

EMPLOYEE. A person whose compensation for mechanical work is reported by the employer on an Internal Revenue Service W-2 form, and is also otherwise considered an employee under applicable laws.

FIREPLACE CONTRACTOR. A person who has the necessary qualification, training, experience, and technical knowledge to properly plan, layout and install fireplaces.

FIREPLACE WORK. Includes all masonry fireplaces, factory built fireplaces, pellet or grain fuel burning appliances, fireplace stoves and room heaters, decorative appliances for installation in fireplaces, vented gas fireplaces, vented gas fireplace heaters and factory built barbeque appliances.

INACTIVE MASTER MECHANIC. A person who is licensed by the city as a master mechanic, but is not designated as a master mechanic for a mechanical contractor and who may be issued upon request an inactive mechanical contractors license.

INACTIVE REFRIGERATION MECHANIC. A person who is licensed by the city as a refrigeration mechanic, but is not designated as a refrigeration mechanic for a refrigeration contractor and who may be issued upon request an inactive refrigeration contractors license.

MASTER MECHANIC. A person who has the necessary qualifications, training, experience and technical knowledge to properly plan, layout and install heating, ventilation, air-conditioning, refrigeration and fireplace systems or equipment and who is licensed by the city.

MECHANICAL CONTRACTOR. A person who undertakes or offers to undertake, to plan for, layout or install or make additions, alterations or repairs in the installation of heating, ventilating, air-conditioning or refrigeration systems or equipment with or without compensation and who is

licensed by the city. A mechanical contractor's license does not, of itself, qualify its holder to perform or supervise mechanical work.

MECHANICAL WORK. All installation, alteration, repair, replacement and maintenance of heating, ventilation, air-conditioning, refrigeration, and fireplace systems or equipment.

OWNER. A natural person who physically performs mechanical work on the premises the person owns and actually occupies as a resident or owns and will occupy as a residence upon completion of the construction.

PERSONAL SUPERVISION. That a master mechanic [or refrigeration mechanic](#) oversees and directs the mechanical [or refrigeration](#) work performed by employee(s) so that:

- (1) The master mechanic is immediately available to the employee(s); and
- (2) The master mechanic [or refrigeration mechanic](#) is able to and does determine that all mechanical [or refrigeration](#) work performed by the employee(s) is performed in compliance with this chapter and any other ordinance regulating mechanical [or refrigeration](#) installations.

REFRIGERATION CONTRACTOR. A person who has the necessary qualifications, training, experience and technical knowledge to properly plan, layout, and install refrigeration systems or equipment and is licensed by the city.

REFRIGERATION MECHANIC. A person who has the necessary qualifications, training, experience, and technical knowledge to properly plan, layout, and install refrigeration systems or equipment and who is licensed by the city.

REFRIGERATION WORK. Include all cooling systems or equipment that will be used for other than human comfort.

§ 150.034 LICENSE REQUIRED.

- (a) *Mechanical contractor.* Except as otherwise provided herein, no person other than an employee, partner or officer of a licensed mechanical contractor shall undertake or offer to undertake mechanical work with or without compensation unless the person obtains a mechanical contractor's license from the city. A mechanical contractor's license does not of itself qualify its holder to perform or supervise mechanical work.
- (b) *Refrigeration contractor.* Except as otherwise provided herein, no person other than an employee, partner or officer of a licensed refrigeration contractor shall undertake or offer to undertake refrigeration work with or without compensation unless the person obtains a refrigeration contractor's license from the city.
- (c) *Fireplace contractor.*
 - (1) Except as otherwise provided herein, no person other than an employee, partner or officer of a licensed fireplace contractor shall undertake or offer to undertake fireplace

work with or without compensation unless the person obtains a fireplace contractor's license from the city.

- (2) Exception: A licensed residential contractor that installs fireplace equipment and obtains a building permit and required inspections from the mechanical inspection division.
- (d) *Master mechanic.* Except as otherwise provided herein, no person shall supervise the planning, layout and installation of heating, ventilation and air conditioning, refrigeration and fireplace systems, or equipment unless that person obtains a master mechanic license from the city.
- (e) *Inactive master mechanic.* Existing master mechanics, after paying the appropriate fee, may be issued an inactive mechanical contractor's license. At that time as a person holding an inactive license desires to change to an active contractor's license, that person shall pay the appropriate for the license.
- (f) *Refrigeration Mechanic.* Except as otherwise provided herein, no person shall supervise the planning, layout and installation of refrigeration systems, or equipment unless that person obtains a refrigeration mechanic license from the city.

§ 150.035 EMPLOYMENT OF MASTER MECHANIC.

- (a) *Licensed master mechanic.* No mechanical contractor shall engage in the business of mechanical work unless the mechanical contractor employs a licensed master mechanic, who shall be responsible for the proper performance and personal supervision of all mechanical work in accordance with this chapter or any order issued under this chapter. All requests for inspections shall be the responsibility of the designated responsible master mechanic of record.
- (b) *Licensed refrigeration mechanic.* No refrigeration contractor shall engage in the business of refrigeration work unless the refrigeration contractor employs a licensed refrigeration mechanic, who shall be responsible for the proper performance and personal supervision of all refrigeration work in accordance with this chapter or any order issued under this chapter. All requests for inspections shall be the responsibility of the designated responsible refrigeration mechanic of record.
- (c) *Experience required for testing.* An applicant for a master mechanic license shall show evidence of four years of experience as a sheet metal mechanic, refrigeration technician, general manager, project manager or engineer in the employ of a licensed mechanical contractor. During this four-year period, the applicant must have spent at least 2,000 hours per year working as a sheet metal mechanic, refrigeration technician, general manager or an engineer.
 - (1) *Trade school credit.* Graduates of an accredited trade school having at least a one-year program in sheet metal or refrigeration will be given one-half year of experience credit for each year of relevant schooling up to a maximum of one year of experience credit.

- (2) *College credit.* Graduates of an accredited college or university having a four-year program in engineering or construction management will be given one-quarter for each year of relevant schooling up to a maximum of one year of experience credit.
- (3) *Military credit.* Credit for military sheet metal, refrigeration, mechanical construction management, or engineering work will be given at the rate of one year credit for each two years in the military up to a maximum of two years credit.
- (d) *Out-of-city applicants.* Applicants for a master mechanic license from out-of-city may take the examination upon showing affidavits of the same qualifications in the municipality or state from which the applicant resides that are required for applicants from in-city.
- (e) *Application.* Applications for testing shall be made on forms furnished by the code official.
- (f) *Approval and investigation.* If the code official finds the applicant has the required experience, the individual may be tested. The code official may investigate the individual's experience and the applicant shall cooperate fully with the investigation. Failure to provide information or records related to applicant experience shall be grounds for denial of the application.
- (g) *Denial and appeal.* The code official shall notify in writing any applicant whose application for testing has been refused. The notice shall clearly state the reason for refusal and a statement of the applicant's right to appeal. An applicant whose application for testing is refused may appeal the decision to the mechanical board of appeals. The decision of the board or the hearing examiner is subject to judicial review as provided by law.

§ 150.036 TERMINATION OF MASTER MECHANIC OR REFRIGERATION MECHANIC.

In the case of termination of the designated master mechanic or refrigeration mechanic a mechanical contractor or refrigeration contractor may be issued a temporary license permitting the firm, partnership, or corporation to continue mechanical work for 90 days provided that a bond required in § 150.038 has been filed. No new permits may be issued until a new master mechanic has been licensed.

§ 150.037 LICENSE USE RESTRICTED.

No licensed mechanical contractor, refrigeration, or fireplace contractor shall allow his or her name to be used by any other person directly or indirectly, either to obtain a permit for the installation of any heating, ventilating, air-conditioning, refrigeration or fireplace equipment or to install any system or equipment.

§ 150.038 BOND REQUIRED.

- (a) As a condition of the license, each mechanical, refrigeration or fireplace contractor shall give and maintain a surety bond in the penal sum of \$10,000 in a form approved by the city. The bond shall be conditioned upon the faithful and lawful performance of all mechanical work, refrigeration work or fireplace work entered upon by the contractor within the city

and for compliance with all the provisions of ~~the~~ this chapter. The bond shall be in lieu of all other license bonds to any political subdivision or government agency. The bond shall be written by a corporate surety licensed to do business in the state.

- (b) Claims upon the bond may be filed by any person damaged by reason of the principal's failure to perform his or her obligation under the bond.
- (c) Suspension or revocation of the license of the principal shall not by itself affect the liability of either the principal or the surety on the bond.

§ 150.039 VEHICLE IDENTIFICATION.

Any vehicle used by a contractor while performing mechanical, refrigeration or fireplace work for which a license is required shall have the contractor's business name and city license numbers as they appear on the license in contrasting color with characters one and one-half inches high by one and one-half inches wide affixed to each side of the vehicle.

§ 150.040 LICENSE APPLICATION.

Any person desiring to engage in the business of mechanical, refrigeration or fireplace contracting or a master mechanic shall first make an application for a license therefor to the administrative authority on forms furnished.

§ 150.041 LICENSE TERM AND RENEWAL.

- (a) All licenses issued under the provisions of this chapter shall expire biennially beginning on December 31, 1995. All renewal fees shall be paid prior to the expiration of the license.
- (b) Any person who shall fail to renew a license within 60 days after it has lapsed shall pay in addition to the ~~license-renewal~~ fee a reinstatement fee equal to 50% of the renewal fee.
- (c) Licenses not renewed within one year of the date of expiration shall not be renewed until the applicant has submitted and passed the examination and paid all fees required for a new license.

§ 150.042 EXAMINATION.

- (a) Before a master mechanic license or refrigeration ~~contractor-mechanic~~ license shall be issued, the applicant shall be required to submit to and pass an examination as to his or her qualifications and fitness to install heating, ventilating and air-conditioning or refrigeration equipment as applicable. The examination shall be given under the direction of the mechanical ~~board of appeals and examiners~~ inspection manager. Any applicant who fails to pass the examination shall not be eligible to take another examination until at least 30 days have elapsed from the date of the last examination.
- (b) Applications for examinations shall be made at least one week prior to the examination date. The examination must be completed within ~~90~~ 120 days of the application submittal

date. Failure to complete the examination within ~~90~~120 days shall result in the forfeiture of the examination application fee and the application will be deemed null and void.

- (c) After passing the examination, applicants shall secure the license within 90 days from the examination date.

§ 150.043 INSTALLATION BY OWNER.

- (a) Owners may install heating, ventilating, air-conditioning equipment or fireplaces in a single-family residence which they occupy as their own home or will occupy as their own home. All equipment installed by the owner shall be for themselves without compensation or pay from or to any other persons for the labor or installation. The installation by owner shall comply with the requirements of this Code. The owner shall be required to file plans, apply for and secure a permit, pay fees, and call for all inspections in the manner provided in this Code.
- (b) After the work has been commenced, the owner shall make arrangements for the mechanical inspector to inspect the installation. Failure to arrange for an inspection shall cause the permit to expire by limitation and become null and void and the work shall be presumed unsafe in accordance with § [108.7](#) of the International Mechanical Code.
- (c) All homeowner permits shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the permit is commenced for a period of 180 days, and all work which has not received a final inspection shall be presumed unsafe in accordance with § [108.7](#) of the *International Mechanical Code*.

§ 150.044 SUSPENSION OR REVOCATION OF LICENSE.

The chief building ~~services~~ official may suspend, revoke or refuse to renew a license if he or she finds:

- (a) In his or her discretion that the order is in the public interest;
- (b) Based upon substantial evidence presented, the applicant or licensee:
 - (1) Has violated any applicable provision of this ode, city ordinance, rule, regulation or state law;
 - (2) Has engaged in any fraudulent, deceptive or dishonest act or practice;
 - (3) Has filed an application for a license which is incomplete in any material respect or contains statements which are false or misleading;
 - (4) Fails to file with the chief building ~~services~~ official the necessary bonds or certificate of insurance;

- (5) Fails to provide copies of records in the person's possession related to a matter under investigation;
- (6) Fails to pay inspection and permit fees in a timely manner as determined by the chief building ~~services~~-official;
- (7) Fails to respond to a lawful order of the building official; and
- (8) Fails to employ a master mechanic or refrigeration mechanic.

§ 150.045 ADMINISTRATIVE APPEAL OF LICENSE SUSPENSION, REVOCATION OR REFUSAL TO RENEW.

- (a) A party whose license is suspended, revoked, or refused renewal may appeal that decision to the mechanical board of appeals and examiners.
- (b) Appeals shall be commenced by filing a written appeal with the department within ten days of the decision. The appeal shall include a statement of the action complained of, why the same should be modified or rescinded, whether the appellant desires an open or closed hearing, and an address where the appellant can be mailed notice of hearing. The department shall immediately deliver a copy of the appeal to the city attorney who will act as legal counsel.

§ 150.046 TIME OF HEARING AND NOTICE.

A public hearing, or a closed hearing if the board determines it is necessary, shall be held on all appeals within 15 working days after the filing of the appeal, unless a later date is agreed upon by the appellant and the board. The department shall cause written notice of the date, time and place of the hearing to be served upon the appellant by personal service or certified mail to the address set forth in the appeal at least five days before the hearing date.

§ 150.047 HEARING PROCEDURES.

The following rules shall govern the procedures for an administrative hearing on matters concerning license suspension, revocation or refusal to renew.

- (a) Hearings and administrative appeals need not be conducted according to the technical rules relating to evidence and witnesses.
- (b) Oral evidence shall be taken only on oath or affirmation.
- (c) The chairperson of the board or the board recorder shall administer oaths or affirmations to witnesses.
- (d) Any relevant evidence shall be admitted if it is the type of evidence upon which reasonable persons are accustomed to rely in the conduct of serious affairs, regardless of the existence of any common law or statutory rule which might make improper the admission of the evidence after objection in civil actions in courts of competent jurisdiction in this state.

- (e) Irrelevant and unduly repetitious evidence and evidence that lacks trustworthiness shall be excluded.
- (f) The appellant, the major organization unit or agency, and any other party to an appeal shall have these rights among others:
 - (1) To call and examine witnesses on any matter relevant to the issue of the hearing;
 - (2) To introduce documentary and physical evidence;
 - (3) To cross-examine opposing witnesses on any matter relevant to the issues of the hearing; and
 - (4) To rebut evidence.
- (g) After each appeal hearing, the board or hearing examiner shall perform the following:
 - (1) Make written findings of fact; and
 - (2) Based upon the written findings, sustain, remand for further hearing or action, or rescind the complained action or decision. The board may in its discretion waive the payment of any reinstatement or late penalty fee.
- (h) A written report of the decision, including the findings of fact, shall be furnished to the appellant and the chief building ~~services~~ official within 15 working days from the date the appeal hearing is closed. The city and the appellant shall bear their own respective costs of the appeal proceeding. The decision of the board shall be final.

§ 150.048 APPEAL TO CIRCUIT COURT.

The decision of the board or the hearing examiner is subject to judicial review as provided by law.