ORDINANCE NO. 683

AN ORDINANCE ADOPTING A CODE TO BE KNOWN AS THE "MESQUITE AIR CONDITIONING AND VENTILATING CODE" WHICH PROVIDES FOR CERTAIN MINIMUM STANDARDS, PROVISIONS AND REQUIREMENTS FOR SAFE AND SUITABLE DESIGN, MATERIALS AND METHODS OF INSTALLATION FOR HEATING, AIR CONDITIONING, REFRIGERATION, VENTILATING AND EVAPORATIVE COOLING HEREAFTER INSTALLED, CONSTRUCTED, ENLARGED, ALTERED, MOVED, MAINTAINED OR REPAIRED IN THE CITY OF MESQUITE, TEXAS, TO SAFEGUARD THE LIFE AND PROPERTY OF THE INHABITANTS OF SAID CITY OF MESQUITE; PROVIDING FOR A PENALTY; AND PROVIDING FOR THE EFFECTIVE DATE OF THIS ORDINANCE.

WHEREAS, at the present time there are no adequate provisions and requirements regulating the design, materials and methods of installation for heating, air conditioning, refrigeration, ventilating and evaporative cooling units installed and maintained in the City of Mesquite, and the Governing Body of the City of Mesquite is of the opinion that specific provisions and requirements should be adopted in order to safeguard life and property of the inhabitants of the City of Mesquite, NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MESQUITE:

SECTION 1. That there be and is hereby adopted a Code to be known as the "Mesquite Air Conditioning and Ventilating Code" which shall read as follows:

HEATING AND AIR CONDITIONING
PART I
ADMINISTRATION AND ENFORCEMENT
CHAPTER I
ADMINISTRATION

Section I Title.

This ordinance shall be known as the "Mesquite Air Conditioning and Ventilating Code," may be cited as such, and will be referred to in this ordinance as "this Code".

Section II Purpose and Intent.

(a) The purpose and intent of this Code is to provide certain minimum standards, provisions and requirements for safe and suitable design, materials, and methods of installation for heating, air conditioning, refrigeration, ventilating, and evaporative cooling hereafter installed, constructed, enlarged, altered, moved, maintained or repaired in the City of Mesquite, Texas.

(b) Further, it is the intent of this Code to assure that heating, air conditioning, refrigeration, ventilation and evaporative cooling be maintained in a mechanically workable and safe condition, and shall not become a nuisance or menace to health, life or welfare.

(c) This Code is hereby declared to be remedial and shall be construed to secure the beneficial interests and purposes thereof, which are health, safety, and welfare through adequate design and provisions for safety to life and property from hazards incident to the installation and use of heating, air conditioning, refrigeration, ventilation, and evaporative cooling.

Section III Scope.

(a) The scope of this Code is to provide reasonable minimum requirements for safety to life and property.

(b) New heating, air conditioning, refrigeration, ventilation and evaporative cooling hereafter installed shall conform to the requirements of this Code.

(c) Existing heating, air conditioning, refrigeration, ventilating, and evaporative cooling, now installed shall be maintained in a mechanically workable and safe condition in accordance with the requirements of this Code.

(d) All heating, air conditioning, refrigeration, ventilating and evaporative cooling installations shall be done in an approved mechanical manner and under the authority of permits as provided in this Code.

(e) The provisions of this Code shall apply to refrigeration systems employing a fluid which is vaporized and liquefied in its refrigerating cycle, which may be used for the extraction of heat, including the cooling and dehumidification of air for comfort and industrial purposes, but shall not include the preparation and preservation of food or mechanical refrigeration used as an aid to or a part in a chemical process within a manufacturing plant.

Section IV Structures and Premises Affected.

The provisions of this Code shall apply with equal force to all installations, and all premises, whether public or private within the corporate limits of the City of Mesquite and shall also apply to installations in buildings, structures, and/or premises located outside the corporate limits when connected to the water or sewage system of the Mesquite City Waterworks. Premises, the title of which is vested in the United States Government, are exempt from this Code. The various agencies of the City of Mesquite and the State of Texas shall be subject to the provisions of this Code insofar as the same may be applicable, but shall be exempt from the payment of fees as provided herein.

Section V Responsibility for Safe Work.

This Code shall not be construed to relieve from or lessen the responsibility or liability of any person, firm or corporation owning, operating, controlling or installing any heating, air conditioning, refrigeration, ventilating or evaporative cooling for damages to persons or property caused by any defect therein, nor shall the City of Mesquite be held as assuming any such responsibility or liability by reason of the inspection or reinspection authorized herein; or the issuance of the "Certificate of Approval" as herein provided; or by reason of the approval or disapproval of any installation.

Section VI Other Laws and Ordinances.

The provisions of this Code shall not be construed to waive or set aside existing ordinances of the City of Mesquite and County of Dallas or any law of the State of Texas.

CHAPTER II
PERMIT AND INSPECTION REQUIREMENTS

Section VII Permits Required.

(a) It shall be unlawful for any person, firm or corporation to commence, begin, or proceed with the erection, construction, enlargement, extension, improvement, alteration, or conversion of any part of an Air Conditioning or Ventilating System, or cause the same to be done until a permit has been obtained, as herein provided, from the office of the Division of Building Inspection.

(b) The payment of Air Condition and Ventilating permit inspection fees and/or the issuance of an Air Conditioning permit and the making of the required inspections shall not waive the requirements of other ordinances which require permits and/or inspection fees, but such permit shall be obtained and such inspection fees shall be paid in addition thereto.

(c) It shall be unlawful for any person, firm or corporation to lend, rent or transfer an air conditioning permit or permit a person to do the work or for any person to make use of any such permit which is not actually his own, and any such permit obtained under these conditions is hereby declared to be null and void.

(d) The term "unlawful" as used in this Section shall mean unlawful insofar as the City of Mesquite has lawful jurisdiction within its police powers.

(e) In case any work is begun for which a permit is required, and without such permit being first obtained, or if the installation is made in violation of the Code, the Inspector is empowered to stop further work at once and order all persons engaged therein to cease and desist therefrom until the proper permit is obtained and the work is made to comply with this Code. Such action shall not defer any other penalties which may be applicable under this Code.

Section VIII Other Requirements.

(a) Water, sewer and gas service connections shall be made by a licensed plumbing contractor, as required in the "Mesquite Plumbing Code", after the obtaining of proper permits.

(b) Electrical service connections shall be made by a licensed Electrical Contractor, as required in the"Mesquite Electrical Code", after the obtaining of proper permits.

Section IX Air Conditioning for which Permits are not Required.

No Air Conditioning permit shall be required for the following:

1. Work involved in the setting up for display in a sales

show room of Air Conditioning, Refrigeration, Ventilation or Evaporative Cooling, except that water, sewer, gas and electrical connection, if any, shall be made as provided in Section VIII.

2. Work involved in the manufacture of Air Conditioning, Refrigeration, Ventilating or Evaporative Cooling such as repair, adjusting, or testing of same in the course of manufacture at the factory site.

3. The removal ov Air Conditioning, Refrigeration, Ventilating or Evaporative Cooling from a building or structure or portion thereof being razed, when the requirements of Section VIII have been met.

4. The maintenance, repair or replacement in like kind of any part which is or has become defective.

5. Where no structural alterations to the building are required and no duct work is installed, the installation of self-contained room air conditioning or cooling units in residential structures and connections are made through a factory installed conventional cord and plug to a properly sized existing approved circuit and outlet; drain connections are made to existing connections which have been installed by licensed plumbers; and the rating of the unit does not exceed two (2) horsepower and the size of the blower motor does not exceed one-half (½) horsepower.

Section X Application for Permits.

(a) An application for an air conditioning or a ventilating permit shall be made to the office of the Public Works Department by the contractor who proposed to do the work. Such application shall describe the work to be done and be accompanied by plans in duplicate and such other details describing the installation as may by required. Computations and other data sufficient to show the correctness of the design shall accompany the drawings when required. Manufacturer's specification sheets and data shall be furnished when requested. All plans shall be signed by the designer and plans involving systems of fifteen (15) tons or more capacity shall bear the seal and license number of the designing engineer.

(b) The application shall show the contractor's name, address, and such other information as may be required to determine that an installation will be installed in conformity with the requirement of this Code.

(c) When, in the course of the work, it is found necessary or desirable to make a change from approved plans, amended plans shall be submitted to the office of the Public Works Department and a supplementary permit shall be obtained to cover such changes.

Section XI Records.

The Public Works Department shall keep for a reasonable time a record of all Air Conditioning or Ventilating permits issued and inspections made.

Section XII Approval of Application

The application, with two (2) sets of plans and such other information as may be required, shall be examined by the Building Inspector, and, when found to comply with the Code and all other applicable ordinances, a permit shall be issued therefor upon receipt of the required inspection fee. When the permit is issued, approval shall be stamped on such plans. One approved set of plans shall be returned to the applicant, and this set shall be kept on the premises at all times while the work is in progress and shall be accessible to the Inspector. These approved plans shall not be changed, modified, or altered without written permission from the Building Inspector. The other set of approved plans shall be retained in the office of the Public Works Department as a public record.

Section XIII Issuance of Permits.

(a) Permits shall be for a specific installation, alteration, addition, or replacement of air conditioning or ventilation as herein defined within a specific single building or premises.

(b) Each specific permit issued shall expire by limitation and become null and void, if such work authorized by it has not been started within six (6) months from the date of such permit, or if the work is suspended or abandoned at any time for a period of six (6) months. Before such work is started again, a new permit shall be obtained.

(c) The issuance of a permit shall not be construed as permission to violate any of the requirements of this Code.

(d) No permit shall be issued or be valid for the installation of any air conditioning or ventilating which causes a violation of the Smoke Ordinance, Minimum Housing Ordinance, Building Code or Zoning Ordinance.

Section XIV Permit Inspection Fees.

(a) In addition to filing an application as herein provided, the applicant shall pay to the City of Mesquite a permit inspection fee which shall be calculated as follows:

1. Fees for Heating Systems. For the installation of each direct-fired unit heater, hot air furnace, or central heating plant, the permit inspection fee shall be $1.00 for each unit, with a capacity up to and including a total capacity of 100,000 BTU input rating and such fee shall be increased 25¢ per 50,000 BTU input rating or major fraction thereof in excess of such initial 100,000 BTU input rating.

2. Fees for Refrigerated Air Systems. For the installation of each refrigerated air system, the permit inspection fee shall be $1.00 for each unit with a capacity up to and including a total capacity of 3 tons (36,000 BTU) rating and such fee shall be increased 25¢ per ton rating or major fraction thereof in excess of such initial 3 ton capacity.

3. Fees for Ventilating Systems. For the installation of each blower or fan system, the permit inspection fee shall be $1.00 for each system plus 50¢ for each remote air outlet or inlet supplied by a duct.

4. Fees for Combination Systems. For the installation of each system with both heating and cooling, the permit inspection fee shall be determined for each and fee paid for the combined total.

(b) In case any work for which a permit is required by this Code is started prior to obtaining said permit, the fee above specified shall be doubled. The payment of such doubled fee shall not relieve any person from fully complying with the requirements of this Code in the execution of work nor from other penalties prescribed herein.

(c) No permit fee shall be required for air conditioning or ventilating as defined herein when installed or repaired in any building, or on any premises, the title to which is directly vested in the State of Texas, County of Dallas or the City of Mesquite, Mesquite Independent School District or any church. When a request for such permit is made, this exemption shall be claimed in writing.

Section XV Revocation of Permits.
The Building Inspector is authorized to revoke any permit obtained by fraud, misrepresentation, or in any way contrary to the requirements of this Code.

CHAPTER III

ENFORCEMENT

Section XVI General.
The administration and enforcement of this Code is hereby assigned to and shall be the responsibility of the Department of Public Works of the City of Mesquite.

Section XVII Authority of Inspectors.
(a) Inspectors are hereby invested with the power and full police authority in enforcing this Code, and shall have the full power to make, or cause to be made, arrests of any persons violating the provisions of this Code.

(b) Whenever Inspectors shall call upon the Police Department for aid and assistance in making an arrest or stopping work, they shall have the authority to do so, and it shall be the duty of each member of the police department to act immediately in giving the assistance.

Section XVIII Service of Notice.
When any order or notice is issued pursuant to the provisions of this Code to any person who cannot be found after reasonable search, then such order or notice may be served by posting it in a conspicious place upon the premises occupied by him or upon the premises where the defects are alleged to exist. Such posting of the order or notice shall be considered equivalent to personal service of such order or notice. An order or notice sent by certified mail in a sealed envelope with postage prepaid and directed to the last known address of the Air Conditioning Contractor, Owner, Lessee, or the Occupant of the premises shall be equivalent to personal service of such order or notice.

CHAPTER IV

INSPECTION, APPROVAL, CONDEMNATION, AND VARIANCES

Section XIX General.
New air conditioning, as defined herein, or any portion of existing installations which are affected by new work or are changed, and work for which an air conditioning permit has been obtained, shall be inspected to insure compliance with the requirements of this Code, and the requested tests shall be applied.

Section XX Request for Inspection.

(a) Air Conditioning Installers shall request an inspection from the Public Works Department at least twenty-four (24) hours before the time such inspection is to be made, exclusive of Saturdays, Sundays, and holidays.

(b) The Air Conditioning Installer shall make sure that the work is ready for inspection as stated in the request mentioned above.

(c) When the Inspector finds that the work does not comply with the requirements of this Code or does not pass the required tests, corrections shall be made and the Air Conditioning Installer shall request a new inspection.

Section XXI Inspections Required.

(a) Required Inspections

All pipes and fittings, oil and gas connections, fixtures, appurtenances and devices, of appliances, heating, air conditioning, and ventilating systems shall be inspected to insure compliance with all requirements of this Code. No person shall cover up or conceal any portion of work until inspected.

(b) Inspection of Parts to be Concealed

1. In new buildings or in new additions to older buildings; immediately upon completion of those portions of the installation which are thereafter to be concealed or covered up in any heating, ventilating or air conditioning installation, the contractor shall notify the Building Inspector, in the manner herein provided, that such portions of the installation are ready for inspection. The inspector shall make the inspection and either approve that portion of the work as completed or shall notify the permit holder wherein the work fails to comply with this Code. The inspector may attach to such piping, duct or equipment a notice of inspection.

(c) Final Inspection.

The contractor shall immediately notify the Building Inspector, upon completion of the installation, that work for which the permit has been issued is ready for inspection and the Inspector shall make a final inspection for compliance with the requirements of this Code.

Equipment, materials, power and labor necessary for the required inspection shall be furnished by the contractor. When an installation is found not to be fully in compliance with the provisions of this Code, the Inspector shall give notice of the defects of deficiencies to the contractor. Where necessary, notice may be served as herein provided.

Section XXII Certificate of Approval.

(a) When the inspector finds that the installation is in conformity with the provisions of this Code, he shall issue to the person, firm or corporation making the installation a "Certificate of Approval" with duplicate copy for delivery to the owner, authorizing the use of such installation.

(b) No installation shall be placed in operation until it complies with all of the requirements of this Code and the "Certificate of Approval" in writing has been issued as provided above.

Section XXIII Inspector's Notices.

Wherever any work covered by this Code is being performed in violation of any of the provisions of this Code or any other ordinance of the City of Mesquite covering such work, the Inspector shall post a notice to stop work, signed by the Inspector, on the premises where such work is in progress and notify anyone on the premises of such Inspector's Notice. After posting of such notice it shall be unlawful for any person, firm or corporation to do, or permit to be done, any further work on such project until such time as the defects or violations of this Code have been eliminated and the work approved by the Inspector and such Inspector's Notice released in writing by him.

Section XXIV Reinspection.

When unsafe conditions are called to their attention, Inspectors shall reinspect existing installations of Air Conditioning, refrigeration, ventilating and evaporating cooling. When such equipment and/or installation is found by the Inspector to be in a dangerous or unsafe condition, the person, firm or corporation owning or having control of said installation shall be notified in writing, and shall make the necessary changes or repairs to place such installation in a reasonably safe condition according to the standards set out by this Code.

Section XXV Condemnation.

If defects or deficiencies are not remedied or abated after proper notification to the contractor or owner of the premises, the Inspector may declare such installation hazardous and unsafe and disconnect, or order same to be done, from all water, sewer, gas or electrical connections. Thereafter, it shall be unlawful for any person to cause or permit reconnection of any part of such installation to be made until such defects have been remedied and the Inspector shall have issued a "Certificate of Approval" as provided in this Code.

CHAPTER V

AIR CONDITIONING DEFINITIONS

Section XXVI General.

(a) For the purpose of this Code, certain terms, phrases, words and their derivatives which are subject to variations of meaning shall be construed as defined below, and as explained under specific sections of this Code.

(b) Words relating to buildings, structures and premises, and their use, when not otherwise separately defined, when used in this Code, shall be construed to conform to the meaning set out in the Building Code and Zoning Ordinance, if set out, and if such definition is not in express conflict with the context of this Code as written; otherwise, they shall have their usual meanings.

(c) Words related to plumbing and electrical work, as defined by the Plumbing Code and Electrical Code, when used in this Code, shall be construed to conform to the meanings set out in the Plumbing Code and Electrical Code, if set out, and if such definition is not in express conflict with the context of this Code as written; otherwise, they shall have their usual meanings.

Absorption System - is a refrigerating system in which the vapor evolved in the evaporator is absorbed in an absorber by an absorbent.

Accepted Standards - are the standards cited in this Code, but may include additional standards when approved.

Air Cleaner - is a device designed for the purpose of removing air borne impurities such as dust, gases, vapors, fumes and smoke, including air washers, air filters, electrostatic precipitators and charcoal filters.

Air Conditioning - is the process of treating air so as to control its temperature, humidity, cleanliness, or distribution to meet the requirements of the conditioned space.

Air Conditioning Appliance - is an air heating or cooling appliance permanently installed or fixed in a building or premises so constructed that heated or cooled air is distributed from such appliance without the use of ducts or pipes.

Air Conditioning Contractor - is any person, firm or corporation engaged in the business of installing, repairing, adding to, altering, servicing, replacing or removing of any heating, air conditioning, refrigeration, ventilation, or evaporative cooling as defined herein, or portion thereof.

47 Air Conditioning System - is any mechanical arrangement consisting of appliances, units, or parts from or by which heated, cooled, humidified air is distributed with a common supply or return by means of ducts, pipes or otherwise and shall include any and all accessory apparatus and equipment installed in connection therewith.

Air Washer - is a filter which employs aqueous methods for the elimination of particles from the air, humidifying or dehumidifying the air.

Blower - is a fan used to force or exhaust air under pressure into or from an area.

Brazed Joint - is a gas-tight joint, obtained by joining metal parts with alloys which melt at a temperature higher than 1,000° F., but less than the melting temperatures of the joined parts.

BTU Rating (In Heating) - is the maximum fuel input consumption capacity of a furnace, heater, or burner expressed in British Thermal Units per hour.

British Thermal Unit - is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit at initial temperature of 58° F. at 14.696 pounds per square inch atmospheric pressure.

Brine - is a saline solution used for the transmission of heat without a change in its physical state.

Central Fan System - is a mechanical, indirect system of heating, ventilating or air conditioning in which the air is treated or handled by equipment normally located outside the rooms served, usually at a central location, and is conveyed to and from the rooms by means of a fan and a system of distributing ducts.

Centrifugal Filter - is an air filter which employs mechanical methods for the elimination of particles from the air.

Chief of the Division of Building Inspection - is the chief administrative officer or his first assistant of said division.

City - is the territory within the Corporate Limits of the City of Mesquite or is the legally constituted governing body thereof, its agents and its officers, depending upon the use of the word.

City Manager - is the chief administrative and executive officer of the City.

Combustible - is a substance capable of igniting and supporting combustion when subjected to an ignition temperature of 1000° F. or less.

Compressor - is a mechanical device used in a refrigerating system for the purpose of increasing the pressure upon the refrigerant.

Condensate - is the liquid fomed by condensation of a vapor. In steam heating, water condensed from steam; in air conditioning, water extracted from the air, as by condensation on the cooling coil of a refrigeration system.

Condenser - is a vessel or arrangement of pipe or tubing in which vaporized refrigerant is liquified by the removal of heat.

Condensing Unit - is a specific refrigerating machine combination consisting of a motor driven compressor, a condenser, a liquid receiver and accessories.

Container - is a vessel for the transportation of refrigerants.

Cooling Equipment - is an equipment used for the purpose of lowering the temperature within an enclosure.

Cooling Tower - is a structure through which air is passed to affect the lowering of the temperature of a liquid by exposure to the atmosphere.

Dehumidify - is to reduce by any process the quantity of water vapor within a given space.

Designed Working Pressure - is the maximum allowable working pressure for which a vessel is designed.

Dew Point - is the temperature at which the air becomes saturated and below which point dew will form.

Dry Filter - (air filter) - is a filter which depends upon its cellular structure to screen or strain the impurities from the air.

Duct - is a tube or conduit used for conveying air.

Duct Unit - is a heating or cooling unit located in a duct, remote from the central fan, through which the air under pressure is conducted.

Evaporator - is that part of a system in which liquid refrigerant is vaporized to produce refrigeration.

Exhauster - is a fan for the withdrawing of air under suction from an area.

Expansion Coil - is an evaporator constructed of pipe or tubing.

Fan - is the assembly comprising the blades or runners and a housing or casing for the movement of air.

Filter - is a device for the removal of particles from the air.

Flue - is a passageway of incombustible construction for the purpose of carrying off the products of combustion.

Furnace.- is that part of a heating system in which combustion takes place.

Fusible Plug - is a device having a predetermined temperature fusible member for the relief of pressure.

Generator - is a device equipped with a heating element and used in the refrigerating system to increase the pressure of the refrigerant in its gas or vapor state for the purpose of liquefying the refrigerants.

Governing Body - is the City Council of the City of Mesquite, Texas.

Heating Equipment - is an appliance, vent or system to raise the temperature of gases or liquids and shall include all warm air furnaces, warm air heaters, burners, air supply and air distribution ducts and fans, together with all control devices and appurtenances installed in part thereof or in connection with any heating plant or appliance regulated by this Code.

Hot Water Heating System - is a heating system in which water is used as a medium by which is carried from the boiler or heat exchanger to the heating units.

Humidify - is to increase, by any process, the density of water vapor within a given space.

Insulation (Thermal) - is a material having a relatively high resistance to heat flow and used principally to retard the flow of heat.

Limit Control - is a device responsive to changes in pressure or temperature or liquid level for turning on or shutting off the fuel supply of an appliance at predetermined limits.

Liquid Receiver - is a vessel permanently connected to a system by inlet and outlet pipe for storage of a liquid refrigerant.

Machinery - is equipment and includes any or all of the following: compressor, condenser, generator, absorber, receiver, connecting pipe, evaporator, cooling towers, pumps or complete unit system.

Mechanical Joint - is a gas-tight joint obtained by the joining of metal parts through a positive-holding mechanical construction.

Modulating Control - is a device responsive to changes in pressure, temperature, or liquid level for controlling the rate of flow of gas, liquid, or electrical supply at predetermined quantities or sequence of operation of equipment in response to capacity increase or decrease.

Non-Positive Displacement Compressor - is a compressor in which increasing vapor pressure is attained without changing the internal volume of the compression chamber.

Owner - is any person, firm, or corporation, owning or controlling a building or premises, including a duly authorized agent or attorney, executor, administrator, guardian, conservator, or trustee.

Person - is a human being, his heirs, executors, administrators, or assigns, and, where the context permits, it also includes a firm, partnership, association, or corporation, its or their successors or assigns, or the agent of any of the aforesaid.

Piping - is a pipe or tube for interconnecting the various parts of heating or refrigeration systems.

Plenum - is an air pressure compartment or chamber to which one or more ducts are connected and which forms part of the air distribution system.

Positive Displacement Compressor - is a compressor in which increase in vapor pressure is attained by changing the internal volume of the chamber.

Prescipitator - is a filter using electrostatic means for the elimination of particles from the air.

Pressure Limiting Device - is a mechanism designed to automatically stop the operation of the system at a predetermined pressure.

Pressure Relief Device - is a valve in which a ruptured or spring controlled member automatically relieves the pressure.

Pressure Relief Valve - is a valve held closed by a spring or other means and designed to automatically relieve pressure in excess of its allowable setting.

Pressure Vessel - is a receptacle for refrigerants other than the expansion coils, headers and pipe connections.

Refrigerant - is a substance which produces a refrigerating effect by its absorption of heat while expanding or vaporizing.

Refrigeration System - is a combination of interconnected refrigerant containing parts in which a refrigerant is circulated for the purpose of extracting heat.

Rupture Member - is a device that automatically ruptures at a predetermined pressure.

Self-Contained System (Packaged Unit) - is a factory-made and factory tested system in a single frame or enclosure which is fabricated and shipped in one or more sections and in which the system may be placed in operation by making necessary power and plumbing connections only.

Shall - is a mandatory word.

Standard Atmospheric Pressure - is equivalent to 29.921 inches of mercury at 32° F.

Stop Valve - is a shut-off for controlling the flow of refrigerants.

Soldered Joint - is a gas or air tight joint obtained by joining the metal parts with metallic mixtures or alloys which melt at temperatures above 350° F. and below 1000° F.

Thermostat - is an instrument which responds to changes in temperature and which directly or indirectly controls temperature.

Ton (of refrigeration) - is the removal of heat at a rate of 12,000 BTU's per hour.

Unit Heater - is any warm air heater equipped with a fan and constructed to deliver air directly to the space in which such heater is located.

Unit System - is a self contained system which has been assembled and tested prior to its installation and which is installed without connecting any refrigerant-containing parts except factory-assembled companion or block valves.

Vapor - is the gaseous form of substances which normally are in a solid or liquid state and which change to the gaseous form either by an increase in the temperature or a decrease in the pressure.

Vent - is a passageway for the movement of air.

Ventilating Contractor - is any person, firm or corporation engaged in the business of installing, repairing, adding to, altering, servicing, replacing or removing of any ventilating system including attic fans and evaporative cooling systems as defined herein.

Ventilating System - is a system installed for the purpose of supplying air to, or removing air from, any room or space by mechanical means and which equipment is not a portion of any warm air heating system or refrigerated-air system.

Ventilation - is the process of supplying or removing air, by natural or mechanical means, to or from any space.

Viscous Filter - is an air filter using a liquid adhesive to entrap particles from the air.

Warm Air Heater - is any self-enclosed air heating appliance designed or arranged to burn liquid, gas, or solid fuel and constructed or installed to discharge heated air directly to the space in which such heater is located without the use of any duct or pipe and which appliance is connected to a flue or smoke pipe or is permanently secured or attached to a structure by any means other than by fuel pipe, water piping or electrical wiring.

Warm Air Heating System - is a heating unit (fuel-burning furnace) enclosed in a casing from which the heated air is distributed to various parts of the structure through ducts or plenum chambers.

Warm Air Heating System, Forced - is a warm air heating system in which air is circulated by a fan or blower.

Warm Air Heating System, Gravity - is a warm air heating system in which the motive head producing flow depends on the difference in weight between the heated air leaving the casing and the cooler air entering the inlet of the casing.

Warm Air Heating Unit - is any self-enclosed air heating appliance or furnace permanently secured or attached to a structure by any means other than by fuel pipe, water piping or electrical wiring. If attached to duct or plenum chambers, the whole shall be known as a warm air heating system. If provided with appurtenances to discharge heated directly to the space in which such unit is located without the use of ducts or pipe, the whole shall be known as a warm air heater.

Welded Joint - is a gas or air tight joint obtained by the fusing of metal parts in the plastic or molten state.

PART II

BASIC INSTALLATION REGULATIONS

CHAPTER VI

DUCTS

Section XXVII General.

Each duct or plenum chamber which is a portion of an air conditioning, heating or ventilating system, as defined in this Code, shall comply with the requirements as provided herein.

Section XXVIII Materials.

(a) Materials for warm air supply and/or combination heating and cooling ducts shall be constructed entirely of approved non-combustible materials equivalent in structural strength, durability and corrosion resistiveness to that shown in Table I as follows:

TABLE I

MINIMUM SHEET METAL GAUGES FOR RECTANGULAR DUCTS[a]

Aluminum B&S Gage	Steel U.S. Std. Gage	Maximum Side Inches	Type of Transverse Joint Connections[b]	Bracing
24	26	up to 12	S, Drive, Pocket or Bar Slips, on 7 ft. 10 in. centers	none
22	24	13 to 24	S, Drive, Pocket or Bar Slips, on 7 ft. 10 in. centers	none
		25 to 30	S, Drive, 1 in. Picket or 1 in. Bar Slips, on 7 ft. 10 in. centers[c]	1 X 1 X 1/8 in. angles 4 ft. from joint
		31 to 40	Drive, 1 in. pocket or 1 in. bar Slips, on 7 ft. 10 in. centers[c]	1 X 1 X 1/8 in. Angles, 4 ft. from joint
20	22	41 to 60	1½ in. angle connections, or 1½ in. pocket or 1½ in. Bar Slips with 1-3/8 in. X 1/8 in. Bar reinforcing on 7 ft. 10 in. centers[c]	1½ X 1½ X 1/8 in. angles 4 ft. from joint
18	20	61 to 90	1½ in. angle connections, or 1½ in. pocket or 1½ in. bar slips 3 ft. 9 in. maximum centers with 1-3/8 X 1/8 in. bar reinforcing	1½ X 1½ X 1/8 in. diagonal angles, or 1½X 1½ X 1/8 in. angles 2' from joint

Aluminum B&S Gage	Steel U.S. Std. Gage	Maximum Side, Inches	Type of Transverse Joint Connections[b]	Bracing
16	18	91 & up	2 in. Angle connections or 1⅓ in. pocket or 1½ in. Bar Slips 3 ft. 9 in. maximum centers with 1-3/8 X 1/8 in. bar reinforcing[d]	1½X1½X1/8 in. diagonal angles, or 1½ X 1½ X 1/8 in. angles, 2 ft. from joint

Note: Round ducts shall be constructed of the same gage metal as specified for rectangular ducts of the same cross sectional area except round ducts eight (8) inches or less in diameter may be of 28 U. S. Standard gage or equivalent.

[a]For normal pressures and velocities utilized by Typical ventilating and air conditioning systems. Where special rigidity or stiffness is required, ducts shall be constructed of metal two gages heavier. All uninsulated ducts 18 in. and larger shall be cross-broken. Cross-breaking may be omitted on uninsulated ducts if two gages of heavier metal are used.

[b]Other joint connections of equivalent mechanical strength and air tightness may be used. Acme lock-joints may be used on longitudinal joints of round ducts.

[c]Duct sections of 3 ft. 9 in. may be used with bracing angles omitted, instead of 7 ft. 10 in. lengths with joints indicated.

[d]Hanging and supporting methods of ducts 91 inches or larger shall be approved by the inspector before installation.

(b) Supply ducts where underground shall be of clay tile, concrete tile, asbestos-cement pipe, or other approved incombustible materials, other than sheet metal, except that ducts that are completely encased in not less than three (3) inches of concrete need not be of incombustible materials except where within two (2) feet of the furnace supply plenum, and where within two (2) feet of a vertical connection to a riser or register. Such ducts shall be air tight and moisture-resistant.

Section XXIX Design.

Ducts shall be designed to accomplish the unrestricted flow of air, with long sweep elbows or turning vanes. In gravity systems, all ducts shall be as direct as possible, and where approximate horizontal runs are made, no run shall, at any point, have a drop in elevation. True horizontal runs in gravity systems shall not be greater than three (3) feet and any run longer than three (3) feet shall have a pitch toward the source of supply. In residential installations the velocity of air from a supply outlet shall not exceed 800 feet per minute, and the velocity of air into a return air inlet shall not exceed 500 feet per minute. Commercial installations and high pressure duct systems shall be designed so that noise is not objectionable for the use of the premises.

Section XXX Joints and Seams.

Joints and seams of ducts shall be securely fastened and made substantially air-tight. Slip joints shall have a lap of not less than one (1) inch and shall be individually fastened with approved fastenings or sheet metal screws spaced not more than eight (8) inches on center with not less than three fastenings in each joint equally spaced. Flexible woven asbestos or other approved fire-resistive material, or sleeve joints with rope asbestos packing, or other approved non-combustible material shall be used for flexible connections.

Section XXXI Supports and Hangers.

Supports and hangers for ducts and branches shall consist of straps of heavy gauge metal securely fastened to ducts and branches with sheet metal screws, bolts or rivets and attached to joists or other framing members at intervals of not more than eight (8) feet and braced as set out in Table I. Ducts underground shall be supported at each joint from the slab above by hangers of not less than one-fourth (¼) inch bars or rods.

Section XXXII Insulation and Linings.

(a) Duct insulation and sound proof linings shall be of fire-resistive material and shall not give off pungent, toxic, or obnoxious odors or smoke in the presence of temperatures in excess of 250° F. in the duct. The requirement that linings inside air ducts be fire-resistive is intended to mean that they should be of low fire hazard, that is, be resistant to ignition and burning to a high degree. Any material listed in Underwriters' Laboratories, Inc. Fire Protection equipment List under the heading Building Materials - Hazard Classification (Fire) with a flame spread rating not higher than 50 or designated "Light" or "Negligible" shall be considered as meeting the requirement for a fire-resistive lining material.

(b) Ducts in which the surface temperature when in operation is below the dew point of the air surrounding the ducts, shall be insulated with a non-combustible and vapor-sealed material to bring the surface temperature of the duct above the dew-point of the surrounding area. The minimum thickness on heating insulation is one (1) inch, where air conditioning is being installed or anticipated two (2) inches foil or vinyl covered wrap is required.

(c) Duct insulation shall be securely fastened to ducts by means of non-combustible cement, wires, screws, or bolts or other approved method.

(d) Insulation covering access doors and openings in duct work shall be sealed-off at edges to permit removal or opening of access doors without breaking the vapor seal.

(e) Where insulated ducts or branches pass through walls or partitions the insulation shall be carried through unbroken.

Section XXXIII Clearances.

(a) Metal ducts from furnaces shall have clearances not less than the following:

1. From bare metal ducts to combustible material - not less than one (1) inch.

2. From bare metal ducts to metal lath and plaster or other non-combustible finish attached to combustible materials - not less than one (1) inch.

3. From metal ducts covered with one-half (½) inch or more of incombustible insulating material - no clearance required.

(b) That portion of ducts less than six (6) feet from the nearest edge of the furnace measured along the duct shall have clearances not less than that required for heating units, furnace bonnets and plenum chambers. Where ducts enter a floor, partition or enclosure within a horizontal distance of six (6) feet from the furnace, the ducts shall be so arranged that warm air shall travel six (6) feet or more from the closest primary heating surface before entering such floor, partition or enclosure and shall change direction equivalent to at least 90° except those units which have been approved by the American Gas Association for installation otherwise.

Pipeless furnaces may have less than the clearance specified when designed and approved for installation otherwise.

(c) Ducts which pierce floors shall be separated from all combustible materials in the floor construction by at least five-sixteenths (5/16) inch, unless the duct is of double wall construction with a continuous air space of not less than five-sixteenths (5/16) inch between the inner and outer walls. The space around the duct

where it enters the floor; whether the duct is single or double wall construction, shall be tightly filled with asbestos cement or other non-combustible insulating materials.

(d) Ducts which are enclosed in combustible partitions, walls, or concealed ceiling spaces, shall be insulated as follows:

1. Ducts shall be covered with not less than one thickness of asbestos paper weighing not less than twelve (12) pounds per hundred square feet with an air space of not less than five-sixteenths (5/16) inch between the duct and combustible material, unless a non-combustible insulating covering of cellular type at least one-fourth (1/4) inch thick is provided.

2. Or, such ducts shall be made double with a continuous air space of not less than five-sixteenths (5/16) inch between the inner and outer walls, and should be flashed at each partition.

3. Or, such ducts shall be of one-fourth (1/4) inch thick asbestos cement board or equivalent separated from combustible material by an air space of not less than one-eighth (1/8) inch.

(e) Ducts which are located in closets or other small confined spaces shall be insulated as follows:

1. The ducts shall be covered with not less than one-fourth (1/4) inch air cell asbestos or its equivalent.

2. Or, such uninsulated ducts shall be made double with a continuous air space of not less than one inch between the inner and outer walls.

3. Or, such ducts shall be made double with an air space of not less than five-sixteenths (5/16) inch between the inner and the outer walls and shall be covered with not less than one thickness of asbestos paper weighing not less than twelve (12) pounds per hundred square feet.

(f) Ducts which pass through or pierce a wall or partition of combustible construction shall be protected as provided in paragraph (e) of this Section, unless a clearance of one inch or more is provided between the duct and the combustible construction, in which case a metal thimble shall be used to provide the proper clearance, or the space shall be filled with non-combustible material and closed with a metal collar.

(g) Where the insulation of ducts requires the removal of any firestopping, the space around the ducts at points where the firestopping was removed shall be tightly filled with asbestos, mineral wool or other approved non-combustible material.

Section XXXIV Return or Cold Air Ducts.

Return ducts shall be constructed entirely of approved non-combustible materials, except as hereinafter provided. Those portions of such ducts which are closer than two (2) feet from any heating surface of the heater shall be constructed and insulated as provided for warm air ducts. Return ducts which make use of spaces between studs and walls or partitions or between joists and the floor shall be cut off from all remaining unused portions by tight fitting stops of sheet metal or of wood not less than two (2) inches thick. Crawl space under the first floor (other than basements) may be used as plenum chambers for return air from rooms directly above for gas-fired automatically controlled systems, provided that combustion air supply shall not be a part of the return air system and provided such under floor space is connected with the heater through continuous ducts and that storage closets and similar spaces are not a part of the returning system and the return inlet to the crawl-space plenum is sized so that free area velocities through grilles shall not exceed 400 feet per minute. Such crawl-space plenum shall have a vapor barrier on the ground surface equal to not less than two layers of fifteen (15) pound waterproof paper or asphalt saturated felt applied weatherboard fashion solidly mopped between each layer with hot asphalt with head-joints lapped not less than two (2) inches.

Section XXXV Volume Dampers.

Volume dampers, splitters, squeeze dampers or deflectors shall be provided in all supply ducts to permit the balancing of the air supply throughout the system. Handles of such controls shall be exposed, except where their location is clearly indicated on the exterior of insulating materials. Warm air furnace systems other than systems which are automatically fired with oil or gas and have approved temperature limit controls, shall have at least one register or grille without a closable shutter and the duct leading thereto shall have no damper; provided, however, that this requirement shall not apply to systems where dampers and shutters cannot shut off more than 80% of the duct area.

Section XXXVI Fire Dampers.

(a) Where Required.

Approved fire dampers, fire shutters or fire doors shall be provided where ducts pass through floors, wall or ceilings as follows:

1. Fire Walls.
Ducts shall not pass through required four (4) hour fire-resistive walls except where the ducts or the outlets from or inlets to them are provided with approved automatic fire doors on both sides of such walls and are provided with a collar securely fastened to the wall, so arranged that the disruption of the duct will not cause failure to protect the opening. Openings through such fire walls which do not exceed eighteen (18) inches in diameter may be provided with not less than three-eighths (3/8) inch thick steel plate fire dampers in lieu of automatic fire doors.

2. Fire-Resistive Partitions.
Where ducts pass through required one (1) hour fire resistive partitions, approved fire dampers shall be provided in the opening through such partition.

3. Fire-Resistive Floors and Ceilings.
Where duct systems serve two (2) or more floors, approved fire dampers shall be installed at each point where required fire-resistive floors or ceilings are pierced.

4. Fresh Air Intake.
Except for residential occupancies, fresh air intakes shall be protected with automatic fire doors or dampers, except where such intakes are located at least eight (8) feet above grade over public streets or alleys. Fresh air inlets shall be protected by a weather-proof hood or louvre and by substantial grilles or screens with openings in which a one-half inch sphere will not pass. No outside air intake shall be located so as to secure air from a location where flammable liquids or materials are stored or hazardous fumes are present.

5. Integral Garages.
In residential occupancies where a warm air supply is provided within an integral garage space, a separate duct shall be run directly from the heater. The duct shall beequipped with an automatic balanced back draft louvre to prevent siphoning of air from the garage space into other portions of the system.

6. Smoke Dampers.
Systems of over 15,000 cu. ft. per minute air capacity in Group A, C, and F Occupancies, as defined in Article III, Section 300.1 of the National Building Code, shall have approved smoke dampers installed in the main supply duct and main return duct. Such dampers shall be arranged to close automatically when the system is not in operation and also to close by the operation of smoke detecting apparatus or by manual emergency motor stop.

7. Fire Resistant Qualities.
It is not the intent of this Code to require any longer or greater fire-resistant qualities in fire doors or dampers in duct systems than are afforded by the walls, partitions, or floors through which such ducts pass.

8. High Velocity Ducts.
High velocity, high pressure duct systems with soldered, or approval equal, joints which have been air-pressure tested and approved may pass through floors or fire walls without being equipped with fire dampers when provided with a firestat, the location of which is to be determined by the Inspector, in both the supply and return duct so as to stop the fan system in case of fire.

(b) Construction

Fire dampers installed in the system, as required in other than fire wall openings, shall be of #16 U.S. Gauge steel or equal in ducts from nineteen (19) inches up to thirty-six (36) inches in diameter or greatest width and shall be of #7 U.S. Gauge or equal on ducts above thirty-six inches in diameter or greatest width. Multi-blade (louvered type) automatic dampers may be constructed of #18 U.S. Gauge steel or equal, provided the individual louvers are not over six (6) inches in width and are stiffened by formed edges. Dampers shall be arranged to close and lock in place automatically upon the operation of a fusible link or other approved heat actuated device located or readily affected by abnormal rise of temperature in the duct. The temperature rating of fusible links shall not exceed 50° F. above the standard ambient air temperature of the space involved. The dampers shall close in the direction of the air flow. Hand hold openings shall be provided for the inspection and servicing of fire dampers. Pins or hinges for fire doors, fire dampers and fire shutters shall be of corrosive-resistant material. Where direction of exhaust air flow is upward, sub ducts at least twenty-two (22) inches in length may be carried up inside the main duct from each inlet in lieu of dampers. No dampers are required in a system serving only one floor and used only for exhaust of air to the outside of the building except through required exterior fire walls.

Section XXXVII Grilles and Registers.

(a) The sides of boxes of grilles and registers for heating which are placed in floors or walls of combustible construction shall be covered with asbestos paper weighing not less than twelve (12) pounds per hundred square feet with an air space of not less than five-sixteenths (5/16) inch between the sides of the box and any combustible material.

(b) Warm air supply registers and grilles which are less than six (6) feet from the nearest edge of the furnace, measured along the duct, shall be provided with a double wall register box with a continuous air space of not less than one-fourth (1/4) inch between the inner and outer walls.

CHAPTER VII

COOLING TOWERS

Section XXXVIII Construction.

Water cooling towers, evaporative condensers and washers, when located upon the roofs of structures, shall be constructed as provided in Mesquite's Building Code. Detached water cooling towers, evaporative condensers and air washers shall be structurally stable and located as provided by the applicable ordinances.

Section XXXIX Connections.

Discharge water lines and water cooling towers, condensers and air washers shall be connected so as to prevent back siphonage into potable water supply lines. No water used for removing heat from a cooling or refrigerating system which is subject to contamination shall be discharged into any potable water supply. Water supply discharge or overflow piping or tubing shall be flashed where passing through roofs and shall not materially weaken the structure when carried through roofs, floors, ceilings or partitions. Float valves shall be installed with orifices above the overflow line.

CHAPTER VIII

APPLIANCES AND UNITS

Section XXXX Heating and Cooling System Units.

(a) Heating and Cooling Equipment.

Boilers, furnaces, and unit heaters shall be approved and labeled by the American Gas Association Testing Laboratories, the National Board of Fire Underwriters, or the Underwriters' Laboratories, Inc., or other approved testing laboratory for the specific purpose for which it is to be used except boilers of 4,000 sq. ft. E. D. R. (Equivalent Direct Radiation) or larger shall be constructed according to the American Society of Mechanical Engineers Pressure Vessell Code.

Furnaces, boilers, heating and cooling system units shall have attached thereto a name plate which shall contain the model number of the units, manufacturer's approved clearances and shall be installed in accordance with the terms of its approval.

Refrigerant-containing units and joints located in an air duct shall be constructed to withstand, without leakage, a temperature of 450° F.

(b) Air Cooling Equipment Installation.

Mechanical refrigeration equipment used for air cooling shall be installed so that all life, fire and explosion hazards are safeguarded in accordance with recognized good practices for such systems. Installation in accordance with the "American Standard Safety Code for Mechanical Refrigeration, A.S.A. - B 9.1-1953," shall constitute prima facie evidence of compliance.

(c) Refrigerating units, water cooled condensers, evaporative coolers and other water consuming devices shall be equipped with water conserving devices where required.

Section XXXXI Location of Appliances and Units.

(a) General.

Appliances and units shall be so located that they are readily accessible for proper operation, repair, replacement, servicing and lubrication of parts. Fans and air handling equipment connected thereto, such as washers and filters, shall be located in a room set off from other portions of the building by construction having fire-resistance rating of not less than one (1) hour where either of the following conditions prevail:

1. The main portion of the duct system served by the fan or blower passes from story to story through two (2) or more floors or building of Type A, defined in the City of Mesquite Building Code.

(b) No direct fired units shall be installed so that the top of the unit extends into an attic space.

(c) Attic Furnaces (Horizontal Type Central Heating Systems).

Attic furnaces shall be installed so as to be accessible for inspection or repair. The space in which an attic furnace is installed shall be accessible by a door or opening large enough to admit the largest portion of appliance for installation or removal and in no case smaller than twenty-four inches by twenty-four inches (24" x 24"). A passageway having solid continuous flooring at least twenty-four (24) inches wide shall be provided and maintained between the access door and the appliance, controls and valves. Electrical connections shall provide suitable light control with an accessible switch at the entrance to the attic.

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Attic furnaces shall be placed so that concentrated loads upon supporting members will not exceed that which the supporting member is designed.

(d) Roof and/or Attic Units.

Heating, cooling, and ventilating appliances located on the roof or in the attic of structures shall be accessible by means of a stairway or ladder and such ladder shall not be more than eighteen (18) feet between landings nor less than sixteen (16) inches in width with rungs spaced not more than fourteen (14) inches center to center and when used, shall be constructed as provided by the Mesquite Building Code.

(e) Unit Location.

No furnace or boiler shall be installed in a bathroom, or in any room designed for sleeping purposes, or in a private garage or public rest room, nor shall a furnace or boiler be located in a closet less than fifty square feet (50 sq.ft.) in floor area, if such closet has a door opening directly into such rooms or spaces. All boiler rooms shall have fire resistant ceilings to prevent horizontal fire travel.

Section XXXXII Air Supply for Combustion and Space Ventilation.

Except in forced ventilation systems, air supply in the ration of one (1) square inch for each one thousand (1,000) BTU input rating shall be provided for each fuel-burning appliance in the equipment room but shall never be less than 64 square inches in size. No obstruction of any kind shall be placed over such air openings except as provided in Section XXXVI (a) 4 of this Code. Negative pressure shall not be permitted to affect air supply for combustion or act to draw products of combustion from openings in the flue or furnace.

Section XXXXIII Clearances.

Heat producing appliances or units shall be arranged so that their continued operation shall not raise the temperature of surrounding material more than 90° F. above the normal temperature of the room. The appliance or unit shall have clearance to combustible construction not less than that provided by the Mesquite Building Code or that listed by the Underwriters' Laboratories or American Gas Association for such reduced clearance, and installed within the conditions and limitaticns of such listing.

Section XXXXIV Safety Devices and Automatic Controls.

Gas-fired boilers and furnaces shall be quipped with safety devices as provided in Article 14A - 208 of the Plumbing Code (Ordinance #419) which shall be constructed and adjusted so that no gas can flow through the main burner unless the pilot is burning in a manner that causes immediate ignition of the main burner.

The operation of this safety device shall not depend upon the closing of an electrical circuit to cause the shutting off the main gas supply valve. The device shall be adjusted and tested as per the manufacturer's instructions and the combined time required for an automatic pilot and the automatic main gas control valve to shut off the gas supply shall, in no case, exceed three (3) minutes. Operating and limit, or safety control devices, which are not tested as an integral part of an appliance or unit shall be listed as separate devices by the American Gas Association or the Underwriters' Laboratories, Inc.

Warm air heating units shall be equipped with an automatic device to limit the maximum temperature in the warm air ducts. Such device shall be installed in the bonnet or plenum chamber within twenty-four (24) inches of the point where the warm air ducts connect to the unit or shall be so placed as to shut off the main fuel supply in the event that the temperature in the warm air ducts exceeds 250° F.

Section XXXXV Electrical Connections.

Electrical wiring and equipment shall comply with the City of Mesquite Electrical Code. Electrical controls shall be wired in accordance with the diagram furnished by the manufacturer.

Section XXXXVI Filters.

Filters shall be of a type that does not burn freely or emit large volumes of smoke or other toxic or noxious products of combustion when attacked by flames. Liquid adhesive coatings used on filters shall have a flash point of not less than 325° F., Cleveland open cup test.

Electric precipitators shall be provided with interlock switches so as to prevent electrical shock when removing or servicing the filters or when removing the electrostatic unit. Electric precipitating filters shall be equipped with a condenser discharging device or a time lag of access to filters to permit complete discharge of filter plates and ionizing units and shall carry Underwriters' Laboratory approval for the application involved.

CHAPTER IX

VENTILATING FANS AND EVAPORATIVE COOLERS

Section XXXXVII Attic Fans.

Attic fans shall be provided with automatic means of cutting off the fan and closing the ceiling opening in the event of fire. Such closing shall be positive by means of counterweighting the damper.

A fusible link set to open at 140° F. shall be installed in the air stream on the suction side of the fan, and shall be so arranged as to operate the cut off switch in series with the fan motor. The fan housing and grilles shall be built of materials having fire resistance equal to that required for the ceiling in which the housing and grille is installed.

Fans or blowers discharging hot air or offensive odors to the outside air shall be installed, located or re-located in such a manner as to prevent a nuisance.

Section XXXXVIII Evaporative Coolers.

Evaporative coolers moving more than one thousand, five hundred (1,500) cubic feet of air per minute shall be equipped with a water tray and recirculating pump. Such tray shall be equipped with a float control valve with an orifice located above the overflow line of the tray. Wiring subject to extreme moisture conditions shall be of a type approved for such use and shall be installed as provided in the Mesquite Electrical Code.

Section XXXXIX Ventilating Fans.

Enclosed show windows which are provided with artificial illumination shall be provided with a mechanical ventilating system which is designed to exhaust not less than 5 CFM per linear foot of show window measured around its perimeter.

Section XXXXX Exhaust Fans.

Enclosed areas in which exhaust fans larger than 1,000 cubic feet per minute capacity are installed shall be provided with positive source of air supply to replace not less than sixty (60) per cent of such exhaust fan capacity.

Section XXXXXI That any person, firm or corporation who shall violate any of the provisions of this ordinance or fail to comply therewith or with any of the requirements thereof, or who shall hereafter install, construct, enlarge, alter, move, maintain or repair any heating, air conditioning, refrigeration, ventilating or evaporative cooling unit in violation of any detailed statement or plan submitted and approved hereunder shall be guilty of a misdemeanor and shall be liable to a fine of not more than TWO HUNDRED AND NO/100 ($200.00) DOLLARS and each day such violation shall be permitted to exist shall constitute a separate offense. The owner or owners of any such heating, air conditioning, refrigeration, ventilating or evaporative cooling unit, or part thereof, if installed by the owner or owners in violation of the terms and provisions of this ordinance, shall be guilty of a misdemeanor and be subject to be fined provided herein.

If the installation is made by an architect, builder, contractor, agent, person or corporation, other than the owner or owners, in violation of the terms and provisions of this ordinance, such persons or corporations shall be guilty of a misdemeanor and be subject to the fine provided herein.

Section XXXXXII That any contract for the construction of a building or the installation or equipment governed by this ordinance for which permits have been issued or are outstanding at the time of the enactment of this ordinance, will not be subject to the terms and conditions hereof.

Section XXXXXIII If any word, phrase, portion, sentence, provision, clause, paragraph or section of this Ordinance should ever be held to be invalid or unconstitutional by a court of competent jurisdiction, such holding shall not affect the remaining portions of this Ordinance, it being the intention of the City Council in enacting this Ordinance that effect shall be given to so much of this Ordinance as may be valid, even if a portion of same should be held to be invalid, and to this end the provisions of this Ordinance shall be declared to be severable.

Section XXXXXIV The fact that the City of Mesquite does not have any regulations on the installation of heating, air conditioning, refrigeration, ventilating and evaporative cooling creates an urgency and an emergency in the preservation of the public health, safety and welfare and requires that this ordinance shall take effect immediately from and after its passage and publication of the caption of said ordinance as the law in such cases provides.

DULY PASSED by the City Council of the City of Mesquite on the 19 day of June, 1967.

MAYOR

CITY SECRETARY