

ORDINANCE NO. 23-1998

AN ORDINANCE AMENDING CHAPTER 8, "CONSTRUCTION REGULATIONS" ARTICLE VI, "UNIFORM CODES AND OTHER REGULATIONS", AMENDING ARTICLE VI, DIVISION 4, "PLUMBING CODE"; AND AMENDING ARTICLE VI, DIVISION 5, "MECHANICAL CODE", OF THE ABILENE MUNICIPAL CODE, BY AMENDING CERTAIN SECTIONS AS SET OUT BELOW; PROVIDING A SEVERABILITY CLAUSE, AND DECLARING A PENALTY.


BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

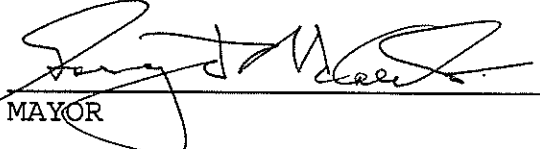
- PART 1. That Chapter 8, Article VI, is amended as set out in Exhibit "A", attached hereto and made a part of this ordinance for all purposes.
- PART 2. That Chapter 8, Article VI, Division 4, "Plumbing Code", is amended as set out in Exhibit "B", attached hereto and made a part of this ordinance for all purposes.
- PART 3. That Chapter 8, Article VI, Division 5, "Mechanical Code", is amended as set out in Exhibit "C", attached hereto and made a part of this ordinance for all purposes.
- PART 4. That if any provisions of any section of this ordinance shall be held to be void or unconstitutional, such holding shall in no way effect the validity of the remaining provisions or sections of this ordinance, which shall remain in full force and effect.
- PART 5. That any person, firm or corporation violating any of the provisions of this chapter, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punishable by a fine of not more than Two Thousand Dollars (\$2,000). Each day such violation shall continue or be permitted to continue, shall be deemed a separate offense. Said ordinance being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON FIRST READING this 9 day of April, A.D., 1998.


PASSED ON SECOND AND FINAL READING this 23 day of April,  
A.D., 1998.

ATTEST:

  
\_\_\_\_\_  
CITY SECRETARY

  
\_\_\_\_\_  
MAYOR

APPROVED:

  
\_\_\_\_\_  
CITY ATTORNEY

**ORDINANCE NO.** 23-1998

**EXHIBIT "A"**

**Delete "Uniform" from the title of Article VI, which will now read as Codes and Other Regulations.**

**ORDINANCE NO.** 23-1998

**EXHIBIT "B"**

**Amend as follows:**

- 1. Rename Division 4. Plumbing\* to Division 4. Plumbing Code.**
- 2. Replace Sec. 8-511 as follows:**

**Sec. 8-511. Adopted.**

The International Plumbing Code, 1997 Edition thereof, published by the International Code Council, Inc., together with a plumbing code pamphlet amending and supplementing that code, are hereby enacted and adopted by reference, as the plumbing code for the City of Abilene, and is hereby incorporated herein. The plumbing code pamphlet, along with the International Plumbing Code, is on file in the building official's and city secretary's offices.

# ABILENE PLUMBING CODE



**TO BE USED IN CONJUNCTION WITH THE  
1997 INTERNATIONAL PLUMBING CODE**

This pamphlet is to be used in conjunction with the 1997 International Plumbing code, published by the International Code Council, Inc. This pamphlet and the 1997 International Plumbing Code comprise the Plumbing code for the City of Abilene, Texas.

This code was adopted by the City Council on April 23, 1998, Ordinance No. 23-1998



Building Inspections, 555 Walnut, Room 204, Abilene, Texas 79601 (915) 676-6271

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# 1997 INTERNATIONAL PLUMBING CODE

Adopt the 1997 International Plumbing Code in its entirety with the following amendments:

## CHAPTER 1 ADMINISTRATION

### Section 101 General

**Section 101.1 Title.** These regulations shall be known as the Plumbing Code of the City of Abilene, Texas, hereinafter referred to as "this code."

**Section 101.2 Scope.** Add to the last sentence: "...or connected to the water supply of the City of Abilene."

### Section 103 Department of Plumbing Inspection

**Section 103.3 Deputies.** Add the following at the end of this section.

**Section 103.3.1 Plumbing Inspector Requirements:** The plumbing and/or plumbing/mechanical inspectors are hereby made a part of the Building Inspection Department of the City of Abilene. They shall have had at least five years of satisfactory experience as a journeyman and/or master plumber and shall hold a plumbing inspector's license issued by the State Board of Plumbing Examiners.

### Section 104 Duties and Powers of the Code Official

**Section 104.2 Rule-making authority.** Delete the first sentence and insert the following:

The code official shall have authority as necessary in the interest of public health, safety and general welfare, to interpret and implement the provisions of this code to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions.

### Section 106 Permits

**Section 106.1 When required.** Add the following sentence.

A permit and gas test in accordance with Section G104.18.1 Method of Testing of this code shall be required if the gas meter has been removed for a period of 180 days or longer.

#### Section 106.1.1 Plumbing License Required.

All persons who engage in or work at the actual installation, alteration, repair, and/or renovation of all piping, fixtures, appurtenances, and appliances that supply gas, water, liquids, or any combination of these, or dispose of waste water or sewage, shall possess a master or journeyman plumber's license, in accordance with the State of Texas Plumbing License Law, Texas Civil Statutes, article 6243-101, as amended. Any business engaging in the work of a plumbing contractor shall employ a person holding a current master plumber's license.

**Section 106.1.1.1 Exemptions.** Add the following, reference State Plumbing License Law, Section 365.11 Exemptions.

(a) Appliance connections, unless the connection also requires cutting into existing piping, any work on the sewer side of a properly installed trap, or work on the structure side of or replacement of valves provided for appliance installation, in which cases a licensed plumber must perform the pre-connection work.

(b) Persons holding a Water Treatment Certificate from the Texas Department of Health may engage in residential water treatment activities involving the cutting into and making connections with a potable water supply system. However, if the activities involve connections to the sewer, soil, or waste line, only a licensed plumber may perform the connection work.

(c) **The following plumbing work shall be permitted without a license but shall be subject to PERMITS AND INSPECTION APPROVAL IN ACCORDANCE WITH LOCAL CITY ORDINANCES:**

(1) Plumbing work done by a property owner in a building designated as that person's homestead or that has filed the appropriate paperwork to obtain homestead status for that building;

(2) Work done on existing plumbing by a maintenance engineer that is incidental or connected to other maintenance duties, provided that such person does not engage in plumbing work for the general public;



(3) Installation of on-site sewage disposal systems done outside municipalities of greater than 5,000 inhabitants or done inside municipalities who voluntarily comply with the plumbing license law;

(4) Plumbing work done by a railroad employee on the premises or equipment of a railroad, provided such person does not engage in plumbing work for the general public;

(5) Plumbing work done by employees of any public utility company in the installation, operation, and maintenance of service of mains or lines and all types of appurtenances, equipment, and appliances associated with service mains or lines;

(6) Installation or service work done by an appliance dealer or an employee thereof in connecting appliances to existing piping;

(7) Irrigation work done by an individual working and licensed as an irrigator or installer;

(8) LP Gas service and installation work done by an individual working and licensed as a LP Gas

Installer.

**Section 106.1.2 Bond Required.** Add the following subsection:

All plumbing contractor's desiring to engage in the business of a plumbing contractor shall first file with the building official of the City of Abilene, a surety bond in the amount of five thousand dollars (\$5,000.00) conditioned that the person engaged in the plumbing business will faithfully observe all the laws pertaining to plumbing; further, that the City shall be indemnified and saved harmless from all claims arising from accidents and damage of any character whatsoever caused by the negligence of such person engaged in the plumbing business, or by any other unfaithful, inadequate work done either by themselves, their agent, or their employees. The same bond is required for yard irrigation systems, OR, a certificate of insurance providing for commercial general liability insurance that meets the requirements set forth in the State Plumbing License Law, with a coverage amount of not less than \$300,000.00 for all claims arising in any one year.

**Section 106.1.3 Contractor's Registration Required.** Add the following subsection:

All plumbing contractor's shall first file with the code official of the City of Abilene, as a registered contractor as per Section 8-161. of the Municipal Code, Article IV, Licenses and Registration.

**Section 106.3 Application for permit.** Delete in its entirety and insert the following:

Each application for a permit, with the required fee, shall be filed with the code official on a form furnished for that purpose and describe the nature of the work to be performed prior to commencing any work. Permits may also be obtained in accordance with the Procedural Guidelines for the **Voucher/Permit Program**.

**Section 106.5 Fees.** Add the following:

Permits may be obtained by charge account with the following restrictions:

(a) A deposit of \$150.00 shall be made with the City of Abilene by the applicant.

(b) The deposit is security for the account and shall not be applied to the account of the applicant.

(c) Every applicant shall be billed each month for the total balance of his account and a written list of permits shall be identified on the invoice.

(d) All accounts shall be payable within ten days after the billing date; any account not paid within ten days, and upon notice from the Accounting Department to the Building Inspection Department, shall not be eligible for further issuance of permits by charge account. Failure to pay said account shall result in the applicant's deposit being forfeited to the City of Abilene. Charging privileges are therefore revoked and a new deposit and all bills paid to the City before any additional charges are permitted.

**Section 106.5.1 Work Commencing before permit issuance.** Add the following

Further work performed by the same contractor without permits will result in a penalty and investigation fee of ten (10) times the amount of the permit fee required by this code if a permit were to be issued. At the end of twelve months from issuance of the ten times fee, a contractor with no further violations shall be determined to start without previous penalties.

**Section 106.5.2 Fee Schedule.** Add the following:

Fees shall be set by Abilene City Council resolution. Appendix A references approved fees at the time of adoption of this code. Fees published in this document are subject to change by Council action.

**Section 106.5.3 Fee Refunds.**

2. Insert 80%
3. Delete in its entirety

**Section 107 Inspections and Testing**

**Section 107.7 Temporary connection.** Add the following.

Permits for temporary gas shall be issued in the plumbing contractor's name and utilities released in the plumbing contractor's name or general contractors name only, and shall be limited to ninety (90) days. The owner, or legal representative of the owner, must first file an affidavit for temporary service utility release, with the office of the Code Official, prior to the temporary service inspection and release of utilities.

**Section 108 Violations**

**Section 108.3 Prosecution of violation.** Delete in its entirety and insert the following:

If notice of violation is not complied with promptly, the code official or his/her deputies may issue citations regarding the offense/offenses. In addition, legal counsel of the jurisdiction may be requested to institute the appropriate proceeding at law or in equity to restrain, correct, or abate such violation.

**Section 108.4 Violation penalties.** Amend to identify the following:

(Specify Offense) - Misdemeanor - Class C

(Fine) - Not to exceed \$2,000.00 per offense

(Number of Days Imprisonment) - Delete in their entirety.

**Section 108.5 Stop work orders.** Amend last sentence as follows:

... , shall be subject to a citation for a Class C Misdemeanor.

**Section 109 Means of Appeal** Delete in its entirety and insert the following:

**Section 109 Board of Appeals**

**Section 109.1 General.** The Board of Appeals may hear appeals of any decision of the building official or his/her representatives regarding the electrical, mechanical, plumbing, or swimming pool ordinance. The board does not have the authority to waive code requirements, but may consider alternate materials and methods for the purpose of complying with the provisions of this code. The board shall be as is established in the Municipal Code, Article V, Division 3, Section 8-391 through Section 8-407 for the Mechanical, Plumbing, Electrical, and Swimming Pool Board of Appeals.

**CHAPTER 2  
DEFINITIONS**

**Section 202 General Definitions** Add the following:

**INDUSTRIAL WASTE:** Reference the City of Abilene Industrial Waste Ordinance, Ordinance #36-92.

**LICENSED IRRIGATOR:** A person licensed by the Texas Board of Irrigators under the Licensed Irrigators Act, Article 8751, Section 7, Vernon's Texas Civil Statutes who sells, designs, consults, installs, maintains, alters, repairs or services an irrigation system including the connection of such system in and to a private or public, raw or potable water supply system or any water supply.

**CHAPTER 3  
GENERAL REGULATIONS**

**Section 304 Rodent proofing** Amend as follows:

**Section 304.4 Openings for pipes.** Change "metal collars" to "approved collars".

**Section 305 Protection of Pipes and Plumbing System Components** Amend as follows:

**Section 305.6.1 Sewer Depth.** Delete and insert the following:

Building sewers that connect to private sewage disposal systems shall meet the State of Texas regulations for Private On-Site Sewage Disposal Facilities. Building sewers shall be a minimum of 12 inches below grade.

**Section 305.8. Protection against physical damage.** Amend last sentence as follows:

Protective shield plates. . . shall be a minimum of three (3") inches at sole plates and top plates.

**Section 310 Washroom and Toilet Room Requirements**

**Section 310.4 Water Closet Compartment.** Delete in its entirety.

**Section 312 Tests and Inspections**

**Section 312.2 Drainage and Vent Water Test.** Delete in its entirety and insert:

The water test shall be applied to drainage and vent systems either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly plugged except the highest opening of the section under test, and each section shall be filled with water, but no section shall be tested with less than 6" above the highest fixture rim. The water shall be kept in the system or in the portion under test for at least fifteen (15) minutes before inspection starts. The system shall then be tight at all points.

**Section 312.6 Gravity Sewer Test.** Add the following exceptions:

**Exceptions:**

1. Not required for single family residence/duplex.
2. Tests may be limited to sewers within the confines of the property line.

**Section 312.9 Periodic inspection and testing of backflow prevention devices.** Delete in its entirety and insert the following:

All backflow prevention assemblies shall be tested. The premise owner or responsible person shall have the backflow prevention assembly tested by a certified backflow assembly tester at the time of installation, repair, or relocation, to determine whether they are operable. Moderate or high hazard uses shall be tested on an annual schedule thereafter or more often when required by the Code Official. Low hazard uses shall be tested at least once every three (3) years thereafter, or more often, when required by the Code Official. Add the following definition:

Responsible Party - May be any of the following: premise manager, premise maintenance manager, tenant, or occupant.

## CHAPTER 4

### FIXTURES, FAUCETS, AND FIXTURE FITTINGS

**Section 403 Minimum Plumbing Facilities** Amend as follows:

**Section 403.1 Minimum Number of Fixtures.** Delete Table 403.1 in its entirety and insert Table A-29-A from the 1997 Uniform Building Code. *(See attached Table)*

**Section 403.2 Separate Facilities.**

2. Separate employee facilities shall be required when the number of employees exceeds four persons in groups B,F,H,M,, and S Occupancies and as per Chapter 29 of the 1997 UBC for other occupancies.

**Section 405 Installation of Fixtures**

**Section 405.3.1 and Figure 405.3.1. Water Closets, Lavatories and Bidets.** Amend to require 24" clear space in front of the water closet or bidet in lieu of 18" for consistency with the Uniform Building code.

**Section 424 Faucets and Other Fixture Fittings**

**Section 424.4 Shower valves.** Amend exceptions as follows:

**Exception:** 1. Balanced pressure, thermostatic or combination mixing valves shall not be required for showers and tub-shower combinations in one-or-two family dwellings.

2. Balanced pressure, thermostatic or combination mixing valves shall not be required for showers and tub-shower combinations in multiple showers supplied with a single tempered water supply provided the hot water supply for such showers is controlled by an approved master thermostatic mixing valve adjusted in accordance with the

## Appendix Chapter 29 MINIMUM PLUMBING FIXTURES

### SECTION 2905 — GENERAL

Each building shall be provided with sanitary facilities, including provisions for accessibility in accordance with Chapter 11. Plumbing fixtures shall be provided for the type of building occupancy with the minimum numbers as shown in Table A-29-A. The

number of fixtures are the minimum required as shown in Table A-29-A and are assumed to be based on 50 percent male and 50 percent female. The occupant load factors shall be as shown in Table A-29-A.

**EXCEPTION:** Where circumstances dictate that a different ratio is needed, the adjustment shall be approved by the building official.

**TABLE A-29-A—MINIMUM PLUMBING FIXTURES<sup>1,2,3</sup>**

TYPE OF BUILDING OR OCCUPANCY <sup>4</sup>	WATER CLOSETS <sup>5</sup> (fixtures per person)		LAVATORIES <sup>6</sup> (fixtures per person)		BATHTUB OR SHOWER (fixtures per person)
	MALE	FEMALE	MALE	FEMALE	
For the occupancies listed below, use 30 square feet (2.78 m <sup>2</sup> ) per occupant for the minimum number of plumbing fixtures.					
<b>Group A</b> Conference rooms, dining rooms, drinking establishments, exhibit rooms, gymnasiums, lounges, stages and similar uses including restaurants classified as Group B Occupancies	1:1-25 2:26-75 3:76-125 4:126-200 5:201-300 6:301-400 Over 400, add one fixture for each additional 200 males or 150 females.	1:1-25 2:26-75 3:76-125 4:126-200 5:201-300 6:301-400	one for each water closet up to four; then one for each two additional water closets		
For the assembly occupancies listed below, use the number of fixed seating or, where no fixed seating is provided, use 15 square feet (1.39 m <sup>2</sup> ) per occupant for the minimum number of plumbing fixtures.					
Assembly places— Auditoriums, convention halls, dance floors, lodge rooms, stadiums and casinos	1:1-50 2:51-100 3:101-150 4:151-300 Over 300 males, add one fixture for each additional 200, and over 400 females add one for each 125.	3:1-50 4:51-100 6:101-200 8:201-400	1:1-200 2:201-400 3:401-750 Over 750, add one fixture for each additional 500 persons.	1:1-200 2:201-400 3:401-750	
For the assembly occupancies listed below, use the number of fixed seating or, where no fixed seating is provided, use 30 square feet (2.29 m <sup>2</sup> ) per occupant for the minimum number of plumbing fixtures.					
Worship places Principal assembly area Worship places Educational and activity unit	one per 150  one per 125	one per 75  one per 75	one per two water closets  one per two water closets		
For the occupancies listed below, use 200 square feet (18.58 m <sup>2</sup> ) per occupant for the minimum number of plumbing fixtures.					
<b>Group B</b> Offices or public buildings	1:1-15 2:16-35 3:36-55 Over 55, add one for each 50 persons.	1:1-15 2:16-35 3:36-55	one per two water closets		
For the occupancies listed below, use 50 square feet (4.65 m <sup>2</sup> ) per occupant for the minimum number of plumbing fixtures.					
<b>Group E</b> Schools—for staff use All schools  Schools—for student use Day care  Elementary Secondary	1:1-15 2:16-35 3:36-55 Over 55, add one fixture for each additional 40 persons.  1:1-20 2:21-50 Over 50, add one fixture for each additional 50 persons.  one per 30 one per 40	1:1-15 2:16-35 3:36-55  1:1-20 2:21-50  one per 25 one per 30	one per 40    1:1-25 2:26-50 Over 50, add one fixture for each additional 50 persons.  one per 35 one per 40	one per 40    1:1-25 2:26-50  one per 35 one per 40	
For the occupancies listed below, use 50 square feet (4.65 m <sup>2</sup> ) per occupant for the minimum number of plumbing fixtures.					
<b>Education Facilities other than Group E</b> Others (colleges, universities, adult centers, etc.)	one per 40	one per 30	one per 40	one per 40	

TABLE A-29-A—MINIMUM PLUMBING FIXTURES<sup>1,2,3</sup>—(Continued)

TYPE OF BUILDING OR OCCUPANCY <sup>4</sup>	WATER CLOSETS <sup>5</sup> (fixtures per person)		LAVATORIES <sup>6</sup> (fixtures per person)		BATHTUB OR SHOWER (fixtures per person)
	MALE	FEMALE	MALE	FEMALE	
For the occupancies listed below, use 2,000 square feet (185.8 m <sup>2</sup> ) per occupant for the minimum number of plumbing fixtures.					
<b>Group F</b> Workshop, foundries and similar establishments, and Group H Occupancies	1:1-10 2:11-25 3:26-50 4:51-75 5:76-100 Over 100, add one fixture for each additional 300 persons.	1:1-10 2:11-25 3:26-50 4:51-75 5:76-100	one for each two water closets		one shower for each 15 persons exposed to excessive heat or to skin contamination with irritating materials
For the occupancies listed below, use the designated application and 200 square feet (18.58 m <sup>2</sup> ) per occupant of the general use area for the minimum number of plumbing fixtures.					
<b>Group I</b> Hospital waiting rooms Hospital general use areas	one per room (usable by either sex) 1:1-15 2:16-35 3:36-55 Over 55, add one fixture for each additional 40 persons.		one per room one per each two water closets		
Hospitals Patient room Ward room	one per room one per eight patients		one per room one per 10 patients		one per room one per 20 patients
Jails and reformatories Cell Exercise room	one per cell one per exercise room		one per cell one per exercise room		
Other institutions (on each occupied floor)	one per 25	one per 25	one per 10	one per 10	one per eight
For the occupancies listed below, use 200 square feet (18.58 m <sup>2</sup> ) per occupant for the minimum number of plumbing fixtures.					
<b>Group M</b> Retail or wholesale stores	1:1-50 2:51-100 3:101-400 Over 400, add one fixture for each additional 500 males and one for each 150 females.	1:1-50 2:51-100 3:101-200 4:201-300 5:301-400	one for each two water closets		
For Group R Occupancies, dwelling units and hotel guest rooms, use the chart. For congregate residences, use 200 square feet (18.58 m <sup>2</sup> ) for Group R, Division 1 Occupancies and 300 square feet (27.87 m <sup>2</sup> ) for Group R, Division 3 Occupancies for the minimum plumbing fixtures.					
<b>Group R</b> Dwelling units Hotel guest rooms	one per dwelling unit one per guest room		one per dwelling unit one per guest room		one per dwelling unit one per guest room
Congregate residences	one per 10 Add one fixture for each additional 25 males and one for each additional 20 females.	one per 8	one per 12 Over 12, add one fixture for each additional 20 males and one for each additional 15 females	one per 12	one per eight For females, add one bathtub per 30. Over 150, add one per 20.
For the occupancies listed below, use 5,000 square feet (464.5 m <sup>2</sup> ) per occupant for the minimum number of plumbing fixtures.					
<b>Group S</b> Warehouses	1:1-10 2:11-25 3:26-50 4:51-75 5:76-100 Over 100, add one for each 300 males and females.	1:1-10 2:11-25 3:26-50 4:51-75 5:76-100	one per 40 occupants of each sex		one shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious or irritating materials

NOTE: Occupant loads over 30 shall have one drinking fountain for each 150 occupants.

<sup>1</sup>The figures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction thereof.

<sup>2</sup>Drinking fountains shall not be installed in toilet rooms.

<sup>3</sup>When the design occupant load is less than 10 persons, a facility usable by either sex may be approved by the building official.

<sup>4</sup>Any category not mentioned specifically or about which there are any questions shall be classified by the building official and included in the category which it most nearly resembles, based on the expected use of the plumbing facilities.

<sup>5</sup>Where urinals are provided, one water closet less than the number specified may be provided for each urinal installed, except the number of water closets in such cases shall not be reduced to less than one half of the minimum specified.

<sup>6</sup>Twenty-four inches (610 mm) of wash sink or 18 inches (457 mm) of a circular basin, when provided with water outlets for such space, shall be considered equivalent to one lavatory.

manufacturer's instructions to a maximum hot water setting of 120 degrees F (49 degrees C). Such master thermostatic mixing valves shall be sized according to the peak demand of fixtures located downstream of the valve and shall comply with ASSE 1016. The water heater thermostat shall not be used as the temperature-control device for compliance with this section.

## CHAPTER 5 WATER HEATERS

### Section 501 General

**Section 501.4 Location.** Add the following sections from the International Mechanical Code.

**Section 501.4.1 Hazardous locations.** Equipment shall not be located in a hazardous location unless listed and approved for the specific installation.

**Section 501.4.2 Protection from damage.** Equipment shall not be installed in a location where it is subject to mechanical damage unless protected by approved barriers.

**Section 502 Installation** Add the following sections.

### Section 502.4 Clearances.

Uninsulated water heaters shall not be installed closer than six(6) inches to unprotected combustible construction nor closer than three (3) inches to protected combustible construction . Insulated water heaters shall not be installed closer than two (2) inches to unprotected combustible construction nor closer than one (1) inch to protected combustible construction. The clearances may be reduced for water heaters which are designed and listed or approved for installation adjacent to combustible materials and installed in accordance with the conditions of such approval. (*Ref. 1991 UPC Sec. 1308*)

**Section 502.5 Water heaters installed in attics, alcove, or similar space.** Amend as follows:

Clearances around equipment or appliances to elements of permanent construction, including other installed equipment and appliance, shall be sufficient to allow inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistant rated assembly. Such access shall be continuous and be one of, or any combination of the following means:

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

2. Attics containing water heaters requiring access shall be provided with an opening and unobstructed passageway large enough to allow removal of the water heater but not less than 30 inches high and 30 inches wide. The passageway shall have continuous solid flooring not less than 24 inches wide. A level service space at least 30 inches deep and 30 inches wide shall be present at the front or service side of the water heater. The access opening dimension shall be a minimum of 22 inches by 30 inches where such dimensions are large enough to allow the removal of the largest piece of equipment.

**Exception:** The passageway and level service space is not required when the equipment can be serviced from the required access opening.

3. Where water heaters requiring access are installed in attics, elevated structures or roofs at a height exceeding 16 feet, such access shall be provided by a permanent approved means of access such as a stairway or ladder permanently fastened to the building.

4. A light shall be provided at the equipment for service and when the walkway exceeds 20 linear feet in distance, a light shall be provided for every 20 linear feet and at the equipment.

### Section 504 Safety Devices

**Section 504.7.2 Location.** Delete in its entirety.

**Section 504.8 Required Pan.** Revise first sentence to read as follows:

When a water heater is located in an attic or furred space where damage may result from a leaking water heater, the tank

or connections, the water heater shall be installed in a galvanized steel or other metal pan of equal corrosion resistance having a minimum thickness of 24 gage.

Add the following section:

**Section 506 Combustion Air**

Reference the 1997 International Mechanical Code Chapter 7, Combustion Air . Fuel-burning equipment such as water heaters shall be provided with combustion air in accordance with this section.

**CHAPTER 6  
WATER SUPPLY AND DISTRIBUTION**

**Section 602 Water Required**

**Section 602.1 General.** Amend last sentence to read as follows:

Hot water shall be provided for permanent residences.

**Section 603 Water Service**

**Section 603.2 Separation of water service and building sewer/drain.** Amend to read as follow:

Water service pipe and the building sewer shall be separated by three feet (3') of undisturbed or compacted earth.

Exception: Remain as written.

**Section 604 Design of Building Water Distribution System**

**Section 604.9 Water hammer.** Amend to read as follows, balance to remain as published.

The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water hammer arrestor or air chamber shall be installed where quick-closing valves are utilized, unless otherwise approved.

Add the following :

**Exception:** single family or duplex dwelling units.

**Section 606. Installation of the Building Water Distribution System**

**Section 606.1 Location of full-open valves.** Amend as follows:

3. Delete in its entirety.
6. Delete in its entirety.

**Section 606.2 Location of shut-off valves.** Amend as follows:

2. Delete in its entirety.

**Section 608 Protection of Potable Water Supply**

**Section 608.16.5 Connections to Lawn Irrigation System.** Delete the first sentence and insert the following:

The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure type vacuum breaker, a reduced pressure principle backflow preventer, or a double-check valve assembly.

**Section 610 Disinfection of Potable Water System**

**Section 610.1 General.** Amend as follows:

2. Delete in its entirety.
3. Delete in its entirety.
4. Delete in its entirety.

**CHAPTER 7  
SANITARY DRAINAGE**

**Section 708 Cleanouts**

**Section 708.3.2 Building Sewers.** Delete in its entirety and insert:

All building sewers shall be provided with cleanouts located not more than 75' apart.

**Section 708.3.4 Base of stack.** Delete in its entirety.

**Section 708.3.6 Manholes.** Delete in its entirety and insert:

Manholes shall comply with City of Abilene Engineering standards.

**CHAPTER 8  
INDIRECT/SPECIAL WASTE**

**Section 803 Special Wastes**

**Section 803.1 Waste Water Temperature.** Delete in its entirety and insert the following:

Steam pipes shall not connect to any part of a drainage or plumbing system, nor shall any water above 120 degrees F., (48 degrees C.), at the point of connection to the sanitary sewer be discharged under pressure directly into any part of a drainage system.

**CHAPTER 9  
VENTS**

**Section 903 Vent Stacks and Stack Vents**

**Section 903.3 Vent Termination.** Add the following exception:

**Exception:** Typical vents may be used as clean-outs when clean-outs are provided in accordance with Section 709.

**Section 905 Vent Connections and Grades**

**Section 905.4 Vertical rise of vent.** Amend to read:

Where structurally possible, every dry vent shall rise vertically to a minimum of 6 inches (152mm) above the flood level rim of the highest trap or trapped fixture being vented.

**Section 912 Combination Drain and Vent System**

**Section 912.2 Connection.** Amend last sentence to read:

Where structurally possible, the vent connecting to the combination drain and vent pipe shall extend vertically a minimum of 6 inches (152mm) above the flood level rim of the highest fixture being vented before off-setting horizontally.

**Section 913 Island Fixture Venting**

**Section 913.2 Vent Connection.** Amend last sentence to read:

Where structurally possible, the vent or branch vent for multiple island fixture vents shall extend to a minimum of 6 inches above the highest island fixture being vented before connecting to the outside vent terminal.

**CHAPTER 10  
TRAPS**

**Section 1002 Trap Requirements**

**Section 1002.8 Recess for trap connection.** Delete in its entirety.

**Section 1003 Interceptors and Separators**



### Section 1003.3 Grease Trap.

Add the following:

1. Appendix to Standard PDI-G101
  - A1.0 - Sizing
  - A2.0 - Installation
2. City of Abilene Standard Grease Trap Design

Realizing the need for uniform sizing, installation and maintenance data for Plumbing and Drainage Institute certified grease interceptors conforming to the testing and rating procedures outlined in Standard PDI-G101, it was deemed advisable to cover this information in an appendix. The recommendations for sizing, installation and maintenance of grease interceptors contained in this appendix are based on experience of the Industry.

## A1.0 Sizing

### A1.1 Sizing Considerations

**A1.1.1** A grease interceptor conforming to Standard PDI-G101 is designed and certified to operate efficiently at its rated capacity. The larger the interceptor the higher the flow rate it will handle efficiently with a greater quantity of grease retained before cleaning is required. While a small interceptor, undersized, can accommodate a flow of waste water well in excess of its rated capacity, it will not intercept grease efficiently under such overload conditions.

**A1.1.2** Fixture drainage period in combination with the service required and the quantity of waste water involved, establishes the rate of flow through the grease interceptor. Flow rate is therefore the primary gauge; and flow rate establishes interceptor size or capacity.

**A1.1.3** The link between flow rate and installation to produce satisfactory grease interceptor operation is a Flow Control Fitting. A correctly sized grease interceptor will not regulate the flow of water discharged from the fixture it is serv-

ing. Therefore, to ensure that the flow rate does not exceed the grease interceptor's rated capacity, a flow control fitting is required. The flow control fitting is essential for protection against overloading the grease interceptor which could otherwise occur from sudden surges from the fixture. The flow control fitting will control the flow of waste water at all times, enabling the interceptor to operate at its certified capacity.

### A1.2 Size Symbols

It has been determined through the testing and rating procedure that eight (8) different sized grease interceptors are required for normal domestic, commercial, and institutional installations. These sizes are based on certification standard flow rates and grease retention capacity ratings for grease interceptors. See Table I, page 8, Standard PDI-G101. Table A1.2 lists the PDI size symbol for each of the standard rated grease interceptors.

Table A1.2  
Sizing and Rating

PDI Size Symbol	4	7	10	15	20	25	35	50
Flow Rate GPM	4	7	10	15	20	25	35	50
L/s	.25	.44	.63	.95	1.26	1.58	2.20	3.16
Grease Capacity Pounds	8	14	20	30	40	50	70	100
Kg	3.6	6.4	9.1	13.6	18.2	22.7	31.8	45.4

### A1.3 Sizing Procedure

Table A1.3 is provided to show the standard formula in steps for sizing grease interceptors to suit requirements of specific fixtures. An example of this sizing formula application is included to illustrate the steps.

**Table A1.3**  
**Procedure for Sizing Grease Interceptors**  
**(Metric Equivalents Omitted for Simplicity)**

Steps	Formula	Example
1	Determine cubic content of fixture by multiplying length x width x depth.	A sink 48" long by 24" wide by 12" deep. Cubic content 48 x 24 x 12 = 13,824 cubic inches.
2	Determine capacity in gallons. 1 gal. = 231 cubic inches.	Contents in gallons $\frac{13,824}{231} = 59.8$ gallons
3	Determine actual drainage load. The fixture is normally filled to about 75% of capacity with water. The items being washed displace about 25% of the fixture content, thus actual drainage load = 75% of fixture capacity.	Actual drainage load $.75 \times 59.8 = 44.9$ gallons
4	Determine flow rate and drainage period. In general, good practices dictate a one (1) minute drainage period; however, where conditions permit, a two (2) minute drainage period is acceptable. Drainage period is the actual time required to completely drain the fixture.  $\text{Flow rate} = \frac{\text{Actual Drainage Load}}{\text{Drainage Period}}$	Calculate flow rate for one-minute period $\frac{44.9}{1} = 44.9$ GPM Flow Rate  Two-minute period $\frac{44.9}{2} = 22.5$ GPM Flow Rate
5	Select interceptor. From Table A1.2 select interceptor which corresponds to the flow rate calculated. Note: Select next larger size when flow rate falls between two sizes listed.	For one-minute period—44.9 GPM requires PDI size "50."  For two-minute period—22.5 GPM requires PDI size "25."

### A1.4 Selection

Table A1.4 is included as a selection chart for standard PDI Certified grease interceptors applicable to various size fixtures commonly used in domestic, commercial and institutional installations. The selections listed are based on the sizing formula covered in Table A1.3.

### A1.5 Dishwashers

A separate grease interceptor is recommended for each commercial dishwasher. The size of the interceptor is determined by the GPM discharge rate of the dishwasher as specified by the manufacturer. Select proper interceptor of equivalent or next higher rate from Table A1.2.

**Table A1.4**  
**Selection Chart**  
**(Metric Equivalents Omitted for Simplicity)**

Fixture Compartment Size (Inches)	Number of Compartments	Drainage Load (Gallons)	Recommended PDI Size Grease Interceptor	
			One-minute drainage period	Two-minute drainage period
18 x 12 x 6	1	4.2	7	4
16 x 14 x 8	1	5.8	7	4
20 x 18 x 8	1	9.4	10	7
18 x 16 x 8	2	15.0	15	10
20 x 18 x 8	2	18.7	20	10
30 x 20 x 8	1	15.5	20	10
24 x 20 x 12	1	18.7	20	10
22 x 20 x 8	2	23.0	25	15
22 x 20 x 12	2	34.0	35	20
24 x 24 x 12	2	44.9	50	25

### A1.6 Multiple Fixtures

Where multiple fixtures are served by a single interceptor, calculate the total capacity of all fixtures, establish the maximum number of fixtures that may be drained simultaneously and apply this factor to the total capacity to determine the maximum simultaneous capacity. Then proceed with sizing and selection of interceptor using sizing formula Table A1.3.

### A1.7 Alternate Sizing Method Based on Drainage Fixture-Units

Most plumbing codes list drainage Fixture-Unit values for plumbing fixtures and for fixtures not listed, these values are given for drain outlet or trap size. Fixture-Unit values are converted to discharge rates on the basis of one Fixture-Unit equaling 7.5 GPM. See Table A1.7 for recommended PDI size grease interceptor based on drainage Fixture-Unit sizing method.

**Table A1.7**

Fixture Outlet or Trap Size (Inches)	Drainage Fixture-Unit Value	GPM Equivalent	PDI Size Grease Interceptor
1¼	1	7.5	10
1½	2	15.0	15
2	3	22.0	25
2½	4	30.0	35
3	5	37.5	50
4	6	45.0	50

## A2.0 Installation

### A2.1 Installation Considerations

A2.1.1 Install interceptor as close as practical to fixture or fixtures being served, see figures A2.5.1 through A2.5.5. The interceptor may be set on the floor, partially recessed in the floor, with top flush

with the floor, or fully recessed below the floor to suit piping and structural conditions.

A2.1.2 Anticipate sufficient clearance for removal of interceptor cover for cleaning.

A2.1.3 Avoid installation wherein long runs of pipe (exceeding 25 feet) are necessary to reach interceptor. This precaution will preclude the possibility of pipeline becoming clogged with congealed grease that will collect before reaching the grease interceptor.

A2.1.4 Do not install grease interceptor in waste line from garbage grinder. Garbage grinder waste must bypass interceptor, for rapid accumulation of solid matter will greatly reduce grease interceptor efficiency preventing operation in compliance with rated capacity.

## A2.2 Flow Control

A2.2.1 The flow control fitting furnished with PDI certified interceptors must be installed ahead of interceptor in the waste line beyond the last connection from the fixture and as close as possible to the underside of lowest fixture. When waste of two or more sinks or fixtures are combined to be served by one interceptor, a single flow control fitting should be used.

A2.2.2 Air intake for flow control may terminate under sink drain board as high as possible to prevent overflow or terminate in a return bend at the same height and on outside of building. When fixture is individually trapped and back-vented, air intake may intersect vent stack. All installation recommendations subject to approval of code authority.

## A2.3 Venting

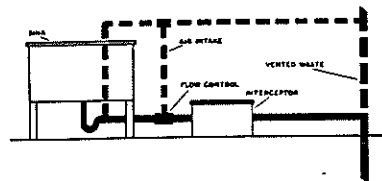
Grease interceptors must have a vented waste, sized in accordance with code requirements for venting traps to retain water seal and prevent siphoning.

## A2.4 Multiple Fixture Installation

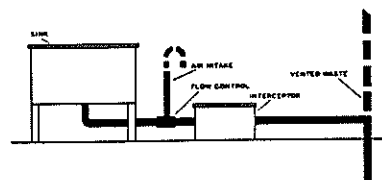
One interceptor to serve multiple fixtures is recommended only where fixtures are located close together. In such installations, each fixture should be individually trapped and back-vented.

## A2.5 Installation Diagrams

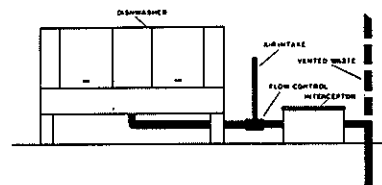
Figures A2.5.1 through A2.5.5 are included to illustrate various grease interceptor installations normally encountered in domestic, commercial and institutional systems. These figures will serve as a guide to practical application of grease interceptors.



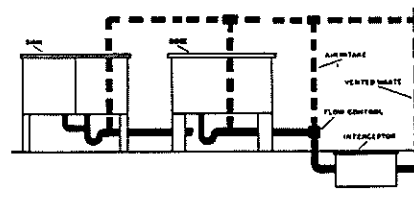
Interceptor Serving Trapped and Vented Sink—Flow Control Air Intake Intersects Vent  
Fig. A2.5.1



Interceptor Serving Sink—Flow Control Air Intake Terminates in a Return Bend Above Flood Level  
Fig. A2.5.2



Interceptor Serving Dishwasher—Flow Control Air Intake Terminates Above Flood Level  
Fig. A2.5.3



Interceptor Serving Two Individually Trapped and Vented Sinks—Flow Control Air Intake Intersects Vent  
Fig. A2.5.4



**APPENDIX A**  
**PLUMBING PERMIT FEE SCHEDULE**

**PLUMBING PERMIT FEES**

The permit and inspection fees, herein provided, shall be paid to the City before the issuance of a permit and before any work is started.

Minimum Permit Fee	\$20.00
Reinspection Fee	20.00
Water Heater	5.00
Each Plumbing Fixture	2.00
Sand Trap, Grease Trap, Interceptors	5.00
Sewer	5.00
Alley Cuts, Paved	5.00
Alley Cuts, Gravel	5.00
Water Service Line	5.00
Gas Service Line	5.00
Gas Test	7.50
Each Gas Opening	1.50
Gas Dryer	3.00
Outside Appliance	3.00
Boiler to 3 HP	6.00
Boiler 3 HP, to/and including 15 HP	10.00
Boiler over 15 HP, to/and including 30 HP	15.00
Boiler over 30 HP, to/and including 50 HP	25.00
Boiler over 50 HP	50.00
Sprinkler Permit Through 2"	25.00
Sprinkler Permit Over 2"	35.00
Mobile Home Sewer P-Trap	5.00
Septic Tank	10.00
Water Softener	10.00
Rain Water Roof Drain	3.00
Infrared Radiant Heaters	5.00
Wall Heaters	5.00
Floor Furnaces	8.00
Unit Heaters	5.00
Backflow Prevention Device	15.00
Temporary Gas Service	15.00

**OTHER INSPECTIONS AND FEES**

Inspections outside of normal business hours (Minimum Charge-one hour)	\$50.00
Special Request Inspections (Minimum Charge-one hour)	50.00
Board of Building Standards and Mechanical, Plumbing, Electrical, and Swimming Pool Board of Appeals request for hearing for alternate methods and materials, or second requests for hearing by owner or purchaser for condemnation cases	50.00
Contractor's Registration (annually, due by December 31 of each year)	25.00
Temporary Certificate of Occupancy	
Extension request for Temporary Certificate of Occupancy (per extension)	500.00

## APPENDIX G FUEL GAS PIPING

Adopt in its entirety with the following amendments:

### Section G103 Piping Materials

#### Section G103.20.1 Compression end riser transitions. Amend first sentence as follows:

Where connecting plastic to a metallic riser, there shall be a minimum of 30-inch of horizontal length of metallic piping underground at the end of any plastic piping installed, and such section of metallic piping shall be suitably protected against corrosion.

### Section G104 Piping System Installation

#### Section G104.7.1 Alternative Installation. Amend as follows:

1. Piping shall be installed in a casing of Schedule 40 steel pipe (or Schedule 40 PVC) with tightly...continue as written.

Add sentence, as follows: The casing shall be vented to the outside atmosphere with a minimum 1 ½" vent.

#### Section G104.11. Minimum burial depth. Amend to read as follows:

Underground piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade. Individual outside appliances underground piping shall be installed to the same minimum depth requirements.

#### Section 104.11.1 Individual outside appliances. Delete in it's entirety.

#### Section G104.18.1 Method of testing. Delete the last sentence and insert the following:

Low pressure gas piping and valves of 4 ounces or less, shall be tested at a pressure of at least 1 ½ time the designed operating pressure, but not less than 6 inches (6") mercury for a period of not less than ten (10) minutes before showing a drop in pressure.

Add the following appendix chapter:

## APPENDIX H MOBILE HOMES

### Section H101 Sewer Connection

1. Shall be a 4" line with a 4" trap.
2. Shall have a 4" two-way clean out downstream of trap.  
**Exception:** An existing clean-out complying with other provisions of this section is acceptable.
3. Connection to trap shall be air tight and made by mechanical means.
4. Clean out and trap shall be no more than 4' from the mobile home.  
**Exception:** Trap and clean out may be under the mobile home if there is a minimum 18" vertical and 30" horizontal clearance.
5. When the drain line from the mobile home to the trap is exposed above grade, it shall be protected from sunlight and physical damage.

### Section H102 Water Connection

1. Shall not be less than 3/4" nominal size.
2. Shall have an accessible shut-off valve, within 4' of the mobile home
3. Connection shall be made with PVC, copper, or PB piping.
4. Connecting line from valve to mobile home hook-up shall be insulated where exposed above grade.

### Section H103 Gas Connection

1. Gas piping shall be rigid black pipe, and shall be the same size (or not less than) the mobile home inlet.
2. Gas lines shall not be buried under mobile home.
3. Each mobile home equipped for gas shall have a gas valve and insulated union upstream of said valve.
4. The riser shall be so located that the horizontal piping from the riser to the mobile home does not exceed 4 feet.

5. All gas piping shall be tested at a pressure of at least  $1\frac{1}{2}$  times the designed operating pressure, but not less than six inches (6") mercury for a period of not less than ten (10) minutes before showing a drop in pressure.

**ORDINANCE NO.** 23-1998

**EXHIBIT "C"**

**DIVISION 5. MECHANICAL CODE**

**Replace Sec. 8-526 as follows:**

**Sec. 8-526. Adopted.**

The International Mechanical Code, 1996 Edition, and the 1997 Supplement to the International Mechanical Code, published by the International Code Council, Inc., together with a mechanical code pamphlet amending and supplementing that code, are hereby enacted and adopted by reference, as the mechanical code for the City of Abilene, and is hereby incorporated herein. The mechanical code pamphlet, along with the International Mechanical Code and Supplement to the International Mechanical Code, is on file in the building official's and city secretary's offices.

**Sec. 8-527. Delete in its entirety.**

# **ABILENE MECHANICAL CODE**



TO BE USED IN CONJUNCTION WITH THE  
1996 INTERNATIONAL MECHANICAL CODE & THE  
1997 SUPPLEMENT TO THE INTERNATIONAL MECHANICAL CODE



This pamphlet is to be used in conjunction with the 1996 International Mechanical Code and the 1997 Supplement to the International Mechanical Code, published by the International Code Council, Incorporated. This pamphlet and the referenced codes comprise the Mechanical Code for the City of Abilene, Texas, as adopted in the Municipal Code Section 8- 526 & 8-527

This code was adopted by the City Council on April 23, 1998, Ordinance No. 23-1998.



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## ABILENE MECHANICAL CODE

Adopt the 1996 International Mechanical Code and 1997 Supplement to the International Mechanical Code in its entirety, with the following amendments:

### CHAPTER 1 ADMINISTRATION

#### Section 101 General

**Section 101.1 Title.** These regulations shall be known as the Mechanical code of the City of Abilene, Texas, hereinafter referred to as "this code".

#### Section 103 Department of Mechanical Inspection

**Section 103.3 Deputies.** Add the following at the end of this section.

**103.3.1 Mechanical Inspector Requirements.** The mechanical and/or plumbing/mechanical inspectors are hereby made a part of the Building Inspection Department of the City of Abilene. They shall have had at least five years of satisfactory experience in the trades of mechanical and/or plumbing work.

#### Section 104 Duties and Powers of the Code Official

**Section 104.2 Rule-Making Authority.** Delete the first sentence and insert the following:

The code official shall have authority, as necessary, in the interest of public health, safety and general welfare, to interpret and implement the provisions of this code to secure the intent thereof, and to designate requirements applicable because of local climatic or other conditions.

#### Section 106 Permits

**Section 106.1 When Required.** Add the following subsections:

##### Section 106.1.1 Mechanical License Required.

All persons who wish to obtain a permit for work covered by this code must first file a copy of the required license, proof of insurance, and contractor's registration with the Building Inspection Department. All persons who engage in the business of mechanical contracting shall possess a license as required for Air-Conditioning and Refrigeration Contractors in accordance with the State of Texas licensing requirements; reference Texas Civil Statutes, **Article 8861**.

**Section 106.1.1.1 Exemptions.** Add the following local amendment and the State of Texas Air-Conditioning and Refrigeration Contractors License Law - **Section 6 Exemptions**.

(a) Commercial kitchen exhaust hood installations may be done by those holding a license to do so issued by the City of Abilene under procedures established by the Mechanical, Plumbing, Electrical, and Swimming Pool Board of Appeals;

(b) performs air conditioning and refrigeration contracting in a building owned solely by him/her as his/her home;

(c) performs air conditioning or refrigeration maintenance work if (i) the person is a maintenance man or maintenance engineer who is a regular bonafide employee of the property owner, the property lessee, or the management company managing the property where the maintenance work is being

performed; (ii) the work is performed in connection with the business in which the person is employed; and (iii) the person and the person's employer referred to in (I) above do not engage in the occupation of air conditioning and refrigeration contracting for the general public;

(d) perform air conditioning and refrigeration contracting and is regularly employed by a regulated electric or gas utility;

(e) is licensed as a professional engineer under The Texas Engineering Practice Act (Article 3271a, Vernon's Texas Civil Statutes), performs work in connection with the business in which the person is employed, and does not engage in the practice of air conditioning and refrigeration contracting for the general public;

(f) performs process cooling or heating work for an industrial operation such as a chemical plant, petrochemical plant, refinery, natural gas plant, or natural gas treating plant when employed by that operation;

(g) performs air conditioning services only on a motor vehicle air conditioning unit or who employs a person who performs air conditioning services only on a motor vehicle air conditioning unit.

**The work described by Section 106.1.1 remains subject to any permit, inspection, or approval requirements prescribed by this ordinance.**

**Section 106.1.1.1 Contractor's Registration Required.** Add the following subsection:

Prior to obtaining permits, mechanical contractors must be on file with the code official or the City of Abilene, as a registered contractor, as per Section 8-161 of the Municipal Code, Article IV, Licenses and Registration.

**Section 106.3 Application for Permit.** Delete in its entirety and insert the following:

Each application for a permit, with the required fee, shall be filed with the code official on a form furnished for that purpose and describe the nature of the work to be performed prior to commencing any work.

Permits may also be obtained in accordance with the 'Procedural Guidelines' for the **Voucher/Permit Program**.

**Section 106.5 Fees.** Add the following:

Permits may be obtained by charge account with the following restrictions:

(a) A deposit of \$150.00 shall be made with the City of Abilene by the applicant.

(b) The deposit is security for the account and shall not be applied to the account of the applicant.

(c) Every applicant shall be billed each month for the total balance of his account and a written list of permits shall be identified on the invoice.

(d) All accounts shall be payable within ten days after the billing date; any account not paid within ten days, and upon notice from the Accounting Department to the Building Inspection Department, shall not be eligible for further issuance of permits by charge account. Failure to pay said account shall result in the applicant's deposit being forfeited to the City of Abilene. Charging privileges are therefore revoked and a new deposit and all bills paid to the City before any additional charges are permitted.

**Section 106.5.1 Work Commencing Before Permit Issuance.** Add the following:

Further work performed by the same contractor without permits will result in a penalty and investigation

fee of ten (10) times the amount of the permit fee required by this code if a permit were to be issued. At the end of twelve months from issuance of a penalty fee, a contractor with no further violations shall be determined to start without previous penalties.

**Section 106.5.2 Fee Schedule.** Delete and insert the following:

Fees for mechanical work shall be set by Abilene City Council Resolution. Appendix B references approved fees at the time of adoption of this code. Fees published in this document are subject to change by Council action.

**Section 106.5.3 Fee Refunds.**

2. Insert 80%.
3. Delete in its entirety.

### **Section 108 Violations**

**Section 108.3 Prosecution of Violations.** Delete in its entirety and insert the following:

If notice of violation is not complied with promptly, the code official or his/her deputies may issue citations regarding the offense/offenses. In addition, legal counsel of the jurisdiction may be requested to institute the appropriate proceeding at law or in equity to restrain, correct, or abate such violation.

**Section 108.4 Violation Penalties.** Amend to identify the following:

(Specify Offense) - Misdemeanor - Class C

(Fine) - Not to exceed \$2,000 per offense per day.

(Number of Days Imprisonment) - Delete in their entirety.

**Section 108.5 Stop Work Orders.** Amend last sentence as follows:

...shall be...subject to a citation for a Class C Misdemeanor.

**Section 109 Means of Appeal.** Delete in its entirety and insert the following:

### **Section 109 Board of Appeals**

**Section 109.1 General.** The Board of Appeals may hear appeals of any decision of the building official or his/her representatives regarding the electrical, mechanical, plumbing, or swimming pool ordinance. The board does not have the authority to waive code requirements, but may consider alternate materials and methods for the purpose of complying with the provisions of this code. The board shall be as established in the Municipal Code, Article V, Division 3, Section 8-391 through Section 8-407 for the Mechanical, Plumbing, Electrical, and Swimming Pool Board of Appeals.

## **CHAPTER 3 GENERAL REGULATIONS**

**Section 301 General.** Add the following section:

### **Section 301.15 Structural Forces.**

The addition of equipment to an existing structure shall be evaluated to determine that the structure will support the loads proposed by the weight and vibration of the equipment. Units up to 5 tons or 500 lbs.

may be installed at support members such as beams and columns. Units 5 tons or greater or over 500 lbs shall require the installation to be designed by an engineer licensed by the State of Texas.

### **Section 303 Equipment and Appliance Location**

**Section 303.3 Prohibited locations.** Add the following to end of sentence:

**Exception 4.**

..... or a key locking device.

### **Section 304 Installation**

**Section 304.8 Guards.** Add Exceptions:

1. Single family residences.
2. Existing units on one story buildings.
3. A 30" parapet may be substituted for the guard.

### **Section 306 Access and Service Space**

**Section 306.3 Equipment in attics.** Delete in its entirety and insert the following:

Attics containing equipment requiring access shall be provided with an opening and an unobstructed passageway large enough to allow removal of the largest piece of equipment. The access opening dimensions shall be a minimum of 22 inches by 30 inches clear, provided such dimensions allow removal of the largest piece of equipment. The area from the attic way access to the furnace, coil, or air handler shall be constructed of a minimum ½" plywood/wafer board, of continuous unobstructed solid flooring not less than 24 inches wide, with a minimum head clearance of 30 inches from an entrance opening to the equipment.

A level working platform not less than 30 inches in depth shall be provided in front of the entire fire-box side of the warm-air furnace, and if the furnace temperature-limit control, air filter, fuel-control valve, or air-handling unit is not serviceable from the firebox side of the furnace, a continuous floor not less than 24 inches in width shall be provided from the platform in front of the firebox side of the furnace to and in front of this equipment.

**Exception:** A working platform need not be provided when the equipment can be serviced from the required access opening.

Provide one lighting fixture per 20 linear foot of passageway, in addition to a lighting fixture at or near the equipment, and a receptacle in accordance with the National Electrical Code.

**Section 306.5 Equipment on roofs or elevated structures.** Amend to read as follows:

Where equipment and appliances requiring access are installed on roofs or elevated structures, such access shall be provided by a permanent approved means of access. Permanent exterior ladders providing roof access need not extend closer than 16 feet (4877mm) to the finish grade or floor level below and shall extend to the equipment's level service space. An approved device is to be mounted to the structure that will assist in preventing an extension ladder from falling. Such access shall...*(balance of paragraph to remain the same)*.

Add the following exception:

**Exception:** 1. Existing structures less than three (3) stories in height.

**Section 306.6 Sloped roof.** Add the following exception:

**Exception:** 1. Existing structures less than three (3) stories in height.

**Section 307 Condensate Disposal** Add the following subsection:

**Section 307.2.2.1 Condensate waste sizing.** Condensate waste pipes from air-cooling coils shall be sized in accordance with equipment capacity as follows:

<b>Equipment Capacity</b>	<b>Minimum Condensate Pipe Diameter</b>
Up to 20 tons of refrigeration	3/4 inch
21 to 40 tons of refrigeration	1 inch
41 to 90 tons of refrigeration	1 1/4 inch
91 to 125 tons of refrigeration	1 1/2 inch
126 to 250 tons of refrigeration	2 inches

The size of condensate waste pipes may be for one unit or a combination of units, or as recommended by the manufacturer. The capacity of waste pipes assumes a 1/8 inch-per-foot slope, with the pipe running three-quarters full.

**Section 307.2.2 Drain pipe materials and sizes.** Add the following sentence:

Where plastic pipe is subject to ultra-violet rays, the piping shall be protected in an approved manner.

## **CHAPTER 4 VENTILATION**

### **Section 403 Mechanical Ventilation**

**Section 403.1 Ventilation system.** Delete and amend as follows:

Mechanical ventilation shall be provided by a method of supply air and return or exhaust air. The amount of supply air shall be approximately equal to the amount of return and exhaust air. The system shall not be prohibited from producing a negative or positive pressure. The system to convey the ventilation air shall be designed and installed in accordance with Chapter 6.

## **CHAPTER 5 EXHAUST SYSTEMS**

### **Section 501 General**

**Section 501.3 Outdoor discharge.** Add the following exception:

2. Allow bathroom exhaust fans in single family residences to discharge into properly ventilated attic space.

### **Section 506 Commercial Kitchen Grease Ducts and Exhaust Equipment**

**Section 506.13 Fire resistive access opening.** Amend 1997 Supplement as follows:

Delete *sliding or hinged* in second sentence.

**Section 508 Makeup Air**

**Section 508.1.1 Makeup air temperature.** Delete in its entirety.

**CHAPTER 6  
DUCT SYSTEMS**

**Section 606 Systems Control**

**Section 606.4.1 Supervision.** Add the following exception:

3. Smoke detectors are not required in the return air system in single family residences.

**CHAPTER 8  
CHIMNEYS AND VENTS**

**Section 801 General**

**Section 801.20 Multistory prohibited.** Add exception:

**Exception:** Multiple gas appliances on two different floors, is limited to single family residences, utilizing the Gamma Venting Tables.

**CHAPTER 9  
SPECIFIC APPLIANCES, FIREPLACES AND SOLID FUEL  
BURNING EQUIPMENT**

**Section 926 Unvented Room Heaters**

**Section 926.2 Prohibited use.** Add the following exception to the 1997 Supplement:

**Exception:** Group R occupancies containing existing unvented room heaters may continue in use if installed, maintained, and used in a safe manner.

**Section 926.5 Oxygen-depletion safety system.** Add the following exception:

**Exception:** Existing unvented room heaters may continue in use if installed, maintained, and used in a safe manner.

**CHAPTER 10  
BOILERS, WATER HEATERS, AND PRESSURE VESSELS**

**Section 1004 Boilers**

**Section 1004.4 Mounting.** Delete second sentence.



## **CHAPTER 11 REFRIGERATION**

### **Section 1106 Machinery Room, Special Requirements**

**Section 1106.7 Egress.** Amend and add exceptions as follows:

**Exceptions:**

1. Self-closing, tight fitting doors opening into a vestibule leading directly to the outside.
2. A one hour self-closing door opening into a protected means of egress.

## **CHAPTER 13 FUEL GAS PIPING**

### **Section 1303 Piping Materials**

**Section 1303.20.1 Compression end riser transitions.** Delete 12 inches and insert 30 inches.

### **Section 1304 Piping System Installation**

**Section 1304.7.1 Alternative installation.** Amend as follows:

1. Piping shall be installed in a casing of Schedule 40 steel pipe (or Schedule 40 PVC) with the casing vented to the outside atmospheric with a minimum of 1 ½" vent.

**Section 1304.11 Minimal burial depth.** Amend as follows:

Underground piping systems shall be installed a minimum of 18 inches (457 mm) below grade. Individual outside appliances underground piping shall be installed to the same minimum depth requirements.

**Section 1304.11.1 Individual outside appliances.** Delete in it's entirety.

**Section 1304.18.2 Testing of piping.** Delete last sentence and insert:

Gas piping shall withstand a pressure of 1 ½ times the designed operating pressure, but not less than six inches (6") mercury for a period of not less than ten (10) minutes before showing a drop in pressure.

**City of Abilene  
MECHANICAL PERMIT FEE SCHEDULE  
APPENDIX B**

The permit and inspection fees, herein provided, shall be paid to the City before the issuance of a permit and before any work is started.

Minimum Permit Fee	\$20.00
Reinspection Fee	20.00
Forced Air or Gravity Type Furnace up to 150,000 BTU's	10.00
Forced Air or Gravity Type Furnace over 150,000 BTU's	15.00
Floor Furnaces, Including Vent	8.00
Suspended Unit Heater or Wall Heater	6.00
Boilers or Refrigeration Compressor up to 3 HP	6.00
or Refrigeration Compressor over 3 HP, to/and including 15 HP	10.00
Boilers or Refrigeration Compressor over 15 HP, to/and including 30 HP	15.00
Boilers or Refrigeration Compressor over 30 HP, to/and including 50 P	25.00
Boilers or Refrigeration Compressor over 50 HP	50.00
Air Handler Units up to 10,000 CFM	5.00
Air Handler Units over 10,000 CFM	8.00
Dryer, Bathroom, and Kitchen Ventilation Fans, that are a portion of any Heating or Cooling System and connected to a Duct	3.00
Installation of a Refrigerant Air Conditioner System up to 7 ½ Tons	10.00
Installation of a Refrigerant Air Conditioner over 7 ½ Tons	15.00
Installation of Incinerator	4.00
Other Appliances, etc.	4.00
Type I Grease Hood	25.00
Type II Vent-A-Hood	10.00
Duct (not part of permitted equipment) per Inspection	5.00
Fireplaces (Pre-Fab)	5.00
Kitchen Equipment Contractor's License	25.00 *
License Renewal for Kitchen Equipment Contractor's License	15.00 *

\*Local Test & License

**OTHER INSPECTIONS AND FEES**

Inspections outside of normal business hours (Minimum Charge-one hour)	\$50.00
Special Request Inspections (Minimum Charge-one hour)	50.00
Board of Building Standards and Mechanical, Plumbing, Electrical, and Swimming Pool Board of Appeals request for hearing for alternate methods and materials	50.00
Contractors Registration (annually, due by December 31 of each year)	25.00

(10/31/97)

CERTIFICATE FOR ORDINANCE

THE STATE OF TEXAS :  
COUNTIES OF JONES AND TAYLOR :  
CITY OF ABILENE :

We, the undersigned officers of said City, hereby certify as follows:

1. The City Council of said City convened in REGULAR MEETING ON THE 23RD DAY OF APRIL, 1998, at the City Hall, and the roll was called of the duly constituted officers and members of said City Council, to-wit:

Gary D. McCaleb, Mayor  
Ray Ferguson, Mayor Pro Tem  
Kay Alexander, Deputy Mayor Pro Tem  
A. Don Drennan  
Paul R. Vasquez  
Rob Beckham  
Carol Martinez

Jo Moore, City Secretary

and all of said persons were present, except the following absentees: Carol Martinez thus constituting a quorum. Whereupon, among other business, the following was transacted at said Meeting: a written

ORDINANCE #24-1998

AUTHORIZING THE ISSUANCE OF CITY OF ABILENE, TEXAS  
COMBINATION TAX AND REVENUE CERTIFICATES OF OBLIGATION, SERIES 1998,  
IN THE PRINCIPAL AMOUNT OF \$2,430,000,

was duly introduced for the consideration of said City Council and read in full. It was then duly moved and seconded that said Ordinance be passed; and, after due discussion, said motion carrying with it the passage of said Ordinance, prevailed and carried by the following vote:

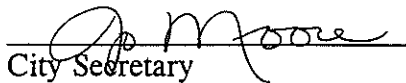
AYES: All members of said City Council shown present above voted "Aye".

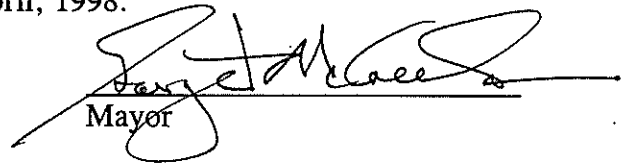
NOES: None.

2. That a true, full and correct copy of the aforesaid Ordinance passed at the Meeting described in the above and foregoing paragraph is attached to and follows this Certificate; that said Ordinance has been duly recorded in said City Council's minutes of said Meeting; that the above and foregoing paragraph is a true, full and correct excerpt from said City Council's minutes of said Meeting pertaining to the passage of said Ordinance; that the persons named in the above and foregoing paragraph are the duly chosen, qualified and acting officers and members of said City Council as indicated therein; that each of the officers and members of said City Council was duly and sufficiently notified officially and personally, in advance, of the time, place and purpose of the aforesaid Meeting, and that said Ordinance would be introduced and considered for passage at said Meeting, and each of said officers and members consented, in advance, to the holding of said Meeting for such purpose, and that said Meeting was open to the public and public notice of the time, place and purpose of said meeting was given, all as required by Chapter 551, Texas Government Code.

3. That the Mayor of said City has approved and hereby approves the aforesaid Ordinance; that the Mayor and the City Secretary of said City have duly signed said Ordinance; and that the Mayor and the City Secretary of said City hereby declare that their signing of this Certificate shall constitute the signing of the attached and following copy of said Ordinance for all purposes.

SIGNED AND SEALED the 23rd day of April, 1998.

  
City Secretary

  
Mayor

SEAL